Chile

The output of educational institutions and the impact of learning

- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Chile, the share is 12%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Chile is no exception. In 2020 the employment rate among 25-34 year-olds with tertiary education in Chile was 23 percentage points higher than among those with below upper secondary attainment and 19 percentage points higher than among those with upper secondary or post-secondary nontertiary attainment. On average across OECD countries, the employment rate among 25-34 yearolds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Chile, 44% of women with below upper secondary attainment were employed in 2020, compared to 77% of those with tertiary attainment. In contrast, the figures were 68% and 83% for men.
- Educational attainment affects not just employment prospects, but also wage levels. On average
 across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary
 attainment earn 29% more than workers with below upper secondary attainment, while those with
 tertiary attainment earn about twice as much. In Chile, the earnings advantage of tertiary-educated
 workers was even greater than the OECD average. In 2018, workers with upper secondary
 attainment earned 44% more than those with below upper secondary attainment and those with
 tertiary attainment earned more than three times as much.
- National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Chile. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Santiago Metropolitan Region, at 38%) and that with the lowest share (O'Higgins, at 21%) was 17 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

Access to education, participation and progress

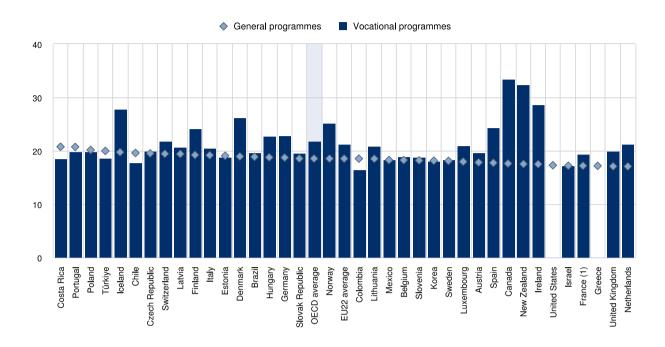
• Compulsory education begins at the age of 6 and ends at the age of 18 in Chile. The range of ages for which at least 90% of the population are enrolled is identical to the period of compulsory

education and goes from the age of 5 to the age of 17. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education.

- The age at which children enter early childhood education differs widely across countries. In Chile, early childhood education starts offering intentional education objectives for children younger than 1 and 20% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Chile, 77% of all children of this age are enrolled in early childhood education, which is slightly below the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 20 years in Chile. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Chile, the average age of graduation from vocational upper secondary education is 18 years, which is below the OECD average at 22 years (Figure 1).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Chile, the share is 52% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Chile where they make up 52% of all vocational upper secondary graduates, below the OECD average (55%).
- In Chile, 55% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (slightly above the OECD average of 54%). A subset of these students (8% of 18-24 year-olds) combine their education or training with some form of employment in Chile, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, including Chile, all vocational upper secondary graduates have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Chile are bachelor's students (66%). However, the next commonest enrolment level varies from country to country. In Chile, short-cycle tertiary students make up the second largest group of tertiary students at 26%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.
- At 23%, business, administration and law was the most popular field of study among new entrants into tertiary education in Chile, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Chile, 90% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 5% of new entrants into tertiary education. This is below the OECD average of 6%.

Figure 1. Average age of first-time upper secondary graduates, by programme orientation (2020)





1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes. **Source**: OECD//Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022 X3-B.pdf).

Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Chile, the corresponding share was 6.5%. Between 2008 and 2019, funding for educational institutions from all sources grew by 62% in Chile. Over the same period of time, the increase in GDP was lower with 36%. As a consequence, expenditure on educational institutions as a share of GDP grew by 1 percentage point over the same time period.
- Public spending on primary to tertiary education was 17.4% of total government expenditure in Chile (Figure 2), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.6%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures
 of the importance that countries place on education in their budgeting decisions. However, they do
 not show the total amount of funding per student because GDP levels, public budgets and student
 numbers vary from country to country. Across primary to tertiary education, OECD countries spend
 an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on
 educational institutions each year. In comparison, Chile spent USD 7 239 per student in 2019. Its
 cumulative expenditure on educating a student from the age of 6 to 15 was USD 60 627, which
 was significantly below the OECD average of USD 105 502.

Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)

Tertiarv Secondary and post-secondary non-tertiary Primary 20 15 10 5 0 Norway Brazil Mexico lceland Ireland Rica (1) Korea Finland Slovenia Latvia India (1) Israe Türkiye Belgium Estonia Austria Republic France Chile South Africa (1) Switzerland (1) Sweden Denmark United States Netherlands **New Zealand** Canada (2) Argentina Australia OECD average Czech Republic Poland Lithuania Spain Japan Italy Hungary Greece Jnited Kingdom Portugal EU22 average Colombia Germany -uxembourg Costa Slovak I

Primary to tertiary education (including R&D), in per cent

1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

Source: OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022 X3-C.pdf).

- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Chile, the values are USD 6 018 at primary and USD 5 997 per student at secondary level, which are among the lowest across OECD countries.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Chile is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Chile is USD 10 253 per year, which is about USD 4 200 higher than that of the primary level and USD 4 300 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 4%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Chile than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 19% in Chile in 2019. In contrast, private expenditure at

tertiary level was higher in all OECD countries. In Chile, the share of private expenditure at tertiary level reached 61%, which was above the OECD average of 31%, after public-to-private transfers. These latter accounted for 10% of expenditure on educational institutions at this level.

