



Better Jobs and Brighter Futures:

Investing in Childcare to Build Human Capital

Amanda E. Devercelli and Frances Beaton-Day
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Executive Summary

In this paper, we present the evidence on why childcare matters for building human capital, look at the current status of childcare provision worldwide, including an estimate of the global gaps in access, and propose specific actions countries can take to expand access to quality, affordable childcare for all families that need it, especially the most vulnerable. This paper was originally drafted prior to the COVID-19 pandemic and has been updated to include new content, taking into account the unique challenges that the COVID-19 pandemic poses for families, children, governments and the childcare industry, as well as the importance of investing in childcare to drive countries' economic recovery.

■ **Scaling up families' access to quality childcare has the potential to unlock pathways out of poverty, build human capital and increase equity - all of which are cornerstones of a country's economic growth and productivity.** Expanding quality childcare can yield multi-generational impacts by promoting equity and improving women's employment and productivity, child outcomes, family welfare, business productivity, and overall economic development.

■ **Children's earliest years are a period of rapid and consequential development that lay the foundation for future life success; while family influence is critical during this period, many children spend substantial time in some form of childcare outside the home.** The first five years of a child's life are a period of rapid brain development and a critical window to intervene to promote healthy growth and development. Countless studies have demonstrated the long-lasting returns to quality early interventions and the importance of ensuring that children are in safe and stimulating environments. Access to good quality childcare is essential for child development, but for many families, childcare is a binding constraint that restricts decisions on whether to work and what type of work in which to engage. The childcare challenge impacts all working parents, but it is especially acute for parents with young children, who are not yet old enough to enroll in primary school (when accessible government-supported services become available in most countries). With rural-urban migration on the rise and more families removed from the traditional extended family structures that could otherwise offer childcare support, the magnitude of the challenge will continue to grow.

BOX S.1 THE IMPLICATIONS OF COVID-19 ON CHILDCARE

The COVID-19 pandemic has laid bare the deep inadequacies in the current system of childcare provision, including uneven access, poor quality, the need for public finance, poor terms of employment for the workforce, and the overall vulnerability of the sector. Smart investments to support families and the childcare industry—through a variety of channels—are an essential part of recovery efforts across countries to enable parents to return to work and provide children and families with support. In many countries, this may include channeling resources to childcare providers in financial difficulty so they can reopen. As childcare services begin to reopen, some adjustments will be needed to keep children and staff safe. The experience that so many parents have had in the last few months of struggling to balance childcare and their work responsibilities may also open new opportunities, increase public empathy, and generate policy momentum to address inadequacies in childcare provision worldwide that leave so many families with limited choices and children in settings that do not ensure their safety, let alone promote development.

■ **While childcare is an issue that impacts all working parents, it is particularly important in the context of efforts to improve women’s employment opportunities and productivity in both the formal and informal sectors.** Lack of affordable childcare often keeps women out of the workforce or from reentering the workforce after childbirth. It also limits the quality of employment and income earning opportunities that women can pursue. This can have a wide range of negative impacts, including on family economic security, gender equality and empowerment, and business and economic growth. When women earn and control their own incomes, more resources tend to be channeled to support their children’s health, education, and overall family welfare. When women exit the workforce, firms lose valuable employees, resulting in increased costs related to attrition and reduced business productivity, as well as missing out on the benefits of a more diverse workforce.

■ **Too many children are spending their early years in suboptimal environments, with negative implications for their development and lifetime opportunities.** In the absence of other options, many working parents are forced to leave their children in unsuitable or even unsafe environments. Children may be left alone or with a sibling, or may accompany their parents at work in unsafe conditions. Aside from safety, the development consequences for children who do not have access to quality childcare and early learning opportunities emerge quickly, as children arrive to primary school without the skills to succeed and then fall further behind more advantaged peers during primary school. An estimated 53 percent of children in low- and middle-income countries are living in “learning poverty,” unable to read and understand a simple story by the end of primary school. In the poorest countries, this figure can be as high as 80 percent. These early deprivations and poor learning outcomes impact countries’ human capital as children grow into adults who cannot achieve their full potential: The Human Capital Project estimates that 56 percent of children born today will grow up to be, at best, half as productive as they could have been. Older siblings, especially girls, are also impacted by the childcare challenge when they are forced to take on childcare responsibilities, with consequences for their own education opportunities and life choices. Keeping adolescent girls in school longer has positive implications for delaying marriage and first pregnancy.

■ **The size of the unmet need for childcare is substantial: we estimate that over 40 percent of all children (nearly 350 million) who are below primary-school-entry age worldwide need childcare but do not have access to it.** More specifically, 72 percent of all children below primary-school-entry age need some form of childcare (593 million), and 59 percent of these children who need childcare do not currently have access (349 million). The childcare challenge disproportionately impacts families in low- and lower-middle-income countries: nearly eight out of ten children who need childcare but do not have access are living in low- and lower-middle-income countries. A child living in a low-income country is nearly five times less likely to have access to childcare than a child living in a high-income country. These figures likely underestimate the global need, as they do not factor in parents who are prevented from entering the workforce due to a lack of childcare. These excluded families are likely some of the most vulnerable and could benefit the most from childcare. The gap in access is particularly acute for children below the age of 3, because costs are generally higher for this age group and few countries have policies or widespread provision that covers them. For children ages 3 to 6, preschool, where available, can offer a partial solution, often providing at least a half day of services. Despite progress in preschool expansion, however, nearly 40 percent of all preschool-age children globally are not enrolled in preschool, and in low-income countries 80 percent of preschool-age children are not enrolled.

■ **It is not just a question of access; the quality of childcare that children receive is paramount to ensuring that the various returns can be realized.** In considering both current childcare services and childcare expansion, it is critical that quality be at the forefront of any policies and program designs to ensure children’s development and learning. Quality is essential, both to ensure good outcomes for young children and also as a “signal” to motivate parents to enroll their children in the first place. If quality is low, children will not benefit and may even be harmed, and parents may be unwilling to leave their children in facilities that do not feel safe or likely to benefit their children. Unfortunately, many childcare settings currently are not of high enough quality to positively impact child development.

■ **Expanding the childcare economy offers substantial employment opportunities: we estimate that the expansion of the childcare workforce to meet current needs could create 43 million jobs globally.** These jobs are important for the future of work, as they are much less vulnerable to automation than some other

employment opportunities. Given that one of the most important aspects of quality is a capable, caring, and qualified workforce, appropriate training opportunities for these practitioners are crucial. Expanding childcare could also create millions of small business opportunities (for center-based and home-based provision) that could generate income while meeting community needs. In the context of the COVID-19 pandemic, for example, ensuring access to childcare will be essential to enable parents to return to work and is, in its own right, a source of potential job creation for childcare providers.

■ **Childcare policies and service delivery are fragmented in many countries, which exacerbates the challenge of ensuring quality and planning.** In many countries, the regulation and provision of childcare do not fit neatly into one agency or ministry mandate, and the roles of different stakeholders are often unclear. In the absence of clearly defined roles and responsibilities, childcare may fall through the cracks, and the robust and effective planning, regulation, quality assurance and monitoring needed to ensure adequate provision never materializes. The result is millions of families without reliable childcare, leaving millions of children in inadequate or even unsafe care settings. A comprehensive approach to ensure that country systems and enabling environments support quality is currently lacking in most countries.

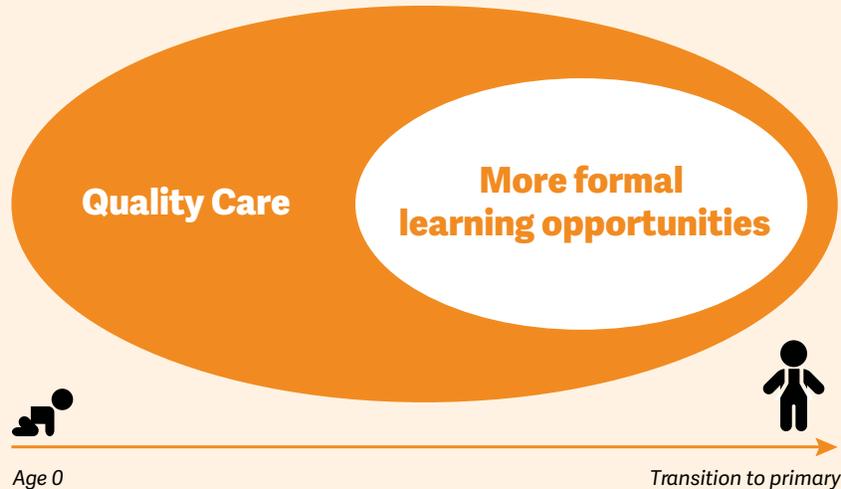
■ **Expanding access to quality, affordable childcare will generate a number of positive externalities, and should be a priority area for public intervention and finance.** The current system in many countries does not meet the needs of most families and the market alone is unlikely to yield a solution that maximizes both female labor force participation and child development. Childcare should be a priority area for public intervention: without government support, childcare will not be accessible to the most vulnerable families. There are a range of policy options available to governments to correct the current market failure; a whole-of-government approach will be needed to leverage diverse solutions and financing mechanisms and build a strong enabling environment to expand access to quality, affordable childcare. At the country level, a range of existing financial sources and programs could be better leveraged to begin to fill gap. But that would just be a start—additional resources will be needed in most countries.

■ **We suggest five policy goals that governments should focus on to ensure that childcare is available, affordable, of decent quality and meets the needs of all families:** (i) expand access to childcare by promoting diverse types of provision; (ii) prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available; (iii) allocate sufficient financing to make quality childcare affordable for families; (iv) define clear, workable institutional arrangements and build system coherence; and (v) ensure that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce.

■ **In this paper, we present the evidence on why childcare matters for building human capital, look at the current status of provision, and consider a holistic set of solutions countries can use to expand quality childcare.** In Section 1 we make the case for why childcare matters for building human capital and how it relates to a web of diverse issues that include women's employment, family welfare, child development, business productivity, and the overall economy. In Section 2, we present the scope of the challenge worldwide, with projections of the unmet need for quality childcare and, ultimately, the size of the market opportunity. In Section 3 we suggest five policy goals that all governments should work toward to ensure affordable, quality childcare for those families that need it. In Section 4, we lay out an agenda to better leverage existing resources and cross-sectoral opportunities, support country-level processes, and expand the research agenda. Detailed annexes are included at the end of the paper, which include additional research, guidance for countries, and specific policy and country examples that may be helpful in policy dialogue. These annexes can be used as standalone resources to go into more depth on specific topics.

■ **Investing in more and better quality childcare is an important strategy for countries seeking to build human capital and could bring transformational change to many government priority areas.** The expansion of quality childcare presents an incredible opportunity to deliver better jobs and brighter futures by improving women's employment and productivity, child outcomes, family welfare, productivity, and overall economic growth development.

Quality care is essential for all children; as children get older, more formal early learning opportunities, including with other children, become more important



In this report, we refer to childcare as a service with the primary objective of caring for children while parents are working while ensuring children are safe and have opportunities to learn and develop positive relationships with caregivers and peers. Quality care is critical for all children, and as children get older they also need more formal learning experiences to help them prepare for primary school.

Ages of children: This report covers children from birth up to primary-school-entry age. Sometimes, a distinction is made between services for children below 3 years of age and children between age 3 and primary-school-entry age. Provision for these different age groups may be provided separately due to differences in regulations, program design, and children's needs. Some countries, however, also have approaches that cover children from birth up to primary-school-entry age in a single setting and/or have consistent regulation for the whole age range.

Is preschool childcare? The primary objective of preschool is to prepare children for primary school by supporting their cognitive, socio-emotional, and physical development, but the quality of care remains critical. Preschool can serve as a childcare solution, though often it is only a partial solution for working parents, if a preschool operates for a half-day only.

Types of settings: Childcare can be provided in many different settings and is called different things in different countries. Types of childcare tend to fall into three categories: home-based care, center-based care, and improvised and unremunerated family arrangements.



Home-based care: Broadly speaking, home-based care falls into two types: (i) care by someone in the child's own home who is sometimes called a nanny or au pair; (ii) childcare provided for a group of children in a caregiver's home.



Center-based care: Centers providing care for young children are generally called daycares, nurseries, or crèches. Preschools and kinder-gartens can also serve such a childcare function.



Family and other informal arrangements: These are arrangements that put the burden for care on a friend or family member. This could include taking the child to work or leaving the child with a neighbor, friend, sibling, grandparent, or other relative. This type of care may or may not be remunerated.

SECTION 1: Why Childcare Matters

Increasing access to quality childcare can have multigenerational impacts, improving women’s employment and productivity, child outcomes, family welfare, business productivity, and the economy as a whole (as presented in figure 1.1). In this section we present the evidence for these different benefits. We recognize that the choices families make surrounding childcare are deeply personal and are influenced by a variety of factors. We close this section with a discussion on the need for public policy to ensure that all families can make their own choices with minimal constraints.

FIGURE 1.1 OVERVIEW OF THE BENEFITS THAT ACCRUE FROM ACCESS TO CHILDCARE



Though benefits are categorized into those that accrue to individuals, families and economies /societies, we recognize there is substantial cross-over between categories.

■ Increasing the availability of childcare can lead to more and better women's employment

A lack of childcare affects working parents across all income levels and geographies, but it is especially important for women's employment and economic opportunities. Women disproportionately shoulder the burden of care in households.¹ A lack of affordable childcare is frequently cited as one of the biggest barriers to women's opportunities to work, limiting the type and amount of work in which they can engage in outside the home (IFC 2017; Hein and Cassirer 2010; Diaz and Rodriguez-Chamussy 2013; Woetzel et al. 2015; UN Women 2015; World Bank 2018; Revenga and Dooley 2020). On a day-to-day basis, parents (mostly women) are often forced to choose between leaving their children with poor care or no care, working reduced hours, taking on more flexible / informal work (which may offer less security and worse pay), or forgoing work altogether (IFC 2017; Alfery 2016). In 2018, 606 million women of working age declared themselves to be either unavailable for employment or not looking for work due to care responsibilities, compared to only 41 million men (ILO 2018b). In Sri Lanka, mothers with children below age 5 were 11 percent less likely to engage in the job market than other women (Gunatilaka 2013), and childcare is the number one issue that women cited for leaving the workforce (Madurawala 2009). Similarly, in Germany and Latvia, 45 percent and 56 percent, respectively, of mothers with children under age 3 who were either not employed or worked only part-time reported that this was due to a lack of affordable and available childcare (Mills et al. 2014).

A lack of childcare can limit productivity and the type of employment women can engage in, preventing women from taking more stable and lucrative opportunities (Alfers 2016). In Uganda, a recent study found that 38 percent of self-employed women brought their children to work, a practice that was associated with 45 percent lower profits (Delecourt and Fitzpatrick 2019). Interviews with street traders in Ghana and South Africa revealed that women were unable to take advantage of the best times for business (early morning and evening), because this was when their children needed them most (Alfers 2016). In the slums of Guatemala, 40 percent of mothers working informally reported caring for their children themselves and cited a lack of childcare as a key reason for not taking formal-economy jobs (2003 IFPR study cited in Cassirer and Addati 2007). The lack of childcare also constrains choice of employment within the informal sector: many women may be forced to accept even more poorly paid, insecure, and precarious types of work in the informal sector to increase flexibility (Alfers 2016). In South Africa, waste pickers cited flexibility as the reason for taking on this precarious type of work (Alfers 2016). Beyond employment, a lack of childcare also restricts participation in skills and employment programs, which can help support more productive employment (Cho et al. 2013; Valdivia 2015). In most countries, the gender pay gap is due at least in part to the "motherhood pay gap" (ILO 2018c).

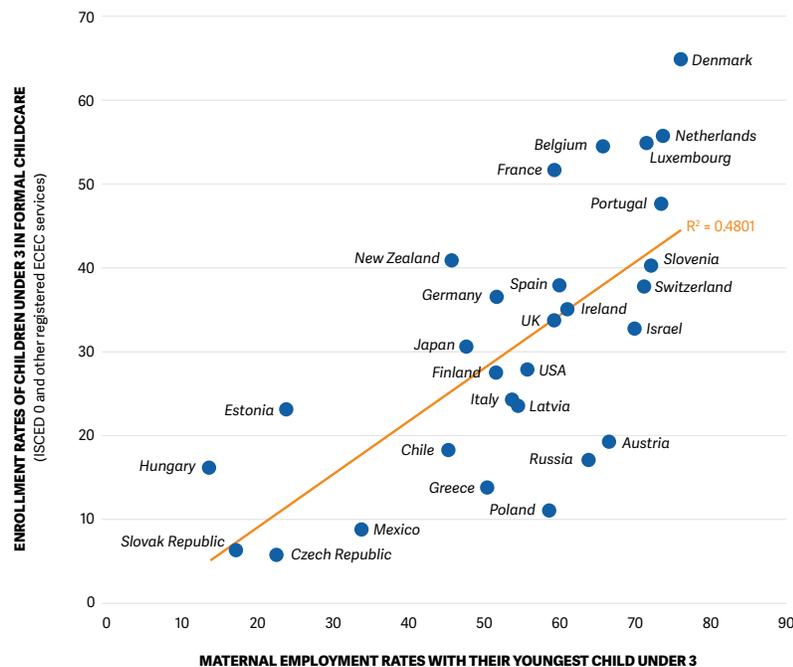
There is compelling evidence of the positive impact of childcare availability on women's employment, including in low- and middle-income countries. This effect is most often seen in women's labor force participation, but there is also emerging evidence suggesting childcare allows for longer working hours, higher productivity and income, and employment in the formal, rather than informal, sector. A number of studies and surveys have concluded that more affordable childcare leads to higher female labor force participation (Blau and Currie 2006; Gathmann and Sass 2012; Fong and Lokshin 2000; Lokshin 1999). In Brazil, center-based childcare increased the probability of maternal employment by 44 percentage points, enabled mothers to work full-time, and increased mothers' work in the formal sector (Sanfelice 2018). A similar range of outcomes was demonstrated in Mexico, including increased income, following the significant expansion of childcare there in 2007 (Calderon 2014). In Vietnam, childcare increased the probability of wage employment by 41 percent and working in the formal sector by 26 percent, as well as longer hours and higher income (Dang, Hiraga, and Nguyen 2019). A recent study in Kenya found that childcare enabled women to reduce their working hours with no negative impact on earnings and to move into formal sector jobs with fixed hours (Clark et al. 2019). It is important to note, however, that for those working in the informal sector, childcare will not always enable a move into formal sector work unless it is accompanied by other labor market strategies to promote formal sector employment, which is limited in many countries.

¹The disproportionate care burden on women is well documented in the cited papers, but here we are focusing on childcare arrangements outside the home.

Even preschools operating for just 3 or 4 hours a day have been associated with increases in mothers' employment. The availability of preschool increased the likelihood of maternal employment in Mozambique by 26 percent (Martinez, Naudeau, and Pereira 2012), in Argentina by 7 to 14 percentage points (Berlinski and Galiani 2007), and in Indonesia by 7.4 percentage points (Halim, Johnson, and Perova 2019).² The Indonesia study, however, did caution that the shorter preschool hours of operation meant that mothers were more likely to take up work in the informal sector, with more flexible working hours (Halim, Johnson, and Perova 2019).³ Several studies have shown an impact from childcare services on men's employment (Dang Hiraga, and Nguyen 2019; Calderon 2014), though further research is needed in this area (Harper, Austin, and Nandi 2017).

There is a strong correlation between mothers' labor force participation and enrollment of children in childcare services in OECD countries. As shown in Figure 1.2, countries with high rates of enrollment in childcare also tend to have higher female labor force participation (albeit often part-time). This includes Denmark, Luxembourg, the Netherlands, and Portugal. Some countries at the bottom end of the distribution have generous maternity leave entitlements. Mothers in Hungary, Estonia, and the Slovak Republic, for example, are entitled to more than 160 weeks of paid maternity leave (totaling 72, 85, and 54 weeks of full-pay equivalent, respectively), while the Czech Republic offers 110 weeks of leave (53 weeks of full pay).⁴ Longer maternity leave or parental leave policies can be an effective way to ensure parents have financial support while caring for children at home, as opposed to placing them in childcare.⁵ Various policy options for providing a continuum of care are explored further in Box C.6 in Annex C of this report.

FIGURE 1.2 MOTHERS' LABOR MARKET PARTICIPATION AND RATES OF ENROLLMENT IN CHILDCARE AMONG CHILDREN BELOW AGE 3, OECD COUNTRIES, 2014



Source: OECD (2017), accessed at <http://www.oecd.org/education/school/SS%20V%20Mothers%20labour%20market%20participation%201.png>

² A number of studies have demonstrated the link between the availability of preschool and maternal employment in high income countries. See, for example, Baker, Gruber, and Milligan 2008; and Gelbach 2002.

³ For more discussion of studies from Latin America, see Diaz and Rodriguez-Chamussy 2016.

⁴ Based on OECD Indicators 2016 (Table PF2.1.A: "Summary of paid leave entitlements available to mothers").

⁵ However, there are studies that find negative impacts resulting from extensive periods of maternity leave, such as career advancement and wage penalties (Addati, Cassirer, and Gilchrist 2014).

■ **Childcare and better employment opportunities have benefits for family welfare**

Higher family income, especially when earned by women, positively affects both women and their families. When households earn less because women are excluded from employment outside the home, a family's economic security can be weakened. The resulting lower—or missing—earnings can also perpetuate gender inequality, decreasing women's independence, bargaining power, and voice (Wodon and De le Briere 2018). Evidence from a range of countries (including Bangladesh, Brazil, China, Cote d'Ivoire, Ghana, India, Mexico, South Africa, and the United Kingdom) shows that increasing the share of household income controlled by women, either through their own earnings or through cash transfers, changes spending in ways that benefit families, and especially children, with increased spending on education, health, nutrition, or housing (World Bank 2012). Increased income can also lead to subjective gains in the well-being of women (Banerjee et al. 2015; Macours and Vakis 2014). For women in the formal sector with access to pensions, there are substantial long-term implications for financial independence. However, if childcare costs are too high or employment is not well remunerated, the potential benefits will be limited.

Addressing the childcare gap could help ensure that older siblings can stay in school longer, which has particularly important implications for adolescent girls. In addition to the risks of leaving young children in the care of siblings, evidence suggests that a lack of access to childcare can have serious consequences for the education of older siblings, who often take on responsibility for care. Burdensome care responsibilities can bring risks for these carers: recent research from the World Health Organization suggests that young carers reported tiredness and difficulty concentrating, mental health problems and lack of leisure time (Baltag 2020).⁶ In Kenya, the effect of a 10 percent increase in mothers' wages increased boys' school enrollment by 11 percent but reduced girls' enrollment by 8.8 percent, indicating that girls were dropping out of school and taking on domestic responsibilities (Lokshin, Glinskaya, and Garcia 2000). Another study, in India, led to similar conclusions, although the schooling of both girls and boys was negatively correlated with increases in their mothers' income (Skoufias 1994). In contrast, in Mozambique, the establishment of community-based preschools meant that older siblings were 6 percent more likely to be enrolled in school (Martinez, Naudeau, and Pereira 2012). Increasing adolescent girls' participation in school, in turn, may be linked to better outcomes for adolescent girls, for whom staying in school longer may help in delaying marriage and first pregnancy, with potential implications for total fertility.

■ **A child's earliest years are the most critical period for development, and children need to be in safe, stimulating environments during this period**

Evidence from a range of disciplines confirms that a child's earliest years are a critical time to invest in building foundational skills. Children's brains develop faster and are more malleable during their first five years (and particularly the first 1,000 days) than at any other time in life. Children need a range of inputs during this critical period, and a vast literature has documented the lifelong impacts that quality interventions during these early years can have (Heckman and Masterov 2007; Engle et al. 2011). During this time, children need nurturing care, which includes stimulation, protection from stress, adequate healthcare and nutrition, and opportunities to play and learn (Black et al. 2017; World Health Organization 2018). Children left in unsafe or unstimulating environments without appropriate adult care are at risk of developing deficits that persist throughout life.

Early deficits and missed opportunities can have lifelong consequences for children. Recent estimates suggest that more than 250 million young children around the world are at risk of failing to reach their developmental potential due to poverty, inadequate nutrition, exposure to stress and lack of early stimulation and

⁶The term young carer is used by the World Health Organization as a person under the age of 18 who provides unpaid care and support to a family member or friend. This is in line with the UK's definition from section 96 of the Children and Families Act 2014, which defines a young carer as: "...a person under 18 who provides or intends to provide care for another person (of any age, except where that care is provided for payment, pursuant to a contract or as voluntary work)".

learning (Black et al. 2017; Lu, Black, and Richter 2016). This early deprivation impacts children throughout their lives. Approximately 53 percent of children in low- and middle-income countries (LMICS) are living in “learning poverty,” which is defined as being unable to read and understand a simple story by the end of primary school. In the poorest countries, this figure can be as high as 80 percent (World Bank 2019e). This learning poverty has its roots in a child’s earliest years when a critical window of opportunity exists to build strong foundations for future learning. While the home environment is a critical influence, quality childcare and early learning settings can influence children’s development in ways that yield benefits for a lifetime.

The benefits of quality childcare and early learning settings include improved school readiness, reduced repetition and drop-out rates, and higher achievement in school (Heckman and Masterov 2007; Engle et al. 2011). Efforts to support children’s development and learning prior to primary school entry are critical to ensure that children arrive at school prepared to succeed. Quality early learning services (which could be

provided through center-based or home-based childcare) that promote cognitive and socio-emotional skills will help children build language and pre-literacy skills and develop the ability and the love of learning that can carry them through the rest of their education. Early literacy skills such as word recognition, alphabet knowledge and phonological awareness are predictive of later literacy skills and will be important interventions to tackle learning poverty (National Early Literacy Panel 2008; Scarborough 1998).

Learning poverty has its roots in a child's earliest years when a critical window of opportunity exists to build strong foundations for future learning.

Quality childcare can help keep children safe and reach children with other services, and there is emerging evidence that being in a childcare setting can positively impact nutrition outcomes. In rural Bangladesh, community-based childcare reduced mortality, including drowning, and injuries (Rahman et al. 2012). In Guatemala, children attending childcare experienced an increase in the percentage of daily nutrition requirements consumed, including protein (by 26 percentage points), iron (by 22 points), and vitamin A (by 85 points) (Ruel et al. 2006). In Colombia, five to 15 months exposure to a childcare program reduced the prevalence of underweight among children ages 25–36 months by 2.6 percentage points (Bernal et al. 2009). The Mobile Creches organization in India reports improvements in wasting among 55 percent of the children who attend creche services for at least four months (based on Mobile Creches internal data). However, this is an emerging area of evidence, and there are also some studies that are inconclusive (Leroy, Gadsden, and Guijarro 2012). The potential for childcare

to promote dietary diversity is an area for further exploration, with meals provided through childcare services offering a potential pathway to improve dietary diversity in the early years and beyond. Childcare centers can provide opportunities to reach children with other critical services, including screening for development delays and health services, including immunizations, growth monitoring and promotion, and others.

Evidence from a range of settings suggests that the development of the cognitive and socio-emotional skills during a child’s earliest years is critical to success in the workplace and in life as adults, leading to better employment prospects and higher earning potential.⁷ These advantages have implications beyond the individual’s lifetime in their potential to stop the intergenerational transmission of poverty. The landmark study in Jamaica, which evaluated a nutrition and early stimulation program, found that children who had been enrolled in the program (from 9 to 24 months old), were earning 25 percent more than their peers two decades later (Gertler et al. 2014). A recent survey of adults in 12 lower- and middle-income countries found that those who had attended childcare and/or early childhood education programs stayed in school on average 0.9 years longer, and tended to be employed in higher-skilled jobs, controlling for family background and other factors (Shafiq, Devercelli, and Valerio 2018).

⁷ See for example Cunha and Heckman 2007; Cunha et al. 2006; Engle et al. 2011; Garcia, Devercelli, and Valerio, forthcoming; Heckman 2006; Naudeau et al. 2011; Neuman and Devercelli 2013; and Shafiq, Devercelli, and Valerio 2018.

■ Expanding access to childcare can result in increased business productivity and economic growth.

The benefits that accrue to individuals yield long-term positive economic and social impacts. The 2005 Perry Preschool Study in the United States found long-term benefits when it examined the life paths of former participants years later. Those benefits included reduced involvement in crime, better health-seeking behaviors, and increased social cohesion and equality, all of which promote economic growth and reduce the burden on government systems (see Garces, Thomas, and Currie 2000; Heckman 2008a, 2008b, 2010; Heckman and Masterov 2007; Karoly et al. 1998; and Schweinhart, Barnes, and Weikart 1993).

Improving childcare and women's opportunities to work can improve business productivity, reduce employee attrition costs, and bring benefits associated with diversity (IFC 2017). The challenge of maximizing human capital is not only the need to build it but also the misallocation when care responsibilities cause women to opt out of the workforce. When skilled women leave the workforce, firms lose out on a pool of skilled women workers, and may instead hire less-skilled men to take their place (Revenga and Dooley 2020), reducing productivity and increasing costs associated with attrition. Childcare could be a powerful tool to realign this so that countries and businesses can take advantage of the human capital they have right now. When women leave the workforce, firms suffer: the cost to employers of employee attrition is equivalent to at least 16–20 percent of an employee's annual salary, and can be more than two times the value of employees' salaries at senior levels, when factoring in the costs of recruiting new employees, training, and onboarding, as well as losses in productivity (Boushey and Glynn 2012). Employee performance and productivity are improved when employees have access to childcare, through reduced absenteeism and improved focus levels (IFC 2017; Addati, Cassirer, and Gilchrist 2014). A study of medium-sized firms in Germany demonstrated that family-friendly strategies, including childcare support, resulted in a return on investment of 25 percent (Addati, Cassirer, and Gilchrist 2014). The increased workforce diversity from women's higher participation can yield a range of benefits, including in innovation, leadership, and financial performance (IFC 2016).

