# Indicator B2. How do early childhood education systems differ around the world?

# **Highlights**

- More children under the age of 3 are enrolling in early childhood education and care. The share has risen from 22% in 2015 to 25% on average across OECD countries.
- There were fewer pre-primary children per teaching staff across most OECD and partner countries in 2019 than in 2015. This is mostly due to a higher increase in the number of teachers compared to the number of children enrolled over this period.
- Despite the high share of private funding in ECEC in some countries, public-to-private transfers remain very low. In 2018, they represented less than 1% of total expenditure on pre-primary institutions on average across OECD countries.

#### Context

There is an increasing awareness of the key role that early childhood education and care (ECEC) plays in children's cognitive and emotional development, learning and well-being. Children who start strong are more likely to have better education outcomes when they grow older. This is particularly true for children from disadvantaged socio-economic backgrounds, because they often have fewer opportunities to develop these abilities in their home-learning environments (OECD, 2017[1]).

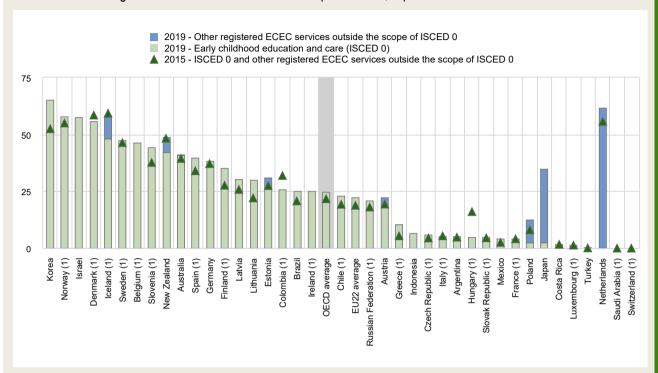
Affordable and accessible ECEC makes it easier for parents to take on employment and contribute to economic prosperity and growth. The increasing number of women entering the labour market has increased governments' interest in expanding ECEC services. High-quality ECEC services and other provisions to improve parents' work-life balance provide greater opportunities to enter employment and combine work and family responsibilities (OECD, 2018<sub>[2]</sub>; 2011<sub>[3]</sub>; 2016<sub>[4]</sub>).

Such evidence has prompted policy makers to design early interventions, to take initiatives that aim to enhance the quality of ECEC services and improve the equity of access to ECEC settings, lower the starting age of compulsory education, and to rethink education spending patterns to gain "value for money" (Duncan and Magnuson, 2013<sub>[5]</sub>). Despite these general trends, there are significant differences across OECD countries in the quality of ECEC services provided to young children, the types of ECEC services available and the usual number of hours per week each child attends.

The global COVID-19 pandemic has severely impacted the delivery of ECEC services as settings around the world closed down to contain the spread of the virus. Relying strongly on private funding in some countries, enrolment disruptions due to health and safety concerns and declining household budgets following job loss and insecurity, have jeopardised the future of a number of ECEC settings and the participation rates of young children (OECD, 2021[6]).

Figure B2.1. Enrolment rates of children under age 3 in early childhood education and care, by type of service (2015 and 2019)

ISCED 0 and other registered ECEC services outside the scope of ISCED, in per cent



Note: 2015 refers to both early childhood education and care (ISCED 0) and other registered ECEC services outside the scope of ISCED 0 (except for OECD and EU averages which only cover services within ISCED 0).

1. Data for 2015 excludes other registered ECEC services..

Countries are ranked in descending order of the enrolment rates in ISCED 0 of children under age 3 in 2019.

Source: OECD (2021), Table B2.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-aglance/EAG2021 Annex3 ChapterB.pdf).

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# Other findings

- Countries with lower levels of participation in ECEC tend to have starker regional variation, while participation in countries with higher levels of enrolment is more equitably distributed across the territory.
- Annual expenditure per child enrolled in early childhood development services (ISCED 01) is significantly higher than for pre-primary education (ISCED 02), averaging about USD 14 400 across OECD countries. The higher cost is mostly driven by the fewer number of children per teacher: on average, there are five children less per teacher in early childhood development services than in pre-primary education.
- About a third of children in pre-primary education are enrolled in private institutions on average across OECD countries. The source of funding in ECEC does not necessarily reflect the entity providing the service: the public sector provides for at least 50% of total costs, even in countries where almost all pre-primary children attend private institutions.

# **Analysis**

There is a growing consensus among OECD countries of the importance of high-quality early childhood education and care (ECEC). However, the type of ECEC services available to children and parents in OECD countries differ greatly. There are variations in the targeted age groups, the governance of centres, the funding of services, the type of delivery (full-day versus part-day attendance) and the location of provision, whether in centres or schools, or at home (OECD, 2017[1]).

The organisation of national ECEC systems is diverse across countries, primarily regarding the highest administrative authorities in charge and whether the system is split or integrated at the national level. About half of the OECD countries with available data have integrated ECEC services, where one or more authorities are responsible for administering the whole ECEC system and setting adequate intentional education for children from the ages of 0 or 1 until they start primary education (see Box B2.1 in (OECD, 2019<sub>[7]</sub>)).

Generally, formal ECEC services can be further classified into two categories:

- ECEC services that comply with the ISCED 2011 classification must: 1) have adequate intentional educational properties; 2) be institutionalised; 3) have an intensity of at least 2 hours per day of educational activities and a duration of at least 100 days per year; 4) have a regulatory framework recognised by the relevant national authorities; and 5) have trained and accredited staff (OECD/Eurostat/UNESCO Institute for Statistics, 2015[8]).
- Other registered ECEC services that are an integral part of countries' ECEC provision but that do not comply with
  one or more of the criteria to be considered an educational programme under the ISCED 2011 classification
  (e.g. crèches in France or amas in Portugal). While such programmes exist in many countries, particularly for children
  under age 3, not all are able to report the number of children enrolled in them. For this reason, data relating to
  participation in ECEC services that comply with the ISCED 2011 classification and those that do not are explicitly
  presented and analysed separately in this chapter.

Informal care services (generally unregulated care arranged by the child's parents either in the child's home or elsewhere, provided by relatives, friends, neighbours, babysitters or nannies) are not covered by this indicator (see the *Definitions* section for more details).

## Enrolment in early childhood education and care

#### Enrolment of children under age 3

Participation in high-quality ECEC in the first years of children's lives can have a positive effect on their well-being, learning and development in the short and the long term (OECD, 2018[9]; 2018[2]). The availability and length of parental leave, as well as the typical starting age for ECEC influence the age at which children are likely to begin attending such services. Other factors such as cultural perspectives on the role of women in the workplace and as primary caregivers are also likely to be important. In 2019, about one in four children under age 3 was enrolled in a formal ECEC setting on average across OECD countries, though enrolment in formal ECEC services shows only one part of the picture for young children under age 3, ranging from 2% or less in Costa Rica, Japan, Luxembourg, the Netherlands, Saudi Arabia, Switzerland and Turkey to more than 50% in Denmark, Israel, Korea and Norway (Figure B2.1).