Focus on tertiary education

- Among 25-64 year-olds in Chile, bachelor's degrees are the most common tertiary attainment at 19% of the population followed by short-cycle tertiary qualifications at 10% and master's and doctoral degrees with 2%. This is similar to the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%).
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2020, employment rates in Chile were highest among tertiary-educated individuals who studied medical and dental fields with 92% and lowest among those who studied natural sciences, mathematics and statistics or natural sciences, mathematics and statistics at 78%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 15.5 percentage points higher than among those with upper secondary attainment (all fields combined).
- Wages also differ according to the field of study. In Chile, tertiary attainment in engineering, manufacturing and construction generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average more than twice as much as workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in the field of education leads to the lowest wages. Workers with this educational background earn on average 68% more than the wage of workers with upper secondary attainment (all fields combined).
- In most OECD countries including in Chile, tertiary-educated adults have higher rates of participation in non-formal education and training than those with a lower level of educational attainment. In 2015, 68% of 25-64 year-olds with tertiary attainment in Chile had participated in non-formal education and training in the twelve months prior to being surveyed, compared to 24% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Chile, comparatively high levels of tuition fees are combined with midrange levels of financial support for students. Public institutions charge tuition fees of USD 8 131 for national students at bachelor's level and of USD 11 274 at master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families. Chile falls between the two groups, with 61% of students receiving financial support.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Chile, 70% of tertiary students are enrolled in such institutions. Independent private institutions charge

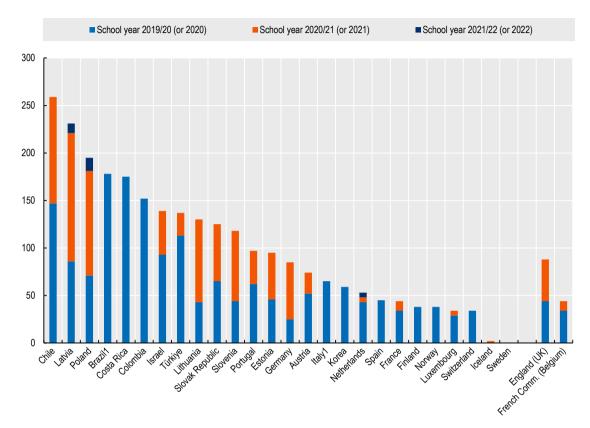
higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.

COVID-19: The second year of the pandemic

- The COVID-19 pandemic disrupted traditional schooling in 2020 and the first half of 2021, leading to school closures across all OECD countries. While most shut down their premises entirely in the wake of the pandemic in 2020, by 2021 the situation had improved and returned to normal in most countries in 2022. In Chile, primary and secondary schools were entirely closed for 147 days in 2020, for 112 days in 2021 and stayed open in 2022 (Figure 3). Partial closures reached 48 days in 2020 and 68 days in 2021.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Chile rescheduled its national examinations in 2020.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Chile has conducted studies to evaluate the effects of the pandemic on the impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics, reading and science. Like many other countries, Chile also evaluated dimensions such as the mental health and well-being of students.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Chile at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included accelerated education or catch-up programmes for students who dropped out of school, community mobilisation campaigns to bring students back to school, adjustments to subject curricula, early warning systems to identify students at risk of dropping out, additional school nutrition services, psychosocial and mental health support to students, individualised self-learning programmes, increased instruction time through summer schools, extended school days or the school week or academic year and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Chile has responded to the pandemic with an enhanced provision of digital tools at school, in-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary level in Chile declined slightly (by between 1% and 5%, in nominal terms), while it increased slightly (by between 1% and 5%) at primary to upper secondary level and increased strongly (by more than 5%) at the tertiary level.

Figure 3. School closures due to COVID-19 (2020, 2021 and the first quarter of 2022)

Number of instruction days of full closure of lower secondary schools excluding school holidays, public holidays and weekends



Note: The data underlying this report were produced through the Survey on Joint National Responses to COVID 19, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank (WB), and the Organisation for Economic Co-operation and Development (OECD). Data for other levels of education are available at https://www.oecd.org/education/Results-4th-wave-COVID-Survey-OECD-database.xlsx.

1. Data for 2021 and 2022 are missing.

Countries and other participants are ranked in descending order of the total number of days lower secondary schools were fully closed during the school years 2019/20 (2020), 2020/21 (2021) and 2021/22 (2022).

Source: OECD/UIS/UNESCO/UNICEF/WB (2022).

References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <u>https://dx.doi.org/10.1787/69096873-en</u>.

OECD (2022), "Regional education", OECD Regional Statistics (database), https://dx.doi.org/10.1787/213e806c-en.

More information

For more information on Education at a Glance 2022 and to access the full set of Indicators, see: https://doi.org/10.1787/3197152b-en

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, See Annex 3 (https://www.oecd.org/education/education-at-a-glance/EAG2022 X3.pdf).

For general information on the methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (<u>https://doi.org/10.1787/9789264304444-en</u>).

Updated data can be found on line at <u>http://dx.doi.org/10.1787/eag-data-en</u> and by following the *StatLinks* and *statLinks* under the tables and charts in the publication.

Data on subnational regions for selected indicators are available in the OECD Regional Statistics (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

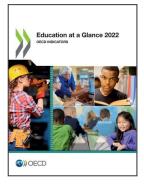
https://gpseducation.oecd.org/

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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