Significant increases in income from high female labor force participation will contribute to economic growth. A 1995 study of four (then) recently industrialized countries (Hong Kong, Singapore, South Korea, and Taiwan) found that labor input was a key contributing factor to economic growth and that this increase was a result of declining post-war birth rates and rising female labor-force participation (Young 1995). Several more recent studies have estimated the substantial global value that could be attributed to closing gender gaps in economic participation. ActionAid calculated that women could increase their incomes globally by up to 76 percent if the employment participation gap and the wage gap between women and men were closed, with an estimated global value of US\$17 trillion (2015). A 2015 McKinsey study estimated that global gross domestic product (GDP) could increase by US\$12 trillion by 2025 if all countries matched the gender parity being achieved in the fastest-improving countries in their own regions (Woetzel et al. 2015). The increased income will yield higher tax revenues for countries to invest in priority areas. The increased family income associated with increased access to childcare may even be enough to cover the costs of expansion once recouped via income taxes. In Quebec, the extensive childcare program launched in 1996 was initially projected to cover about 40 percent of program costs via increased tax revenue; the most recent estimates, however, indicate that the increased income tax revenue more than covers the cost of the program (McCluskey 2018).

Expanding childcare services and supporting the growth of the childcare market has the potential to lead to the creation of new jobs, contributing to women's employment and productivity, as well as overall economic growth. In Section 2 of this report we estimate the current need for childcare and indicate the substantial employment opportunities associated with growing the childcare economy. We estimate that the expansion of childcare to meet the current need worldwide could create 43 million new jobs. These jobs are important for the future of work, as they are much less vulnerable to automation than some of the other opportunities for the same populations.

which outcomes are measured.⁹ However, for children whose home environments may not be safe or stimulating, quality childcare can be transformational and offers an incredible public policy opportunity: several studies in high-income countries, including the United States, Norway, Germany, and Italy, have indicated that childcare provision, even for very young children, has had significant positive impacts for disadvantaged families if it is of high quality.¹⁰ For example, the Abecedarian program in the United States demonstrated positive impacts on: cognitive development as early as 18 months old; reading and math achievement throughout the entire school period; rates of university graduation; and health, social decision-making and reduced criminal behavior as adults (Sparling and Meunier 2019). Further research is needed to better understand the trade-offs and under what circumstances childcare services are most appropriate (see suggested research agenda in section 4), and sensitivity is needed in the policy and research agenda to better understand and respect family needs, choices, and situations. For all families, the quality of childcare is crucial – when care is of low quality there is a risk to child development (see the contents on quality in section 2 for more details).

For many families, no real choice exists. Families need the income generated by working parents, and when parents go to work, too many children end up left in unsuitable and unsafe conditions, often accompanying their mothers to work or being left with a sibling (UN Women 2015). For low-income families, finding a childcare option that is available and affordable—but still of adequate quality to at least ensure child safety—can be impossible.

All families need to have real choices available to them to be able to exercise unconstrained preferences. The questions presented here are ones that all families should be able to consider and answer for themselves. Public policy should not endeavor to answer these questions for families; public finance and policy should ensure that families have meaningful choices available to keep children safe and well cared for and that parents can engage in productive employment. Policies and programs designed with the tandem goals of women's employment and child development can result in more aligned approaches (Diaz and Rodriguez-Chamussy 2016), and if governments can ensure quality while also ensuring that services are affordable for working parents they can mitigate possible tensions between child development and employment (Berlinski et al. 2020). Family structures are diverse. With increasing numbers of single-parent families, families where both parents work, internal migration, and other trends, the need for childcare will continue to increase globally and the efforts governments make to support their citizens need to reflect citizens' needs, especially the needs of the most vulnerable.

⁹ See for example Fort, Ichino and Zanella (2017), Baker, Gruber and Milligan (2019), and Corazzini, Meschi and Pavese (2020).

¹⁰ See for example Felfe and Lalive (2014) for Germany; Drange and Havnes (2015) for Norway; Del Boca, Pronzato, and Sorrenti (2015) and Corazzini, Meschi and Pavese (2020) for Italy; Sparling and Meunier (2019) for the Abecedarian program and Mathematica Policy Research (2002) for Early Head Start in the United States.

SECTION 2:

The Scale of the Childcare Challenge

In this section we look at the level of access to childcare currently, alternative childcare arrangements, and barriers to using childcare and reaping the associated benefits. We also provide estimates on the global need for childcare, the current supply, and the gap between them. We estimate that over 40 percent of all children (nearly 350 million) below primary-school-entry age worldwide need childcare but do not have access to it. The expansion of childcare to meet the global gap in access could create 43 million new jobs.

■ Too few families have access to childcare, particularly low-income families and those with children below age 3.

Childcare needs are growing in most countries and are likely to continue to grow. The rise of single-parent households (which tend to be female-headed) and more women entering the labor force will contribute to the growth in global demand for childcare, while increasing rural-urban migration means that more and more families are being separated from the traditional extended family support systems that could provide some childcare (Hein and Cassirer 2010). This childcare challenge affects families across all income levels, in almost all countries, and in both urban and rural contexts.

For families in low-income countries, data are sparse but indicate extremely limited access to childcare (Hein and Cassirer 2010; IFC 2017; Samman et al. 2016). A survey across 31 developing countries revealed only 4 percent of employed women use organized childcare or nursery provision (UN Women 2015). The 740 million women working in the informal economy globally (ILO 2018d) often have few childcare options available (Samman et al. 2016) and the need is great among poor households, especially in urban informal settlements. A study in Dhaka, Bangladesh, for example, found that slum households were four times more likely to need childcare than non-slum households (Elsey et al. 2019).

For families with children below the age of 3, the childcare challenge is particularly acute. Even among middle- and higher-income countries with stronger policies and provision for early childhood education (ECE) and early childhood development (ECD) in general, childcare for children below age 3 is often neglected in government policies. Only a handful of (mostly high-income) countries, including Sweden, Denmark, and France, have widely available public childcare for children below the age of 3. A few countries have strong policies in place, but coverage remains low and waiting lists are often high. For example, in Brazil, strong policy commitments to public childcare and parental demand have led to recent increases in enrollment; however, recent research from Rio de Janeiro and Sao Paulo shows that demand for public childcare places outstrips supply, with long waiting lists and lottery systems being used (Sanfelice 2018; Attanasio et al. 2017). Similarly, a World Bank study looking at childcare in the Eastern Europe and Central Asia region found that almost

two-thirds of service providers do not accept new children straight away, with more than half referring families to a waiting list (World Bank 2015b). Across the European Union (EU), enrollment for children below age 3 is 33 percent: a recent EU survey found that 20 percent of women who were not working, or were working reduced hours, cited a lack of childcare as the main reason for their employment situation (European Commission 2018).

For children ages 3 to primary-school-entry age, governments are increasing access to preschool, which can serve a childcare function. In response to evidence of impact on child development and increasing parental demand, preschool enrollment has been steadily increasing globally. Global preschool enrollment has increased dramatically in the last 20 years, from 34 percent in 2000, to 47 percent in 2010 and 62 percent today. Despite this improvement, nearly 40 percent of the world's children are still not enrolled in preschool and in low-income countries, 80 percent are not enrolled.¹¹

Parents' demand for childcare and early learning is reflected in, and contributes to, over-enrollment in the early grades of primary school. Nearly 40 countries in the world have enrollment rates in Grade 1 that exceed the population of children of corresponding grade-for-age by 30 percent or more, with under-age enrollment into Year 1 considered one of the primary causes (Crouch et al. 2019). Families are choosing to enroll children into primary school early, most likely due to the absence of affordable preprimary education or other childcare options. A recent household survey in Uganda indicated that 29 percent of parents sent their children to primary school "early" because it was free (unlike preprimary school), despite the majority knowing that their children might have to repeat Grade 1 (Weatherholt et al. 2019). In Ethiopia, although the government established a reception class for 6-year-old children, in practice the majority of the students enrolled in it are ages 3 to 5, because parents, especially in rural areas, are using preschool in part to fulfill a childcare need (ELP ELSR 2018).

The nonstate sector (including community-based models) is an important player in childcare and preschool provision, but the market is underdeveloped in most countries. Because many governments lack the necessary financial resources to finance universal coverage and the capacity to deliver services, the nonstate sector (including community-based models) is playing a crucial role in expanding access to preschool and childcare. Nonstate sector provision includes childcare centers established by individuals or organizations (both for-profit and not-for-profit), chains of private providers, NGO providers, faith-based providers, community-based or cooperative models of childcare, and home-based childcare (typically established by women in their homes catering to small numbers of children). Nonstate provision now accounts for around 30 percent of global preschool provision and has increased in the last decade, both in total numbers and as a percentage of total enrollment (UIS). Many community and NGO groups are leading efforts to fill the gap in provision, particularly for vulnerable families in harder-to-reach areas. However, the scale is often limited and the provision may not be financially sustainable.

In the urban areas of some countries, enrollment in private preschool (often low-cost for-profit providers) is substantially higher than in public preschool. In India, for example, a study of 4,300 parents across eight cities estimated that in some areas, up to 90 percent of children attending preschool were enrolled in private schools (FSG, 2015). For children below the age of 3, childcare options are very limited in most low- and middle-income countries, and what provision is available is informal and unregulated. In South Africa, around 40 percent of children ages 0 to 4 are attending formal childcare (Republic of South Africa 2018), and the private sector is the main provider of these services. The Department of Social Development has encouraged private operators to serve vulnerable families by providing a subsidy for children ages 0 to 4 whose families pass an income means test. As of 2018, the subsidy was reaching 700,000 children (less than one-third of those enrolled), but based on the income profile of families, many more children should be eligible (BRIDGE et al. 2020). The limited reach of the subsidy is partly because the budget is insufficient, and partly because many operators are unreg-

Preschool programs can fulfill a childcare need for some families, but worldwide just 62% of children are enrolled and in low-income countries—just 20 percent.

¹¹ UNESCO UIS data <https://data.worldbank.org/indicator/SE.PRE.ENRR> accessed December 2020.

istered—due to registration requirements that are sometimes unrealistic—and are therefore ineligible for the subsidy (Giese and Budlender 2011).

Inadequate childcare provision often leads women to bring children to work or leave them at home with another child. Several studies, including by UN Women (2015) and Heymann (2007), have analyzed survey data from women across multiple countries and reported widespread use of inadequate and often unsafe childcare arrangements.¹² In the UN Women (2015) survey, 39 percent of employed women reported having to mind their child at work. Children are often in unsafe conditions (Heymann 2007). Bringing children to work may result in women taking employment in the informal sector or shifting to even more flexible and lower paid work within the informal sector (Alfers 2016).

Even more concerning is the high number of employed women leaving their children in the care of another child. In the UN Women study, 12 percent of employed women left their child in the care of another child (rising to 18 percent among the poorest women). Heymann’s study (2007) found that in all countries where interviews were conducted, between 10 and 40 percent of families had left a young child home alone.¹³ This puts children at risk: in two out of three families where parents had to leave children home alone or with an unpaid child, the children suffered accidents or other emergencies (Heymann 2007). Across 53 low-and middle-income countries, 20 percent of children below age 5 were either left alone or left in the care of a sibling below the age of 10 for at least an hour in any given week (Samman et al. 2016). Within the low-income countries in the survey, the figure is 46 percent, and in parts of Ethiopia more than 50 percent of rural girls ages 5 to 8 are providing such care daily.

Using grandparents or other family members for childcare remains an option for some families (when available), although this is not always a safe or desirable strategy. In the context of the COVID-19 pandemic, for example, grandparents have been removed as a childcare option for many families due to their vulnerability and need for social distancing. Although using grandparents for childcare may be a good option for some families, this may not always be appropriate. Older family members may also be in need of care or employment themselves. In many low- and middle-income countries, a lack of pension schemes (as well as people being healthier and living longer) means that grandparents often continue to work longer and may therefore be subject to the same constraints as working parents, for example looking after their grandchildren while they work (UN Women 2019). Evidence from China and South Africa suggests that the availability of a pension increases the likelihood that grandparents (especially grandmothers) will be able to take on the care of a grandchild (UN Women 2019).

■ Even when childcare is available, additional challenges limit uptake and reduce the potential benefits, including: high cost, low quality, lack of convenience, and cultural norms.

There are a range of supply- and demand-side challenges within the childcare and early-learning market that can act as barriers to uptake and reduce the quality of provision and we will focus on four specifically:



HIGH COST: Childcare needs to be affordable for parents; many parents struggle to afford it and, due to high operating costs, many providers cannot offer a low enough price point to families.



LOW QUALITY: Quality is crucial for achieving child development outcomes and to build parents’ trust that children will be safe and that the service is a worthwhile investment in their child’s future; in many places quality is inadequate to ensure child safety and does not inspire parent confidence.

¹² The UN Women (2015) paper included data from 31 developing countries on the use of childcare. In Heymann (2007), survey data from 55,000 people from around the world are combined with more than 1,000 in-depth interviews of families and policy-level data on more than 160 nations.

¹³ In-depth interviews were conducted with more than 1,000 parents, childcare providers, teachers, and healthcare providers in North America, Latin America, Africa, Asia, and Europe.



INCONVENIENT SERVICES: For childcare to be useful, the provision needs to be aligned with parents' needs, including a convenient location and operating hours that match parents' working hours.



CULTURAL NORMS: What is acceptable is often influenced by broader social attitudes. Norms against having children cared for outside of the family limit uptake in many contexts.

These challenges are reflected in both demand-side and supply-side constraints, as summarized in Table 2.1.

TABLE 2.1 KEY CONSTRAINTS IN THE CHILDCARE MARKET

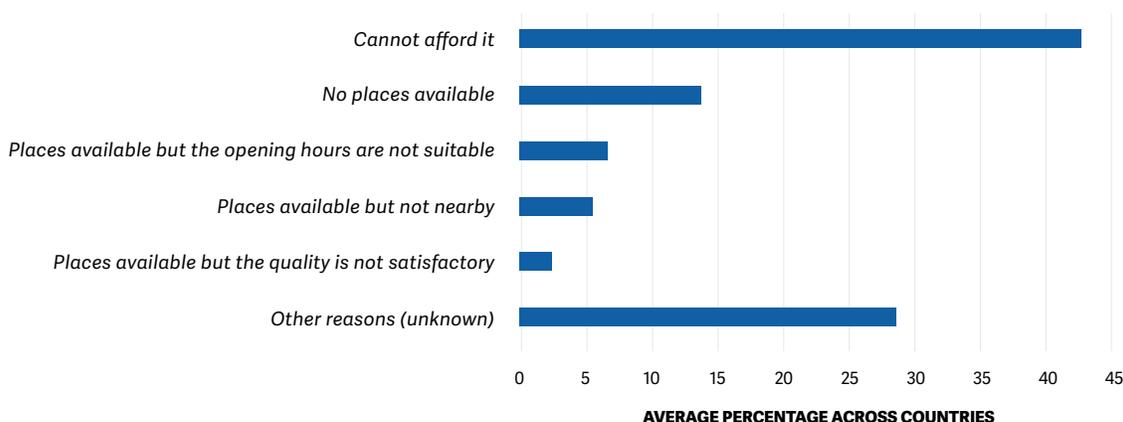
Supply side issues	Demand side issues
<ul style="list-style-type: none"> Operators are prevented from entering the market (particularly those serving children below age 3) due to unclear or unrealistic requirements for registration, a lack of accreditation regulations, and limited financing. High operational costs and tight margins (especially for services targeting younger children due to higher caregiver to child ratios) make providers financially vulnerable. Quality is often poor due to an undertrained and unsupported childcare and early learning workforce, a lack of guidance on quality standards, and a lack of financing. 	<ul style="list-style-type: none"> High cost of services acts as barrier for many families, especially low-income families. Poor quality means parents may not trust that their children would be safe or that they would be getting a valuable service for which they are willing to pay. Parents may not understand what good quality looks like and may demand inappropriate practices and/or be unable to engage with providers to demand better quality. Inconvenient location of services and operating hours limit uptake. Cultural and social norms against having children cared for outside of the family limit uptake.

■ Cost is frequently cited as one of the biggest barriers to using childcare.

For the poorest families, affordable childcare options are extremely limited. This particularly affects childcare for children below age 3, for whom there is less free public provision (most countries that offer free or heavily subsidized provision start from age 3). Studies from Mozambique, Liberia, and Kenya revealed that cost was the main constraint to using childcare and discouraged use (Bhatkal 2014, Lokshin, Glinskaya and Garcia 2000). For those using childcare, its costs can represent a high proportion of household income. For example, a study in Nairobi, Kenya, found parents spending an average of 12 percent of their household income on childcare (Bidwell and Watine 2014). In the Mexico Federal Daycare Programme for Working Mothers, which ran from 2007 to 2019, the average fees were equivalent to 22.5 percent of the monthly minimum wage (Gerhard and Staab 2010). Globally, 58 percent of women who are working work in the informal economy, and in low-income countries this figure is 92 percent (Bonnet, Vanek and Chen 2019). The nature of informal work often means low and irregular income, which makes it particularly challenging for families to afford childcare services (Moussié 2020). Refer to Box 2.1 for further details on costs.

Cost is also an issue in high-income countries, and enrollment rates are significantly lower among poorer families. In a 2016 study of EU countries, more than 40 percent of households stated that they had some difficulties in affording the cost of childcare (Figure 2.1), and in 30 out of 33 countries cost was cited as the main barrier to using childcare (European Commission 2016). The average cost of childcare for children below age 3 in OECD countries is 15 percent of net family income, but this varies substantially, ranging from 2.9 percent for a single parent in Denmark to 33.7 percent in the United Kingdom for an average dual-earner family (OECD 2016; European Commission 2018).

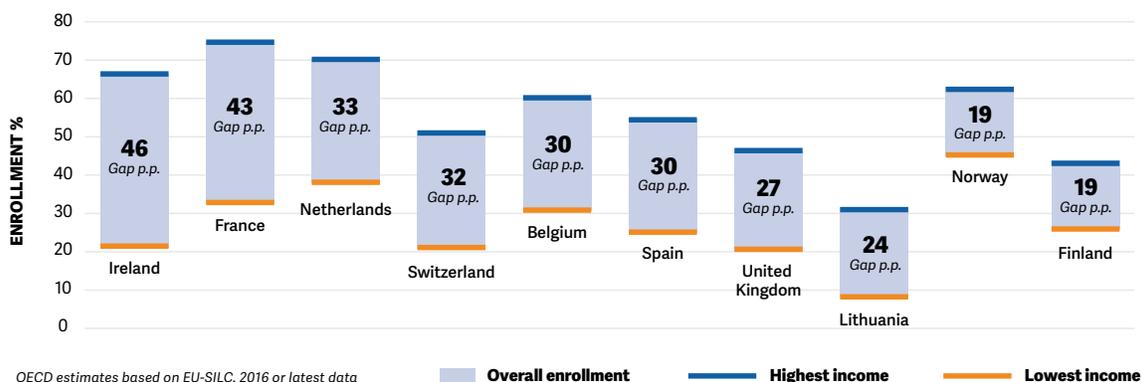
FIGURE 2.1 MAIN REASONS CITED FOR NOT MAKING (MORE) USE OF CHILDCARE SERVICES IN THE EU (AVERAGE PERCENTAGE ACROSS COUNTRIES)



Source: European Commission 2016.

Substantial inequality in access to childcare based on family income is widespread in most countries. Across eight OECD countries, there is a difference of more than 20 percentage points in the childcare enrollment rates between the wealthiest and poorest population segments (OECD family database), with a high of 46 percentage points in Ireland. The 10 OECD countries with the biggest gaps in enrollment between families with the highest and lowest incomes are shown in Figure 2.2. This pattern is reflected across other regions as well. In Latin America, the use of childcare services for children ages 0 to 5 is substantially higher among richer households; in Brazil, El Salvador, and Honduras, the use of services by the richest quintile is double that of the poorest quintile (Diaz and Rodriguez-Chamussy 2016).

FIGURE 2.2 GAP IN CHILDCARE ENROLLMENT FOR CHILDREN BELOW 3 BETWEEN FAMILIES IN THE WEALTHIEST TERTILE AND POOREST TERTILE (DATA FROM THE 10 OECD COUNTRIES WITH THE LARGEST GAPS)



OECD estimates based on EU-SILC, 2016 or latest data

Overall enrollment Highest income Lowest income

Source: OECD estimates, based on data from European Commission (2016).

Despite cost being a barrier, the relatively high proportion of families that are willing to pay for childcare shows that strong demand exists and that market-based solutions may be an option for many families, but these services will not reach the very poorest. Globally, evidence suggests that families are willing to pay for childcare and early learning services, especially if they believe these services to be of high quality (see Box 2.1 for details). However, for the poorest families, even very low-cost services are likely to be unaffordable. Many families in the lowest-income demographic are in informal work, with incomes that are not only low but irregular. For example, agricultural workers in India stated that they could not afford the expense of the low-cost childcare facilities offered by the Self-Employed Women's Association (SEWA), which was R150 per month, approximately US\$2 (Alfers 2016). There may also be a disconnect between the willingness of parents to pay in theory and their ability to pay in practice. For example, in Bangladesh, a survey in 2017 indicated that 96 percent of parents would be willing to pay on average tk224 (~\$2.50) per month for childcare, but when charged tk100 per month (~\$1.20), parents could not actually afford it and many children dropped out (Else et al. 2019).

BOX 2.1 HOW MUCH ARE PARENTS WILLING TO PAY FOR CHILDCARE?

Examples from Ghana, Mexico, Nigeria, Kenya, South Africa, and Thailand show that some low-income families are willing to pay relatively high proportions of their income for childcare. While this indicates demand, it also suggests that free or heavily subsidized services are likely to be needed to reach the poorest families.

- In Mexico, the Federal Daycare Programme for Working Mothers that ran between 2007 and 2019 targeted low-income families. Although it was heavily subsidized, parental contributions accounted for an average of 35 percent of the operating costs (Gerhard and Staab 2010). Because fees were unregulated they varied substantially across centers, and even for children within the same center (Diaz and Rodriguez-Chamussy 2016). The average parental contribution equated to 22.5 percent of the monthly minimum wage (Gerhard and Staab 2010), but could be as low as 2 percent at the lower end of parental contributions (Calderon 2014).
- The IPA/UBS Optimus study of poor neighborhoods in four cities in Africa (Johannesburg, Accra, Lagos, and Nairobi) revealed a trend of even very poor parents paying for preschool (Bidwell and Watine 2014). In the low-income neighborhood of Mukuru in Nairobi, more than 80 percent of 4-to-5-year-olds were attending preschool, 94 percent of them enrolled in low-cost private preschools. Even for children from households in the poorest quintiles, participation rates were more than 70 percent, with average costs of US\$18 per month (12 percent of self-reported household incomes) (Bidwell and Watine 2014). In this study, the average amount of time children in the study spent in the preschool centers was 35 hours or more per week, indicating the preschools were fulfilling a childcare function.

Many private providers struggle to enter the market and deliver services at a price point that the poorest families can afford. Factors that contribute to high costs of services include low ratios of children to staff (especially for younger children), which increase staff costs; offering food, which is particularly important for children's growth and for attracting parents; and high startup costs, driven by unrealistic licensing requirements in some countries. Very limited access to credit also restricts providers from entering the market. These factors can make it difficult to operate at a reasonable price point and provide good quality of service for lower-income families.

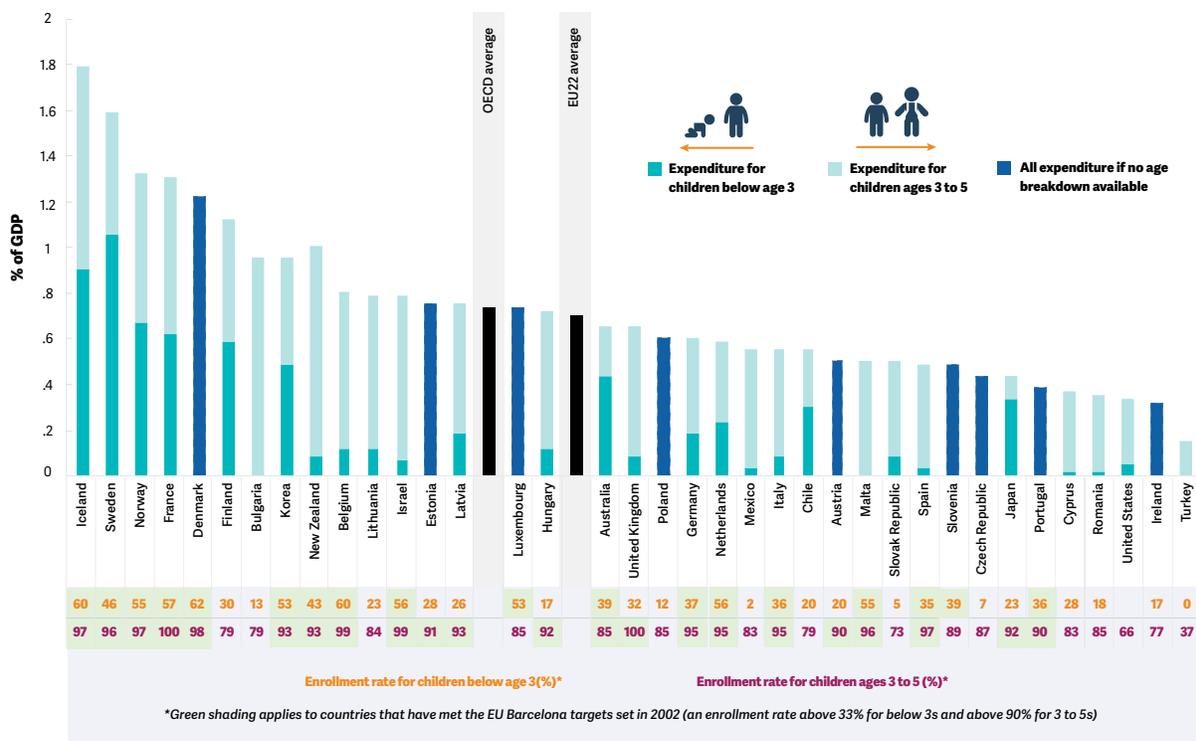
Tight operating margins make operators financially vulnerable. Childcare providers rely heavily on parental fees to break even and often operate with very tight margins, but payments, especially in the poorest communities, can be inconsistent and the revenue of providers is highly sensitive to broader economic impacts that affect household income (BRIDGE et al. 2020). COVID-19 has exposed the financial vulnerability of the childcare sector: recent surveys from South Africa, and the United States have found that many providers fear they will be unable to reopen. In the United States, 63 percent of childcare operators surveyed stated they could not survive if closed for a month without public support, including 17 percent of operators who stated they could not survive a closure for any amount of time (NAEYC 2020). In South Africa, 68 percent of operators surveyed

were worried they would be unable to reopen, which could mean 20,000–30,000 ECD operators at risk along with the jobs of 118,000–175,000 people employed in the ECD sector (BRIDGE et al. 2020).

Most governments are not allocating adequate funding to childcare, which can result in the financial burden falling on families. The OECD has suggested a public spending target of 1 percent of GDP for childcare and early learning (OECD 2006a). Figure 2.3 presents childcare and early learning funding levels across OECD countries. There is substantial variation in funding levels across these countries, from a low of 0.1 percent of GDP in Turkey to a high of 1.8 in Iceland (OECD Family database).¹⁴ The OECD average is currently at 0.7 percent, more than two-thirds of which is allocated to services for children above age 3 (OECD Family database).¹⁵ Only a few countries, including Norway, Iceland, Australia and France have more balanced spending between younger children (below age 3) and preschool-age children (above age 3). Figure 2.4 presents an analysis of the associations between public spending on childcare and early learning (as a percentage of GDP) and enrollment rates, with the analysis separated by age group. The analysis shows that countries that allocate a higher proportion of spending on childcare and early learning tend to have higher enrollment rates. When the analysis is extended to control for other factors (including GDP per capita, maternity leave duration, female labor force participation and maternal employment rates), the findings are statistically significant for preschool-age children but not for children below age 3.