Although early childhood development services caters to children under the age of three, the typical starting age may differ across countries. In most of them, children may enrol within the first year of birth, while in a few countries and for specific programmes within countries, children may enter at age 1 or 2. However, in many countries, a large share of children under age 3 attend other ECEC services that do not comply with one or more of the criteria of the ISCED classification. For example, in Japan, 32% of children under age 3 are enrolled in such settings, compared to 2% in formal ECEC. In the Netherlands, formal ECEC settings in adherence with the ISCED criteria for children under age 3 do not even exist, while about two-thirds of children in this age group attend other ECEC services (Figure B2.1).

On average across OECD countries, the enrolment of young children under age 3 has risen steadily in most OECD countries since 2005. Some countries have particularly accelerated the expansion of ECEC for children under age 3 in recent years. For example, 35% of children under age 3 were enrolled in ECEC (ISCED 0) in Finland in 2019 compared to 28% in 2015 and 25% in 2005. Korea witnessed the largest expansion between 2015 and 2019, with the enrolment of children under age 3 increasing by 13 percentage points. In some countries, the enrolment of young children under the age of 3 has declined between 2015 and 2019. This is the case in Colombia and Denmark (Table B2.1).

In many European countries, the expansion of ECEC has been a result of further stimulus from the objectives set by the European Union (EU) at its Barcelona 2002 meeting to supply subsidised full-day places for one-third of children under age 3 by 2010 (OECD, 2017[1]). Globally, the rise in ECEC provision over recent decades is strongly correlated to the increase in women's participation in the labour force, particularly for mothers with children under age 3. Countries with higher enrolment rates of children under age 3 in 2019 tend to be those in which the employment rates of mothers are the highest (see Table B2.1 in OECD (2018[2])).

Despite efforts to increase the affordability and access to ECEC for very young children, the likelihood of participation is still very contingent on family income, particularly in early childhood development services that rely strongly on private sources of funding. Data from the European Union Statistics on Income and Living Conditions (EU-SILC) Survey reveal that on average across European OECD countries, 0-2 year-olds in low-income households were one-third less likely to participate in ECEC (centre-based care, organised family day care, care services provided by (paid) professional childminders, and, in some countries, children in primary education) than 0-2 year-olds in high-income households in 2017. In some countries, such as France and Ireland, the difference in participation rates between children from high- and low-income families exceeds 40 percentage points. In contrast, in Denmark, there is a high participation rate of young children in ECEC regardless of parents' income level (OECD, 2020[10]).

# Enrolment of children from age 3 to 5

Bringing forward the starting age of compulsory schooling has been the focus of policy reform in recent years as research suggests that an early start to a quality education can be beneficial for children's development and can help prepare them for school. A decade ago, most OECD countries saw the start of compulsory education coincide with the start of primary school. But today, in many OECD countries, ECEC begins for most children long before they turn 5 years old. Some countries have lowered the age at which formal schooling starts. In Colombia, Greece, the Netherlands, Poland and Sweden, compulsory education starts one year before entry into primary school. In a few cases, compulsory education starts even earlier, at age 3 in France, Hungary, Israel and Mexico, at age 4 in Costa Rica and Luxembourg and at age 4-5 in Switzerland. Even in countries where compulsory education does not start until age 5 or 6, from the first year of primary school, many OECD countries offer universal legal entitlements to a place in ECEC services for at least one or two years before the start of compulsory schooling.

Although participation in ECEC is not compulsory in all countries, enrolment of 3-5 year-olds is still very common across OECD countries, with 87% of 3-5 year-olds enrolled in ECEC and primary on average. In more than half of the 42 OECD and partner countries with available data, the enrolment of children between the ages of 3 and 5 is nearly universal, i.e. at least 90%. The highest enrolment rates of 3-5 year-olds in ECEC and primary education are found in Belgium, Denmark, France, Iceland, Ireland, Israel, Norway, Spain and the United Kingdom, where they equal or exceed 97%. In contrast, less than 50% of 3-5 year-olds are enrolled in education in Saudi Arabia, Switzerland and Turkey (Table B2.1). Lower enrollment in ECEC may be due to insufficient places available, lack of awareness by parents of the importance of ECEC or limited public coverage of early learning settings (OECD, 2017[11])

In the past decades, enrolment of 3-5 year-olds in education has been expanding as a result of the extension of compulsory education to younger children, the increased provision of free ECEC for some ages and targeted population groups, and universal provision for older children. Between 2015 and 2019, the average enrolment of 3-5 year-olds in pre-primary and primary education in OECD countries rose by 2 percentage points. A few countries have seen spectacular increases, of more than 5 percentage points, in the enrolment of 3-5 year-olds over this period, including Brazil, Colombia, Costa Rica, Finland, Greece, Poland and the Slovak Republic. In contrast, other countries have not shown much change, mostly as enrolment levels were already high in 2015. Switzerland is the only country where enrolment was low in 2015 (less than one in two 3-5 year-olds were enrolled in education) and there has not been any significant progress since. This is due to the lack of compulsory education programmes for 3-year-olds in Switzerland, where pre-primary education is intended for children aged 4 and over (Table B2.1).

The vast majority of 3-5 year-old children enrolled in education attend pre-primary education across most OECD countries. However, in some countries such as Australia, Ireland, New Zealand and the United Kingdom, primary education begins at age 5 (Annex 1). The age at which children transition to primary education has long been debated across OECD countries: while ECEC programmes aim to develop the cognitive, physical and socio-emotional skills needed to participate in school and society, primary education is designed to give pupils a sound basic education in reading, writing and mathematics, along with a preliminary understanding of other subjects (OECD/Eurostat/UNESCO Institute for Statistics, 2015[8]). While good quality ECEC can have a beneficial impact for young children, a large body of evidence indicates the crucial importance of child-led free play in young children's development, before engaging in a more academically oriented programme (OECD, 2017<sub>[11]</sub>).

### Regional variation in the enrolment of 3-5 year-olds

Equitable access to quality ECEC can strengthen the foundations of lifelong learning for all children and support the broad educational and social needs of families. Among the various equity dimensions, geographical location may hinder access to a quality education, particularly in rural regions where the provision of ECEC settings may be unequal and families may have to travel long distances to access the nearest setting.

Higher levels of participation in ECEC among 3-5 year-olds at national level tend to be associated with lower disparities among regions. Most countries where the enrolment of 3-5 year-olds in ECEC was above 90% also had low regional variation, with a standard deviation below 7%. Similarly, the countries with the lowest levels of participation in ECEC also had the highest disparities across regions. In Switzerland and the United States, more than 40 percentage points separate the regions with the highest and lowest enrolment of 3-5 year-olds. Both countries are highly federal with a great degree of autonomy in the organisation of ECEC. Low levels of enrolment may be due to lower provision of ECEC and the inability of some families to travel to the nearest ECEC setting in certain regions, particularly the more rural ones.

