



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

COUNTRY NOTE – ESTONIA

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

Please consult our website: www.oecd.org/edu/eag2011

Estonia is slipping in the ranks of having a well-educated work force.

Estonia has an above-average share of adults who attained at least upper secondary education (89% against 73%, on average, in OECD area) and tertiary education (36% against 30%, on average), a result of the country's historically strong investment in education. Much of this advantage stems from a high educational level among older age groups (Tables A1.2a and A1.3a).

However, things are changing fast, and the proportion of 25-34 year-olds who attained at least an upper secondary level of education decreased slightly compared to that of 35-44 and 45-54 year-olds (Table A1.2a).

Investment in education has increased significantly...

Expenditure per student in primary, secondary and post-secondary non-tertiary education more than doubled (a 119% increase of public expenditure) between 2000 and 2008, the second largest increase among 30 countries with available data. In most countries, changes in enrolment do not seem to have

been the main factor behind changes in expenditure at these levels. However, in Estonia, a large increase in expenditure (63%) coincided with significant a decrease in enrolment (25%). Nevertheless, in 2008, expenditure per student in Estonia was less than three-quarters of the level of the OECD average (USD 6 054 against USD 8 169).

At the tertiary level, expenditure per student reached USD 5 780 (excluding R&D) in 2008, less than half the OECD average of USD 13 717, and increased by 32% (public expenditure only) between 2000 and 2008, the 5th highest increase (Tables B1.1a and B1.5). This resulted from the fact that expenditure on tertiary education more than doubled (a 54% increase) between 2000 and 2008, while enrolment increased by 16%.

At primary and secondary levels, this increase may reflect the rise in teachers' salaries.

Between 1995 and 2009, teachers' salaries in primary and secondary education increased in real terms in most countries, but in Estonia, the increase was one of the largest among OECD countries. Between 1995 and 2009, the increase in Estonia (69%) was the third highest among OECD countries (84% or more in the Czech Republic and 90% in Turkey). And between 2000 and 2009, the increase in Estonia was the largest among OECD countries (46%, against 7% on average).

While analyses of data from the OECD's Programme for International Student Assessment (PISA) do not establish a significant relationship between spending per student and average learning outcomes across countries, data from PISA on secondary education do suggest that high-performing education systems generally prioritise the quality of teachers over the size of classes. In this respect, investing in teachers' salaries may be especially important.

But teachers' salaries are still low, and fail to attract students to the education profession...

Despite these large increases, teachers in Estonia are among the lowest paid, from an international perspective, and earn less than their peers with similar educational backgrounds.

In 2009, the statutory salary for a teacher at primary or secondary level varied from USD 14 881 at the starting point to USD 21 749 at the top of the scale (on average in the OECD area, statutory salaries, from starting salaries to the top of the scale, vary from USD 29 767 to USD 48 154 at the primary level, from USD 31 687 to USD 51 317 at the lower secondary level, and from USD 33 044 to USD 53 651 at the upper secondary level). Despite the large increase, in real terms, in teachers' salaries between 2000 and 2009 in Estonia (Estonia is among the three countries with the largest increases), statutory teachers' salaries (in USD or relative to GDP per capita) are among the four lowest salaries among OECD countries, regardless of the level of education or the number of years of experience. Moreover, salary scales are less steep than in other countries (Tables D3.1 and D3.4) and lower secondary teachers reach the highest step on the salary scale within seven years. These weak monetary incentives, as teachers approach the peak in their age-earnings profiles, may create difficulties in attracting and hiring teachers.

Compared to other tertiary-educated individuals, a teacher with 15 years of experience can expect to receive only 82% of the earnings of someone working in another profession, less than that observed in other OECD countries (the average varies from 77% for primary teachers to 85% for upper secondary teachers). The relatively low wages for primary, lower secondary and upper secondary teachers

compared with the earnings of people with similar educational backgrounds in other occupations suggest that salaries alone will not attract the most talented students to the education profession (Table D3.2).

...and result in low salary costs per student.

The low levels of teachers' salaries in Estonia compared to other OECD countries become the most significant cost driver at primary, lower secondary and upper secondary levels (Chart B7.1 and tables B7.1, B7.2 and B7.3).

Because of low teachers' salaries, salary costs per student in Estonia are the lowest or second lowest among OECD countries: USD 773 at the primary level (the OECD average is USD 2 309), USD 791 at the lower secondary level (the OECD average is USD 2 991) and USD 1 026 at the upper secondary level (the OECD average is USD 3 398). Of the three other factors driving the level of salary cost per student (instruction time, teaching time and class size), the below-average number of instruction hours for students in Estonia also results in low levels of salary cost per student. In 2009, students in Estonia between the ages of 7 and 14 received 5 644 hours of instruction, the second fewest number of hours, against 6 732 hours, on average, in OECD countries (about 3 hours less per week in Estonia than on average in OECD countries) (Chart D1.1 and Table D1.1).

Teaching time and class size have a smaller impact on salary cost in Estonia as they are closer to the OECD averages (see Indicator D2 and D4).

Overall national income invested in education remains below the OECD average.