FIGURE 2.3

PUBLIC EXPENDITURE ON CHILDCARE AND EARLY LEARNING AS A PERCENTAGE OF GDP IN OECD COUNTRIES (2015)



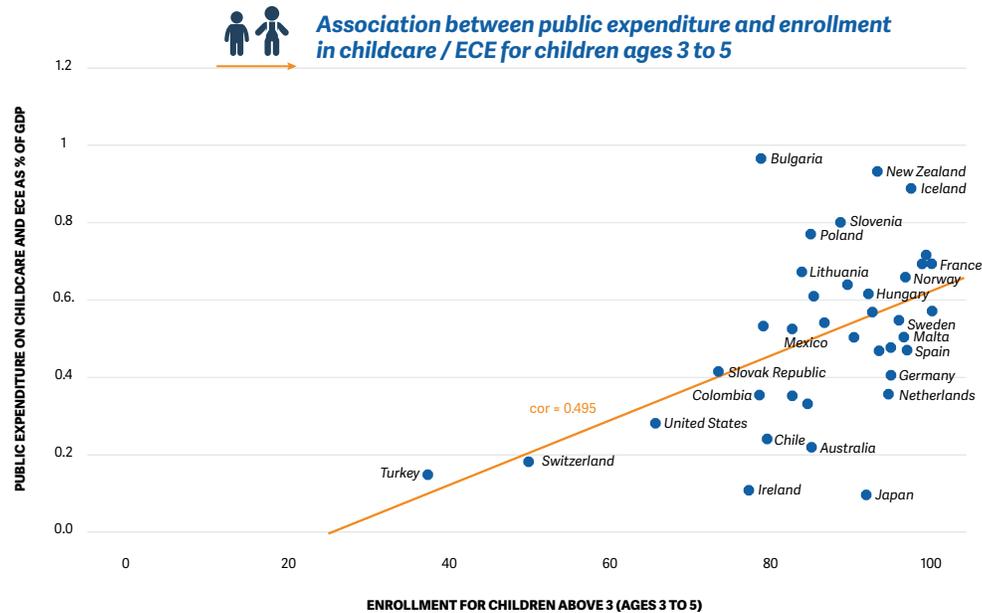
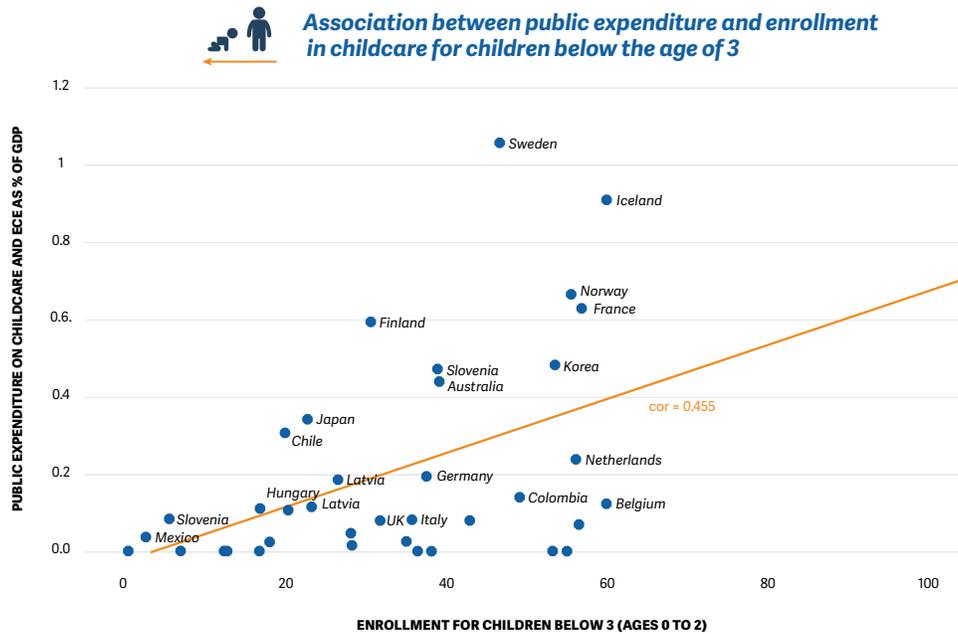
Source: All data are from OECD Family database (PF3.1 and PF3.2): public expenditure data is from 2015 or latest available and enrollment data are 2016 or latest available. Other sources may arrive at slightly different calculations.

¹⁴Data is lacking for many countries, but indicatively, there are a number of low- and middle-income countries that spend as little as 0.1 percent or less on preprimary as a percentage of GDP. These include: Burkina Faso; Ethiopia; Iran; Jordan; Namibia; Nepal; Rwanda; South Africa and Zambia. (UIS, Government expenditure on pre-primary education as a percentage of GDP (latest estimates between 2015 and 2019, accessed September 2020))

¹⁵ Although public expenditure on childcare and early learning is not disaggregated by age group for the OECD average in the latest data from 2015, in the 2013 data, the OECD average public expenditure on childcare and early learning was 0.8 percent of GDP, of which 0.2 percent was allocated to services for children below the age of 3, and 0.6 percent was allocated for children above the age of 3 (OECD 2017).

FIGURE 2.4

ASSOCIATION BETWEEN PUBLIC EXPENDITURE AND ENROLLMENT IN CHILDCARE / ECE ACROSS OECD COUNTRIES



Source: Authors' analysis using data from the OECD Family database (PF3.1 and PF3.2): public expenditure data is from 2015 or latest available and enrollment data is 2016 or latest available. We controlled for the following factors and for each we have listed the data source in parentheses: female labor force participation rates (ILO), maternity leave duration (OECD family database), maternal employment rates (OECD family database) and GDP per capita (World Bank national accounts data and OECD National Accounts data files). Countries have been labeled where space allows it.

Note: The correlations shown here are statistically significant for children ages 0 to 2 and ages 3 to 5. For children ages 0 to 2 the correlation coefficient is 0.455** (p-value = 0.004), and for ages 3 to 5 it is 0.495** (p-value = 0.0018). Limitations of this analysis include: (i) the inclusion of OECD countries only, (ii) a static snapshot rather than longitudinal data, and (iii) observational in nature, limiting the ability to determine a causal link.

■ Poor quality of childcare impacts child outcomes and uptake of services.

The quality of childcare is critical to ensure that children are in safe and stimulating environments that yield benefits (OECD 2018; Rao 2010; Malmberg et al. 2011; Richter and Samuels 2018). In the worst cases, children may be in unsafe settings and exposed to risk. Many more children, however, may be in low-quality settings that can lead to no benefits or have detrimental effects on their development and learning (Britto, Yoshikawa, and Boller 2011; Howes et al. 2008). There is substantial variability in the implementation quality of childcare services, including among well-respected programs (Bernal and Fernandez 2012). Poor-quality provision is a serious challenge across many countries, where regulation, quality standards, and quality assurance systems are lacking or ineffective. The lack of regulation in some countries, and lack of enforcement in others, has led to the proliferation of unlicensed childcare centers, particularly in urban areas. Many of these providers are filling a crucial community need and doing an admirable job, but without adequate quality assurance children may not be safe or in environments that promote their development.

Poor-quality provision is a serious challenge across many countries, where regulation, quality standards, and quality assurance systems are lacking or ineffective.

Robust quality standards do not exist in most countries, especially for children ages 0 to 3. Recent surveys confirm that quality standards exist in most high and upper-middle income countries (Anderson et al. 2017). A number of low- and middle-income countries have also adopted national quality standards; however, for many of these countries the standards are only applicable to preschool-age children, and very few have standards for children ages 0 to 3. There is also variation and disconnect in the type of provision covered by regulation and quality standards. Private provision is not always included, and guidance may be more focused on, or detailed for, center-based provision than home-based childcare. Some countries have several sets of standards developed by different ministries (for example, in Turkey and Mexico). Regulations for childcare may also be scattered across different government policy documents or laws (Diaz and Rodriguez-Chamussy 2016).

Even if regulation and quality standards are well developed, many countries lack effective roll-out, monitoring, and enforcement of standards. India is one example of a country that has developed decent quality standards at the national level for children ages 0 to 6, but translating this into high quality monitoring systems at the state-level is evolving and progress is uneven. In Jamaica, although the Early Childhood Commission aims to do inspections twice a year, in reality this is not manageable due to resource constraints and high enrollment rates (World Bank 2013a).

In South Africa, an audit in 2013-14 of nearly 18,000 ECD centers found that only 45 percent were fully registered, 11 percent were conditionally registered (needing to make some improvements), and 44 percent were unregistered; for those that were conditionally registered, the most common issues were inadequate infrastructure, equipment, staff skills, or training (Republic of South Africa 2014). Sometimes infrastructure and personnel standards may be nearly impossible for small businesses to achieve and may not be the most important aspects to ensure safe and stimulating environments. There is a risk that governments adopt overly punitive approaches rather than working with providers to bring them into the system.

Inadequate training and tools for inspectors and a lack of understanding about quality from key school and community-level leaders and parents limit the effectiveness of monitoring in many middle- and low-income countries. Tools, if they exist, are often focused more on the physical environment and material inputs, and there are few examples of low-income countries having tools to more holistically monitor critical elements of quality, especially at scale (Anderson et al. 2017). Many inspectors have not had sufficient training to assess and support childcare and early learning services. Often the remit of education inspectors is expanded to include childcare and early learning services, but they may not understand what quality looks like in a childcare or preschool setting compared to a primary school (for example, in terms of learning environments, pedagogy, interactions, and broader components essential for ECD). This may also be the case for other important stakeholders, such as school directors and parents. Indeed, a common challenge in providing early learning stems from parents pushing for inappropriate practices, such as an overly academic focus or classroom instruction style, homework, or limited use of mother-tongue languages (Wolf, Aber, and Behrman 2018).

One of the most important elements for quality is a capable, caring, and qualified workforce, but in many countries the childcare and early learning workforce is under-trained and not well-supported. There is a wide body of literature linking the benefits of investing in childcare and early learning practitioners to child development outcomes (e.g. Wolf, Aber, and Behrman 2018; Slot et al. 2015). Many countries face a severe shortage of trained caregivers and teachers, contributing to poor quality provision and restricting the ability to scale. Working with young children requires a unique set of professional and pedagogical knowledge, skills and dispositions that equip childcare and early learning practitioners with the motivation and drive to deliver high-quality care and educational experiences (Rao 2020 forthcoming). However, in some contexts, early childhood educators and caregivers may be perceived as “babysitters” and are not seen to be in need of professional training; in other contexts, training programs are woefully inadequate, lacking specialized content for those who work with young children. Even when qualification standards for practitioners do exist (particularly for the preschool workforce), there is enormous variation and countries face substantial challenges in building a qualified workforce; according to data from 20 low- and middle-income countries, fewer than half of preschool teachers actually meet their countries’ national quality standards (Sun, Rao, and Pearson 2015). No comprehensive global data on qualifications are available for the broader childcare workforce. Moreover, emphasizing qualifications alone will not improve the quality of the childcare and early learning workforce, because most countries do not provide adequate support for these practitioners to improve their practice. In most countries, there are no clear standards for childcare and early learning practitioner competencies, coaching and continuous professional development are limited, and career progression routes are unclear, limiting opportunities for improvement.¹⁶

BOX 2.2 THE CHILDCARE AND EARLY LEARNING WORKFORCE

The childcare and early learning workforce refers to all practitioners needed to care for and teach children up to primary-school-entry age (usually age 6). It includes preschool teachers, teacher assistants, and caregivers, among others. The profiles of these practitioners vary, depending on the type of provision and regulation present in a given country. Some countries make a clear distinction between practitioners for children ages 0–3 and those for children ages 3–6. Other countries have the same requirements for all childcare and early learning practitioners, especially when services are offered in an integrated setting (ILO 2018b).

Although the specific profiles vary across countries, in most low- and middle-income countries the childcare and early learning workforce is plagued by similar challenges: shortage of practitioners, lack of training, lack of support, poor pay, and high turnover.

The childcare and early learning workforce is further hindered by poor working conditions and low salaries. The childcare and early learning workforce is one of the most underpaid professional groups. Across most countries worldwide, the status, pay, and benefits of childcare and early learning practitioners are poorer than those of primary teachers (ILO 2018b). Despite increasing qualification requirements to be a preprimary teacher (especially in OECD countries), salaries remain far below those of other tertiary-educated workers (OECD 2017). Poor compensation is linked to the low value and recognition attributed to the profession, very high levels of feminization, and very low unionization rates (ILO 2018b). This in turn contributes to low levels of job satisfaction and high rates of attrition, which compromise quality and make training investments even more challenging. In many countries, practitioners responsible for children ages 0 to 3 have worse employment conditions and compensation than those teaching preschool-age children. This tends not to be the case, however, in integrated systems, where higher education qualification requirements and improved compensation and working conditions are consistent across all personnel.

Low quality may result in low take-up of services if parents do not trust providers or see the value in the service. Even if childcare is available and affordable, there is evidence that childcare provision may not lead

¹⁶ ISSA website: <https://www.issa.nl/content/news-six-promising-practices-supporting-early-childhood-workforce>

to an increase in female labor force participation if it is of poor quality, since many parents may not feel comfortable leaving their children in settings that aren't appealing or reassuring. As mentioned previously in this section, the link between quality provision and child development outcomes is well documented. While there is limited empirical evidence on which factors matter most to families (apart from cost), surveys and reports have indicated the importance of quality to parents (e.g. Bouguen et al. 2013). In Thailand, low-quality childcare and newspaper reporting on accidents involving children and mistreatment of children discouraged parents from enrolling children in services (Kusakabe 2006). In a study in Bangladesh, parents took a long time to trust the childcare provider and build enough confidence to enroll their children (Elsey et al. 2019). Focus group discussions in Latin America (Diaz and Rodriguez-Chamussy 2016) and interviews with informal workers in Ghana, South Africa, Brazil, Thailand, and India (Alfers 2016) frequently highlighted quality issues, particularly around caregiver quality. In Uzbekistan, parents' perceptions of quality influenced enrollment rates in preschools, and regions with more qualified teachers and better infrastructure had significantly higher enrollment rates, holding all else equal (World Bank, 2013b).

Parents' perceptions of quality influence their decision on whether or not to enroll their children in childcare.

In some contexts, parents may not always understand what to look for in quality provision, particularly in terms of pedagogy and curriculum, and may be inadvertently encouraging inappropriate practices. Parents may place pressure on childcare and early learning practitioners for inappropriate practices, such as too much focus on an academic curriculum, or to limit play-based learning or the use of local languages, which are both important for developing foundational skills in the early years (UNESCO 2015) but may not be well understood by parents. Although this issue has received relatively limited attention, in India FSG is conducting a series of pilots to engage parents in activity-based learning and change mindsets around what quality looks like. To ensure that parents can still engage easily and track their children's progress, FSG has developed a set of learning markers through questions and activities that parents can do with their children to understand their level of learning

■ Inconvenient locations and hours of operation are barriers to take-up.

Much of the childcare provision that is available does not meet parental needs. Many countries lack data on parental preferences and barriers to usage (Diaz and Rodriguez-Chamussy 2016). Parents need childcare that is easy to reach and covers the hours during which they are working. In urban areas, getting to work can involve long commutes, and the additional travel for childcare could be both difficult and potentially unsafe (Alfers 2016). In rural areas, transport options may be even more difficult or nonexistent. For those working in the informal economy, finding a convenient and safe location is particularly challenging. It is harder to plan for childcare services within marketplaces, near a waste dump, or in informal urban settlements where many of the lowest-income informal workers live and work, compared to services for those working in offices or on plantations (Moussié 2020). For example, in Ghana, across Accra's 42 markets only seven childcare centers exist (Boateng-Pobee, 2018). Operating hours also present a challenge. The standard hours of childcare providers can be problematic when parents' working times are variable or when they do not align with conventional working hours (Hein and Cassirer 2010; Moussié 2020).

Preschool provision is often only a partial solution to childcare needs. While most services for children below age 3 are provided with working parents in mind and therefore offer a full day, most preschool programs run for three to four hours a day during term-time and therefore do not fully meet the childcare needs of working parents. In Sweden, for example, parents are entitled to 525 hours annually, which is the equivalent of a half day. The public preschool provision in Chile runs for 22 hours a week (OECD 2015b). Preschools that offer extended services are often highly utilized by working parents. While many surveys indicate that parents state they are enrolling their children in preschool to prepare them for primary school, the longer hours that some children are spending in these programs suggest that preschools are also serving a childcare function.

■ Community or cultural concerns can impact the use of childcare and women's employment.

Perceptions of what is acceptable in terms of childcare are often influenced by broader social attitudes, and in many countries cultural norms may be against having children cared for outside of the family. In many countries, people fear that mothers' labor force participation is linked with adverse outcomes for children (Samman, Presler-Marshall, and Jones 2016; World Bank 2015b). When a World Values Survey asked respondents across 52 countries whether they agree with the statement that "when a woman works for pay, children suffer", nearly half (46 percent) agreed, and the agreement of women was almost as high as that of men. The strength of opinion differs across countries, regions and in some cases, generations. For example, a mixed-method study found that people in Eastern Europe and Central Asia tended to have more conservative views than those in Western Europe (World Bank 2015b). In some countries, younger generations, which have been exposed to more flexible norms and higher levels of female labor force participation, may be less likely to have a gendered view on childcare issues. A recent study from Lebanon, Jordan and Iraq indicates that the younger generation tends to have different perspectives on some gender aspects, including female labor force participation and household responsibilities (World Bank 2020). Cultural norms can be a barrier to fathers taking on more of the childcare burden. Even in Nordic countries, where there is generous shared parental leave, fathers only take between 11 and 30 percent of their leave entitlement, in part due to unsupportive colleagues and potential negative impacts on their relationships and progression at work (Nordic Council of Ministers 2019).

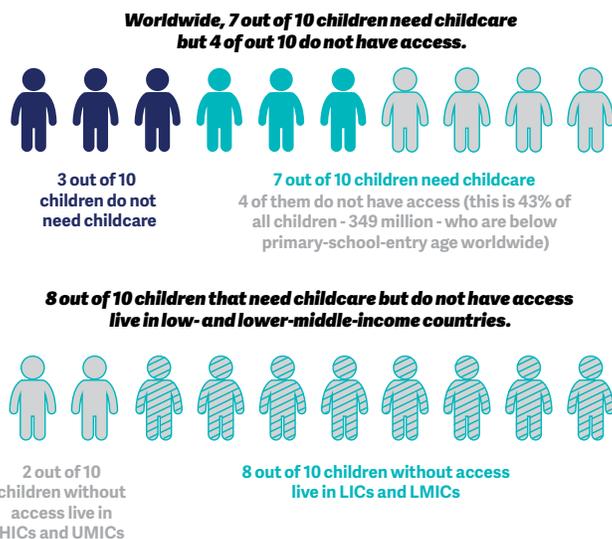
■ Global estimates: Substantial gaps in access to childcare

- Over 40 percent of children (nearly 350 million) who are below primary-school-entry age need childcare but do not have access to it.
- The childcare challenge disproportionately impacts families in low- and lower-middle-income countries: nearly 8 out of 10 children who need childcare but do not have access live in low- and lower-middle-income countries.
- A child living in a low-income country is nearly five times less likely to have access to childcare than a child living in a high-income country.

We have used available data and a set of assumptions to estimate the global need for childcare and provide an indication of the gap in supply. We used country-specific population numbers and female labor force participation rates to estimate the need, and then country-specific preschool enrollment rates and extrapolated childcare enrollment rates (by level of country income) to estimate the current coverage and gap in access. Table 2.2 provides an overview of the key figures, with footnotes to explain data sources and high-level assumptions. We show these key figures as the number of children and as a percentage of children. Detailed calculations and explanations of all assumptions are in Annex A, along with a comparison of how these compare to other related childcare estimates.

Worldwide, we estimate that 43 percent of all children (349 million) who are below primary-school-entry age need childcare but do not have access to it. The need for childcare worldwide is substantial with 72 percent of children (593 million) who are below primary-school-entry age in need of childcare. The majority (59%) of the children who need childcare do not have access.

The gap in access is substantial across the whole age group, but it is proportionately largest for children below the age of 3 (72 percent of children below the age of 3 that need childcare do not have access, compared



to 52 percent of children in need above age 3). Recent preschool expansion is closing some of the gap for older children, but intentional policy responses are needed, especially for children below the age of 3, without which the gap is unlikely to close.

TABLE 2.2 **OVERVIEW OF THE GLOBAL CHILDCARE NEED, SUPPLY, AND GAP IN ACCESS: ESTIMATIONS FOR CHILDREN AGE 0 TO PRIMARY-SCHOOL-ENTRY AGE AND A BREAKDOWN BY AGE GROUPS**

		#children (millions)	% children
 <p>Age 0 to primary-school-entry age</p>	Total number of children worldwide*	819	100% of all children below primary-school-entry age
	Children that need access to childcare / preschool**	593	72% of all children below primary-school-entry age
	Children who need childcare / preschool but do not have access ***	349	59% of children that need childcare do not have access (349 / 593 million). This means that 43% of children below primary-school-entry age need childcare and do not have access (349 / 819 million)
 <p>Below the age of 3</p>	Number of children worldwide below age 3*	406	100% of all children below age 3
	Children with working mothers that need childcare**	209	51% of children below 3
	Children who need childcare but do not currently have access ***	150	72% of children below 3 that need childcare do not have access (150 / 209 million)
 <p>Age 3 to primary-school-entry age</p>	Number of children age 3 to primary-school-entry age worldwide*	413	100% of all children age 3 to primary-school-entry age
	Children that need access to childcare / preschool**	384	93% of children age 3 to primary-school-entry age
	Children who need childcare/preschool but do not currently have access***	198	52% of children age 3 to primary-school-entry age that need childcare do not have access (198 / 384 million)

* Based on World Bank Databank Health, Nutrition and Population Statistics: Population estimates for 2018. We include all children up to primary-school-entry age (as defined by each country's official entry age for primary). Using other data sources may result in slightly different figures. This results in 819 million children up to primary-school-entry age (406 million below the age of 3 and 413 million children age 3 to primary-school-entry age).

**For children below 3, the need is based on ILO FLFP participation rates for each country to estimate the number of children with working parents. We recognize the diversity in family structures and that some families may have one mother who works and one mother who stays home or a father who stays home caring for children or just one single parent. FLFP remains the best available option to serve as a proxy to estimate the number of families with two working parents or single-headed households with one working parent. Given that we know many more women are prevented from entering the workforce due to lack of childcare, this is an underestimate and does not reflect those who are out of the workforce. For the many women just at the margin, having childcare available could enable them to enter the workforce. For children age 3 to primary-school-entry age (mostly up to age 6), we divide this group into two. First, in alignment with country policies and global advocacy around preschool, we use country preschool policies to estimate the number of children included in the official preprimary age group in each country (for most countries, preprimary starts at age 3, and in almost all countries it starts by age 4). For children in countries that do not start preprimary school at age 3, we follow the methodology for children below 3 and assume that all children with working mothers will need childcare. The difference in methodology for children above the age of 3 aligns with the globally accepted position that children should attend at least one year of preschool. SDG Target 4.2 calls for countries to "ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education" by 2030. See also UNICEF's recent paper, A World Ready to Learn. Prioritizing quality early childhood education (2019).

*** The estimated gap in access is based on subtracting supply estimates from the number of children estimated to need childcare. We estimate that 244 million children currently have access to childcare (59 million below the age of 3 and 185 million age 3 to primary-school-entry age). Supply estimates are based on latest enrollment rates for preschool-age children (UNESCO UIS statistics, accessed July 2020) and estimated childcare enrollment rates for children below the age of 3 (and for children ages 3 to 5 that live in countries where official preschool start is later than age 3) extrapolating from countries with available data. See Annex A for further details.

The gap in access disproportionately impacts families in low and lower-middle-income countries: nearly eight out of 10 children who need childcare but do not have access are living in these countries. A child living in a low-income country is nearly 5 times less likely to have access to childcare than a child living in a high-income country. This global imbalance means striking inequality of opportunity facing children and their families. Table 2.3 shows the percentage of the total need for childcare places, current access, and the gap in access across different levels of country income. Worldwide, 20 percent of all children that need childcare are located in low-income countries, but just 8 percent of childcare enrollment worldwide is in low-income countries. In contrast, high-income countries account for 10 percent of the childcare places needed, but 19 percent of the current places available.

TABLE 2.3 PERCENTAGE OF THE TOTAL NEED, ENROLLMENT AND GAP ACROSS DIFFERENT LEVELS OF COUNTRY INCOME (FOR CHILDREN AGE 0 TO PRIMARY-SCHOOL-ENTRY AGE)

	LEVEL OF COUNTRY INCOME				
	High	Upper middle	Lower middle	Low	Total
Percentage of the total need	10%	28%	42%	20%	100%
Percentage of the total enrollment	19%	43%	31%	8%	100%
Percentage of the total gap in access	4%	18%	50%	28%	100%

■ What expansion is required to meet the current gap and how many jobs could be created by expanding access to childcare?

Expansion of childcare offers substantial job creation opportunities in countries: we estimate that 43 million practitioners would be required to meet the current gap. This is based on a caregiver-to-child ratio of 1:5 for children below age 3 and 1:15 for children ages 3 to primary-school-entry age.¹⁷ Around three-quarters of these new childcare and early learning practitioners are needed in lower-middle or low-income countries. These jobs are important for the future of work, as they are much less vulnerable to automation than some of the other opportunities for the same populations. Expanding childcare could also create millions of small business opportunities (for center-based and home-based provision) that could generate income while meeting community needs. For example, the home-based childcare program in Colombia (Hogares Comunitarios de Bienestar), which is one of the largest childcare programs in Latin America, engages more than 65,000 home-based providers (Diaz and Rodriguez-Chamussy 2016).

BOX 2.3 NOTE ON DATA LIMITATIONS

There is very limited data on childcare available across low- and middle-income countries, particularly for children below age 3, and this limits the precision of our estimates. While there is undoubtedly a need for better data on childcare to derive more precise estimates, and while different methodologies to calculate the gap could result in changes on the margins, our estimates illustrate the enormous size of the issue. Hundreds of millions of children and their parents currently do not have access to childcare.

Previous related efforts are described in the annex and include ILO's recent estimations for the ECD workforce, the European Council targets set at the Barcelona Summit in 2002, and UNICEF's 2019 estimates for preschool-age children. Although we are estimating different things the approaches would arrive at similar figures. See Annex A, Box A.1 for details.

¹⁷This ratio is to enable quality provision, but we know that in reality pupil-teacher-ratio in many countries is much higher

SECTION 3:

Five policy goals to expand access to quality, affordable childcare

In sections 1 and 2, we reviewed the evidence on the potential for investments in childcare to build human capital and the current status of childcare worldwide, including the challenges with the childcare market that influence parent uptake and limit the quality of services. Governments should ensure that childcare is available, affordable, of decent quality and meets the needs of all families that need it. In this section we propose five policy goals to achieve this.

Five policy goals for governments

Childcare should be a priority area for public intervention given the substantial positive externalities and current market failure. The market alone is unlikely to yield a solution that maximizes both female labor force participation and child development. The level of fees that low-income families can afford is likely to be inadequate to ensure quality for children and financial sustainability for operators. The current system (or lack thereof) in many countries does not meet the needs of most families, and without government support, childcare will not be accessible to the most vulnerable families. While the nonstate sector, including community-based efforts, is filling important gaps in provision in many countries, many providers operate in tenuous circumstances. The financial vulnerability of the sector was exposed dramatically during the COVID-19 pandemic, with many childcare providers at risk of being unable to reopen following prolonged closures and loss of revenue.

Governments should ensure that childcare is available, affordable, of decent quality, and meets the needs of all families. We suggest five policy goals for governments to fulfill this responsibility:

-  **Expand access to childcare by promoting diverse types of provision.**
-  **Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available.**
-  **Allocate sufficient financing to make quality childcare affordable for families.**
-  **Define clear, workable institutional arrangements and build system coherence.**
-  **Ensure that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce.**

Throughout this section, we summarize options within each policy goal for governments to consider. Given the enormous scale of the challenge in most countries, a range of strategies and approaches will be needed to achieve these five policy goals. These options are expanded on in greater depth in Annex C, in which we provide further detail and illustrative examples from a review of various countries.

FIGURE 3.1 OVERVIEW OF POLICY GOALS TO IMPROVE ACCESS TO AFFORDABLE, QUALITY CHILDCARE



GOAL 1: Expand access to childcare by promoting diverse types of provision

Diverse types of service provision are important to meet diverse family needs and bring in additional stakeholders and financing to help expand access to childcare. Options for governments to expand access to childcare can be grouped into four main approaches: (i) direct government provision; (ii) financial support to families; (iii) incentives for nonstate provision, including community-based models; and (iv) mandates or incentives for employer-supported childcare.

The right mix of strategies will vary by country, and governments will choose different approaches based on their contexts and constraints. Key factors may include financial resources and capacity available, political commitment, existing institutional arrangements and government structure, existing types and quantity of provision, labor market structure, and family needs. Country-level diagnostics are needed to understand these different factors and the interplay between them.

► See Annex C, Goal 1 for a range of examples from countries to illustrate these different approaches and a summary table of 13 countries showing the multiple strategies used (including Brazil, Chile, Colombia, Denmark, France, India, Jamaica, Netherlands, Turkey, South Africa, Sweden, and the United Kingdom). Annex C, Goal 1 also contains an overview of 8 countries' policies for mandated employer-supported childcare.

It will be important to identify the types of actors in a country and consider the potential benefits of engaging with diverse types of organizations providing childcare and early learning services. Table 3.1 provides a description of different types of nonstate childcare and early learning providers.