Children in capital cities are less likely to participate in ECEC in a number of countries. For example, in Chile, enrolment of 3-5 year-olds in the Santiago metropolitan is among the lowest in the country. Even in countries such as the Czech Republic, Italy, Korea, Norway, Portugal, Sweden or Spain, where the enrolment of 3-5 year-olds exceeds 90% nationally, capital cities tend to have among the lowest share of young children participating to ECEC. Lower provision of public ECEC compared to demand and the higher prevalence of privately managed settings in capital cities may explain a lower participation rate in urban areas. In contrast, publicly managed centres are significantly more likely to be located in more rural areas, underlining the role of the public sector in ensuring equal access to ECEC settings across the national territory (OECD, 2019<sub>[12]</sub>).

# Staffing of early childhood education and care

#### Child-staff ratios

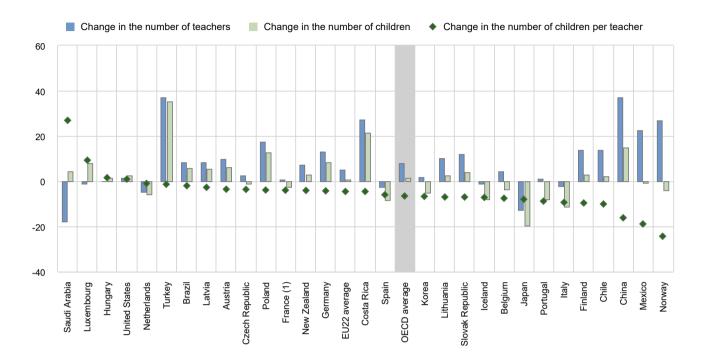
Research demonstrates that enriched, stimulating environments and high-quality pedagogy are fostered by better-qualified practitioners, and that better-quality child-staff interactions facilitate better learning outcomes. In that context, lower child-staff ratios are found to be consistently supportive of child-staff relationships across different types of ECEC settings. Smaller ratios are often seen as beneficial, because they allow staff to focus more on the needs of individual children and reduce the amount of class time spent addressing class disruptions (OECD, 2020[13]).

The ratio of children to teaching staff is an important indicator of the resources devoted to education. Child-staff ratios and group sizes are part of the regulations used to improve the quality of ECEC. On average across OECD countries, there are 15 children for every teacher working in pre-primary education, but wide variations exist across countries. The ratio of children to teaching staff, excluding teachers' aides, ranges from fewer than 10 children per teacher in Denmark, Finland, Germany, Iceland and New Zealand to 20 or more in Brazil, Chile, Colombia, France, India, Mexico, Slovenia and the United Kingdom (Table B2.2).

Between 2015 and 2019, the number of children per teaching staff at pre-primary level dropped across most OECD and partner countries. In most of these countries, the drop in the ratio of children to teaching staff is due to stronger growth in the number of teachers compared to the number of children enrolled in pre-primary education. In Belgium, the Czech Republic, France, Korea, Mexico, Norway and Portugal, the number of teachers increased despite a drop in the number of children enrolled since 2015. Finally, in Iceland, Italy, Japan, the Netherlands and Spain, the number of children enrolled in pre-primary education declined at a faster rate than the number of teachers. Between 2015 and 2019, the child-to-teacher ratio increased by 9% or more in Luxembourg and Saudi Arabia. This was the combined effect of both an increase in the number of enrolled pre-primary children and a decrease in the number of teachers (Figure B2.2).

Figure B2.2. Changes in the number of children, the number of teachers and the number of children per teacher in pre-primary education between 2015 and 2019

In per cent



1. Data on ratios of children to staff are presented for public institutions and government-dependent private institutions. Countries are ranked in descending order of the change over the period 2015-19 in the ratio of children to teaching staff in pre-primary education. Source: OECD (2021), Table B2.2 and Education at a Glance database, http://stats.oecd.org. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2021\_Annex3\_ChapterB.pdf).

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Lower child-to-staff ratios are particularly important for quality interactions with children under age 3 (OECD, 2018[9]). With the exception of Hungary, Indonesia and Lithuania, the child-to-teacher ratio in early childhood development services (ISCED 01) is consistently lower than for pre-primary education (ISCED 02) across all OECD member and partner countries. On average across OECD countries, there are 10 children for every teacher working in early childhood educational development services, ranging from 31 in the United Kingdom to 3 in Denmark, Iceland and New Zealand (Table B2.2).

Some countries - Austria, Chile, France, Lithuania, Norway, Slovenia, Sweden and the United Kingdom - also make extensive use of teachers' aides, which can be seen from the smaller ratios of children to contact staff compared to children to teaching staff. Teachers' aides assist teachers in their daily tasks, support children with special needs and are expected to perform certain educational tasks autonomously. In most countries, they have a lower qualification level than teachers, often an upper secondary vocational qualification. In some countries, additional selection is required to qualify as a pre-primary school assistant. For example, in Slovenia, it is required to pass a state professional examination in education to qualify as an assistant at pre-primary level.

#### Financing early childhood education and care

Sustained public financial support is critical for the growth and quality of ECEC programmes. Appropriate funding helps to recruit trained staff who are qualified to support children's cognitive, social and emotional development. Investment in early childhood facilities and materials also helps support the development of child-centred environments for well-being and learning. In countries that do not channel sufficient public funding towards achieving both broad access and high-quality programmes, some parents may be more inclined to send their children to private ECEC services. Moreover, if the cost of ECEC is not sufficiently subsidised, the ability of parents to pay will greatly influence participation in ECEC of children from disadvantaged socio-economic backgrounds (OECD, 2017<sub>[1]</sub>).

#### Expenditure per child

In pre-primary education, annual expenditure for both public and private settings averaged about USD 9 300 per child in OECD countries in 2018, ranging from less than USD 1 400 in Colombia to more than USD 15 000 inIceland, Luxembourg, Norway and Sweden. Child-to-staff ratios and teacher compensation are a main driver of spending at pre-primary level, as countries with lower child-to-staff ratios tend to spend more per child. Other factors, such as the number of hours per year an ECEC setting is required to be open, also influence expenditure levels. For example, pre-primary settings in Norway are open 48 weeks a year on average, compared to about 35 weeks in Belgium, Greece, Israel and Spain (see Box B2.2 in (OECD, 2018<sub>[14]</sub>)).

Annual expenditure per child enrolled in early childhood educational development services (ISCED 01) is significantly higher than for pre-primary education (ISCED 02), averaging about USD 14 400 across OECD countries. However, this masks wide variation across countries: in Australia, Chile and Lithuania, spending in early childhood educational development services is at most USD 1 000 more per child than at pre-primary level, compared to at least USD 10 000 more in Denmark, Finland and Norway. Hungary and Israel are the only OECD countries with data where spending per child in early childhood development services is lower than at pre-primary level.