Despite the fact that expenditure on all levels of education combined increased by more than 60% between 2000 and 2008, spending on educational institutions as a share of GDP remained, at 5.8%, slightly below the OECD average of 5.9% in 2008, as expenditure on educational institutions increased at the same pace as GDP (Table B2.1).

Public funding is predominant and, unlike in most other OECD countries, is expanding at the tertiary level.

The share of public expenditure on education relative to the total public budget has decreased from 14.8% in 2000 to 14.2% in 2008 (Table B4.1), signalling that public spending has expanded more in other areas.

However, education is predominantly funded by public sources. Overall, 95% of total expenditure on education comes from public sources – 10 percentage points more than on average in OECD countries. Pre-primary, primary, secondary and post-secondary non-tertiary education relies nearly exclusively on public funds (99% of expenditure is from public sources, table B3.2a). At the tertiary level, the proportion of expenditure from private sources is 10 percentage points smaller than the OECD average (31%), and Estonia is one of the few countries, along with New Zealand and Slovenia, where this proportion has decreased since 2005, from 30% to 21%, the second largest drop after New Zealand (Table B3.3).

Investment in education has a great impact on employment prospects, and differences between educational groups are large.

Education is generally good insurance against unemployment and for staying employed in difficult economic times; this is particularly true in Estonia. Since the start of the recession in 2007, employment rates decreased much more in Estonia than in any other OECD country, except Ireland, but the decline is largest at the lower levels of educational attainment (Table A7.3a).

Between 2007 and 2009, the employment rate among adults who have not completed an upper secondary education dropped by almost 10 percentage points and stood at 47.4% in 2009 (the OECD average is 56%). In comparison, the employment rate for those with a tertiary education fell by only 4.6 percentage points during the period and the overall employment rate remained above 80% (82.8%) in 2009, close to the OECD average of 83.6%. The employment rate among the most qualified adults is over 35 percentage points higher than among those without an upper secondary education. On average in OECD countries, the difference is about 27 percentage points (Table A7.3a).

Unemployment rises sharply for those without a baseline qualification.

In Estonia, as on average across OECD countries, unemployment rates decrease as educational attainment increases. However, in 2009, unemployment rates for those with a tertiary-type A education were above the OECD average (6.3% against 4.4%). Both women and men who did not attain a tertiary level of education were particularly vulnerable: unemployment rates reached 24% (the second highest level after the Slovak Republic) among those without an upper secondary diploma (compared to the OECD average of about 11.5%), and 14.8%, the second highest level after Spain, among those with upper secondary or post-secondary attainment (the OECD average is about 6.8%) (Table A7.4a).

Individuals with less education were particularly hard hit by the recession, and unemployment rates among those without an upper secondary education rose by more than 14 percentage points between 2008 and 2009, the largest change among OECD countries. Even those individuals with an upper secondary education have seen their job prospects deteriorate: unemployment rates among these adults rose above 10% (from 5.2% in 2008 to 14.8% in 2009) (Table A7.4a).

The employment advantage for higher-educated individuals does not translate into high earnings premiums...

Tertiary education brings substantial economic benefits for individuals. On average across OECD countries, a person with a tertiary education can expect to earn over 50% more than a person with an upper secondary education. At 37%, this premium is much lower in Estonia and among the lowest in the OECD area (ranks 25 of 32 countries). However it increased from 29% in 2008 to 37% in 2009, suggesting that the supply of tertiary-educated workers has not kept up with demand.

Meanwhile, the penalty for not completing high school is small. Someone who has not completed an upper secondary education can expect to receive 91% of a high school graduate's earnings (compared to 77%, on average, across OECD countries). Only in Finland and Belgium do those without a baseline qualification earn as much (Table A8.2a).

...as employers pay below the average for qualified labour.

The overall cost structure in Estonia is considerably lower than in other OECD countries. The annual labour cost is the second lowest after Poland and amounts to USD 13 147 for a worker without an upper secondary qualification (about USD 25 000 less than the OECD average), USD 14 346 for a worker with a baseline qualification (about USD 30 000 less than the OECD average) and USD 19 480 for a worker with a tertiary degree (about USD 50 000 less than the OECD average) (Table A10.1).

Employers usually pay an additional premium not only for education but also for labour-market experience. On average in OECD countries, an employer can expect to pay an additional USD 29 000 (about 50% more) per year for a man with a tertiary degree and work experience. However, in Estonia, labour costs for a man who recently graduated are higher than those for their experienced peers (Tables A10.2 and A10.4).

The skills premium in Estonia (the ratio of the labour cost of those with a tertiary degree to the labour cost of a worker without an upper secondary qualification) is among the 6th lowest in OECD countries (1.48 against 1.78, on average, in OECD countries). This may be because the proportion of tertiary-educated adults is larger than the OECD average (see Indicator A1) and does not increase among younger age groups.

In Estonia, these labour costs translate into net incomes in purchasing power that amount to USD 9 346 for workers without an upper secondary qualification, USD 10 144 for those with an upper secondary degree, and 13 566 for those with a tertiary qualification. These are the smallest after-tax gains among OECD countries. And the difference between those without an upper secondary education and those with a tertiary education – less than USD 4 300 – is the smallest among OECD countries (Tables A10.1).