TABLE 3.1 DIFFERENT TYPES OF NONSTATE CHILDCARE AND EARLY LEARNING PROVIDERS

 Center-based ECE and childcare providers	
Type of provider	Description
Formal for-profit providers	<ul style="list-style-type: none"> Privately managed preschools and childcare services, ranging from high-end to low-cost services Often single providers, some chains Standalone or attached to a primary school
Informal for-profit providers	<ul style="list-style-type: none"> Services that are legal in nature, but are not formally registered by the government Mostly single providers (small business) Standalone or attached to an informal private primary school
Community-based models	<ul style="list-style-type: none"> Community-managed usually with NGO and / or government support Mostly preschool focus - sometimes offer childcare for younger children Standalone or attached to primary school
Faith-based providers	<ul style="list-style-type: none"> Some affiliation with a religious institution or faith Often overlaps with community-based
NGO providers	<ul style="list-style-type: none"> NGO supported or managed services Often overlaps with community-based
Parent cooperatives	<ul style="list-style-type: none"> Focus on parental ownership and contributions Can be facilitated by movements and policies or occur organically
Employer-supported childcare	<ul style="list-style-type: none"> Various models including onsite childcare (established or contracted); partnerships with other companies; reserved places / subsidies
 Home-based ECE and childcare providers	
Type of provider	Description
Home-based providers (childminders)	<ul style="list-style-type: none"> Childcare provided for a small group of children in a caregiver's home (registered or unregistered)
Nannies / au pairs	<ul style="list-style-type: none"> Childcare in the child's own home by someone employed to provide care

Note: In addition to engaging the nonstate sector in the direct provision of childcare and early learning services, the nonstate sector can be an important provider of ancillary services to improve the efficiency and quality of provision. Ancillary services can include: training for the childcare and early learning workforce; developing curriculum materials; supporting provision with noninstructional activities (for example, maintenance, student transportation, midday meals); and delivering infrastructure

TABLE 3.2 SUMMARY OF DIFFERENT GOVERNMENT APPROACHES TO INCREASE ACCESS

Approach	Policy rationale	Implementation considerations
<p>(i) Direct government provision</p> <p><i>This refers to services that are managed and implemented by the government.</i></p>	<p>One way to ensure accessible and affordable childcare for the most disadvantaged families, if there is strong political commitment and government capacity for free or highly subsidized services.</p>	<ul style="list-style-type: none"> • Requires significant financial and human resources, implementation capacity and political commitment. • This policy may result in spending more money and effort than necessary, given that other approaches may be possible.
<p>(ii) Financial support for families</p> <p><i>Support for families can be provided through vouchers (that reduce or eliminate fees and allow parental choice in selecting provision), rebates, or tax breaks.</i></p>	<p>Important way to alleviate the costs of childcare and give choice to parents without the implementation burden of government-provided childcare that could require higher levels of capacity.</p>	<ul style="list-style-type: none"> • Widespread provision needs to be already available or with accompanying supply-side strategies to encourage the expansion of provision. • The level of financing should be realistic to make the cost affordable for parents and to allow childcare providers to offer a decent quality service. Where resources are constrained, financing should prioritize low-income families and ensure the contribution is large enough to drive uptake for these families. • Capacity is required to administer a scheme and to regulate and ensure quality.
<p>(iii) Incentives for nonstate provision, including community-based models</p> <p><i>Strategies include: grants to help set up provision; ongoing subsidies (which could be linked to quality); specific inputs (e.g. staff, land); and tax breaks.</i></p>	<p>Given the large and urgent demand for childcare and the wide variety of family needs, the nonstate sector can bring in approaches and resources to complement other government expansion strategies. In many countries the non-state sector (including community-based approaches) is filling some gaps.</p>	<ul style="list-style-type: none"> • Given the additional costs and complications of providing childcare, especially for younger children (ages 0-3), some level of grants, subsidies, or other government contributions (such as providing staff or land) may help encourage providers to enter the market and maintain quality. • Thoughtful conditions attached to subsidies / inputs may help to ensure that this provision serves lower-income families. • Accompanying government policies on accreditation, quality assurance, and the childcare and early learning workforce that include the private sector are essential to support implementation.
<p>(iv) Employer-supported childcare (mandated or incentivized)</p> <p><i>Placing the obligation for childcare on employers</i></p>	<p>Given the strong business rationale for individual companies to invest in childcare, this can be an effective way to diversify provision, freeing up government resources to focus on vulnerable populations.</p>	<ul style="list-style-type: none"> • Because mandated employer-supported childcare is often limited to large, formal-sector companies, this should not be the only strategy deployed by governments, especially for countries with a large informal sector. • Despite good business rationale, companies may need to be guided in recognizing the business case. • Policies should be based on a minimum number of employees, rather than on the number of female employees, to avoid gender-based discrimination. • Policies should offer employers different options to meet the mandate to meet employee needs (e.g. provision of on-site or near-site childcare, stipends, vouchers, consortia with other employers, etc.). • Governments could offer incentives to encourage employers (e.g. tax breaks, land and other PPP arrangements).



GOAL 2: Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available

As governments make decisions on how to support childcare expansion and how to finance it, the question of targeting and prioritizing is key. All governments face resource constraints. Given what we know about equity and family needs, scarce resources should be reserved for the most disadvantaged. Solutions which focus on informal workers are particularly important. In many low- and middle-income countries, large numbers of women are working in the informal economy, with low and irregular sources of income and extremely limited childcare options.

Strategies to support low-income or otherwise disadvantaged families include:

- Establishing or supporting provision that specifically targets low-income families (through subsidies, means testing or other strategies);
- Mandating the reservation of places for vulnerable families;
- Offering extra financial support to low-income parents (e.g. extra hours of free / subsidized childcare);
- Linking to and leveraging existing programs that are serving target families, building in childcare as an additional support to families;
- Designing programs with a focus on equity and cultural sensitivity to encourage uptake within disadvantaged communities (including language of instruction, hiring local community members as staff, addressing disability etc.); and,
- Identifying spaces that could be used to provide services for informal workers near their worksites or neighborhoods.

▶ See Annex C, Goal 2 for examples to illustrate these different approaches, including a wide range of examples of countries which have established or are supporting provision targeting low-income families (including Colombia, India, Rwanda, Singapore, South Africa, and the United States).



GOAL 3: Allocate sufficient financing to make quality childcare affordable for families

Governments need to ensure that enough financing is available to make childcare affordable for families, and to support a system that can ensure quality. Right now, in many countries, the financial burden falls disproportionately on families (and, to a lesser extent, providers who operate under tenuous circumstances). Increasing government financing could redistribute the burden. Governments may also get a decent proportion of the investment back through increased revenue from income taxes.

Common options for financing childcare include:

- Allocations within the national budget;
- Specific childcare-related taxes through individual income tax or payroll taxes;
- Individual general contributions through social security systems (this usually covers only a portion of the population working in the formal sector, but policies such as voluntary contribution schemes and non-contributory cash benefits can extend coverage to those in the informal sector);
- Individual parental contributions through fees (for those that can afford it but should be in conjunction with other financing mechanisms to limit the burden on parents); and
- Employer funding through employer taxes or mandated employer-supported childcare.

A number of other financial options are less commonly used to finance childcare specifically but have been used across the education and health sectors, and the concepts could be replicated for childcare. These include:

- Public private partnerships (PPPs) for childcare (financing is often supplemented by nonstate sector investments, increasing the total resources available for the sector);
- Social impact bonds (SIB)s allowing governments to bring in new investment for social interventions, and at a lower risk than financing directly;
- Entrepreneurship funds from philanthropic donors; and,
- Loans to childcare business owners from financial institutions (accompanying measures may be required to make encourage / support banks to make credit accessible to home-based or center-based childcare providers).

► See Annex C, Goal 3 for examples to illustrate these different options.



GOAL 4: Define clear, workable institutional arrangements and build system coherence

Fragmented childcare policies and service delivery exacerbate the challenges of ensuring quality and planning. In the absence of clearly defined roles and responsibilities, childcare often falls through the cracks. Clear institutional arrangements can make lines of accountability more transparent and facilitate planning, implementation, and monitoring and a holistic, systems approach to childcare.

Countries use different institutional arrangements to oversee childcare systems, and there is no single correct approach. Some countries have a split system, with different ministries in charge of different aspects (often split by responsibility for different ages of children or by function of the ministry), while others take a more unified approach, which either places childcare and early learning under the leadership of one ministry or establishes a coordinating body with representation from multiple ministries. Another option is a decentralized model which may offer stronger potential for localized approaches, but can also raise challenges, especially in widening differences in access and quality between regions.

It is critical that an institutional anchor is in place and able to lead effectively. The right institutional anchor will vary by country, but whatever institution(s) is the lead, it needs to have: a clear mandate and adequate finance and capacity; a focus on promoting child development; the ability to ensure continuity and coherence across the whole age range (from birth to primary-school-entry age); and, strong coordination mechanisms to bring in all relevant stakeholders.

In addition to childcare, there are other family-friendly policies that can protect the health and economic security of parents (especially mothers) and their children and provide a continuum of care.¹⁸ These include paid maternity leave; paternity and longer-term parental leave; breastfeeding breaks at work; and child assistance grants. More research is needed on the relative impacts of complementary policies compared to childcare, as well as how the different policies interact with and impact each other, in order to make informed decisions on a policy package (this is highlighted as part of the research agenda in section 4). Policies around paid leave are particularly important, as they offer an alternative to childcare services. For example, in Sweden, public childcare starts at age 1 due to long parental leave policies (2006b). In Box 3.1, we describe family-friendly policies in more detail.

► See Annex C, Goal 4 for examples to illustrate these different options and a table detailing the institutional arrangements for 15 countries (including Chile, Denmark, France, Germany, India, Jamaica, Mexico, Netherlands, Norway, South Africa, Sweden, Turkey, the United Kingdom, Vietnam, and Zambia).

¹⁸For a more comprehensive overview, see Addati, Cassirer, and Gilchrist (2014).

Maternity leave and cash benefits. Paid maternity leave allows mothers to recover from childbirth and care for young infants during the first weeks of their lives and protects them from discriminatory labor practices (Addati, Cassirer, and Gilchrist 2014). While there have been gradual improvements over the last two decades, there is significant variation across countries and there remain large gaps in coverage, particularly for the most vulnerable families. Globally, only one-quarter of employed women (330 million) are actually entitled to maternity leave cash benefits, and nearly 750 million women are not covered by maternity policies (Addati, Cassirer, and Gilchrist 2014; ILO 2018b). Frequently excluded groups include self-employed workers, those in domestic, agricultural, or temporary work, and migrants. Out of all those excluded, 80 percent are living in Africa and Asia. Policies that can support vulnerable groups of women include: non-contributory cash benefits through social insurance; public funds or social assistance schemes (for example, in Ethiopia); the extension of maternity leave coverage to sectors not typically covered, such as domestic workers (now covered in 54 countries including South Africa and Argentina); and voluntary contribution schemes to allow various groups, including the self-employed, the informal sector, and casual or temporary workers to access maternity leave benefits (for example in Mexico, Peru, Thailand, Laos, and Tanzania). Effective coverage can be limited with voluntary schemes, and in many cases achieving adequate benefit levels for maternity protection may need a combination of contributory and noncontributory mechanisms (ILO 2017).

Paternity leave and parental leave. Adequate leave provision for fathers is crucial to enable them to support their partners in the weeks following a birth, take up family responsibilities, and bond with their children. It also helps to break down traditional social attitudes, promoting greater equality for both men and women at work and at home (Addati Cassirer, and Gilchrist 2014). Although there have been improvements, paternity leave and longer parental leave policies remain mostly inadequate to support families. Of the 79 countries that had legislation on paternity leave in 2013, 36 provided less than a

week of leave. Parental leave is the least established policy, globally. Just 66 countries provide parental leave, including only five countries in Africa, three in Asia, and two in Latin America, and only 55 percent of these countries (36) offer cash benefits. However, there are some standout examples of parental leave, where countries have adopted policies to encourage men's take-up (e.g. Sweden, Norway, and Germany).

Breastfeeding. Supporting breastfeeding at work is an integral part of maternity protection measures (Addati et al. 2014). Provision for this is made in at least 121 countries either through work breaks or a reduction in daily working hours. This is a policy that many countries in Africa (79 percent), Asia (69 percent), Latin America (69 percent), and the Middle East (80 percent) have taken up, and in almost all of these countries breastfeeding breaks are paid. However, only around one-third of countries have accompanying legislation on facilities. For those working in the informal economy, breastfeeding remains a challenge, and creative solutions are needed to support these women.

Child assistance grants: Social assistance/child assistance grants are another way for governments to support families. Grants are usually financed by public funds and are often means-tested, providing higher support for lower-income families. For mothers who are not entitled to maternity-leave cash benefits, these grants can be an important substitute. In certain cases, conditions may be applied to receive the grants, such as regular medical check-ups or having given birth in a health facility (Addati Cassirer, and Gilchrist 2014). Evidence from Latin America suggests that when confronted with a choice between childcare and cash assistance grants, lower-income households tend to choose the cash benefit, and higher-income households choose childcare. Although cash allowances seem to have a positive short-term redistributive effect, over the longer term they can promote socioeconomic inequality and gender inequality by reinforcing gender patterns of care and keeping women away from the workforce (Diaz and Rodriguez-Chamussy 2016).

¹⁹ UNICEF launched an initiative on family friendly policies in 2019 and an interim guidance note on family friendly policies in the context of COVID-19 in 2020. <https://www.unicef.org/early-childhood-development/family-friendly-policies>. <https://www.unicef.org/media/66351/file/Family-friendly-policies-covid-19-guidance-2020.pdf>



GOAL 5: Ensure that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce

As indicated in section 2, the quality of childcare services is crucial to encourage parental uptake and to realize the many benefits associated with better child development. Governments need to ensure that strong quality assurance systems are in place, and that the workforce is well trained, supported and motivated. Specifically, countries should put in place:

- **Registration and accreditation systems:** Governments should define clear registration and accreditation requirements. These should apply to all types of government and nonstate sector providers with adjustments as needed to reflect different types of provision and / or local conditions. They should also be feasible enough to encourage registration; unrealistic requirements may disincentivize providers from setting up and / or encourage providers to operate unregistered outside the system.
- **Quality standards:** Countries should have comprehensive and coherent quality standards that apply to provision across the whole age range (again with adjustments as needed for specific types of provision and / or local conditions). It is critical to include standards around safety, but a range of other quality aspects should also be included: structural quality (e.g. group size, staff/child ratios, and infrastructure), program quality (e.g. curriculum, materials, duration / intensity, parental engagement), interactions quality (e.g. interactions of children with caregivers and peers), and workforce quality (e.g. qualifications and competencies). For countries that currently lack quality standards and have multiple types of provision already established, a progressive system with the most critical standards clearly identified and enforced may be a practical way to introduce standards.
- **Monitoring systems:** Governments should ensure sufficient capacity and expertise within inspection systems to carry out this work effectively. Inspectors should receive training and tools to help them assess the quality of provision and support practitioners to improve. Other complementary monitoring activities could include self-assessment surveys and parental feedback. Compliance with standards should be encouraged through incentives to perform well and consequences when standards are not met. If standards are clearly defined, publishing data from systematic monitoring of usage and quality could help parents make more informed decisions and hold providers to account.
- **Mechanisms to engage and empower parents:** Beyond more formal monitoring mechanisms, engaging parents can be a powerful strategy to increase quality. Parents can contribute to the running of the childcare services, support their child's progress by engaging in their learning and development, and support the self-regulation of the childcare service and push for higher quality.
- **Training programs for the childcare and early learning workforce:** Quality training programs are crucial. These do not have to be multiyear degree level programs; shorter programs can be easier to scale and effective if they are targeted, highly practical, and practitioners continue to be supported through continuous professional development.
- **Professional standards and recognition for the workforce:** The Early Childhood Workforce Initiative²⁰ highlights the importance of creating solid competencies and standards that guide the work of early childcare workers and defining clear career pathways. Establishing salary scales (with living wages) and raising the status of the profession are also crucial. Flexible pathways for practitioners across the whole age range (from birth to primary school entry), with similar salaries and employment structures, could be considered to avoid devaluing childcare practitioners that focus on younger children.
- **Data collection:** Data is a foundational component, so it is crucial that governments put in place good data collection to inform policy design and implementation and to hold key parts of the childcare system to account.

In addition, in countries where non-state sector provision is encouraged, additional supports should be considered to help small scale childcare operators, particularly home-based providers, to achieve quality and sustainability. These supports could include establishing networks (including more formal franchises), peer support mechanisms, training programs and coaching, access to learning resources, etc.

► See Annex C, Goal 5 for examples to illustrate these different aspects and a comparison of quality standards and monitoring arrangements for 5 countries (Chile, Denmark, India, Jamaica, and the United Kingdom). Annex D also contains more information on, and examples of, programs that are supporting small scale operators to encourage quality and financially sustainable models (for example Kidogo Mamapreneurs in Kenya and SmartStart in South Africa).

²⁰ <https://www.issa.nl/workforce>

Summary of priority actions to achieve the five policy goals

TABLE 3.3 SUMMARY OF PRIORITY ACTIONS TO ACHIEVE THE FIVE POLICY GOALS

 <p>GOAL 1: Expand access to childcare by promoting diverse types of provision</p>	<ul style="list-style-type: none"> • Conduct country-level diagnostics to understand family needs and adjust programming accordingly. • Use multiple levers to support the expansion of childcare provision (various policy options exist, including direct government provision, financial support for families, incentives for the nonstate sector and mandated employer-supported childcare). • Integrate childcare into other existing public programs (e.g. childcare alongside training or public works programs to maximize participation).²¹
 <p>GOAL 2: Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available</p>	<ul style="list-style-type: none"> • Prioritize childcare options for vulnerable families (e.g. allocated spaces, targeted provision). • Heavily subsidize childcare costs at least for the most vulnerable families (through financial support to families and/or subsidies to nonstate providers that serve vulnerable families). • Consider the needs of, and solutions for, informal workers, including identifying spaces that could be used to provide services for informal workers near their worksites or neighborhoods. • To ensure equity, consider the needs of especially disadvantaged children (e.g. children with disabilities, ethnic or linguistic minorities, refugee populations or others affected by violence and conflict, etc). • Apply conditions/means testing to ensure government-supported and nonstate sector provision is accessible for low-income families. • Build on existing programs that serve vulnerable populations (e.g. using them to identify target populations and / or piggy-back on services).
 <p>GOAL 3: Allocate sufficient financing to make quality childcare affordable for families</p>	<ul style="list-style-type: none"> • Allocate sufficient public funding to make childcare affordable for all families. • Consider diverse funding streams—public funding, employer funding, reasonable individual contributions (for those that can afford it), and various types of private-sector funding. • Leverage existing financing by integrating childcare into programs for win-win investments. • Ensure sufficient budget to build and maintain a robust quality assurance system.
 <p>GOAL 4: Define clear, workable institutional arrangements and build system coherence</p>	<ul style="list-style-type: none"> • Define institutional arrangements to cover services for children from birth to primary school entry to ensure child safety and promote child development. • Identify a clear institutional anchor(s) with the mandate and resources to promote access and ensure quality, along with clear roles and responsibilities for other sectoral and agency engagement. • Collect data on usage and quality to inform implementation and policy. • Take a whole-of-government approach to optimize programs and policies to promote both child development and women's employment and ensure system coherence (taking into account other complementary policies such as child benefits and parental leave).
 <p>GOAL 5: Ensure children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce</p>	<ul style="list-style-type: none"> • Establish registration requirements that apply to all types of providers, reflect local conditions, and are feasible enough to encourage registration. • Develop comprehensive and coherent quality standards (with clear minimum standards and progressive pathways to improve over time). • Establish monitoring systems with inspectors trained in early child development. • Encourage parental engagement and establish mechanisms to help parents support their children's development and advocate for quality services. • Develop and support quality initial and ongoing training and support for childcare and early learning practitioners with a strong focus on practice. • Professionalize the childcare and early learning workforce with formal qualifications, career pathways, and suitable remuneration. • Provide supports for home-based providers and other entrepreneurs (networks, training and coaching programs, peer support, access to learning resources etc).

²¹ See section 4 and Annex D for ideas.

SECTION 4:

The Road Ahead: Leveraging diverse sectoral entry points, supporting country-level processes and expanding research

In section 3 we highlighted five policy goals for governments to focus on to expand access to affordable, quality childcare that meets the needs of all families. In this section we highlight three areas for further work to support the expansion of childcare worldwide: identifying and leveraging new funding sources and diverse sectoral entry points; supporting country-level processes and developing tools to support country-level diagnostics and implementation; and expanding childcare research.

Identifying and leveraging new funding sources and diverse sectoral entry points

Childcare is central to solving multiple challenges that governments face, and there are many different potential entry points that can be leveraged to expand access to quality, affordable childcare. While new funding is undoubtedly needed to expand access given the scale required, there are also a number of opportunities to leverage financing within existing programs that could finance an expansion of childcare. Table 4.1 lays out some of these entry points. Searching for and leveraging these opportunities in countries can maximize the returns to investments and help governments achieve multiple objectives with limited sources of finance. In the short-term, these opportunities offer practical and fast options to increase the resources available to support the expansion of childcare, while governments work toward mobilizing new resources.

► *In Annex D, we provide further details on five ideas for smart investments that meet multiple objectives using one finance stream: (i) offering childcare to facilitate participation in skills and training programs; (ii) using skills and training programs to build the childcare workforce; (iii) supporting entrepreneurs to open their own childcare businesses; (iv) leveraging health and nutrition programs to support childcare; and (v) establishing childcare provision to maximize participation in public works schemes (e.g. mobile creches).*

TABLE 4.1 POTENTIAL SECTORAL ENTRY POINTS TO INVEST IN CHILDCARE

SECTOR	EXAMPLES OF WAYS TO SUPPORT CHILDCARE
 EDUCATION	<ul style="list-style-type: none"> Increasing early childhood education and preschool programs with consideration as to how they also serve a childcare function (hours, location, etc) Developing and implementing regulation and quality standards for all early learning provision, including childcare (in collaboration with other sectors) Offering childcare to facilitate participation in skills and training programs Using skills and training programs to build the childcare workforce
 HEALTH AND NUTRITION	<ul style="list-style-type: none"> Using childcare facilities to reach children with services to address malnutrition and reduce stunting, especially during the critical first 1,000 days Leveraging health and nutrition programs to support childcare Using childcare facilities as referral points and to improve the efficiency of community health workers Taking into account the burden of childcare placed on older female siblings, with implications for adolescent girls' enrollment in school and ultimately for delaying marriage and reducing adolescent pregnancy
 GENDER	<ul style="list-style-type: none"> Expanding childcare to improve women's employment Supporting women entrepreneurs to provide childcare services Promoting complementary policies around maternity / paternity leave and breast-feeding at work
 SOCIAL PROTECTION AND JOBS	<ul style="list-style-type: none"> Establishing childcare provision to maximize participation in and completion of active labor market and empowerment programs, including skills and training programs and public works schemes (e.g. mobile creches) Encouraging childcare to increase female labor force participation Promoting cash transfers or child assistance grants, which could be used for childcare and / or maternity benefits Promoting complementary policies and regulations around maternity / paternity leave Expanding coverage of complementary benefits, such as maternity/paternity leave, to workers in both the formal and informal sectors (e.g. through establishing voluntary contribution to social security)
 AGRICULTURE	<ul style="list-style-type: none"> Establishing childcare to ensure children are safe and increase agricultural productivity
 URBAN DEVELOPMENT	<ul style="list-style-type: none"> Establishing childcare facilities for women workers in industrial zones and urban public spaces (e.g. markets and waste dumps) Investing in childcare facilities as part of "slum upgrading" programs
 PRIVATE SECTOR	<ul style="list-style-type: none"> Encouraging childcare to increase female labor force participation and business productivity Establishing childcare to maximize participation in training programs Supporting childcare expansion through innovative financing mechanisms Prioritizing childcare sector in funding for Micro, Small and Medium Enterprises (MSME)

Supporting country-level processes and developing tools to support country-level diagnostics and implementation

Efforts to expand access to quality, affordable childcare will require more intentional whole-of-government approaches in most countries and support for governments to engage in policy dialogue across sectors, budgets, and institutional arrangements. Tools are needed to provide policymakers with the information needed to design better policies and programs, in particular:

- Financial analysis and budgeting (including public expenditure reviews and other reviews of existing budgets and new financing opportunities)
- Diagnostic tools to look at markets and demand and supply
- Institutional assessments and systems-level diagnostics
- Basic quality standards and safeguarding guidelines that can be adapted to local contexts.

Expanding childcare research

As we have noted in other sections of this paper, a number of information gaps plague efforts to better understand childcare and the dynamics between country policies, family choices, and a variety of outcomes and market forces within countries. One of the challenges is that much of the research on childcare to date has focused on a narrow set of outcomes (e.g. either on women’s employment or empowerment, or child development, or business productivity). A new wave of evaluations is ongoing and beginning to yield results that look more holistically at outcomes related to childcare. Specific areas for further research are highlighted in Table 4.2.²²

TABLE 4.2 SUMMARY OF AREAS FOR FURTHER RESEARCH ON CHILDCARE

TOPIC		DESCRIPTION / RESEARCH QUESTIONS
Country-level situation assessments	Country-level data on childcare in LMICs (disaggregated by income group)	<ul style="list-style-type: none"> • Demand side: What childcare arrangements are parents using? What is the demand for childcare services and are parents aware of different types of supply? What factors are the most important for parents in different contexts? How do parents perceive quality? What is the willingness of parents to pay and how sensitive is the use of childcare to price (price elasticity)? • Supply side: What are the different types of childcare available and what is the relative share of them within the market? What are the different operating models including services offered, quality, fees (absolute and as a percentage of income)? What barriers do private providers face in entering the childcare sector and being financially sustainable? • What are the projections for childcare demand and supply? • What questions can be integrated into various household and attitude surveys to quickly and easily gather additional information on the childcare market, family utilization, and preferences in different countries?

²² This research agenda was developed with the participants of a two-day workshop in July 2019 to discuss the paper’s messaging, strategy, and content. The participants are listed in the acknowledgements of this paper.

TABLE 4.2 SUMMARY OF AREAS FOR FURTHER RESEARCH ON CHILDCARE (CONT.)

	TOPIC	DESCRIPTION / RESEARCH QUESTIONS
Further understanding the impact of childcare	Child development outcomes and the balance between cost and quality	<ul style="list-style-type: none"> • What is the impact of childcare on child development outcomes including cognitive, socio-emotional, physical, health and nutrition? • What level of quality is needed to achieve positive impact, and what is the cost of that? • What aspects of quality are most important for achieving child outcomes?
	Women’s employment and empowerment outcomes	<ul style="list-style-type: none"> • What is the impact of childcare for economic participation, beyond FLFP rates (hours, levels of income, and quality of employment)? • What is the impact of childcare on broader well-being and empowerment? • To what extent does the quality of childcare provision impact economic participation and well-being outcomes?
	Economic outcomes	<ul style="list-style-type: none"> • What are the wider-ranging economic benefits of investing in childcare?
	Business outcomes	<ul style="list-style-type: none"> • What is the impact of childcare on business productivity, and how does the quality of childcare impact this?
Policy options and tools	Scalable models to reach vulnerable families	<ul style="list-style-type: none"> • What are some of the best practices around scalable, quality models for vulnerable families (including low-income families, those working in the informal sector, those in rural areas, etc)?
	Comparative impact and complementarity of childcare and other social assistance	<ul style="list-style-type: none"> • How do different strategies (and mix of strategies) compare in their impact on child development and women’s economic participation and empowerment? Strategies include childcare, maternity and parental leave, and child grants.
	Encouraging quality nonstate sector models	<ul style="list-style-type: none"> • What are viable business models for private providers of childcare? • What are the most effective ways to incentivize private providers to improve quality?
	Parental engagement	<ul style="list-style-type: none"> • What are best-practice models that integrate parents into governance structures? • What are best-practice models that integrate parents into governance structures? • To what extent are parents aware of the benefits of childcare? • How do parents perceive quality?
	Quality parameters and measurement	<ul style="list-style-type: none"> • What are appropriate tools to measure children’s development for children ages 0 to 6? • What should countries include in frameworks for quality standards (minimum standards and more advanced aspects)? • What are feasible ways to measure and monitor the quality of childcare provision? • What are the key competencies for childcare and early learning practitioners?
	Lessons from other forms of unpaid care work	<ul style="list-style-type: none"> • What are the implications and learnings from other models of care, for example, caring for elderly or sick family members or those with disabilities?

Conclusion

Increasing access to quality, affordable childcare is an essential tool to help countries unlock pathways out of poverty, build human capital and increase equity - all of which are cornerstones of a country's economic growth and productivity. There are a number of opportunities that can be leveraged to expand access to childcare, working across sectors and through a variety of entry points. Recognizing the substantial positive externalities of childcare, and that childcare is a shared responsibility, is critical to efforts to scale-up childcare. Increasing access to quality, affordable childcare will require the mobilization of public and private finance, shifts in public policy, innovative service provision, and a focus on ensuring quality. Public finance will be crucial to ensure equitable access that can effectively reach the most vulnerable populations. Various existing financial sources and programs could be better leveraged to begin to fill gap. But that would just be a start—additional resources will be needed in most countries.