The smaller child-to-staff ratio in early childhood development services is one of the main drivers of this difference (Table B2.2). However, it does not explain all of it. For example, although the child-to-teacher ratio in early childhood development services is about half its value in pre-primary education in Chile, spending increases by less than USD 1 000 per child. This may be partly due the lower qualifications required of teaching staff at this level, resulting in a lower salary cost in some countries. For example, in the Flemish Community of Belgium and in Greece, only an upper secondary qualification is required to teach in an early childhood development setting, compared to a bachelor's degree at pre-primary level

#### Expenditure as a percentage of gross domestic product

Spending on ECEC can also be analysed relative to a country's wealth. Expenditure on all ECEC settings accounted in 2018 for an average of 0.9% of gross domestic product (GDP) across OECD countries, of which two-thirds was allocated to preprimary education. While 0.3% or less of GDP was spent on pre-primary education (ISCED 02) in Australia, Colombia, Greece, Japan and the United Kingdom, countries such as Chile, Iceland, Israel, Norway and Sweden spent at least 1% of GDP (Table B2.3).

The differences on expenditure are largely explained by enrolment rates, legal entitlements and the intensity of participation, as well as the different starting ages for primary education. On the latter point, the shorter duration of pre-primary education, as a result of children's earlier transition from pre-primary to primary education in Australia, Ireland and the United Kingdom, partly explains why the expenditure on ECEC as a percentage of GDP is below the OECD average in these three countries. Similarly, late entry into primary education, as in Estonia, Finland, Latvia and Sweden, means a longer duration of ECEC than in other countries and may explain why those countries spend more as a percentage of GDP than the OECD average (see the information on starting ages for primary education in Table B2.1).

To avoid this distortion, an estimation of spending by age group has been included in the ECEC spending indicators since the 2019 edition of *Education at a Glance*. This methodology avoids the distortion arising from the differences in age groups attending ECEC, and compares expenditure on children of the same age, giving a more accurate picture of countries' investment in young children. As this indicator presents an estimation of the actual cost, the data should be interpreted with caution. Across OECD countries, the share of national resources devoted to 3-5 year-olds enrolled in ECEC and primary education is 0.6% of GDP. It ranges from 0.3% of GDP in Greece and Ireland to 1.0% or more in Chile, Iceland and Norway (Table B2.3).

#### Public and private provision and funding of early childhood education and care

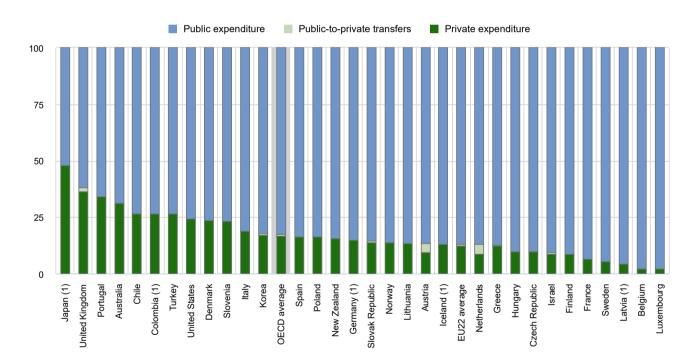
Parents' needs and expectations regarding accessibility, cost, programme, staff quality and accountability are all important in assessing the expansion of ECEC programmes and the type of providers. When parents' needs for quality, accessibility or

affordability are not met by public institutions, some parents may be more inclined to send their children to private ones (Shin, Jung and Park, 2009[15]).

Private institutions can be classified into two categories: independent and government-dependent. Independent private institutions are controlled by a non-governmental organisation or by a governing board not selected by a government agency and receive less than 50% of their core funding from government agencies. Government-dependent private institutions have similar governance structures, but they rely on government agencies for more than 50% of their core funding (OECD, 2018[16]). In most countries, the share of children enrolled in private institutions is considerably higher in early childhood education than at primary and secondary levels. On average across OECD countries, about half of the children in early childhood educational development services and a third of those in pre-primary education are enrolled in private institutions. This average, however, hides huge discrepancies across countries. In the Czech Republic, Lithuania, Slovenia, Switzerland and the Russian Federation, 5% or less of the children in pre-primary education attend private institutions. In a few countries, however, preprimary remains mostly private: in Australia, Indonesia, Ireland, Japan, Korea and New Zealand, at least 75% of children attending pre-primary programmes are enrolled in private institutions (Table B2.2).

Figure B2.3. Distribution of public and private expenditure on educational institutions in pre-primary education (2018)

In per cent



<sup>1.</sup> Information on public-to-private transfers is missing.

Countries are ranked in descending order of the share of private expenditure after public-to-private transfers.

Source: OECD (2021), Table B2.3. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-aglance/EAG2021 Annex3 ChapterB.pdf).

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Generally, there has been a substantial and increasing public investment in ECEC, although there are differences between pre-primary (ISCED 02) and early childhood educational development (ISCED 01). On average across OECD countries, private funding represented 29% of total expenditure on early childhood educational development and 17% on pre-primary education in 2018.

While the share of private funding varies significantly across countries, the source of funding does not necessarily reflect the entity providing the service. In all OECD member and partner countries, the public sector provides for at least 50% of total costs in pre-primary education, even in countries where almost all pre-primary children attend private institutions. In New Zealand, for example, although 99% of pre-primary children attend private institutions, the private sector provides for less than 20% of total costs, a lower share than in countries with significantly higher public provision of pre-primary education, such as Denmark or Slovenia (Figure B2.3). Different private entities may contribute to the funding of pre-primary education. In the United Kingdom, most of the private funding comes from households. In Japan, a high share of private cost is shared between households, foundations and the business sector, although private ECEC centres are publicly subsidised and household contributions to ECEC are capped.

Public-to-private transfers in the form of subsidies and financial support may help alleviate the financial burden on households to enrol their children in early childhood education. However, in 2018, public-to-private transfers on pre-primary institutions represented less than 1% of total expenditure on average across OECD countries. Among OECD countries, Austria and the Netherlands had the highest share of public-to-private transfers, representing about 4% of total expenditure on pre-primary institutions. In contrast, transfers from the public to the private sector were non-existent or represented less than 2% in countries with a strong reliance on private expenditure at pre-primary level, such as Australia or the United Kingdom (Figure B2.3).

As a result, early childhood education remains expensive for many parents, particularly for children under age 3, where households' financial contributions tend to be higher than at pre-primary level. Calculations using comparable data on childcare prices charged to parents, and accounting for all relevant support provisions, show that net costs average 17% of women's median full-time earnings for a middle-income two-earner couple. This varies from more than half of female median earnings or more in Japan and the United Kingdom to almost zero in Chile, Germany and Italy, where families with children in public childcare centres can benefit from heavily subsidised childcare fees or may be exempt from fee payments altogether (OECD, 2020[10]). Acknowledging the important role of ECEC in children's cognitive and emotional development and in facilitating parental employment, a number of countries have introduced measures to expand participation in ECEC. For example, since October 2019, free ECEC is a universal legal entitlement for children aged 3-5 in Japan (OECD, 2020[17]).