Governments should ensure that childcare is available, affordable, of decent quality and meets the needs of all families. We suggest five policy goals for governments to fulfill this responsibility:

-  **Expand access to childcare by promoting diverse types of provision.**
-  **Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available.**
-  **Allocate sufficient financing to make quality childcare affordable for families.**
-  **Define clear, workable institutional arrangements and build system coherence.**
-  **Ensure that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce.**

Over 40 percent of all children (nearly 350 million) who are below primary-school-entry age worldwide need childcare but do not have access to it. Achieving quality, affordable childcare for all families that need it will require substantial increased political and financial commitments in many countries, and it is imperative that governments act now. Too many families are desperately struggling to make a living and give their children the best possible start. These families are not in a position to consider the optimal balance between women's employment and child development. They need and deserve solutions now. We are failing this generation and future generations. The expansion of quality childcare presents an incredible opportunity to deliver better jobs and brighter futures by improving women's employment and productivity, child outcomes, family welfare, business productivity, and overall economic development.



Annexes

Annexes provide additional detail and can be used as standalone resources for specific topics.

ANNEX A.

Detailed methodology for estimating the need for childcare places

- Over 40 percent of children (nearly 350 million) who are below primary-school-entry age need childcare but do not have access to it.

- The childcare challenge disproportionately impacts families in low- and lower-middle-income countries: nearly 8 out of 10 children who need childcare but do not have access are in low- and lower-middle income countries.

- A child living in a low-income country is nearly five times less likely to have access to childcare than a child living in a high-income country.

We have used available data and a set of assumptions to estimate the global need for childcare and provide an indication of the gap in supply. We used country-specific population numbers and female labor force participation rates to estimate the need, and then country-specific preschool enrollment rates and extrapolated childcare enrollment rates (by level of country income) to estimate the current coverage and gap in access.

Worldwide, we estimate that 43 percent of all children (349 million) who are below primary-school-entry age need childcare but do not have access to it. The need for childcare worldwide is substantial with 72 percent of children (593 million) who are below primary-school-entry age in need of childcare. The majority (59%) of the children who need childcare do not have access.

The gap in access is substantial across the whole age group, but it is proportionately largest for children below the age of 3 (72 percent of children below the age of 3 that need childcare do not have access, compared to 52 percent of children in need above age 3). Recent preschool expansion is closing some of the gap for older children, but intentional policy responses are needed, especially for children below the age of 3, without which the gap is unlikely to close.

Overview of assumptions and calculations

Our starting point for the number of children below primary-school-entry age is 819 million (406 million below the age of 3 and 413 million children age 3 to primary-school-entry age).²³ For children below the age of 3 (0 to 2 inclusive), we use ILO female labor force participation rates to calculate the number of those with working mothers to estimate how many children need a form of childcare.²⁴ This equates to an estimate that 209 million children below the age of 3 need childcare (51 percent of all children below the age of 3). Given that we know many more women are prevented from entering the workforce due to lack of childcare, this is an underestimate and does not reflect those who are out of the workforce. For the many women just at the margin, having childcare available could enable them to enter the workforce.

²³ Based on World Bank Databank Health, Nutrition and Population Statistics: Population estimates for 2018. We include all children up to primary-school-entry age. This is calculated for each country according to their official primary-school-entry age, which ranges from 5 to 7 but is age 6 in around 70 percent of countries (based on UIS Education Systems indicator: Official entry age to each ISCED level of education - primary). Using other data sources may result in slightly different figures.

²⁴ We recognize the diversity in family structures and that some families may have one mother who works and one mother who stays home or a father who stays home caring for children or just one single parent. FLFP remains the best available option to serve as a proxy to estimate the number of families with two working parents or single-headed households with one working parent.

Worldwide, 7 out of 10 children need childcare but 4 out of 10 do not have access.



8 out of 10 children that need childcare but do not have access live in low- and lower-middle-income countries.



For children age 3 to primary-school-entry age (mostly up to age 6), we divide this group into two. First, we use country preschool policies to estimate the number of children included in the official preprimary age group in each country and who therefore should be attending preschool. For most countries, preprimary starts at age 3, and in almost all countries it starts by age 4.²⁵ For children in countries that do not start preprimary school at age 3, we follow the methodology for children below 3 and assume that all children with working mothers will need childcare. This equates to an estimate of 384 million children age 3 to primary-school-entry age requiring childcare (93 percent of all children age 3 to primary-school-entry age). In total, across both age groups, 593 million children up to primary-school-entry age need childcare, which is 72 percent of all children in this age range.

TABLE A.1 CURRENT GLOBAL NEED FOR CHILDCARE: ESTIMATIONS

	Total	Assumptions / sources
 <p>#children below 3 with working mothers, that need a childcare solution (millions)</p>	209	<p>Step 1) Using the World Bank Databank Population estimates for 2018 we calculate the number of children age 0, 1, and 2 to reach a total of 406 million children below age 3.</p> <p>Step 2) We use FLFP rates for each country (with a 7 percentage point increase to reflect underreporting in LMICs*) to estimate the number of children below 3 with working mothers. This equates to 209 million (51% of the children below three). We recognize the diversity in family structures and that some families may have one mother who works and one mother who stays home or a father who stays home caring for children or just one single parent. We use FLFP because it is the best available option to serve as a proxy to estimate the number of families with two working parents or single-headed households with one working parent.</p>
 <p>#children age 3 to primary-school-entry age that need access to childcare / preschool (millions)</p>	384	<p>Step 1) We use World Bank Databank Population data to calculate the number of children included in each country's official preprimary school age (official ages as detailed in the UIS metadata for preschool age population). For children in these countries, we assume that 100 percent of children of the official age for preprimary in countries should have access to preschool. This totals 352 million children.</p> <p>Step 2) For the 63 million children from the 67/225 countries that do not start preprimary school at 3 (or in a few cases age 4 or 5), we follow the same methodology for children below age 3 and assume that all children with working mothers will need childcare. This totals approximately 34 million children from the age of 3 to primary school age entry that need childcare.</p>
 <p>Total # of children age 0 to primary-school entry age needing access to childcare (millions)</p>	593	This is 209 million children (below the age of 3) plus 384 million children (age 3 to primary-school-entry age)
<p>Percent of all children age 0 to primary-school-entry age that need childcare/preschool</p>	72%	This is 593 / 819 million children.

* Estimates of labor force participation are often underestimated, due to inconsistencies in what constitutes economic activity (leading to many informal activities not being counted), poor question formulation, and recall periods that are too short to account for seasonality and multiple jobs (Fox and Pimhidzai 2013; Fox et al. 2013). Women's work is particularly underreported (Fox and Pimhidzai 2013; Langsten and Salem 2008). Several studies from Tanzania, Uganda, and Egypt have indicated at least a 7–10 percentage-point increase in employment rates when adjusting for these issues (Langsten and Salem 2008; Bardasi et al. 2010; Fox and Pimhidzai 2013). We have used a 7-percentage-point uplift on the latest World Bank FLFP rates for low- and low-middle- income countries.

²⁵ The difference in methodology for children above the age of 3 aligns with the globally accepted position that children should attend at least one year of preschool. SDG Target 4.2 calls for countries to “ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education” by 2030. See also UNICEF's recent paper, *A World Ready to Learn. Prioritizing quality early childhood education* (2019).

Table A.2 shows the breakdown of the 593 million children by country income level and child age, showing all children needing childcare in each age range, the number of children currently with access to childcare in each age range and the gap in access for each age range (distinguishing between children below age 3 and those from age 3 to primary-school-entry age).

To estimate the gap in access for those that need childcare solutions, we use latest enrollment rates for preschool age children²⁶ and estimated childcare enrollment rates for children below the age of 3 (and for children above the age of 3 that live in countries where official preschool start is later than age 3). We estimate that 349 million children who need childcare (including preschool) are not currently enrolled (59 percent of those that need it).

TABLE A.2.1 NEED FOR CHILDCARE AND THE GAP IN SUPPLY DISAGGREGATED BY COUNTRY INCOME LEVEL (FOR CHILDREN BELOW THE AGE OF 3)

 BELOW THE AGE OF 3	Level of country income					Assumptions / sources
	High	Upper middle	Lower middle	Low	Total*	
# children below age 3 (millions)	40	110	186	70	406	As per the calculations in Table A.1, disaggregated by country income level
# children below age 3 in need of childcare (millions)	21	58	82	47	209	As per the calculations in Table A.1, disaggregated by country income level
Need as % of all children below age 3	53%	53%	44%	68%	51%	
# children below age 3 enrolled in childcare	13	22	19	5	59	Estimates based on limited available data**
Enrollment as % of children below age 3 in need of childcare	63%	38%	23%	10%	28%	
GAP in access for children below age 3 needing childcare	7.8	36	64	43	150	
GAP as % of children below age 3 needing childcare	37%	62%	77%	90%	72%	

*Due to rounding, numbers may not add up precisely to the totals provided

**For high-income countries: OECD average, which is 33% (OECD Family database PF3.2.A, 2016). For upper-middle-income countries: estimated 20%, which is believed to be an upper estimate based on Brazil, Colombia, Ecuador, Mexico, and Costa Rica (which range from 22% to less than 10%) (Diaz and Rodriguez-Chamussy 2016). For lower-middle-income countries: estimated at 10% based on Latin American estimates, since Bolivia, Guatemala, and Nicaragua all have significantly less than 10% (Diaz and Rodriguez-Chamussy 2016). For low-income countries: 7%; there are very limited data available for lower-middle- and low-income countries, but these estimates were considered reasonable based on survey data indicating 4–7% (UN Women, FORCES survey in Delhi 2009).

²⁶ UNESCO UIS data <https://data.worldbank.org/indicator/SE.PRE.ENRR> accessed July 2020

TABLE A.2.2 NEED FOR CHILDCARE AND THE GAP IN SUPPLY DISAGGREGATED BY COUNTRY INCOME LEVEL (FOR CHILDREN AGE 3 TO PRIMARY-SCHOOL-ENTRY AGE)

 AGE 3 TO PRIMARY-SCHOOL ENTRY AGE	Level of country income					Assumptions / sources
	High	Upper middle	Lower middle	Low	Total*	
#children age 3 to primary-school-entry age (millions)	41	115	184	74	413	As per the calculations in Table A.1, disaggregated by country income level
#children age 3 to primary-school-entry age in need of preschool or childcare (millions)	40	108	168	69	384	As per the calculations in Table A.1, disaggregated by country income level
<i>Need as % of children age 3 to primary-school-entry age</i>	98%	94%	91%	94%	93%	
Number of children age 3 to primary-school-entry age currently enrolled in some form of childcare or preschool (millions)**	33	82	56	14	185	We use UIS data for pre-primary enrollment rates (latest figure available as of July 2020) for children of the official preprimary age in different countries. For the few countries without data available we apply the average enrollment rate for the relevant country income category.
<i>Enrollment as % of children age 3 to primary-school-entry age in need of childcare / preschool ***</i>	83%	76%	33%	20%	48%	For children in countries where the official preprimary school age does not cover all 3 to 5-year-olds, we estimate that all children outside of the preprimary age with working mothers need some form of childcare, and use the same childcare enrollment rates as for children below age 3.**
GAP in access for children age 3 to primary-school-entry age needing preschool / childcare (millions)	6.8	25	112	55	198	
<i>GAP as % of children age 3 to primary-school-entry age needing preschool / childcare</i>	17%	24%	67%	80%	52%	

*Due to rounding, numbers may not add up precisely to the totals provided

**For high-income countries: OECD average, which is 33% (OECD Family database PF3.2.A, 2016). For upper-middle-income countries: estimated 20%, which is believed to be an upper estimate based on Brazil, Colombia, Ecuador, Mexico, and Costa Rica (which range from 22% to less than 10%) (Diaz and Rodriguez-Chamussy 2016). For lower-middle-income countries: estimated at 10% based on Latin American estimates, since Bolivia, Guatemala, and Nicaragua all have significantly less than 10% (Diaz and Rodriguez-Chamussy 2016). For low-income countries: 7%; there are very limited data available for lower-middle- and low-income countries, but these estimates were considered reasonable based on survey data indicating 4–7% (UN Women, FORCES survey in Delhi 2009).

*** As preschool often only offers a partial childcare solution due to shorter hours of operation we would also expect that some families will need afternoon childcare (however additional childcare provision to meet this need is not captured in these estimations as various options could be used). This could be provided through preschools extending their hours of operation, additional places in other childcare services, or through improvised and unremunerated family arrangements.

TABLE A.2.3 NEED FOR CHILDCARE AND THE GAP IN SUPPLY DISAGGREGATED BY COUNTRY INCOME LEVEL (FOR ALL CHILDREN UP TO PRIMARY-SCHOOL-ENTRY AGE)

		Level of country income				
		High	Upper middle	Lower middle	Low	Total
 <p>CHILDREN AGE 0 TO PRIMARY-SCHOOL-ENTRY AGE</p>	TOTAL need for childcare / preschool (millions)	61	165	250	117	593
	TOTAL current enrollment in childcare / preschool for children age 0 to primary-school-entry age (millions)	46	104	75	19	244
	TOTAL GAP in access for all children age 0 to primary-school-entry age needing childcare or preschool (millions)	15	61	175	98	349
	TOTAL GAP as % in access for all children age 0 to primary-school-entry age needing childcare or preschool	24%	37%	70%	84%	59%

The gap in access disproportionately impacts families in low and lower-middle-income countries: nearly eight out of 10 children who need childcare but do not have access are living in these countries. A child living in a low-income country is nearly 5 times less likely to have access to childcare than a child living in a high-income country. This global imbalance means striking inequality of opportunity facing children and their families. Table A.3 below shows the percentage of the total need for childcare places, current access, and the gap in access across different levels of country income. Worldwide, 20 percent of all children that need childcare are located in low-income countries, but just 8 percent of childcare enrollment worldwide is in low-income countries. In contrast, high-income countries account for 10 percent of the childcare places needed, but 19 percent of the current places available.

TABLE A.3 PERCENTAGE OF THE TOTAL NEED, ENROLLMENT AND GAP ACROSS DIFFERENT LEVELS OF COUNTRY INCOME (FOR CHILDREN AGE 0 TO PRIMARY-SCHOOL-ENTRY AGE)

 <p>CHILDREN AGE 0 TO PRIMARY-SCHOOL-ENTRY AGE</p>		LEVEL OF COUNTRY INCOME				
		High	Upper middle	Lower middle	Low	Total
Percentage of the total need		10%	28%	42%	20%	100%
Percentage of the total enrollment		19%	43%	31%	8%	100%
Percentage of the total gap in access		4%	18%	50%	28%	100%

What expansion is required to meet the current gap and how many jobs could be created by expanding access to childcare?

Expansion of childcare offers substantial job creation opportunities in countries: we estimate that 43 million practitioners would be required to meet the current gap. This is based on a caregiver-to-child ratio of 1:5 for

children below age 3 and 1:15 for children ages 3 to primary school-entry-age.²⁷ Around three-quarters of these new childcare and early learning practitioners are needed in lower-middle or low-income countries. These jobs are important for the future of work, as they are much less vulnerable to automation than some of the other opportunities for the same populations. Expanding childcare could also create millions of small business opportunities (for center-based and home-based provision) that could generate income while meeting community needs. For example, the home-based childcare program in Colombia (Hogares Comunitarios de Bienestar), which is one of the largest childcare programs in Latin America, engages more than 65,000 home-based providers (Diaz and Rodriguez-Chamussy 2016).

Projections of the need for childcare and the gap in access by 2030, based on population growth

To look forward, we calculated the level of need by 2030 based on population growth projections.²⁸ It is clear that the childcare problem is not going away and, because populations are growing in lower-middle- and low-income countries (but declining in high- and upper-middle-income countries), it will get worse in lower-middle-income countries and substantially worse in low-income countries. Keeping enrollment rates constant, we estimate that by 2030 the number of children that will need childcare but will not have access to it will rise by 17 million children globally; the number of children located in high-income countries will reduce by 8 million, but it will increase by 25 million children in lower-middle- and low-income countries. By 2030, 81 percent of the who need childcare but do not have access will be located in low and lower-middle income countries (compared to 78 percent currently). Inequality of access for children and their families living in lower income countries will continue to grow unless concerted efforts are made to address this imbalance. Table A.4 provides an overview of these estimates.

TABLE A.4 OVERVIEW OF THE PROJECTIONS FOR CHILDCARE BY 2030 (NEED AND GAP IN ACCESS FOR CHILDREN BELOW PRIMARY-SCHOOL-ENTRY AGE)

	LEVEL OF COUNTRY INCOME				
	High	Upper middle	Lower middle	Low	Total
 #children age 0 to primary-school-entry age that will need childcare by 2030 (millions)	59m	143m	256m	141m	599m
<i>Change in need estimations by 2030, compared to 2018 (-/+ millions)</i>	-2m	-22m	+6m	+24m	+5m
#children age 0 to primary-school-entry age that will need childcare but will not have access to it by 2030 (millions)	14m	53m	180m	118m	366m
<i>Change in the gap in access estimations by 2030, compared to 2018 (millions)</i>	-0.3m	-8m	+5m	+20m	+17m

²⁷ This ratio is to enable quality provision, but the we know that in reality pupil-teacher-ratio in many countries is much higher

²⁸ Based on World Bank Databank Health, Nutrition and Population Statistics: Population projections for 2030. We include all children up to primary-school-entry age. We also calculated these numbers using the UN Population Division (Department of Economic and Social Affairs) World Population Prospects for the medium . Using other data sources may result in slightly different figures

Data on childcare is imperfect and particularly limited for children below age 3. Our estimates provide a good indication of the gap in services and the expansion required, but we acknowledge that there are other approaches that could be taken to arrive at slightly different figures. These include ILO's recent estimations for the ECD workforce, the European Council targets set at the Barcelona Summit in 2002, and UNICEF's 2019 estimates for preschool age children.

- The Barcelona targets were established in 2002 by the European Council, which comprises the leaders of the EU member states and defines the EU's overall political direction and priorities. The Barcelona Targets include two targets for childcare: (i) to provide childcare for at least 33 percent of children below 3 years of age; and (ii) to provide childcare for at least 90 percent of children between 3 years old and the mandatory primary-school-entry age of a country. Our estimates are higher for children under 3 as our assumptions result in an estimate that 51 percent of children under 3 need childcare. This higher figure seems appropriate for the global level, given that maternity leave policies in many countries are much more limited than in Europe. For children age 3 to primary-school-entry age, our calculations are only marginally higher, as we arrive at 93 percent instead of 90 percent.
- ILO has estimated the number of ECD practitioners required globally (36 million) and as part of this, estimated that 50 percent of children under 3 require childcare and 100 percent of children age 3 to primary-school-entry age need preschool (ILO 2018b). Our assumptions arrive at a very similar estimate for children under 3, as we estimate that 51 percent of children under 3 have working mothers and need childcare. For children above 3, we differ slightly in that we assume 100 percent of children of the official age for preprimary in countries need access to preschool, but for those countries where preprimary does not begin at age 3, we assume that only those children with working mothers will need childcare.
- UNICEF has estimated that approximately 175 million children are not enrolled in preschool (UNICEF 2019). This is slightly lower than our gap estimate of 199 million children age 3 to primary-school-entry age in need of preschool/childcare, because the UNICEF estimates include only children included in the preprimary school age for each country. Because we are looking at childcare, we do additional calculations to cover children ages 3, 4, and 5 who are missing from that preschool-age data for the countries that have an official preprimary school starting age of 4, 5, or 6.

ANNEX B.

Country policies: Official entry ages into preprimary and primary, and theoretical duration of preprimary education

For the estimations in section 2 we used UIS Education Systems indicators for the official entry ages of preprimary and primary, for each country, to (i) estimate the number of children up to primary-school-entry age, (ii) estimate the number of children that according to country policies should have access to preschool. In tables B.1 to B.4, we provide an overview of the official entrance ages for preprimary and primary education, the theoretical durations of preprimary education, and the full list of countries with available data.

TABLE B.1 OFFICIAL ENTRANCE AGE FOR PREPRIMARY: AGGREGATED DATA

	Total number of countries	% of countries
Countries starting preprimary age 2	6	3%
Countries starting preprimary age 3	152	68%
Countries starting preprimary age 4	52	23%
Countries starting preprimary age 5	14	6%
Countries starting preprimary age 6	1	0%
TOTAL number of countries with data	225	

Source: UIS Education Systems indicator: Official entry age to each ISCED level of education – preprimary, accessed August 2020.

TABLE B.2 OFFICIAL ENTRANCE AGE FOR PRIMARY: AGGREGATED DATA

	Total number of countries	% of countries
Countries starting primary age 5	33	15%
Countries starting primary age 6	156	70%
Countries starting primary age 7	35	16%
TOTAL number of countries with data	224	

Source: UIS Education Systems indicator: Official entry age to each ISCED level of education – primary, accessed August 2020

TABLE B.3 THEORETICAL DURATION OF PREPRIMARY EDUCATION: AGGREGATED DATA*

	Total number of countries	% of countries
Countries with 1 year of preprimary	15	7%
Countries with 2 years of preprimary	65	29%
Countries with 3 years of preprimary	119	53%
Countries with 4 years of preprimary	24	11%
TOTAL number of countries with data	223	

Source: UIS Education Systems indicator: Official entry age to each ISCED level of education – primary and preprimary, accessed August 2020.

*Calculated based of the difference between preprimary and primary entry ages.

TABLE B.4 FULL LIST OF COUNTRIES WITH DATA ON THE OFFICIAL ENTRY AGES FOR PREPRIMARY AND PRIMARY

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
Afghanistan	6	7	1
Albania	3	6	3
Algeria	5	6	1
American Samoa	3	6	3
Andorra	3	6	3
Angola	4	6	2
Anguilla	3	5	2
Antigua and Barbuda	3	5	2
Argentina	3	6	3
Armenia	3	6	3
Aruba	4	6	2
Australia	4	5	1
Austria	3	6	3
Azerbaijan	3	6	3
Bahamas	3	5	2
Bahrain	3	6	3
Bangladesh	3	6	3
Barbados	3	5	2
Belarus	3	6	3
Belgium	3	6	3
Belize	3	5	2
Benin	4	6	2
Bermuda	4	5	1
Bhutan	4	6	2
Bolivia (Plurinational State of)	4	6	2
Bosnia and Herzegovina	3	6	3
Botswana	3	6	3
Brazil	4	6	2
British Virgin Islands	3	5	2
Brunei Darussalam	3	6	3
Bulgaria	3	7	4
Burkina Faso	3	6	3
Burundi	5	7	2
Cambodia	3	6	3
Cameroon	4	6	2
Canada	5	6	1
Cabo Verde	3	6	3
Cayman Islands	3	5	2
Central African Republic	3	6	3
Chad	3	6	3
Chile	3	6	3
China	3	6	3

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
China, <i>Hong Kong Special Administrative Region</i>	3	6	3
China, <i>Macao Special Administrative Region</i>	3	6	3
Colombia	3	6	3
Comoros	3	6	3
Congo	3	6	3
Cook Islands	3	5	2
Costa Rica	4	6	2
Côte d'Ivoire	3	6	3
Croatia	3	7	4
Cuba	3	6	3
Curaçao	4	6	2
Cyprus	3	6	3
Czechia	3	6	3
Democratic People's Republic of Korea	5	7	2
Democratic Republic of the Congo	3	6	3
Denmark	3	6	3
Djibouti	4	6	2
Dominica	3	5	2
Dominican Republic	3	6	3
Ecuador	3	6	3
Egypt	4	6	2
El Salvador	4	7	3
Equatorial Guinea	4	7	3
Eritrea	4	6	2
Estonia	3	7	4
Eswatini	3	6	3
Ethiopia	4	7	3
Falkland Islands (Malvinas)	4	5	1
Fiji	3	6	3
Finland	3	7	4
France	3	6	3
French Guiana	2	6	4
French Polynesia	3	6	3
Gabon	3	6	3
Gambia	3	7	4
Georgia	3	6	3
Germany	3	6	3
Ghana	4	6	2
Gibraltar	4	5	1
Greece	4	6	2
Grenada	3	5	2
Guadeloupe	2	6	4
Guam	5	6	1

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
Guatemala	4	7	3
Guinea	4	7	3
Guinea-Bissau	3	6	3
Guyana	3	6	3
Haiti	3	6	3
Honduras	3	6	3
Hungary	3	7	4
Iceland	3	6	3
India	3	6	3
Indonesia	5	7	2
Iran (Islamic Republic of)	5	6	1
Iraq	4	6	2
Ireland	4	5	1
Israel	3	6	3
Italy	3	6	3
Jamaica	3	6	3
Japan	3	6	3
Jordan	4	6	2
Kazakhstan	3	7	4
Kenya	3	6	3
Kiribati	3	6	3
Kuwait	4	6	2
Kyrgyzstan	3	7	4
Lao People's Democratic Republic	3	6	3
Latvia	3	7	4
Lebanon	3	6	3
Lesotho	3	6	3
Liberia	3	6	3
Libya	4	6	2
Liechtenstein	5	7	2
Lithuania	3	7	4
Luxembourg	3	6	3
Madagascar	3	6	3
Malawi	3	6	3
Malaysia	4	6	2
Maldives	3	6	3
Mali	4	7	3
Malta	3	5	2
Marshall Islands	4	6	2
Martinique	2	6	4
Mauritania	3	6	3
Mauritius	3	5	2
Mexico	3	6	3
Micronesia (Federated States of)	3	6	3

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
Monaco	3	6	3
Mongolia	2	6	4
Montenegro	3	6	3
Montserrat	3	5	2
Morocco	4	6	2
Mozambique	3	6	3
Myanmar	3	5	2
Namibia	5	7	2
Nauru	3	6	3
Nepal	3	5	2
Netherlands	3	6	3
Netherlands Antilles	4	6	2
New Caledonia	3	6	3
New Zealand	3	5	2
Nicaragua	3	6	3
Niger	4	7	3
Nigeria	5	6	1
Niue	4	5	1
Norfolk Island		5	
North Macedonia	3	6	3
Norway	3	6	3
Oman	4	6	2
Pakistan	3	5	2
Palau	3	6	3
Palestine	4		
Panama	4	6	2
Papua New Guinea	3	6	3
Paraguay	3	6	3
Peru	3	6	3
Philippines	5		
Poland	3	7	4
Portugal	3	6	3
Puerto Rico	3	6	3
Qatar	3	6	3
Republic of Korea	3	6	3
Republic of Moldova	3	7	4
Réunion	2	6	4
Romania	3	6	3
Russian Federation	3	7	4
Rwanda	4	7	3
Saint Helena	4	5	1
Saint Kitts and Nevis	3	5	2
Saint Lucia	3	5	2
Saint Pierre and Miquelon	2	6	4

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
Saint Vincent and the Grenadines	3	5	2
Samoa	3	5	2
San Marino	3	6	3
Sao Tome and Principe	3	6	3
Saudi Arabia	3	6	3
Senegal	3	6	3
Serbia	3	7	4
Seychelles	4	6	2
Sierra Leone	3	6	3
Singapore	3	6	3
Sint Maarten (Dutch part)	3	6	3
Slovakia	3	6	3
Slovenia	3	6	3
Solomon Islands	3	6	3
Somalia	3	6	3
South Africa	4	7	3
South Sudan	3	6	3
Spain	3	6	3
Sri Lanka	4	5	1
Sudan	4	6	2
Sudan (pre-secession)	4	6	2
Suriname	4	6	2
Sweden	3	7	4
Switzerland	5	7	2
Syrian Arab Republic	3	6	3
Tajikistan	3	7	4
Thailand	3	6	3
Timor-Leste	3	6	3
Togo	3	6	3
Tokelau	3	5	2
Tonga	4	6	2
Trinidad and Tobago	3	5	2
Tunisia	3	6	3
Turkey	3	6	3
Turkmenistan	3	6	3
Turks and Caicos Islands	4	6	2
Tuvalu	3	6	3
Uganda	3	6	3
Ukraine	3	6	3
United Arab Emirates	4	6	2
United Kingdom of Great Britain and Northern Ireland	3	5	2
United Republic of Tanzania	5	7	2
United States of America	3	6	3

Country	Official entry age for preprimary	Official entry age for primary	Theoretical duration of preprimary*
United States Virgin Islands	5	6	1
Uruguay	3	6	3
Uzbekistan	3	7	4
Vanuatu	4	6	2
Venezuela (Bolivarian Republic of)	3	6	3
Viet Nam	3	6	3
Western Sahara	4	6	2
Yemen	3	6	3
Zambia	3	7	4
Zimbabwe	4	6	2

Source: UIS Education Systems indicator: Official entry age to each ISCED level of education – primary and preprimary, accessed August 2020.

*Calculated based of the difference between preprimary and primary entry ages.

ANNEX C.

Five policy goals for all countries and a review of international practices

Childcare should be a priority area for public intervention given the substantial positive externalities and current market failure. The market alone is unlikely to yield a solution that maximizes both female labor force participation and child development. The level of fees that low-income families can afford is likely to be inadequate to ensure quality for children and financial sustainability for operators. The current system (or lack thereof) in many countries does not meet the needs of most families, and without government support, childcare will not be accessible to the most vulnerable families. While the nonstate sector, including community-based efforts, is filling important gaps in provision in many countries, many providers operate in tenuous circumstances. The financial vulnerability of the sector was exposed dramatically during the COVID-19 pandemic, with many childcare providers at risk of being unable to reopen following prolonged closures and loss of revenue.

Governments should ensure that childcare is available, affordable, of decent quality and meets the needs of all families. We suggest five policy goals for governments to fulfill this responsibility:

-  **Expand access to childcare by promoting diverse types of provision.**
-  **Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available.**
-  **Allocate sufficient financing to make quality childcare affordable for families.**
-  **Define clear, workable institutional arrangements and build system coherence.**
-  **Ensure that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce.**

In order to illustrate different approaches that governments could take to achieve these goals, we've reviewed a selection of countries that take different approaches to childcare, with different levels of success. This includes approaches from high-, middle-, and low-income countries.²⁹ Given the enormous scale of the challenge in most countries, a range of strategies and approaches will be needed to achieve these five policy goals.

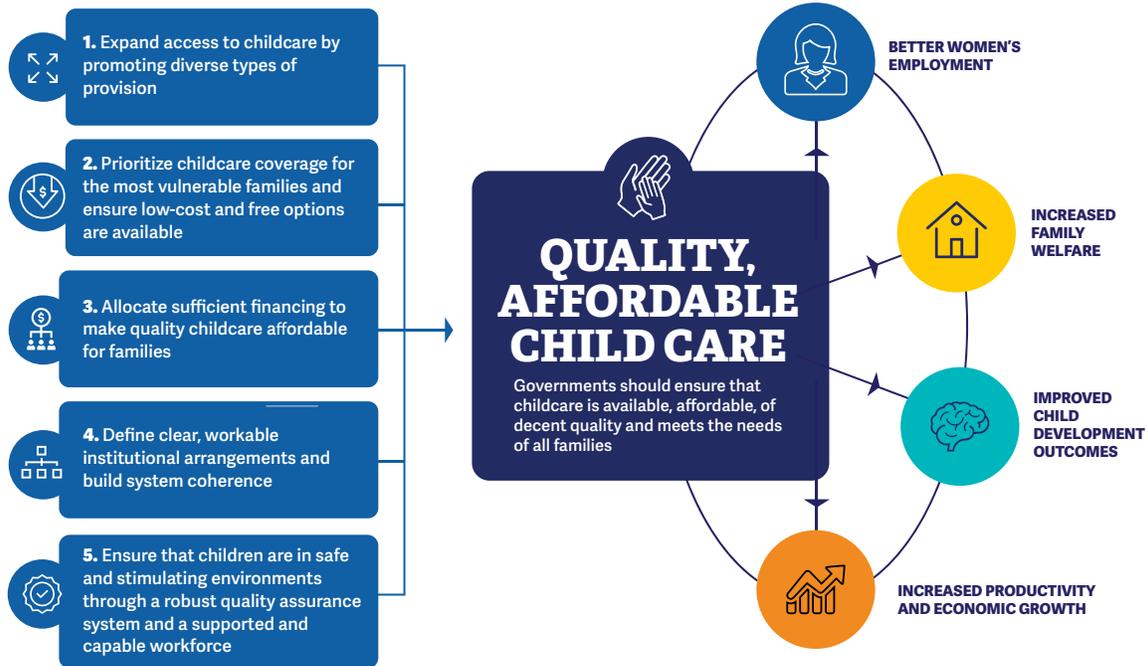
GOAL 1: Expanding access to childcare by promoting diverse types of provision

Diverse types of service provision are important to meet diverse family needs and bring in additional players and financing to help expand access to childcare. Options for governments to expand access to childcare can be grouped into four main approaches: (i) direct government provision; (ii) financial support to families; (iii) incentives for nonstate provision, including community-based models; and (iv) employer-supported childcare (mandated or incentivized).

As indicated in Table C.1, countries often deploy a mix of strategies. This may enable countries to have a wider range of provisions to better meet parents' needs and / or bring in additional nonstate sector resources to help with financial and capacity constraints. Denmark and Sweden stand out in their strong government commitment to supporting mothers and fathers through comprehensive leave policies and universal childcare provision. Across most other countries, government policies and provision tend to be more extensive for chil-

²⁹ 13 countries were chosen based largely on the following criteria: noteworthy approach or outcomes, diversity of approaches, data availability and regional balance. More systematic work is planned to build on this initial review.

FIGURE C.1 OVERVIEW OF POLICY GOALS TO IMPROVE ACCESS TO AFFORDABLE, QUALITY CHILDCARE



dren above the age of 3 due to government support for early childhood education (which can offer parents a partial childcare solution). A number of countries are engaging the nonstate sector, either through incentives for provision (e.g. South Africa, India, Colombia) or by mandating employer-supported childcare (including India, Brazil, Turkey, Jordan, and Japan), which diversifies the provision available. According to recent data from Women, Business and the Law, across 189 economies analyzed, the government provides the following types of childcare-related benefits: direct to parents in 41 percent of economies; to childcare center providers in 35 percent of economies; and to employers in 24 percent of economies.³⁰

The right mix of strategies will vary by country, and governments will choose different approaches based on their contexts and constraints. Key factors may include financial resources and capacity available, political commitment, government structure, existing types and quantity of provision, existing institutional arrangements, labor market structure, and family needs. Country-level diagnostics are required to understand these different factors, with a deep understanding of family needs to ensure the suitability of provision. For example, some preschool programs in Latin America offer full-day options explicitly to accommodate working parents (Araujo, López-Boo, and Manuel Puyana 2013). Coverage during irregular hours can support parents working shifts outside of regular working hours. Data should be gathered to understand family needs and design / adjust policies and programs accordingly.

More details on the four approaches are provided next, with a summary of the policy options and considerations at the end of goal 1.

(i) Direct government provision: This refers to services that are managed and implemented by the government. In a few countries, such as Denmark, Sweden, and France, the government provides direct services to cover children throughout the period from birth to primary-school-entry age (or from age 1 in Sweden). Public provision is widely available in these countries. In Brazil, there is also a strong policy

³⁰ <http://pubdocs.worldbank.org/en/459771566827285080/WBL-Child-Care-4Pager-WEB.pdf>

TABLE C.1 EXAMPLES OF GOVERNMENT STRATEGIES TO SUPPORT ACCESS TO CHILDCARE, BY AGE GROUP

Note: The approaches indicated here are not an exhaustive listing of the full spectrum of initiatives relating to childcare in these countries but rather give an overview of the main policies and approaches relating to government support for childcare provision.

	Country	Age	Enrollment rate*	Employer-supported childcare (mandated or incentivized)	Incentives for non-state sector provision	Financial support for families	Direct government provision	
EUROPE	Denmark	0-2	62%				Highly subsidized	
		3-5	98%				Free services	
	France	0-2	57%			Allowances and tax breaks	Means-tested creche places	
		3-5	100%				Free services	
	Netherlands	0-2	56%			Childcare allowance (ages 0 to 4) for working parents	Some targeted provision age 2-3	
		3-5	95%				Free preprimary from age 4	
	Turkey	0-2	0.3%	>150 women		Tax breaks for 5 yrs		
		3-5	37%					
	Sweden	0-2	47%					1-3 (highly subsidized)
		3-5	96%					525 hours a year free
UK	0-2	32%				15hrs/wk (age 2) low-income families		
	3-5	100%				15-30 hrs/wk (age 3-4)	KG only (age 5)	
LATIN AMERICA	Brazil	0-2	23%	>30 women	Subsidies			Free but limited coverage
		3-5	81%					
	Chile	0-2	20%	Until children are 2	Subsidies for community models - low coverage			Some free places for low-income families
		3-5	80%					
	Colombia	0-2	~20%*		Funding community models for low-income families			Grade 0 mandatory (age 5)
		3-5	84%*					
	Jamaica	0-2	12%*		Subsidies & teachers (but revising policy)			Starting to increase/ make free
		3-5	99%*					Free but low coverage
	Mexico	0-2	2.5%		Grant and subsidies (2007-2019)	Cash transfers**		Provision for those with social security
		3-5	83%					Mandatory and free
ASIA + AFRICA	India	0-2	Unknown	>50 employees in formal sector	Funding creches run by NGOs for low-income families			Free services (Anganwadis)
		3-5	73%*					
	South Africa	0-2	38% (0-4)*		Subsidies for provision for low-income families			Grade R (age 5-6)
		3-5	85% (age 5)*					

Country information is based on the following sources: Brazil: UNESCO (2010); IFC (2017). Chile: Bertram and Pascal (2016); OECD (2015a); Gerhard and Staab (2010); Diaz and Rodriguez-Chamussy (2016). Colombia: Diaz and Rodriguez-Chamussy (2016); World Bank (2013c); Bernal and Fernandez (2012). Denmark: Bertram and Pascal (2016). France: OECD (2015b); European Commission (2018); UN Population Division (2015). India: World Bank (2019b). Jamaica: World Bank (2013a), Government of Jamaica (2017; 2018). Mexico: Gerhard and Staab (2010); Calderon (2014). Netherlands: Netherlands government website. South Africa: IFC (2017); Giese and Budlender (2011). Sweden: OECD (2006b), OECD (2015b). European Commission (2018). Turkey: IFC (2017); European Commission (2018). United Kingdom: UK government website.

*Enrollment data is from OECD Family database (data from 2016 or latest available) unless otherwise specified, as follows: For Brazil: http://simec.mec.gov.br/pde/grafico_pne.php For Colombia: Diaz and Rodriguez-Chamussy (2016) for ages 0-3; and UIS preschool indicators for ages 3-6. For Jamaica: ECC ECI database 2012, cited in World Bank (2013a) for 0-3 and UIS preschool indicators for ages 3-6. For India: World Bank (2019b). For South Africa: data is from GHS data in Statistics South Africa (2018).

**The former Federal Daycare Programme for Working Mothers (2007-2019) has been transformed into a cash transfer program, where the money is given directly to the families. Although not conditional on using childcare, the program's stated objective is to improve mother's access and permanence in the labor market or in school through access to childcare.

commitment to providing public services, including for the youngest children, but coverage is lower and there are long waiting lists in many areas.³¹ More countries ensure provision for preschool-age children, though often just for a single year before entering primary school (for example in the United Kingdom and some states in the United States). It should be noted that government provision of childcare does not always mean the care is free. Often services are free for preschool-age children, but parents must contribute for children below age 3. In France and Sweden, the amount that parents pay is means-tested.

TABLE C.2 DIFFERENT TYPES OF NONSTATE CHILDCARE AND EARLY LEARNING PROVIDERS

 Center-based ECE and childcare providers	
Type of provider	Description
Formal for-profit providers	<ul style="list-style-type: none"> Privately managed preschools and childcare services, ranging from high-end to low-cost services Often single providers, some chains Standalone or attached to a primary school
Informal for-profit providers	<ul style="list-style-type: none"> Services that are legal in nature, but are not formally registered by the government Mostly single providers (small business) Standalone or attached to an informal private primary school
Community-based models	<ul style="list-style-type: none"> Community-managed usually with NGO and / or government support Mostly preschool focus - sometimes offer childcare for younger children Standalone or attached to primary school
Faith-based providers	<ul style="list-style-type: none"> Some affiliation with a religious institution or faith Often overlaps with community-based
NGO providers	<ul style="list-style-type: none"> NGO supported or managed services Often overlaps with community-based
Parent cooperatives	<ul style="list-style-type: none"> Focus on parental ownership and contributions Can be facilitated by movements and policies or occur organically
Employer-supported childcare	<ul style="list-style-type: none"> Various models including onsite childcare (established or contracted); partnerships with other companies; reserved places / subsidies
 Home-based ECE and childcare providers	
Type of provider	Description
Home-based providers (childminders)	<ul style="list-style-type: none"> Childcare provided for a small group of children in a caregiver's home (registered or unregistered)
Nannies / au pairs	<ul style="list-style-type: none"> Childcare in the child's own home by someone employed to provide care

Note: In addition to engaging the nonstate sector in the direct provision of childcare and early learning services, the nonstate sector can be an important provider of ancillary services to improve the efficiency and quality of provision. Ancillary services can include: training for the childcare and early learning workforce; developing curriculum materials; supporting provision with noninstructional activities (for example, maintenance, student transportation, midday meals); and delivering infrastructure

³¹The National Plan for Education in Brazil stipulates to have at least 50% of the children ages 0 to 3, and 100 percent of children ages 4 to 5, enrolled in ECE institutions by 2024. http://simec.mec.gov.br/pde/grafico_pne.php

(ii) Financial support for families: Governments may choose to support childcare through financial support rather than government-provided childcare. There are different options available to do this including tax breaks, rebates, allowances and vouchers that provide families with choices. These options can be a good way to improve the affordability of childcare. In countries where there is a shortage of childcare, governments may also need supply-side strategies to stimulate the expansion of childcare to ensure the availability and quality of services. In the United Kingdom, all parents are entitled to at least 15 hours per week of free care for children ages 3 to 4 (parents choose where to send their children and providers are reimbursed by the government); however, reports suggest that families struggle to find places for children and that the financial contribution may not be enough to cover provider costs (European Commission 2017). Tax breaks are used in a number of countries, including the United Kingdom and France; this approach may not be as effective in low- and middle-income countries, where many people are either below the income tax threshold or working in the informal sector. A recent study of the childcare market in the United States suggests that one of the best options to maximize female labor force participation and child development outcomes could be a combination of increased efforts to regulate quality and vouchers for families (Berlinski et al. 2020). This approach combines demand-side and supply-side efforts. The emphasis on quality will improve the experience of children and the vouchers increase choice and affordability for families, while increasing the funding available to providers. The ultimate effect is that more nonstate sector providers are encouraged to enter the market and improve their quality (Berlinski et al. 2020).

(iii) Incentives for nonstate provision, including community-based models: Nonstate sector provision offers the opportunity to crowd-in resources and meet different parental needs through multiple models of provision.

Incentives can be used in a variety of ways to encourage the nonstate sector to establish childcare services, as well as to encourage quality service provision. Strategies include: grants to help set up provision; ongoing subsidies (which could be linked to quality); specific inputs (e.g. government teachers, land); and tax breaks for private companies. These public-private partnership (PPP) arrangements can be structured with varying degrees of formality and complexity. In Vietnam, the government leases land, provides budget support, and offers preferential interest rates on loans to private childcare centers (World Bank 2019c). In some cases, subsidies have conditions attached to ensure they are targeting low-income families. For example, in South Africa the per-pupil subsidy is linked to a means test for caregivers, and in Colombia the home-based childcare program (Hogares Comunitarios de Bienestar) mandates a cap on parental fees. However, the structure of subsidies matters: for example, in South Africa the subsidy is based on attendance rather than enrollment, which makes operators vulnerable to events outside their control, and only 30 percent of the subsidy can be used for salaries, which does not cover minimum wages (BRIDGE et al. 2020). Box C.3 highlights several countries that have developed incentives to encourage private-sector expansion for young children from vulnerable families. In addition to support with resources, countries need a functioning quality assurance system, one that covers the nonstate sector and includes government policies and guidance on registration, quality standards, and monitoring.

(iv) Government mandates or incentives for employer-supported childcare: An increasing number of countries are placing at least some of the obligation for childcare on employers, including Brazil, Cambodia, India, Japan, Jordan, and Turkey (IFC 2017). Currently, 26 out of 189 countries legally require private-sector employers to support or provide childcare (World Bank 2019c). Typically, governments mandate that childcare should be provided once a company has a certain number of employees. In 70 percent of the countries with legal requirements (18 of the 26 countries), this is based on the number of female employees, which risks causing discrimination in hiring practices (World Bank 2019c). India and Ecuador are examples of countries that mandate childcare based on the total number of employees, regardless of gender. Table C-2 provides an overview of employer-supported childcare policies across 8 countries. Policies also vary in their specificity regarding arrangements for childcare provision and payment. While having such a policy is a start, compliance can be challenging. In Cambodia, a 2016–17 assessment found that 72 percent of the assessed factories did not comply with the requirement to have

a functioning and accessible nursing room and/or a functioning daycare center at or near the workplace (ILO 2018a). As with other mandated benefits, there is a risk that associated costs can be passed on to workers in the form of lower earnings or reduced benefits elsewhere.

Some companies are proactively implementing childcare strategies even where this is not mandated, because it improves their business productivity and reputation. There are multiple types of strategies for employer-supported childcare, and companies may offer more than one strategy to more comprehensively address their employees' needs and generate higher business returns (IFC 2017). These strategies include company-provided childcare (either directly managed or contracted out); agreements or financing to allow employees to access non-company-provided childcare; access to back-up care services for emergencies and school holidays; and advice and referral systems (Hein and Cassirer 2010; IFC 2017).³²

Employer-supported childcare is one part of the solution, but because it mainly applies to the formal sector, its impact will be limited in many low- and middle-income countries that tend to have high levels of informal employment, including self-employment and people employed as domestic workers or in small businesses. More than 740 million women worldwide work in the informal economy (ILO 2018d). Globally, 58 percent of women who work are in the informal economy, and this rises to 92 percent in low-income countries (Bonnet, Vanek, and Chen 2019). Employer-supported childcare and other policy instructions and formal labor market solutions often do not reach these women and their families (Samman, Presler-Marshall, and Jones 2016).

TABLE C.3 POLICIES MANDATING EMPLOYER-SUPPORTED CHILDCARE, SELECTED COUNTRIES

Country	Size of workplace to which policy applies	Details of the policy
Brazil	>30 women employees	During breastfeeding period
Cambodia	>100 women employees	Employers must either set up a daycare center or cover the costs of employees placing their children in any daycare center.
Chile	>20 women employees	Limited to children below 2. Employers must pay cost of the care or provide spaces in centers shared with other employees.
Ecuador	>50 employees	Employers must provide workplace creche.
India	>50 employees	Employers must provide creche facilities.
Japan	No minimum	Employers are required to support work-life balance and the childcare needs of their employees.
Jordan	>15 children under 5 amongst all employees	Employers must provide care by a trained nurse at an adequate childcare facility.
Turkey	>150 women	Employers must provide a workplace crèche for children up to age six, or vouchers to pay for those services from certified childcare providers.

Source: IFC (2017); Addati et al. (2014); World Bank (2019c). For the 2019 Jordanian Labor Law amendment (Law No.14) see https://www.ilo.org/dyn/natlex/natlex4.detail?p_isn=110390&p_lang=en

³² 13 countries were chosen based largely on the following criteria: noteworthy approach or outcomes, diversity of approaches, data availability and regional balance. More systematic work is planned to build on this initial review.

TABLE C.4 SUMMARY OF DIFFERENT GOVERNMENT APPROACHES TO INCREASE ACCESS TO CHILDCARE

Approach	Policy rationale	Implementation considerations
<p>(i) Direct government provision</p> <p><i>This refers to services that are managed and implemented by the government.</i></p>	<p>One way to ensure accessible and affordable childcare for the most disadvantaged families, if there is strong political commitment and government capacity for free or highly subsidized services.</p>	<ul style="list-style-type: none"> • Requires significant financial and human resources, implementation capacity and political commitment. • This policy may result in spending more money and effort than necessary, given that other approaches may be possible.
<p>(ii) Financial support for families</p> <p><i>Support for families can be provided through vouchers (that reduce or eliminate fees and allow parental choice in selecting provision), rebates, or tax breaks.</i></p>	<p>Important way to alleviate the costs of childcare and give choice to parents without the implementation burden of government-provided childcare that could require higher levels of capacity.</p>	<ul style="list-style-type: none"> • Widespread provision needs to be already available or with accompanying supply-side strategies to encourage the expansion of provision. • The level of financing should be realistic to make the cost affordable for parents and to allow childcare providers to offer a decent quality service. Where resources are constrained, financing should prioritize low-income families and ensure the contribution is large enough to drive uptake for these families. • Capacity is required to administer a scheme and to regulate and ensure quality.
<p>(iii) Incentives for nonstate provision, including community-based models</p> <p><i>Strategies include: grants to help set up provision; ongoing subsidies (which could be linked to quality); specific inputs (e.g. staff, land); and tax breaks.</i></p>	<p>Given the large and urgent demand for childcare and the wide variety of family needs, the nonstate sector can bring in approaches and resources to complement other government expansion strategies. In many countries the non-state sector (including community-based approaches) is filling some gaps.</p>	<ul style="list-style-type: none"> • Given the additional costs and complications of providing childcare, especially for younger children (ages 0-3), some level of grants, subsidies, or other government contributions (such as providing staff or land) may help encourage providers to enter the market and maintain quality. • Thoughtful conditions attached to subsidies / inputs may help to ensure that this provision serves lower-income families. • Accompanying government policies on accreditation, quality assurance, and the childcare and early learning workforce that include the private sector are essential to support implementation.
<p>(iv) Employer-supported childcare (mandated or incentivized)</p> <p><i>Placing the obligation for childcare on employers</i></p>	<p>Given the strong business rationale for individual companies to invest in childcare, this can be an effective way to diversify provision, freeing up government resources to focus on vulnerable populations.</p>	<ul style="list-style-type: none"> • Because mandated employer-supported childcare is often limited to large, formal-sector companies, this should not be the only strategy deployed by governments, especially for countries with a large informal sector. • Despite good business rationale, companies may need to be guided in recognizing the business case. • Policies should be based on a minimum number of employees, rather than on the number of female employees, to avoid gender-based discrimination. • Policies should offer employers different options to meet the mandate to meet employee needs (e.g. provision of on-site or near-site childcare, stipends, vouchers, consortia with other employers, etc.). • Governments could offer incentives to encourage employers (e.g. tax breaks, land and other PPP arrangements).

Mobile Crèches, an NGO in India, offers childcare and preschool facilities to children of construction workers. The organization has supported more than 1,000 childcare centers through either (i) direct delivery of childcare services, (ii) identification and training of NGOs to provide childcare services in partnership with the building company, or (iii) supervision of provision established by the building company. Mobile Crèches provides initial training for caregivers (33 days initially, with the rest on the job), supports the set-up, and implements complementary ongoing community programs with the families. All crèches must meet quality standards.

Source: Mobile Crèches 2018; also see Mobile Crèches website at <https://www.mobilecreches.org/>



GOAL 2: Prioritizing childcare coverage for the most vulnerable families and ensuring low-cost and free options are available

As governments make decisions on how to support childcare expansion and how to finance it, the question of targeting and prioritizing is key. All governments face resource constraints. Given what we know about equity and family needs, scarce resources should be reserved for the most disadvantaged. Solutions which focus on informal workers are particularly important. In many low- and middle-income countries, large numbers of women are working in the informal economy, with low and irregular sources of income and extremely limited childcare options.

Many governments prioritize support to low-income families, and strategies include:

- Establishing or supporting provision that specifically targets low-income families through subsidies or other inputs (for example in Colombia, India, New Zealand, Rwanda, South Africa, and the United States – see Box C.3 below);
- Mandating the reservation of places for vulnerable families (for example, in Chile and France);
- Offering extra financial support to low-income parents. For example, in the United Kingdom, low-income families can access 15 hours of childcare for children age 2, plus an additional 15 hours of childcare for children ages 3 to 4.
- Linking to and leveraging existing programs that are serving target families, building in childcare as an additional support to families. For example, in Rwanda and Burkina Faso, public works programs, which were targeting vulnerable populations, added mobile creche services to maximize participation. In India, the Integrated Child Development Services, which predominantly serves low-income families, has expanded health and nutrition services to include several hours of preschool education for children ages 3 to 6.) See Annex D for more details;
- Designing programs with a focus on equity and cultural sensitivity to encourage uptake in disadvantaged communities (including language of instruction, hiring local community members as staff, addressing disability, adapting curricula, etc.);
- Identifying spaces that could be used to provide services for informal workers near their worksites or neighborhoods. Many women in cities work as construction workers, street vendors, market traders, waste pickers and domestic workers. These workers need municipalities to help establish childcare services near their workplaces or in their neighborhoods, so they are accessible (Moussié 2019). Urban planning needs to take childcare services into account, because finding safe spaces (for example in crowded informal settlements or marketplaces) is impractical without the support of the municipality, and rent is prohibitive for many operators offering childcare services in cities.

Some countries prioritize services for working parents. Focusing on working mothers is common in Latin America (Araujo, López-Boo, and Puyana 2013). In the United Kingdom, working parents have access to another 15 hours on top of the universal allocation. However, prioritizing childcare placements works only if significant provision is already available. Also, countries need to have ways to identify target populations, such as through existing social registries or cash transfer programs (Araujo, López-Boo, and Manuel Puyana 2013).

BOX C.3 **EXAMPLES OF COUNTRIES WITH INCENTIVES FOR THE NON-STATE SECTOR TO SUPPORT CHILDCARE PROVISION FOR VULNERABLE FAMILIES**

Colombia	Hogares Comunitarios de Bienestar ICBF (HCB) is a home-based childcare program, established in 1972, to provide childcare to vulnerable families and promote women's employment. It is one of the largest programs in Latin America, serving more than a million children (Diaz and Rodríguez-Chamussy, 2016). Services are delivered through a home-based childcare provider and funded through a mix of public financing and parental fees, with parents paying monthly fees that are less than 25 per-cent of the daily minimum wage (Bernal and Fernández 2012).
India	The government's Rajiv Gandhi National Creche Scheme for Working Mothers (RGNC) provides childcare facilities for children between the ages of 6 months and 6 years for families in the bottom income quintile (MWCD 2015). The creche scheme is established in coordination with NGOs, which run the services. The government covers 90 percent of the costs, with NGOs expected to provide the remaining 10 percent.
New Zealand	Additional equity funding is available to services that cater to low socio-economic communities and children with special needs and non-English speaking backgrounds. Monthly grants are also provided to ECE services in isolated communities
Rwanda	In 2017, the government of Rwanda allocated government-owned space in a marketplace for a childcare service, which was implemented by UNICEF, Action Pour le Développement du Peuple (ADEPE), and the mothers working in the marketplace. The model is intended to be replicated across other market sites in Rwanda (UNICEF 2019).
Singapore	The Anchor Operator (AOP) scheme provides funding to selected preschool operators for children from lower-income or otherwise disadvantaged backgrounds. The intention is to support operators to keep fees to an affordable level and invest in quality, including professional development.
South Africa	The Department for Social Development provides a subsidy to registered ECD centers with children from low-income families. It is calculated per child per day for children 0-4 years whose caregivers pass an income means test (Giese and Budlender 2011). Many ECD centers, however, do not access the subsidy, even though they have eligible children enrolled, partly because the budget is insufficient and partly because the barriers to formal registration of the centers are too high.
United States	The Head Start program in the United States targets children from birth to age five who are from families with incomes below the poverty guidelines. Services are free and receive federal funding.



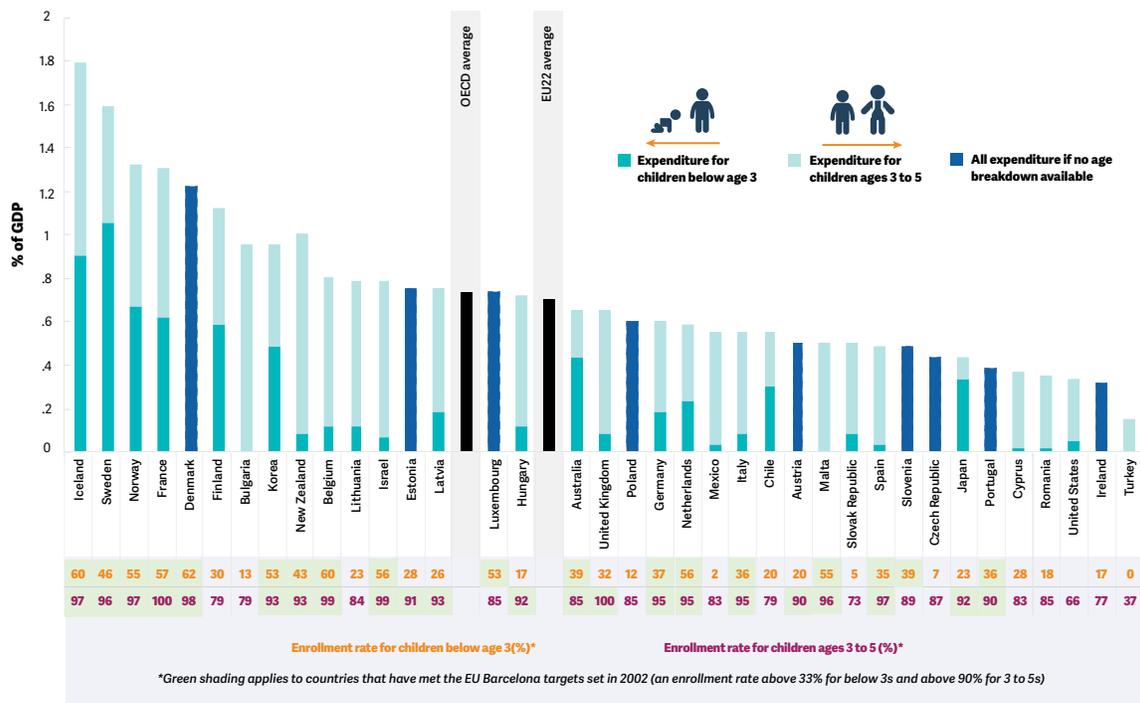
GOAL 3: Allocating sufficient financing to make quality childcare affordable for families

Governments need to ensure that enough financing is available to make childcare affordable for families, and to support the system to promote quality. In too many countries, the financial burden of childcare falls disproportionately on parents (and to a lesser extent, providers, who operate under tenuous circumstance). Increased government finance could redistribute the burden.