#### **Definitions**

**ECEC services:** The types of ECEC services available to children and parents differ greatly. Despite those differences, most ECEC settings typically fall into one of the following categories (OECD, 2017<sub>[1]</sub>) (Table B2.4):

- Regular centre-based ECEC: More formalised ECEC centres typically belong to one of these three subcategories:
  - Centre-based ECEC for children under age 3: Often called "crèches", these settings may have an educational
    function, but they are typically attached to the social or welfare sector and associated with an emphasis on care.
     Many of them are part time and provided in schools, but they can also be provided in designated ECEC centres.
  - Centre-based ECEC for children from the age of 3: Often called kindergarten or pre-school, these settings tend
    to be more formalised and are often linked to the education system.
  - Age-integrated centre-based ECEC for children from birth or age 1 up to the beginning of primary school: These settings offer a holistic pedagogical provision of education and care (often full-day).
- **Family childcare ECEC:** Licensed home-based ECEC, which is most prevalent for children under age 3. These settings may or may not have an educational function and be part of the regular ECEC system.
- Licensed or formalised drop-in ECEC centres: Often receiving children across the entire ECEC age bracket and
  even beyond, these drop-in centres allow parents to complement home-based care by family members or family
  childcare with more institutionalised services on an ad hoc basis (without having to apply for a place).

Some of these ECEC services are in adherence with the criteria defined in the ISCED 2011 classification (see ISCED 0 definition). Others are considered an integral part of countries' ECEC provision, but are not in adherence with all the ISCED criteria. Table B2.5, available on line, makes the distinction between these two categories explicit.

**Informal care services:** Generally unregulated care arranged by the child's parent either in the child's home or elsewhere, provided by relatives, friends, neighbours, babysitters or nannies; these services are not covered in this indicator.

**ISCED 01** refers to early childhood educational development services, typically aimed at children under age 3. The learning environment is visually stimulating, and the language is rich and fosters self-expression, with an emphasis on language

acquisition and the use of language for meaningful communication. There are opportunities for active play so that children can exercise their co-ordination and motor skills under supervision and in interaction with staff.

ISCED 02 refers to pre-primary education, aimed at children in the years immediately prior to starting compulsory schooling, typically aged 3-5. Through interaction with peers and educators, children improve their use of language and their social skills, start to develop logical and reasoning skills, and talk through their thought processes. They are also introduced to alphabetical and mathematical concepts, understanding and use of language, and are encouraged to explore their surrounding world and environment. Supervised gross motor activities (i.e. physical exercise through games and other activities) and play-based activities can be used as learning opportunities to promote social interactions with peers and to develop skills, autonomy and school readiness.

Teachers and comparable practitioners: Teachers have the most responsibility for a group of children at the class or playroom level. They may also be called pedagogue, educator, childcare practitioner or pedagogical staff in education, while the term teacher is almost universally used at the primary level.

Teachers' aides: Aides support the teacher in a group of children or class. They usually have lower qualification requirements than teachers, which may range from no formal requirements to, for instance, vocational education and training. This category is only included in the Education at a Glance indicator on the child-to-staff ratio.

Please see Indicators C1 and C2 for definitions of expenditure per student on educational institutions and expenditure on educational institutions relative to GDP, and Indicator D2 for the definition of child-to-staff ratios.

# Methodology

#### **Enrolment rates**

Net enrolment rates are calculated by dividing the number of children of a particular age group enrolled in ECEC by the size of the population of that age group. While enrolment and population figures refer to the same period in most cases, mismatches may occur due to data availability and different sources used in some countries resulting in enrolment rates exceeding 100%.

#### Full-time and part-time children

The concepts used to define full-time and part-time participation at other ISCED levels, such as study load, child participation, and the academic value or progress that the study represents, are not easily applicable to ISCED level 0. In addition, the number of daily or weekly hours that represent typical full-time enrolment in an education programme at ISCED level 0 varies widely between countries. Because of this, full-time equivalents cannot be calculated for ISCED level 0 programmes in the same way as for other ISCED levels. For data-reporting purposes, countries separate ISCED level 0 data into ISCED 01 and ISCED 02 by age only, as follows: data from age-integrated programmes designed to include children younger and older than 3 are allocated to levels 01 and 02 according to the age of the children. This may involve the estimation of expenditure and personnel at levels 01 and 02. For more information, see the OECD Handbook for Internationally Comparative Education Statistics (OECD, 2018[16]) and Annex 3 for country-specific notes (https://www.oecd.org/education/education-at-aglance/EAG2021 Annex3 ChapterB.pdf).

# Estimated expenditure for all children aged 3-5 enrolled in ECEC and primary education as a percentage of GDP

The calculation of this new measure is based on the distribution of children aged 3-5 enrolled in ISCED 01, ISCED 02 and primary education (ISCED 1). For each country, the calculation was based on what proportion of all children enrolled at each of these three ISCED levels were aged 3-5. For instance, in Australia, children aged 3-5 accounted for 5% of all children enrolled in ISCED 01, 99% of all children enrolled in ISCED 02 and 12% of all children enrolled in ISCED 1. These percentages were used to estimate total expenditure for all children aged 3-5 enrolled in ECEC and primary education. Total expenditure for all children aged 3-5 is calculated by: 5% of all expenditure in ISCED 01 and 99% of all expenditure in ISCED 02 and 12% of all expenditure in ISCED 1. A similar calculation was made for all countries.

# Source

Data refer to the reference year 2019 (school year 2018/19) and financial year 2018.

Data from Argentina, the People's Republic of China, India, Indonesia, Saudi Arabia and South Africa are from the UNESCO Institute of Statistics (UIS).

Data are based on the UNESCO-UIS/OECD/Eurostat data collection on education statistics administered by the OECD in 2020 (for details, see Annex 3 at <a href="https://www.oecd.org/education/education-at-a-glance/EAG2021 Annex3 ChapterB.pdf">https://www.oecd.org/education/education-at-a-glance/EAG2021 Annex3 ChapterB.pdf</a>)).

Data on subnational regions for selected indicators are available in the OECD Regional Statistics (database) (OECD, 2021[18]).