In most countries, the burden of spending on childcare unfortunately falls heavily on families, rather than

the public sector. Parental fees are an important source of funding for the sector. Even in OECD countries, although the majority of the funding comes from the public sector, there are also varying levels of parental contributions. Among OECD countries, Slovenia's home-based care is the only setting where parental contributions (80 percent) account for more than the state's contribution (OECD 2015b). In Latin America, parental fees are common, including for 30 percent of public programs; however, the public programs that do require a contribution charge low fees that represent 2 to 16 percent of monthly household per capita income (Diaz and Rodriguez-Chamussy 2016).

FIGURE C.2 PUBLIC EXPENDITURE ON CHILDCARE AND EARLY LEARNING AS A PERCENTAGE OF GDP IN OECD COUNTRIES (2015)



Source: All data are from OECD Family database (PF3.1 and PF3.2); public expenditure data are from 2015 or latest available and enrollment data are 2016 or latest available. Other sources may arrive at slightly different calculations.

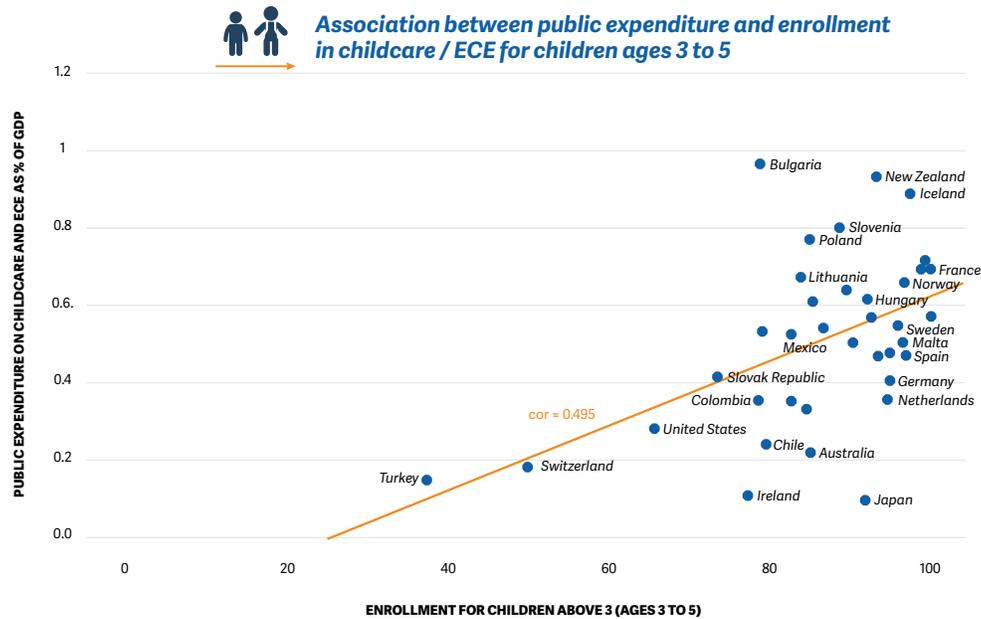
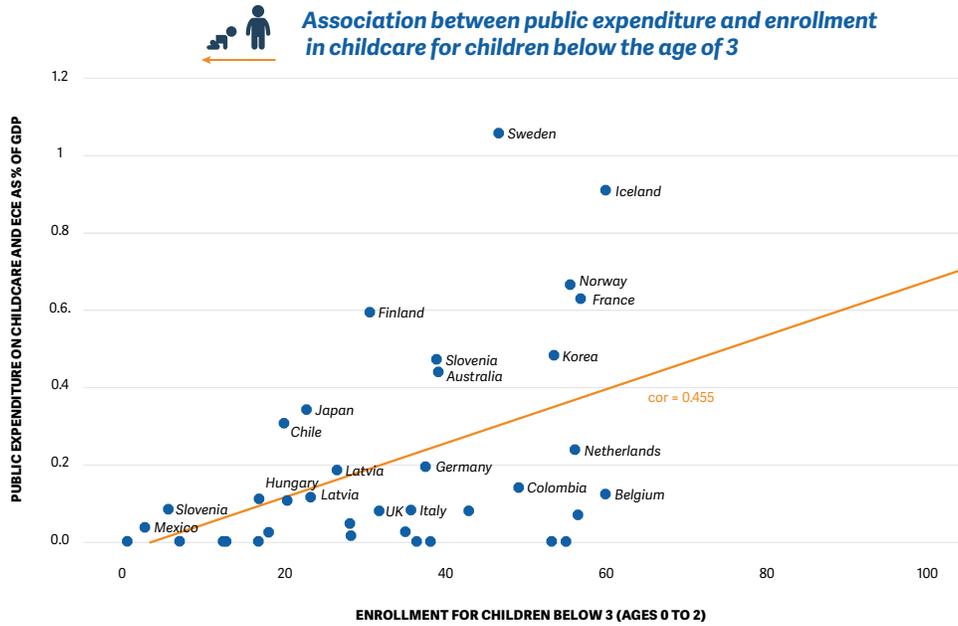
Most governments are not allocating adequate funding to childcare, which can result in the financial burden falling on families. The OECD has suggested a public spending target of 1 percent of GDP for childcare and early learning (OECD 2006a). Figure C.2 presents childcare and early learning funding levels across OECD countries. There is substantial variation in funding levels across OECD countries, from a low of 0.1 percent of GDP in Turkey to a high of 1.8 in Iceland (OECD Family database).³³ The OECD average is currently at 0.7 percent, more than two-thirds of which is allocated to services for children above age 3 (OECD Family database).³⁴ Only a few countries, including Norway, Iceland, Australia and France have more balanced spending

³³ Data is lacking for many countries, but indicatively, there are a number of low- and middle-income countries that spend as little as 0.1 percent or less on preprimary as a percentage of GDP. These include: Burkina Faso; Ethiopia; Iran; Jordan; Namibia; Nepal; Rwanda; South Africa and Zambia. (UIS, Government expenditure on pre-primary education as a percentage of GDP (latest estimates between 2015 and 2019, accessed September 2020))

³⁴ Although public expenditure on childcare and early learning is not disaggregated by age group for the OECD average in the latest data from 2015, in the 2013 data, the OECD average public expenditure on childcare and early learning was 0.8 percent of GDP, of which 0.2 percent was allocated to services for children below the age of 3, and 0.6 percent was allocated for children above the age of 3 (OECD 2017).

FIGURE C.3

ASSOCIATION BETWEEN PUBLIC EXPENDITURE AND ENROLLMENT IN CHILDCARE / ECE ACROSS OECD COUNTRIES



Source: Authors' analysis using data from the OECD Family database (PF3.1 and PF3.2): public expenditure data is from 2015 or latest available and enrollment data is 2016 or latest available. We controlled for the following factors and for each we have listed the data source in parentheses: female labor force participation rates (ILO), maternity leave duration (OECD family database), maternal employment rates (OECD family database) and GDP per capita (World Bank national accounts data and OECD National Accounts data files). Countries have been labeled where space allows it.

Note: The correlations shown here are statistically significant for children ages 0 to 2 and ages 3 to 5. For children ages 0 to 2 the correlation coefficient is 0.455** (p-value = 0.004), and for ages 3 to 5 it is 0.495** (p-value = 0.0018). Limitations of this analysis include: (i) the inclusion of OECD countries only, (ii) a static snapshot rather than longitudinal data, and (iii) observational in nature, limiting the ability to determine a causal link.

between younger children (below age 3) and preschool-age children (above age 3). Figure C.3 presents an analysis of the associations between public spending on childcare and early learning (as a percentage of GDP) and enrollment rates, with the analysis separated by age group. The analysis shows that countries that allocate a higher proportion of spending on childcare and early learning tend to have higher enrollment rates. When the analysis is extended to control for other factors (including GDP per capita, maternity leave duration, female labor force participation and maternal employment rates), the findings are statistically significant for preschool-age children but not for children below age of 3. Two factors are likely to be contributing to this. The first is the Netherlands' Childcare Act, which states that employers, parents and the government must all jointly bear the costs of formal childcare (Government of the Netherlands 2011). The second is that the average time spent in childcare is less than 20 hours a week, which is one of the lowest levels across OECD countries (OECD 2017). In Latin America, all 40 childcare programs reviewed by Diaz and Rodriguez-Chamussy (2016) had some level of public subsidy, including services delivered by the nonstate sector. Governments may also get a decent proportion of this investment back in increased income taxes. In Quebec, the increased income tax revenue from working parents, as a result of the extensive childcare program launched in 1996, now more than covers the cost of the program (McCluskey 2018).

Beyond provision, financing is required to support the entire childcare system to promote quality. Key expenses related to quality include: implementing a quality assurance system; implementing information systems (including collecting data on demand, supply and outcomes ensuring information is available to relevant stakeholders); and training and supporting the workforce.

Raising revenue for childcare through taxes and the reallocation of public spending is the most common way to fund programs, but there are a range of other ways to finance childcare.

- **Allocations in the national budget:** Most public funding is reallocated to childcare from the national budget.
- **Specific childcare-related taxes for individuals:** In 2013, Colombia imposed a special tax on individual income, known as the fairness tax, which is partly used to finance childcare services. The withholding rates are between 0.3 and 1.5 percent, depending on the taxpayer's main economic activity (Ernst & Young 2013). In Mexico, the Institute for Social Security (IMSS) programs are funded by a 0.8 percent payroll tax paid by all employees affiliated with the social security system; these taxes cover 100 percent of the program cost.
- **Individual contributions through social security systems:** This is the most popular way to fund maternity policies, occasionally paternity and parental leave policies, and sometimes childcare. However, it covers only a portion of the population. For those not covered by social security through employers, one option is to allow voluntary contributions schemes, although these may not reach sufficient scale given the many factors that drive informality.
- **Individual parental contributions:** Across different geographies and levels of income, parents have shown willingness and ability to pay for childcare, but it is important that costs be heavily subsidized through public or employer funding to reduce the burden on parents and to account for externalities.
- **Employer funding:** An increasing number of countries are placing some of the financial obligation on employers either through employer taxes or employer-supported childcare. However, the ILO cautions against countries placing all the burden on companies, as it could lead to discrimination in the labor market (Addati, Cassirer, and Gilchrist 2014). In the Netherlands, employer contributions are obtained through a government-imposed childcare levy on all employers (Netherlands 2011). Employer-supported provision covers only a relatively small proportion of the population, mostly in the formal sector, and there is a risk that costs can be passed on to employees through the reduction of other benefits. Childcare offered near workers' homes could also be a good investment for Corporate Social Responsibility (CSR) funding, offering a shared value proposition.

A number of other financial options are less commonly used to finance childcare specifically but have been used across the education and health sectors, and the concepts could be replicated for childcare. These include:

- **Public private partnerships (PPPs) for childcare:** As indicated in section 3, partnering with the nonstate sec-

tor could be a good way to bring additional financing and expand access without needing to build as much public infrastructure. Typically, the government would provide some kind of support, either financial (e.g. grants or per pupil subsidy) and/or in-kind (e.g. location, physical structure, or teachers), but this financing is often supplemented by nonstate sector investments, increasing the total resources available for the sector.

- **Social impact bonds (SIBs):** These bonds are a results-based financing mechanism in which investors provide up-front financial investments and the financial returns are linked to social results. SIBs allow governments to bring in new investment for social interventions, and at a lower risk than financing directly. A report published by the Brookings Institution in 2015 highlighted that SIBs for ECD were under development in several countries, including the United Kingdom, the United States, and South Africa, and suggested ECD as a promising area of growth for SIBs. In particular, it found that SIBs could target services for underserved populations or quality improvements or be used to test new innovations (Gustafsson-Wright, Gardiner, and Putcha 2015).
- **Entrepreneurship funds from philanthropic donors:** Such funds would offer financial (donations or loans) and technical assistance to entrepreneurs to support childcare start-up costs and encourage low-cost, financially sustainable, quality provision. This concept is explored more in Annex D.
- **Loans to childcare business owners from financial institutions:** Credit from financial institutions can be a source of funding for childcare business owners; however, most financial products are inaccessible to childcare or private school owners seeking to establish or expand private provision, because they are considered too high-risk due to the absence of financial records or collaterals. The DEEPEN project in Nigeria is seeking to improve the enabling environment for private schools, with access to finance being an important component. The program is partnering with microfinance banks to raise awareness about the market opportunity (estimated at \$2.5 billion in Lagos alone) and build their capacity to serve the sector, so that they can expand their sustainable lending portfolios by developing tailored loan products for low-cost schools (DEEPEN website; DEEPEN 2014). One of these banks, Accion Microfinance Bank, piloted a tailored loan product, My School Plus, designed around the needs of low-cost schools, including repayment schedules modelled on school-year teaching terms rather than monthly repayments (DEEPEN 2018). Initially, this pilot was subsidized by funding from the Central Bank of Nigeria's Micro, Small and Medium Enterprise Development Funds, which allowed the interest rate to be capped at 9 percent. In the pilot, 100 percent of schools paid back the loan within nine months. Accion has subsequently launched two further longer-term school loan products, which are available to clients that have a good repayment history from their My School Plus loan (DEEPEN 2018). Other NGOs such as Opportunity EduFinance are working alongside financial institutions in similar ways across multiple geographies.



GOAL 4: Defining clear, workable institutional arrangements and building system coherence

The institutional arrangements for managing childcare and early learning provision and regulation vary across countries. In many countries, clear institutional arrangements are lacking: multiple ministries lead on different aspects, without any formal coordinating mechanism or lead ministry. Fragmented childcare policies and service delivery exacerbate the challenge of ensuring quality and planning. In the absence of clearly defined roles and responsibilities, childcare often falls through the cracks. In other countries, a more coordinated approach exists, either under the leadership of one ministry or through a coordinating body with representation from multiple ministries. Countries' institutional arrangements depend on a variety of factors, including the historical evolution, budget allocations, political structures and political commitment.

There is no single approach, and the right institutional anchor will vary by country. However, whatever institution(s) is the lead, it needs to have a clear mandate, adequate finance and capacity, a focus on child development and education, and strong coordination mechanisms to bring in all relevant stakeholders (OECD 2006a).

Clear institutional arrangements make lines of accountability more transparent and facilitate planning, implementation, monitoring and a more holistic, systems approach to childcare. Coherence within and across core accountability relationships (between policymakers, service providers, and families) is necessary

TABLE C.5 OVERVIEW OF INSTITUTIONAL ARRANGEMENTS FOR CHILDCARE

	Country	Split or integrated system	Lead ministries
EUROPE	Denmark	Integrated	Ministry of Family and Consumer Affairs
	France	Split	Ministry of National Education Ministry of Social Affairs and Health
	Germany	Integrated	Federal Ministry of Family Affairs, Senior Citizens, Women and Youth
	Netherlands	Split	Ministry of Social Affairs and Employment Ministry of Education, Culture and Science
	Norway	Integrated	Ministry of Education and Research
	Sweden	Integrated	Ministry of Education and Research
	Turkey	Split	Ministry of National Education Ministry of Family and Social Policies
	United Kingdom	Integrated	Department for Education
LATIN AMERICA + THE CARIBBEAN	Chile	Integrated	Ministry of Education
	Jamaica	Integrated	Ministry of Education, Youth and Information
	Mexico	Split	Ministry of Public Education Mexican Institute for Social Security Ministry of Welfare System for the Integral Development of the Family
ASIA + AFRICA	India	Split	Ministry of Women and Child Development Ministry of Human Resource Development
	South Africa	Split (but planning to move to integrated model under the Department of Basic Education)	Department of Social Development Department of Basic Education Department of Health
	Vietnam	Integrated	Ministry of Education and Training
	Zambia	Integrated	Ministry of Education

Source: Bennett and Kaga (2010); OECD (2006b, 2015a, 2015b, 2015c, 2015d, 2017); Gerhard and Staab (2010); World Bank (2015a); Giese and Budlender (2011).

for systems to achieve their intended outcomes (Pritchett 2015). Systemic outcomes for childcare and early learning services, as opposed to individual or programmatic outcomes, include services that are: high-quality, equitably distributed, efficiently designed and executed, efficiently financed and governed, and durably scaled (Kagan and Roth 2017).³⁵

Some countries have a split system that separates childcare services from early childhood education. In these countries, early childhood services are divided between care services, which typically target the youngest children and are often assigned to welfare or health ministries, and early childhood education services, often located in education ministries (Bertram and Pascal 2016; Bennett 2008; Diaz and Rodriguez-Chamussy 2016).

³⁵ For an interesting review on early care and education systems, see Kagan and Cohen (1997) Not by Chance: Creating an Early Care and Education System for America's Children. The core elements they suggest (financing, governance, regulation and accountability, workforce capacity, data collection and use, family and community engagement and linkages with other services) align with the aspects included within our policy goals.

As presented in Table C.5, split systems could have different ministries responsible for different age groups and / or for different types of provision, as in the following four examples:

- **Turkey:** The Ministry of Education is responsible for the majority of provision, excluding services that cater to children ages 0 to 2. The Ministry of Family and Social Policies has the responsibility for creches and daycare centers for children ages 0 to 6 that are established by private individuals or entities (World Bank 2015a).
- **Belgium:** There is a clear division of responsibility between daycare for children ages 0 to 3, which is under the Ministry for Welfare, Public Health, and Family, whereas preschool provision for children ages 2.5 and above sits with the Ministry of Education (Bennett and Kaga 2010).
- **Indonesia:** Kindergartens for children ages 4 to 6 are under the Ministry of Education, but playgroups for children ages 2 to 6 and childcare centers for children ages 3 months to 6 years are under the Ministry of Social Welfare (Bennett and Kaga 2010).
- **Netherlands:** At the central level, the Ministry of Social Affairs and Employment is in charge for the age group 0-4 years, and the Ministry of Education, Culture, and Science is responsible for programs for children ages 4-5 as well as targeted early learning programs for children ages 2.5 to 4 years. The Municipal Health Service is in charge of monitoring the structural quality of services.

However, many countries have recently been moving toward more unified systems for childcare and early learning to encourage continuity and coherence (Bennett and Kaga 2010). Split systems have been criticized for being too fragmented, disadvantaging children below age 3 with less funding and less developed programs and offering less coherence for parents and children (Bertram and Pascal 2016; Bennett 2008; Bennett and Kaga 2010). More recently, some countries have moved toward an integrated system in which a single lead ministry has been identified as having responsibility for childcare. In Sweden and Norway, the responsibility for childcare was moved from the Ministry of Social Welfare to the Ministry of Education, and many countries have followed suit. These include the United Kingdom, Jamaica, Chile, Vietnam, and Zambia (Bennett and Kaga 2010; OECD 2006a; 2015a). Some countries also integrate services around the social welfare and family ministries. These include Germany, Denmark, and Finland, although in Finland and Denmark preschool classes for children age 6 then transition to being under the Ministry of Education (Bennett and Kaga 2010; OECD 2006c; 2015b; 2015c; Diaz and Rodriguez-Chamussy 2016).

Another aspect to consider is the decentralization of services: in many countries, the responsibility for childcare implementation and / or quality assurance rests at the regional or local levels. For example, in Kenya, Argentina, Germany, and Brazil, childcare programs are decentralized. This can affect financing, service delivery and coordination efforts. Decentralization can positively impact services by facilitating greater sensitivity to local needs; however, it can also raise challenges, especially in widening differences in access and quality between regions (OECD 2006a).

In addition to childcare, there are other family-friendly policies that can protect the health and economic security of parents (especially mothers) and their children and provide a continuum of care.³⁶ These include paid maternity leave; paternity and longer-term parental leave; breastfeeding breaks at work; and child assistance grants. More research is needed on the relative impacts of complementary policies compared to childcare, as well as how the different policies interact with and impact each other, in order to make informed decisions on a policy package (this is highlighted as part of the research agenda in section 4). Policies around paid leave are particularly important, as they offer an alternative to childcare services. For example, in Sweden, public childcare starts at age 1 due to long parental leave policies (2006b). In Box C.4, we describe family-friendly policies in more detail.

³⁶ For a more comprehensive overview, see Addati, Cassirer, and Gilchrist (2014).

BOX C.4 CHILDCARE EXISTS WITHIN A BROADER CONTINUUM OF FAMILY-FRIENDLY POLICIES³⁷

While leave policies have improved in the last two decades, there is significant variation across countries and large gaps remain in coverage, particularly for the most vulnerable families. Policies are often based on a standard employment relationship in the formal economy, which in most places would not currently extend to informal workers and those that are self-employed. Below we briefly note some of the complementary policies around paid maternity; paternity and longer-term parental leave; breastfeeding breaks at work; and child assistance grants.

Maternity leave and cash benefits: Paid maternity leave allows mothers to recover from childbirth and care for young infants during the first weeks of their lives and protects them from discriminatory labor practices (Addati, Cassirer, and Gilchrist 2014). While there have been gradual improvements over the last two decades, there is significant variation across countries and there remain large gaps in coverage, particularly for the most vulnerable families. Globally, only one-quarter of employed women (330 million) are actually entitled to maternity leave cash benefits, and nearly 750 million women are not covered by maternity policies (Addati, Cassirer, and Gilchrist 2014; ILO 2018b). Frequently excluded groups include self-employed workers, those in domestic, agricultural, or temporary work, and migrants. Out of all those excluded, 80 percent are living in Africa and Asia. Policies that can support vulnerable groups of women include: noncontributory cash benefits through social insurance; public funds or social assistance schemes (for example in Ethiopia); the extension of maternity leave coverage to sectors not typically covered, such as domestic workers (now covered in 54 countries including South Africa and Argentina); and voluntary contribution schemes to allow various groups, including the self-employed, the informal sector, and casual or temporary workers to access maternity leave benefits (for example in Mexico, Peru, Thailand, Laos, and Tanzania). Effective coverage can be limited with voluntary schemes, and in many cases achieving adequate benefit levels for maternity protection may need a combination of contributory and noncontributory mechanisms (ILO 2017).

Paternity leave and parental leave: Adequate leave provision for fathers is crucial to enable them to support their partners in the weeks following the birth, take up family responsibilities, and bond with their children. It also helps to break down traditional social attitudes, promoting greater equality for both men and women at work and at home (Addati, Cassirer, and Gilchrist 2014). Although there have been improvements, paternity leave and longer parental leave policies remain mostly inadequate to support families. Of the 79 countries that had legislation on

paternity leave in 2013, 36 provided less than a week of leave. Parental leave is the least established policy, globally. Just 66 countries provide parental leave, including only five countries in Africa, three in Asia, and two in Latin America, and only 55 percent of these countries (36) offer cash benefits. However, there are some standout examples of parental leave, where countries have adopted policies to encourage men's take-up (e.g. Sweden, Norway, and Germany).

Breastfeeding: Supporting breastfeeding at work is an integral part of maternity protection measures (Addati, Cassirer, and Gilchrist 2014). Provision for this is made in at least 121 countries either through work breaks or a reduction in daily working hours. This is a policy that many countries in Africa (79 percent), Asia (69 percent), Latin America (69 percent), and the Middle East (80 percent) have taken up, and in almost all of these countries breastfeeding breaks are paid. However, only around one-third of countries have accompanying legislation on facilities. For those working in the informal economy, breastfeeding remains a challenge, and creative solutions are needed to support these women.

Child assistance grants: Social assistance/child assistance grants are another way for governments to support families. Grants are usually financed by public funds and are often means-tested, providing higher support for lower-income families. For mothers who are not entitled to maternity-leave cash benefits, these grants can be an important substitute. In certain cases, conditions may be applied to receive the grants, for example regular medical check-ups or having given birth in a health facility (Addati, Cassirer, and Gilchrist 2014). Evidence from Latin America suggests that when confronted with a choice between childcare and cash assistance grants, lower-income households tend to choose the cash benefit, and higher-income households choose childcare. Although cash allowances seem to have a positive short-term redistributive effect, over the longer term they can promote socioeconomic inequality and gender inequality by reinforcing gender patterns of care and keeping women away from the workforce (Diaz and Rodriguez-Chamussy 2016).

³⁷ UNICEF launched an initiative on family friendly policies in 2019 and an interim guidance note on family friendly policies in the context of COVID-19 in 2020. <https://www.unicef.org/early-childhood-development/family-friendly-policies>. <https://www.unicef.org/media/66351/file/Family-friendly-policies-covid-19-guidance-2020.pdf>



GOAL 5: Ensuring that children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce

What are the basic elements of a quality childcare or ECE program?

The quality of a childcare or ECE program depends on several different elements, which are usually categorized as either “structural” or “process” elements. In order to make these ideas more actionable, we break down the concept of quality further into five categories: (i) *structural*; (ii) *program*; (iii) *workforce*; (iv) *interactions* (ii to iv are all aspects of process quality); and (v) *system*.³⁸ All five categories should be considered as part of an integrated approach, with each category supporting the others.

- **Structural quality** is typically the easiest aspect of quality to be defined, measured, and regulated and includes staff/child ratio, group size, and physical infrastructure.
- **Elements of process quality:**
 - **Program quality** refers to the content, design, and delivery of programs and includes the curriculum, materials, duration, and intensity of the program and strategies for community and parent engagement.
 - **Workforce quality** is a key contributor to process quality, and refers to the qualifications, experience, competencies, and conditions of employment for ECE teachers or aides.
 - **Interactions quality** reflects the social, emotional, and physical interaction the child has with materials, peers, and teachers on a daily basis.
- **System quality** refers to the overall system in which childcare is delivered. Key aspects to consider include finance, information systems, systems for quality assurance, and the knowledge and the capacity of school leaders to support quality ECE.

While there is some convergence on the basic elements of quality that are needed, there is still variation across countries regarding the quality parameters that are included and the level of prescription mandated. The United Kingdom, Australia, and New Zealand, for example, all mandate that a particular curriculum (or a choice of several options) be used, whereas other countries, including Denmark, Chile, and Jamaica, mandate the use of an appropriate but unspecified curriculum. In terms of monitoring child development outcomes, Chile and Jamaica are more prescriptive than other countries. In Chile, six aspects of child development are formally assessed at the preprimary level, including through standardized tests and tasks. Almost all OECD countries specify teacher training and qualification requirements; however, some countries track only teacher certification, while in others teacher observations also occur (Anderson et al. 2017). In India, despite comprehensive guidelines across a number of key dimensions, guidelines for staff qualifications are too vague, stating only that staff must be “adequately trained.” Process quality within settings, which refers to the various interactions between caregivers and children, is considered one of the most important aspects of quality, but it can be more challenging to measure and improve. Table C.6 shows how quality standards vary across selected countries.

Some countries, including India and Jamaica, have a progressive system for quality standards, including a set of the most critical standards and advanced standards designed to improve practice and achieve higher quality. Jamaica’s system is very extensively laid out with clear indications of those standards that are legally binding. For countries that currently lack quality standards and have multiple types of provision already established, a progressive system with the most critical standards clearly identified and enforced may be a practical way to introduce standards.

Many countries with well-functioning systems have consistent quality standards that cover different providers and age groups. In the United Kingdom and Jamaica, quality standards cover all ages and types of provision and are articulated in a single framework. This makes it easy for all stakeholders to engage with while still allowing for some variation across ages and / or providers. For example, in the United Kingdom Early Years Foundational

³⁸ Many reviews differentiate between “structural” and “process” quality only; we have chosen to expand these two categories slightly to mirror policy and programmatic decision-making. This section draws from the ECD GSG Approach Note, “How can the World Bank help countries scale-up quality early childhood education?”

Stage (EYFS) framework, a few standards, such as staff ratios and requirements for the physical environments, vary by type of provider.

The nonstate sector should be included in government policies and guidance on accreditation and quality assurance, and achieving good-quality, safe childcare is of paramount importance. However, there are examples of contexts where onerous registration requirements have negative consequences for children and their families. For example, the high barriers to entry in South Africa have meant providers are disincentivized from setting up, and large numbers continue to operate unregistered outside the system (BRIDGE et al. 2020). Kago Ya Bana, a program of the Holland Foundation in South Africa, is working with providers and the municipality to identify and resolve barriers to registration. In Turkey, extensive infrastructure requirements have led to providers charging higher fees to recoup high start-up costs and therefore low-income families cannot afford it (World Bank 2015a). Urban planning for childcare infrastructure could help to address serious issues around lack of space and high rental costs in urban areas, which currently make many models serving lower-income families financially unsustainable. In Rwanda, for example, the government's offer of public spaces in markets is a promising approach that could be replicated elsewhere.

Most high-income countries have strong monitoring systems in place, which combine official inspections, with other forms of monitoring such as self-assessment and parental surveys. Finland and Germany are two outliers that do not have mandatory monitoring of standards; instead, voluntary local monitoring occurs (Anderson et al. 2017). Self-assessments and parental surveys are used extensively across high income countries. Out of 22 OECD countries, 18 (82 percent) have self-assessments and 15 (68 percent) also use parental surveys (OECD 2015b). Engaging parents and communities in the governance and monitoring of provision can help ensure program relevance and quality. Providing parents with information has also been a successful strategy in ECE provision and basic education to improve quality and community engagement. For example, the quality rating and improvement system (QRIS) in the United States and the Ofsted system in the United Kingdom give families a way to see and compare programs' quality ratings.