#### References

Duncan, G. and K. Magnuson (2013), "Investing in preschool programs", <i>Journal of Economic Perspectives</i> , Vol. 27/2, pp. 109-132, <a href="http://dx.doi.org/10.1257/jep.27.2.109">http://dx.doi.org/10.1257/jep.27.2.109</a> .	[5]
OECD (2021), "Regional education", OECD Regional Statistics (database), <a href="https://dx.doi.org/10.1787/213e806c-en">https://dx.doi.org/10.1787/213e806c-en</a> (accessed on 27 July 2021).	[18]
OECD (2021), <i>The state of global education – 18 months into the pandemic</i> , OECD Publishing, Paris, <a href="https://doi.org/10.1787/1a23bb23-en">https://doi.org/10.1787/1a23bb23-en</a> .	[6]
OECD (2020), <i>Education at a Glance 2020: OECD Indicators</i> , OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/69096873-en">https://dx.doi.org/10.1787/69096873-en</a> .	[17]
OECD (2020), "Is childcare affordable?", <i>Policy Brief on Employment, Labour and Social Affairs</i> , OECD Publishing, Paris, <a href="https://www.oecd.org/els/family/OECD-ls-Childcare-Affordable.pdf">https://www.oecd.org/els/family/OECD-ls-Childcare-Affordable.pdf</a> (accessed on 11 May 2021).	[10]
OECD (2020), OECD Education Database, https://stats.oecd.org.	[13]
OECD (2019), <i>Education at a Glance 2019: OECD indicators</i> , OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/eag-2019-en">https://dx.doi.org/10.1787/eag-2019-en</a> .	[7]
OECD (2019), <i>Providing Quality Early Childhood Education and Care: Results from the Starting Strong Survey 2018</i> , TALIS, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/301005d1-en">https://dx.doi.org/10.1787/301005d1-en</a> .	[12]
OECD (2018), Education at a Glance 2018: OECD Indicators, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/eag-2018-en">https://dx.doi.org/10.1787/eag-2018-en</a> .	[14]
OECD (2018), Engaging Young Children: Lessons from Research about Quality in Early Childhood Education and Care, Starting Strong, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264085145-en">https://dx.doi.org/10.1787/9789264085145-en</a> .	[9]
OECD (2018), "How does access to early childhood education services affect the participation of women in the labour market?", <i>Education Indicators in Focus</i> , No. 59, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/232211ca-en">https://dx.doi.org/10.1787/232211ca-en</a> .	[2]
OECD (2018), OECD Handbook for Internationally Comparative Education Statistics 2018: Concepts, Standards, Definitions and Classifications, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264304444-en">https://dx.doi.org/10.1787/9789264304444-en</a> .	[16]
OECD (2017), Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care, Starting Strong, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264276116-en">https://dx.doi.org/10.1787/9789264276116-en</a> .	[1]
OECD (2017), Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education, Starting Strong, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264276253-en">https://dx.doi.org/10.1787/9789264276253-en</a> .	[11]

OECD (2016), Walking the Tightrope: Background Brief on Parents' Work-Life Balance across the Stages of Childhood, OECD, Paris, <a href="http://www.oecd.org/social/family/Background-brief-parents-work-life-balance-stages-childhood.pdf">http://www.oecd.org/social/family/Background-brief-parents-work-life-balance-stages-childhood.pdf</a>.

OECD (2011), How's Life?: Measuring Well-being, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264121164-en">https://dx.doi.org/10.1787/9789264121164-en</a>.

OECD/Eurostat/UNESCO Institute for Statistics (2015), ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264228368-en">https://dx.doi.org/10.1787/9789264228368-en</a>.

Shin, E., M. Jung and E. Park (2009), A Survey on the Development of the Pre-School Free Service Model, Korean Educational Development Institute, Seoul.

# **Indicator B2 tables**

# Tables Indicator B2. How do early childhood education systems differ around the world?

Table B2.1	Trends in enrolment rates in early childhood education and care and primary education, by age group (2005, 2015 and 2019)
Table B2.2	Percentage of children enrolled in private institutions, ratio of children to teaching staff, by ISCED 0 levels (2019) and index of change in the ratio of children to teaching staff (2015 = 100)
Table B2.3	Financing of early childhood education and care (ISCED 0) and change in expenditure (2018)
WEB Table B2.4	Coverage of early childhood education and care in OECD and partner countries

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Cut-off date for the data: 17 June 2021. Any updates on data can be found on line at: <a href="http://dx.doi.org/10.1787/eag-data-en">http://dx.doi.org/10.1787/eag-data-en</a>. More breakdowns can also be found at: <a href="http://stats.oecd.org">http://stats.oecd.org</a>, <a href="http://stats.oecd.org">Education at a Glance Database</a>.

Table B2.1. Trends in enrolment rates in early childhood education and care and primary education, by age group (2005, 2015 and 2019)

Public and private institutions

•	Juliano		tion	Under age 3					Age 3 to 5						
	Age when ECEC services (ISCED 0)	Typical starting age of primary education	Starting age of compulsory education	ECEC (ISCED 0)	Other registered ECEC services	ECEC (ISCED 0)	Other registered ECEC services	ECEC (ISCED 0)	Other registered ECEC services	ECEC (ISCED 0)	Primary education	ECEC (ISCED 0)	Primary education	ECEC (ISCED 0)	Primary education
	start offering intentional education objectives	(1)	(2)	2005	2005	2015	2015	2019	2019	2005	2005	2015	2015	2019 (13)	2019
Countries				, i	l í										
Countries Australia	0 years	5	6	m	m	39	1	41	0	m	25	58	28	57	26
Austria	0 years	6	6	6	m	17	2	20	3	76	0	88	0	90	0
Belgium <sup>1</sup>	Fl.: 3-6 months; Fr.: 2 years	6	6	m	m	m	m	46	m	m	0	m	0	98	0
Canada	3-4 years	6	6	m	m	m	m	m	m	m	m	m	m	m	m
Chile	3 months	6	6	m	m	19	0	23	m	m	6	78	0	80	0
Colombia	0 years	6	5	m	m	32	m	26	m	m	m	72	7	78	6
Costa Rica	0 years	6	4	m	m	2	m	2	m	m	m	53	0	62	0
Czech Republic	2-3 years	6	6	m	m	4	m	6	m	85	0	85	0	86	0
Denmark	26 weeks	6	6	m	m	58	m	56	m	m	m	97	1	97	0
Estonia	0 years	7	7	m	m	24	3	27	4	84	0	90	0	91	0
Finland	9 months	7	7	25	m	28	m	35	m	68	0	74	0	85	0
France	2-3 years	6	3	9	m	4	m	4	m	100	0	100	0	100	0
Germany	0 years	6	6	17	а	37	а	39	а	87	0	96	0	94	0
Greece	2 months	6	5	m	m	5	m	10	m	44	0	63	0	69	0
Hungary	20 weeks	7	3	m	7	5	11	5	m	m	0	91	0	93	0
Iceland	0 years	6	6	39	13	47	13	48	10	95	0	97	0	97	0
Ireland	3 years	5	6	m	m	m	m	25	m	m	47	m	45	59	40
Israel	0 years	6	3	m	а	m	а	57	а	m	0	99	0	99	0
Italy	2-3 years	6	6	4	m	5	m	5	m	98	2	92	3	92	2
Japan	3 years	6	6	m	16	m	22	2	32	88	0	91	0	94	0
Korea	0 years	6	6	m	а	52	а	65	а	m	0	92	0	93	0
Latvia	1.5 years	7	5	17	а	26	а	31	а	77	0	92	0	93	0
Lithuania	0 years	7	7	13	а	22	а	30	а	59	0	84	0	87	0
Luxembourg	0 years	6	4	m	m	1	m	1	m	83	1	85	2	87	2
Mexico	1.5 months	6	3	2	а	2	а	4	а	60	3	73	9	71	9
Netherlands	3 years	6	5	0	m	0	56	0	62	m	0	93	0	91	0
New Zealand	0 years	5	5	34	m	42	6	42	7	62	33	62	32	59	31
Norway	0 years	6	6	33	m	55	m	58	m	88	0	97	0	97	0
Poland	3 years	7	6	1	2	3	5	3	10	38	0	80	0	87	0
Portugal 1	0 years	6	6	19	m	m	1	m	m	77	1	89	0	92	0
Slovak Republic	2-3 years	6	6	7	m	5	m	5	m	73	0	72	0	78	0
Slovenia	11 months	6	6	25	m	38	m	44	m	75	0	88	0	92	0
Spain	0 years	6	6	15	m	34	m	40	m	98	0	97	0	97	0
Sweden	1 year	7	6	m	m	45	1	47	m	m	0	93	0	94	0
Switzerland	m m	6	4-5	2	m	0	m	0	m	47	0	49	0	49	0
Turkey	m	6	5-6	m	а	0	a	0	a	10	3	31	7	39	4
United Kingdom	0 years	5	4-5	m	m	m	m	m	m	m	46	67	33	68	32
United States <sup>1</sup>	m	6	4-6	m	m	m	m	m	m	64	2	65	2	64	2
				1	1	22		25		72	5	81		83	4
OECD average EU22 average				m m	m m	19	m m	25	m m	76	3	87	5 2	89	2
Δrgentina <sup>2</sup>	m	m	4	2	m	5	m	5	m	63	0	75	0	77	0
Argentina <sup>2</sup> Brazil China	0 years	6	4	m	а	21	а	25	а	m	m	76	3	84	2
china	m	6	m	m	m	m	m	m	m	m	m	m	m	m	m
India	m	6	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia <sup>2</sup>	m	m	7	m	m	m	m	7	m	m	m	m	m	68	1
Russian Federation	0 years	7	7	m	m	18	m	21	m	m	m	83	0	83	0
Saudi Arabia	m	m	6	m	m	0	m	0	m	m	m	18	0	20	1
South Africa <sup>2</sup>	m	m	7	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: Early childhood education = ISCED 0, other registered ECEC services soutside the scope of ISCED 0, because they are not adherence with all ISCED criteria. To be classified in ISCED 0, ECEC services should: 1) have an adequate intentional educational properties; 2) be institutionalised (usually school-based or otherwise institutionalised for a group of children); 3) have an intensity of at least 2 hours per day of educational activities and a duration of at least 100 days a year; 4) have a regulatory framework recognised by the relevant national authorities (e.g. curriculum); and 5) have trained or accredited staff (e.g. requirement of pedagogical qualifications for educators).