Engaging and empowering parents can be a powerful strategy to increase quality. Parents can contribute to the running of the childcare services, support their child's progress by engaging in their learning and development, and support the self-regulation of the childcare service and push for higher quality. Childcare provision that give parents a say in the way the service is run can also promote trust and social cohesion (Moussié 2019). Parental engagement happens through informal as well as formal mechanisms. More formal mechanisms include having parents involved in the governance, holding regular meetings between parents and the caregivers, and having quality standards that include specific guidelines around parental engagement. For example, in the United Kingdom there is a requirement for a designated caregiver for each child to help build the child and parental relationships. In New Zealand, parents are actively engaged across all types of provision and are also encouraged to lead childcare and early learning services.³⁹ Parents also can influence the market and drive competition between providers (if there is a choice of provision available). Such market-based mechanisms could be an effective approach to pushing for better quality, especially in countries where there is weak quality assurance and government-led quality assurance is less likely to be functioning. In some cases, parents may even be able to intervene and take over services that are not meeting their needs. For example, at Makola market, a large outdoor market in Ghana, parents took over the running of a childcare center that had declined in quality and was not taking into consideration their concerns (UN Women 2019).

Data is a foundational component, so it is crucial that governments put in place good data collection to inform policy design and implementation and to hold key parts of the childcare system to account. All countries should aim to have good data collection on supply, demand, and outcomes. Excluding OECD countries and some Latin America countries, very few countries have data on childcare, especially for children below the age of 3. However, there are some promising examples of simple, low-cost data collection methods in Latin America, where several countries have integrated questions about childcare into household surveys (Diaz and Rodriguez-Chamussy 2016).

³⁹ New Zealand government website: <https://parents.education.govt.nz/early-learning/getting-involved-in-your-childs-ece/>

BOX C.5 EXAMPLE OF A MIXED-METHODS DATA COLLECTION FOR DEMAND AND SUPPLY OF CHILDCARE IN EASTERN EUROPE AND CENTRAL ASIA

To better understand the context of childcare (and eldercare) provision in Eastern Europe and Central Asia, a survey on the distribution of care was designed and implemented in seven countries across urban and rural areas. The field work was divided broadly into two components: a demand assessment and a supply assessment

- **Demand assessment** included data on time use, care needs, perceptions, and preferences about care responsibilities, as well as barriers in access to childcare services. Where possible, it followed the dynamics of care demand and supply at the household level, with women and their labor force engagement at the center. This assessment included quantitative individual-level questionnaires as well as qualitative focus group discussions.
- **Supply assessment** included data on the types of childcare services (both public and private), quality, cost, and accessibility, as well as the social perception of and normative views around care and the use of the different available alternatives. This included site visits, mixed-methods interviews, and, when appropriate, quantitative observational checklists.

Source: World Bank 2015b.

With studies consistently pointing to the importance of well-trained practitioners for childcare and early learning program quality, many countries are increasing the professional training requirements for childcare and early learning practitioners. There is a wide body of literature linking the benefits of investing in childcare and early learning practitioners to child development outcomes (e.g. Wolf, Aber, and Behrman 2018). A robust training program for quality practitioners should include preservice training as well as ongoing training, coaching, and performance management. Qualifications now vary enormously across countries and within countries, ranging from staff with at least a bachelor's degree to staff who have completed only some type of secondary education.

Given the size of the demand and the urgency of the problem, many countries have recognized that there is a need to scale up childcare and early learning practitioner training programs in a way that is cost-effective and rapid but still focused on promoting good quality. Several countries are now investing in shorter initial training programs for childcare and early learning practitioners, often complemented by continuing support and guidance and linked training pathways to facilitate progress toward a higher qualification later (see Box C-6 for examples). Some countries with higher requirements have a “preferred” level and then a lower requirement if that cannot be met. One promising cost-effective approach for building the childcare and early learning workforce is to combine early learning practitioners with skills and employment programs, offering governments a unique opportunity to tackle multiple challenges with a single investment (see section 4).

Inservice training and coaching programs can also be effective in upskilling existing practitioners. A recently published impact evaluation in Ghana showed the positive impact of upskilling (largely untrained) kindergarten teachers. The inservice teacher training and coaching improved teachers' use of the play-based kindergarten-specific pedagogy, with effects persisting one year after the end of the program. This resulted in improved school readiness among the children, including in early literacy, early numeracy, and social-emotional skills (Wolf Aber, and Behrman 2018).

Most countries need to professionalize the childcare and early learning workforce to improve practice and make it a more attractive, respected, and secure career option. The childcare and early learning Workforce Initiative highlights the importance of creating solid competencies and standards that guide the work of early childcare workers and defining clear career pathways, as well as establishing systems for continuous feedback and coaching.⁴⁰ Establishing salary scales (with living wages) and raising the status of the profession is also

⁴⁰ ISSA website: <https://www.issa.nl/workforce>

crucial. Flexible pathways for practitioners across the whole age range (from birth to primary school entry), with similar salaries and employment structures, could be considered to avoid devaluing childcare practitioners that focus on younger children.

In addition, in countries where non-state sector provision is encouraged, additional supports should be considered to help small-scale childcare operators, particularly home-based providers, to achieve quality and sustainability (Kaneko, Lombardi and Weisz, 2020). These supports could include establishing networks (including more formal franchises), peer support mechanisms, training programs and coaching, access to learning resources, etc. See Annex D for more information on, and examples of, programs that are supporting small-scale operators to encourage quality and financial sustainable models (for example, Kidogo Mamapreneurs in Kenya and SmartStart in South Africa).

BOX C.6 EXAMPLES OF COUNTRIES WITH SHORT OR MORE FLEXIBLE CHILDCARE AND EARLY LEARNING TRAINING PROGRAMS

Australia

Directors and teachers working in early childhood care and education in Australia need to have degrees. However, educators working directly with a group of children require more specialized ECD knowledge and fewer managerial skills and therefore are required to hold only a certificate-level qualification instead. The length of this certificate varies from state to state but tends to take 500 to 700 hours to complete. It is incorporated within the national skills framework and delivered through a range of government and private providers.

Mexico

The previously mentioned Federal Daycare Program, which ran from 2007 to 2019, encouraged a market for home-based childcare services, through offering grants and subsidies, and allowing a lower level of qualification for caregivers. Instead of a relevant degree, caregivers in this program were required to have a high-school certificate and to participate in training for a childcare certificate. The level of expansion was impressive, and by 2009, 3,446 caregivers had received this certificate. There were, however, some concerns about the quality of the program.

France

Preschool teachers are recruited by public examination, open to candidates with a three-year university degree, who are then trained for a further 18 months. For childcare settings (children below age 3), the requirements are more flexible. At least half of the staff are required to have a relevant post-secondary diploma, a quarter need to have qualifications related to the sector, and a quarter are exempted from any qualification, as long as the employer provides supervisory support.

Source: Productivity Commission (2011); Calderon (2014); Gerhard and Staab (2010); OECD (2015b).

TABLE C.6.1 COMPARISON OF QUALITY STANDARDS AND MONITORING ARRANGEMENTS FOR SELECTED COUNTRIES

Note: these are examples of key quality standards but this table is not a comprehensive list of all aspects of quality that are essential or should be regulated.

CATEGORIES AND ELEMENTS OF QUALITY		UK	JAMAICA
		<i>Statutory Framework for the Early Years Foundation Stage mandatory for all providers, including schools, daycare, and childminders.</i>	<i>Standards for the Operation, Management and Administration of Early Childhood Institutions outline 12 standards.</i>
STRUCTURAL	Staff ratios	Centers: age <2 = 1:3; age 2 = 1:4; age 3+ = 1:8 or 1:13 (depending on qualification). Childminders: 1:6 (or max 3 under 5 or 1 under 1)	Age 1 = 1:5; age 1-2 = 1:8; age 3-5 = 1:10. Plus minimum of two adults on premises at all times.
	Physical environment and safety	2-3 - 3.5 sqm. Guidelines on safety of indoor / outdoor space, smoking, risk assessments. Must have outdoor space and room for sleeping for children under 2 (not for childminders).	Detailed requirements for the building, facilities, and equipment. At least 1.9 square meters per child; adequate play area outside; properly fenced and gated
PROGRAM	Learning program	Must use national framework or one of 3 other approved curriculums	Must have weekly program with wide range of domains specified. Encouraged to curriculum one approved by ECC
	Health and nutrition	Child safeguarding policy required; basic requirements about medicine, food and drink, accidents or injury	Sanitation, water, food storage, child health records, institutional plans and procedures. Staff trained in first aid, child abuse.
INTERACTIONS	Including child-caregiver, child-child, and caregiver-families	Guidelines for managing behavior. Children assigned person to offer a settled relationship for the child and build parental relationship	Guidelines for interaction and positive behaviors; Regulation on corporal punishment
WORKFORCE	Staff qualification	Centers: the manager must hold relevant 'level 3' qualification. At least 50% of other staff must hold relevant 'level 2' qualification. Childminders: some relevant training required.	If child over 3 years, must have fully qualified teacher (with degree or diploma). All other staff must have had ECD training by an approved institution
SYSTEM	Child development monitoring	Must review progress of children aged 2-3 years and provide parents short written summary of their child's development	Written observations of each child's progress categorized into areas of learning.
	Quality assurance	Independent body (Ofsted) inspects for regulatory compliance and quality. Results published online.	Early Childhood Commission (ECC) oversees all institutions. Inspections twice a year

Notes: Standards for United Kingdom, Jamaica, India, and Chile are from the standards documents listed at the top; for Denmark, information is from Bertram and Pascal (2016) and OECD (2006c). Additional information on Chile from Gerhard and Staab (2010) and OECD (2015a).

TABLE C.6.2 COMPARISON OF QUALITY STANDARDS AND MONITORING ARRANGEMENTS FOR SELECTED COUNTRIES (CONT.)

Note: these are examples of key quality standards but this table is not a comprehensive list of all aspects of quality that are essential or should be regulated.

CATEGORIES AND ELEMENTS OF QUALITY		DENMARK	CHILE	INDIA
		National standard	National standards for all nursery / preschool establishments as per 2015 congressional bill.	MWCD Quality Standards for Early Childhood Care and Education. 11 Non-negotiables plus wider set of standards
STRUCTURAL	Staff ratios	Ratios not nationally regulated. Recommends: age 1-3 = 1:4-6; age 3-6 = 1:8	Educators: ratios of ~1:35 – 1:40 plus assistants at 1:6-1:16 (depending on age)	Age 0-3 = 1:10; age 3-6 = 1:20
	Physical environment and safety	Health and safety regulations that cover such aspects as indoor space,	Minimum standards for physical environment and sanitary conditions. Must have furniture, equipment, teaching materials and equipment	Classroom >35 sqm for 30 Children. Outdoor space available. Structurally safe. Facilities: safe water, toilets, hand washing.
PROGRAM	Learning program	Must use a curriculum (since 2004), across 6 key themes. National guidance exists but not mandated.	Must use a curriculum. National curriculum exists and can be used	Must use an appropriate (but not specified) curriculum delivered in the local language. Preschool should be 4 hours duration
	Health and nutrition	Limited additional regulation. Lunch meal must be provided and meet nutrition standards.		First aid kit. Separate spaces for cooking nutritional meals and nap time for children
INTERACTIONS	Including child-care-giver, child-child, and caregiver-families			Broader standards include guidance on interactions with children and their parents
WORKFORCE	Staff qualification	Must have manager and deputy – both must be educators (3.5 year course at specialized training college. Assistants need secondary vocational training. No mandatory training for childminders.	Educators – 5 year university degree in ECE. Support staff – technical degree.	Adequately trained staff (not specified)
SYSTEM	Child development monitoring	No national regulations for ongoing monitoring. But age 3, the municipal council carries out language assessment	6 aspects of child development are formally assessed at pre-primary including through standardized tests and tasks	Broader standards include guidance on age appropriate child assessment
	Quality assurance	Municipal monitoring of quality and also approves curriculum being used	National body responsible for the accreditation and inspection of ECE services.	Not specified. Implemented by States. Limited roll out to date.

Notes: Standards for United Kingdom, Jamaica, India, and Chile are from the standards documents listed at the top; for Denmark, information is from Bertram and Pascal (2016) and OECD (2006c). Additional information on Chile from Gerhard and Staab (2010) and OECD (2015a).

TABLE C.7 SUMMARY OF PRIORITY ACTIONS TO ACHIEVE THE FIVE POLICY GOALS

 <p>GOAL 1: Expand access to childcare by promoting diverse types of provision</p>	<ul style="list-style-type: none"> • Conduct country-level diagnostics to understand family needs and adjust programming accordingly. • Use multiple levers to support the expansion of childcare provision (various policy options exist, including direct government provision, financial support for families, incentives for the nonstate sector and mandated employer-supported childcare). • Integrate childcare into other existing public programs (e.g. childcare alongside training or public works programs to maximize participation).
 <p>GOAL 2: Prioritize childcare coverage for the most vulnerable families and ensure low-cost and free options are available</p>	<ul style="list-style-type: none"> • Prioritize childcare options for vulnerable families (e.g. allocated spaces, targeted provision). • Heavily subsidize childcare costs at least for the most vulnerable families (through financial support to families and/or subsidies to nonstate providers that serve vulnerable families). • Consider the needs of, and solutions for, informal workers, including identifying spaces that could be used to provide services for informal workers near their worksites or neighborhoods. • To ensure equity, consider the needs of especially disadvantaged children (e.g. children with disabilities, ethnic or linguistic minorities, refugee populations or others affected by violence and conflict, etc). • Apply conditions/means testing to ensure government-supported and nonstate sector provision is accessible for low-income families. • Build on existing programs that serve vulnerable populations (e.g. using them to identify target populations and / or piggy-back on services).
 <p>GOAL 3: Allocate sufficient financing to make quality childcare affordable for families</p>	<ul style="list-style-type: none"> • Allocate sufficient public funding to make childcare affordable for all families. • Consider diverse funding streams—public funding, employer funding, reasonable individual contributions (for those that can afford it), and various types of private-sector funding. • Leverage existing financing by integrating childcare into programs for win-win investments. • Ensure sufficient budget to build and maintain a robust quality assurance system.
 <p>GOAL 4: Define clear, workable institutional arrangements and build system coherence</p>	<ul style="list-style-type: none"> • Define institutional arrangements to cover services for children from birth to primary school entry to ensure child safety and promote child development. • Identify a clear institutional anchor(s) with the mandate and resources to promote access and ensure quality, along with clear roles and responsibilities for other sectoral and agency engagement. • Collect data on usage and quality to inform implementation and policy. • Take a whole-of-government approach to optimize programs and policies to promote both child development and women's employment and ensure system coherence (taking into account other complementary policies such as child benefits and parental leave).
 <p>GOAL 5: Ensure children are in safe and stimulating environments through a robust quality assurance system and a supported and capable workforce</p>	<ul style="list-style-type: none"> • Establish registration requirements that apply to all types of providers, reflect local conditions, and are feasible enough to encourage registration. • Develop comprehensive and coherent quality standards (with clear minimum standards and progressive pathways to improve over time). • Establish monitoring systems with inspectors trained in early child development. • Encourage parental engagement and establish mechanisms to help parents support their children's development and advocate for quality services. • Develop and support quality initial and ongoing training and support for childcare and early learning practitioners with a strong focus on practice. • Professionalize the childcare and early learning workforce with formal qualifications, career pathways, and suitable remuneration. • Provide supports for home-based providers and other entrepreneurs (networks, training and coaching programs, peer support, access to learning resources etc).

ANNEX D.

Leveraging multisectoral entry points and innovative approaches to expand access to childcare

Childcare is central to solving multiple challenges that governments face, and there are many different potential entry points that can be leveraged to expand access to quality, affordable childcare. While new funding is undoubtedly needed to expand access given the scale required, there are also a number of opportunities to leverage financing within existing programs that could finance an expansion of childcare. Table D.1 lays out some of these entry points. Searching for and leveraging these opportunities in countries can maximize the returns to investments and help governments achieve multiple objectives with limited sources of finance. In the short-term, these opportunities offer practical and fast options to increase the resources available to support the expansion of childcare, while governments work toward mobilizing new resources.

Although additional funding for childcare is required, in the immediate term governments already have programs that can be leveraged to support childcare. Five ideas for smart investments that meet multiple objectives are discussed below. They are:

- (i) offering childcare to facilitate participation in skills and training programs;
- (ii) using skills and training programs to build the childcare workforce;
- (iii) supporting entrepreneurs to open their own childcare businesses;
- (iv) leveraging health and nutrition programs to support childcare; and
- (v) establishing childcare provision to maximize participation in public works schemes (e.g. mobile creches).

(i) **Offering childcare to facilitate participation in skills and training programs.** Incorporating childcare into skills training programs can help address a common barrier to participation (Buvinic, Furst-Nichols, and Koolwal 2014). For example, in Peru only 42 percent of the roughly 2,000 women micro-entrepreneurs who started a three-month-long business training program were able to attend at least half of the training sessions (three per week) due to travel time and childcare responsibilities (Valdivia 2015). Some promising models are being implemented: services organized by the project and offered free of charge (for example, the Chapeu de Palha Mulher program in Brazil and the Economic Empowerment of Adolescent Girls and Young Women (EPAG) program in Liberia); low-cost fee-for-services models; community groups with mothers taking turns to look after the children (for example the BRAC ELA program in Sierra Leone and Tanzania); and stipends to cover childcare fees through external provision. Some higher education systems in the United States are also implementing childcare provision to support student parents (Gault Cruse, and Schumacher 2019); the State of New York recently announced that it will fund a pilot to support single parents attending community college campuses, which will include on-site childcare (State of New York 2019). Models that focus on the quality of childcare, rather than just addressing participation challenges, will have wider benefits.

(ii) **Using skills and training programs to build the childcare workforce.** One promising cost-effective approach for building the childcare and early learning workforce is to combine childcare and early learning with skills and employment programs, offering governments a unique opportunity to tackle multiple challenges with a single investment. In recent years, trends such as rapid urbanization, the youth bulge, and increasingly educated youth looking for opportunities that match their skills and expectations have all exacerbated the employment challenge in many countries. This has led to rising demand for investments in skills and employment programs. Offering childcare and early learning practitioner qualifications (such as caregivers and preschool teachers) as a training track within skills and training programs can help to alleviate unemployment (and increase female labor force participation), build job-relevant skills linked to market demand, and provide meaningful career opportunities. This approach addresses a common concern that training tracks may be too rigid or have too little market demand, or both. Given the strong and growing demand for childcare and early learning practitioners, it should be a highly relevant option for a skills track in many countries (however, market analysis should

TABLE D.1 POTENTIAL SECTORAL ENTRY POINTS TO INVEST IN CHILDCARE

SECTOR	EXAMPLES OF WAYS TO SUPPORT CHILDCARE
 EDUCATION	<ul style="list-style-type: none"> • Increasing early childhood education and preschool programs with consideration as to how they also serve a childcare function (hours, location, etc) • Developing and implementing regulation and quality standards for all early learning provision, including childcare (in collaboration with other sectors) • Offering childcare to facilitate participation in skills and training programs • Using skills and training programs to build the childcare workforce
 HEALTH AND NUTRITION	<ul style="list-style-type: none"> • Using childcare facilities to reach children with services to address malnutrition and reduce stunting, especially during the critical first 1,000 days • Leveraging health and nutrition programs to support childcare • Using childcare facilities as referral points and to improve the efficiency of community health workers • Taking into account the burden of childcare placed on older female siblings, with implications for adolescent girls' enrollment in school and ultimately for delaying marriage and reducing adolescent pregnancy
 GENDER	<ul style="list-style-type: none"> • Expanding childcare to improve women's employment • Supporting women entrepreneurs to provide childcare services • Promoting complementary policies around maternity / paternity leave and breast-feeding at work
 SOCIAL PROTECTION AND JOBS	<ul style="list-style-type: none"> • Establishing childcare provision to maximize participation in and completion of active labor market and empowerment programs, including skills and training programs and public works schemes (e.g. mobile creches) • Encouraging childcare to increase female labor force participation • Promoting cash transfers or child assistance grants, which could be used for childcare and / or maternity benefits • Promoting complementary policies and regulations around maternity / paternity leave • Expanding coverage of complementary benefits, such as maternity/paternity leave, to workers in both the formal and informal sectors (e.g. through establishing voluntary contribution to social security)
 AGRICULTURE	<ul style="list-style-type: none"> • Establishing childcare to ensure children are safe and increase agricultural productivity
 URBAN DEVELOPMENT	<ul style="list-style-type: none"> • Establishing childcare facilities for women workers in industrial zones and urban public spaces (e.g. markets and waste dumps) • Investing in childcare facilities as part of "slum upgrading" programs
 PRIVATE SECTOR	<ul style="list-style-type: none"> • Encouraging childcare to increase female labor force participation and business productivity • Establishing childcare to maximize participation in training programs • Supporting childcare expansion through innovative financing mechanisms • Prioritizing childcare sector in funding for Micro, Small and Medium Enterprises (MSME)

always be conducted to ensure sufficient demand).⁴¹ Country examples include:

- **Liberia: Economic Empowerment of Adolescent Girls and Young Women program (World Bank, Early Learning Partnership Trust Fund)** Since 2016, the World Bank has been working with the Government of Liberia to integrate an ECD training track into the Economic Empowerment of Adolescent Girls and Young Women (EPAG) project, at a similar cost to other vocational training tracks. The program consists of three months of classroom training focusing on ECD, life skills, business skills, and work readiness, followed by a three-month placement in a preschool classroom. Free on-site childcare is also offered to maximize participation. Results from the first two rounds were encouraging. Both cohorts achieved over 90 percent employment, and in the 2017-18 round more than 80 percent of graduates were employed specifically in ECD services (an improvement of 20 percentage points compared to the pilot round). An RCT is underway to assess the impact on the 2018-19 cohort. In addition, the team is developing an additional professional development opportunity to support graduates of the training program to open their own childcare / preschool centers (aligning with the ECD entrepreneurship model described below).
- **Rwanda: Junior Caregiver Program (DFID, Education Development Center)** This pilot project placed unemployed young women in a training program to create caregivers, with a training curriculum strongly focused on both ECD and broader work-readiness skills. The impact evaluation showed encouraging results: 98 percent demonstrated good ECD knowledge and similar quality of teaching practice to other teachers with higher levels of academic achievement and training, and in terms of child development, cognitive gains were at least the same or higher than among comparison groups. Employment of the program graduates increased from 24 percent at baseline to 40 percent at end-line, with 88 percent employed in ECD and 5 percent running their own centers. The final outcomes report by the Education Development Center indicates that this approach is being scaled up, in alignment with the government's professional education and training institutions and with a focus on strengthening the enabling environment, including accreditation and quality assurance of the training service providers (EDC and Innovation for Education 2015).
- **India: Skill India Mission Operation (World Bank)** The current \$250 million World Bank-supported Skill India Mission Operation (SIMO) project provides the opportunity to develop short (3–6 month) ECD practitioner training courses. Provisionally, four job roles have been identified, which are in alignment with the broader National Skills Qualification Framework (NSQF) and are intended to be suitable for a range of ECD provision serving children up to the age of 6. The qualification framework includes an entrepreneurial skills track to encourage graduates to open crèches and private childcare centers. A recent World Bank market analysis in India estimated that up to 1.6 million ECD practitioners would be needed to support childcare for the children of 31 million female workers (excluding the farming sector) by 2021.

(iii) Supporting entrepreneurs to open their own childcare businesses (center-based or home-based provision). Programs that support entrepreneurs to open low-cost childcare services can address market demand and also encourage good quality provision and financially sustainable models. Support packages could include start-up funding, training, and mentoring in both ECD and business aspects, peer support, and tools to promote quality and effective management. This model recognizes the nonstate sector as an important player in childcare provision, as many governments lack the necessary financial resources, policies, and solutions, but also addresses the risks of insufficient focus on quality and constraints that many would-be operators face to enter the market. Programs that provide extensive support to entrepreneurs to open childcare centers or home-based provision can encourage good quality and financially sustainable low-cost private provision. Several nongovernment programs exist globally, including Kidogo Mamapreneurs in Kenya and SmartStart in South Africa, which have established social franchise networks for ECD entrepreneurs and provide a package of support (subject to meeting certain

⁴¹ For further information on considerations for program design and detail on existing approaches, please refer to the Early Learning Partnership Guidance Note: "How to promote early childhood development through skills training and employment programs" (World Bank, 2018).

conditions). While these programs show significant promise, the quality of provision and the impact on child development outcomes require further review. In addition, more information is needed on models that can promote improved earnings and social security benefits for those establishing and working in these services. Examples of ECD entrepreneurship programs include:

- **South Africa: SmartStart early learning social franchise.** The SmartStart program is seeking to provide a systems solution to the challenge of delivering early learning at scale by helping unemployed men and women to set up their own centers serving children ages 3 to 4. There are three different program models: a playgroup for at least two three-hour sessions per week; a childminder program of 25 hours per week; and a classroom routine held in existing early childhood centers. The program is supported by operational resources and play materials, licensing and quality assurance processes, and a network of 'Clubs' that provide peer support. It operates as a two-part social franchise: (i) a network of SmartStart NGO franchises; and (ii) individual SmartStart centers. Since 2015, 6,429 centers have been established serving over 63,498 children. SmartStart is aiming for 9,000 SmartStart centers by 2020. The ability to scale rapidly is due to the two-part social franchise model, mandatory practices, and streamlined, tailored support. To ensure quality and sustainability at scale, the program is considering key questions around quality assurance for NGO franchisers, the role of the center, and the costs of ongoing monitoring and support. An evaluation took place in 2019 and initial analyses have indicated strong improvements.
- **Kenya: Kidogo Mamapreneurs.** Kidogo aims to improve the quality of childcare across informal settlements in Kenya through a hub-and-spoke social franchise model that provides training (related to ECD and running a center), a starter kit with key resources, and ongoing mentorship to women to start or grow their own quality childcare centers. Kidogo is currently working with ~150 women (serving more than 4,000 children and families daily) who were existing center owners or started new centers. Kidogo is looking to scale-up across Kenya and then East Africa. Key areas of focus going forward include improving the quality of the centers, refining the franchise model, and lowering costs for monitoring and quality assurance.

(iv) Leveraging health and nutrition programs to support childcare. The 2013 Nutrition for Growth (N4G) summit triggered increased attention and funding for nutrition (Global Nutrition Report 2020). As indicated in Section 1, childcare can positively impact nutrition outcomes, and private providers are spending a significant proportion of their budgets (25 to 50 percent) on nutrition. Childcare services offer an easy entry point to reach families and can help to identify those that are vulnerable by aligning with childcare provision that targets vulnerable families. Leveraging nutrition finance for childcare services could therefore be a win-win for nutrition investments and service providers. Alternatively, there may be opportunities to build on existing health and nutrition services to establish childcare provision, leveraging existing infrastructure and resources.

- **India: Integrated Child Development Services (ICDS).** The ICDS program in India is one of the world's largest government-led ECD programs, which since 1975 has provided a range of services to children ages 0 to 6 and their mothers through a network of Anganwadi workers. Services include supplementary nutrition, health check-ups and referrals, immunizations, nutrition and health education and, more recently, preschool (nonformal) education.⁴² ICDS programs now offer several hours of preschool education each day for children ages 3 to 6. In 2017, a new training module was designed for Anganwadi workers to strengthen the early childhood care and education (ECCE) component.⁴³

(v) Establishing childcare provision to maximize participation in and completion of active labor market and empowerment programs, including skills and training programs and public works schemes (e.g. mobile creches). Focusing on childcare to maximize participation in public works, skills and labor programs can be a cost-effective way to increase participation and completion from vulnerable groups and leverage existing investments to achieve multiple impacts. For this to be effective, childcare should

⁴² Integrated Child Development Services (ICDS), Government of India (Accessed August 2020) <https://icds-wcd.nic.in/icds.aspx>

⁴³ See the following link for the Ministry of Women and Child Development training manual: https://wcd.nic.in/sites/default/files/EEC%20Training%20Module%20for%20Anganwadi%20Workers_1.pdf

be recognized as a core design element of programs, rather than being integrated later as an add-on. Providing on-site childcare for skills and employment programs can also be a source of employment in its own right.

- **Rwanda: Vision 2020 Umurenge Programme.** Rwanda's primary Social Protection Program, the Vision 2020 Umurenge Programme, has recently expanded the public works component to target 75,000 households with multiyear, flexible work opportunities, as well as access to home- and community-based childcare. The provision of childcare is intended to relieve the care burden of women, but it also provides a source of employment in its own right: public works participants have the ability to work as caregivers for these project childcare services, receiving the same wage as other participants in the public works scheme (World Bank 2019d).
- **Burkina Faso: Mobile Creches.** The Mobile Creche scheme piloted in Burkina Faso was developed to support a skills and employment project, which provides more than 46,000 young people (mostly women) with temporary public work opportunities (CFI.co 2019). Mobile creches were developed after it was noticed that many of the participants brought their young children to their work sites because they lacked other childcare arrangements, which were either too expensive or located too far from the work sites. The children had been left next to active construction sites without protection. The project established a model of formalized mobile childcare, which follows the women as they move between worksites (each work placement being around six months). The mobile creches are established in an empty building offered by the local authority, or outdoors under a tree; UNICEF has donated many large tents to protect the children. The government worked with the project to develop a standardized list of materials (all weather-resistant) and a stimulating program based on the national preschool curriculum, adapted for younger children.

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