1. Excludes ISCED 01 programmes. For Belgium, excludes ISCED 01 programmes for the French Community of Belgium.

2. Year of reference 2018 instead of 2019.

Source: INES ad hoc survey and OECD/UIS/Eurostat (2021). See Source section for more information and Annex 3 for notes (<a href="https://www.oecd.org/education/education-at-a-glance/EAG2021">https://www.oecd.org/education/education-at-a-glance/EAG2021</a> Annex 3 ChapterB.pdf).

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

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Table B2.2. Percentage of children enrolled in private institutions, ratio of children to teaching staff, by ISCED 0 levels (2019)

and index of change in the ratio of children to teaching staff (2015=100) Index of change between 2015 and 2019 (2015=100) in the ratio of children Ratio of children to staff in full-time equivalents, by type of ECEC service to teaching staff (public and private institutions) in pre-primary education Percentage of children enrolled in private institutions ISCFD 02 Total (ISCED 0) Total (ISCED 02) ISCED 01 (government-dependent and independent private institutions) Children to contact staff (teachers and teachers and teachers) Children to teaching staff to teaching staf of teachers' aides contact staff of teachers' aides contact staff Children to contact staff to contact staff Share of teachers' aides among contact staff numbe numbe (teachers andteachers' aides) Children to contact st (teachers and teachers' aides) Change in the ratio of children per teaching staff Children to teaching Change in the n of children Change in the n of teachers (ISCED 0) ISCED 02 SCED 01 Share of tamong co Children Share of amongc Total ( (1) (2) (3) (7) (10) (13) (15) Australia 86 m m m m m m m m m m Austria 34 12 63 29 36 31 9 35 13 8 10 -4 8 6 Belaium m 53 m m m m а 14 14 m m m -4 4 -8 Canada m m m m m m m m m m m m m m m Chile 9 64 52 37 6 10 60 9 23 60 9 23 2 14 -10 Colombia 20 38 m m m Costa Rica 74 11 12 12 -5 15 5 11 21 27 Czech Republic 4 10 12 13 10 12 13 -1 2 -4 а а а а 22 Denmark 15 20 5 m m m m m m m m m Estonia x(3) 24 x(3)4 m m x(12)m m x(12)m m 8 m m m Finland 16 14 -10 m m m m m m m m 3 14 France а 14 14 а а а 35 15 23 35 15 23 -3 -4 Germany 73 65 67 9 4 5 9 8 9 9 7 7 8 13 -4 Greece 11 10 10 m m m m а m m m m m 18 12 13 13 13 2 Hungary 11 а 15 15 а а 13 0 Iceland 21 15 17 -8 -1 -7 а Ireland 100 99 99 x(10) 4 4 x(10) x(11) x(12) x(11) x(12) m m m Israel 100 35 59 m m m m m m m m m m m m Italy 28 28 12 12 12 12 -11 -2 -9 а а а а а а Japan 77 77 8 13 14 8 13 14 -20 -13 -8 Korea 87 75 79 5 5 12 12 8 8 -5 2 -7 а а а Latvia 19 8 10 10 q 8 -3 m m Lithuania 11 5 36 10 35 10 35 6 10 10 -7 Luxembourg 11 11 12 12 12 12 а а Mexico 70 16 18 71 6 19 20 20 10 18 20 22 -19 а Netherlands 28 28 13 14 16 13 14 16 а а а а -6 -5 -1 **New Zealand** 99 99 99 7 m m 3 m m 6 m m 5 3 -4 Norway 52 49 50 55 55 5 12 55 4 10 27 -24 Poland а 26 26 а а а m m 15 m m 15 13 17 -4 Portugal 47 16 -9 m m m m m m m m m m -8 Slovak Republic 12 11 12 4 12 -7 а 11 Slovenia 53 12 53 10 21 53 8 17 m m m Spain 49 33 37 m 14 m 12 -8 -3 -6 m m m m Sweden 20 18 18 60 13 56 14 57 14 6 6 5 m m m Switzerland 18 5 5 а а а m m m m 18 m m m а 100 Turkey 17 17 m m m m m 17 m m m 35 37 -1 **United Kingdom** m 55 m 92 31 89 5 40 90 4 37 m m m **United States** m 40 m m m 16 10 12 m m m 2 1 **OECD** average 51 33 31 m m 10 34 11 15 m m 13 8 EU22 average 36 26 24 9 28 11 13 12 5 -5 m m m m Argentina<sup>2</sup>
Brazil
China 56 31 33 m m m m m m m m m m m m -2 35 23 28 37 9 14 14 18 21 28 12 17 8 57 57 17 а а а а m m m m 17 15 37 -16 India 22 22 m m 31 m m 31 m m m а а

Note: Early childhood educational development programmes = ISCED 01, pre-primary education = ISCED 02. 1. Exclude data from independent private institutions. For teachers' aides, exclude also government-dependent institutions which implies an overestimation of the ratio of children to contact staff.

2. Year of reference 2018 instead of 2019.

Source: INES ad hoc survey and OECD/UIS/Eurostat (2021). See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-

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Table B2.3. Financing of early childhood education and care (ISCED 0) and change in expenditure (2018) Public and private institutions

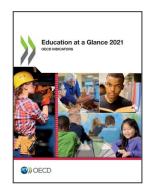
	children a enrolled ir prima ry	ture on all aged 3 to 5 a ECEC and education aead counts)		ure on ECE		in USD, o	expenditure converted us	ing PPPs	early	education an	vate expenditure or tion and care te transfers)		
			cational 01)	12)		ational 01)	(2)		ational	Pre-primary (ISCED 02)			
	As a % of GDP	Per child (in USD PPP)	Early childhood educational development (ISCED 01)	Pre-primary (ISCED 02)	Total (ISCED 0)	Early childhood educational development (ISCED 01)	Pre-primary (ISCED 02)	Total (ISCED 0)	Early childhood educational development (ISCED 01)	Total	of which public to private transfers	Tota (ISCED	
<b>^</b>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Countries	0.5	0.400	0.0	0.0		0.000	7.000	7.700	00	0.4		0.5	
Australia	0.5	8 488	0.3	0.3	0.6	8 088	7 399	7 700	39	31	0.0	35	
Austria	0.5	11 020	0.1	0.5	0.7	12 864	10 915	11 281	23	13	4.0	15	
Belgium <sup>1</sup> Canada	0.6 m	9 406 m	m m	0.7 m	m m	m m	9 401 m	m m	m m	2 m	0.2 m	m m	
Canada Chile	1.0	7 549	0.3	1.0	1.3	8 450	7 516	m 7 722	17	27	0.0	24	
Colombia	0.4	1 484	0.3	0.3	0.4	m	1 325	7 7 7 ZZ	87	27	m	45	
Costa Rica	m	m	m	m	m m	m	m	m	m	m m	a	m	
Czech Republic	0.4	6 818	a	0.6	0.6	a	6 8 18	6 818	a	10	0.0	10	
Denmark	0.6	m	0.7	0.6	1.3	23 140	11 247	15 679	24	24	0.0	24	
Estonia	0.7	8 929	x(5)	x(5)	1.2	x(8)	x(8)	8 929	x(12)	x(12)	x(12)	14	
Finland	0.6	12 051	0.4	0.8	1.2	23 353	12 051	14 154	7	9	0.0	3	
France	0.7	9 163	а	0.7	0.7	а	9 164	9 164	а	7	0.0	7	
Germany	0.5	11 568	0.4	0.6	1.0	18 656	11 569	13 509	15	15	m	15	
Greece <sup>1</sup>	0.3	6 144	m	0.3	m	m	6 144	m	m	13	0.3	n	
Hungary	0.6	m	0.0	0.7	0.8	7 222	7 432	7 421	10	10	0.0	10	
Iceland	1.1	17 070	0.7	1.1	1.8	24 427	17 073	19 420	9	13	m	12	
Ireland	0.3	m	x(5)	x(5)	0.2	x(8)	x(8)	4 439	x(12)	x(12)	а	14	
Israel	0.9	6 321	0.3	1.0	1.3	3 327	6 317	5 226	82	9	0.5	26	
Italy	0.6	10 100	а	0.6	0.6	а	10 110	10 110	а	19	0.0	19	
Japan <sup>2</sup>	m	m	а	0.2	0.2	а	7 841	7 841	а	48	m	48	
Korea <sup>1</sup>	0.5	8 081	m	0.5	m	m	8 075	m C O O O	m	18	0.6	m	
Latvia	0.6	6 035	a	0.8	0.8	a	6 035	6 035	a 10	13	m	14	
Lithuania	0.6	7 810 20 921	0.2	0.8 0.5	1.0 0.5	8 184	7 810 20 916	7 884 20 916	18	2	0.0	14	
Luxembourg Mexico	0.5 0.6	20 921	a x(5)	x(5)	0.5	a m	20916 m	2686	a x(12)	x(12)	x(12)	17	
Netherlands	0.6	8 081	a a	0.4	0.5	a	8 081	8 081	a x(12)	13	4.3	13	
New Zealand	0.4	8 550	0.4	0.4	0.4	10 349	8 389	9 177	31	16	0.1	23	
Norway	1.0	16 514	1.0	1.0	2.0	29 726	16 514	21 286	14	14	0.0	14	
Poland	0.6	7 574	a a	0.9	0.9	23720 a	7 574	7 574	a	16	0.0	16	
Portugal <sup>1</sup>	0.5	8 113	m	0.5	m	m	8 113	m	m	34	m	n	
Slovak Republic	0.5	6 623	а	0.6	0.6	а	6 623	6 623	а	15	0.8	15	
Slovenia	0.6	8 893	0.4	0.7	1.0	11 664	8 893	9 731	23	23	а	23	
Spain	0.5	7 578	0.2	0.5	0.7	9 084	7 577	7 981	34	16	0.0	22	
Sweden	0.9	15 004	0.5	1.3	1.8	18 010	15 004	15 794	6	5	а	(	
Switzerland	m	m	а	m	m	а	m	m	а	m	m	n	
Turkey <sup>1</sup>	0.4	5 173	m	0.4	m	m	5 314	m	m	26	0.0	m	
United Kingdom	m	m	0.1	0.3	0.4	m	m	m	55	38	1.9	41	
United States <sup>1</sup>	0.4	9 906	m	0.4	m	m m	9 832	m	m	24	а	m	
OECD average EU22 average	0.6 0.6	9 123 9 570	0.4 0.3	0.6 0.7	0.9 0.8	14 436 14 686	9 260 9 574	10 118 10 112	29 18	17 13	0.6 0.6	18 13	
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	
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	
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	а	m	m	a	m m	m	a	m	m	l m	

StatLink https://stat.link/3eyvxp

<sup>1.</sup> Expenditure on all children aged 3 to 5 excludes expenditure and enrolment in ISCED 01 programmes.
2. Data does not cover day care centres and integrated centres for early childhood education and care.

Source: INES ad hoc survey and OECD/UIS/Eurostat (2021). See Source section for more information and Annex 3 for notes (<a href="https://www.oecd.org/education/education-at-a-glance/EAG2021 Annex3 ChapterB.pdf">https://www.oecd.org/education/education-at-a-glance/EAG2021 Annex3 ChapterB.pdf</a>).

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



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