



# International childcare report:

## Mapping the deserts

Victoria University's Mitchell Institute



# Acknowledgement of Country



Victoria University acknowledges, recognises and respects the Ancestors, Elders and families of the Bunurong/Boonwurrung, Wadawurrung and Wurundjeri/Woiwurrung of the Kulin who are the traditional owners of University land in Victoria, the Gadigal and Guring-gai of the Eora Nation who are the traditional owners of University land in Sydney, and the Yulara/YUgarapul people and Turrbal people living in Meanjin (Brisbane).

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# Executive summary

We know that reliable access to childcare is critical to families around the world.

It helps support parents to participate in the workforce, which results in enormous economic and social advantages.

Global research confirms that children build invaluable skills in the first five years of life. From language, to social, emotional and cognitive development, this crucial period of intense growth informs later outcomes.

Right now, nations around the world are embarking on new policies designed to increase the supply and accessibility of childcare. Despite the intense policy focus, there are lots of gaps in our understanding.

For instance, what is the best way to expand provision and improve accessibility when many nations are yet to have a clear understanding about how much, or how little, childcare is currently available?

*International childcare: Mapping the deserts*, the world-first study by Australia's Victoria University (VU), pinpoints access to childcare in nine developed nations with different approaches to childcare. The study determines relative accessibility to childcare for more than 10 million children, analysing data from England, Wales, Scotland, Northern Ireland, Netherlands, France, Norway, Sweden, and Australia.

Led by VU's Mitchell Institute, the findings reveal that when it comes to accessing childcare, where you live matters. This report clearly shows – down to a street level - neighbourhoods that have the best access and those with the worst.

From a policy perspective, *International childcare: Mapping the deserts* will help shape important decisions as countries expand and improve current service levels.

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## What do we mean by childcare?

Childcare can take many forms and be called different things around the world. It can be informal, such as when provided by family members, or formal, like services provided in dedicated centres or preschools. Childcare can also be referred to as early childhood education and care (ECEC) and early learning.

We use the term childcare in this report to describe a range of formal services that are designed for children before they start schooling. These settings usually include centre-based day care, preschools, creches, childminders, nurseries and kindergartens.

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## Key findings

- This is a **world-first study of international childcare access** that finds where you live affects your access to childcare.
- The research examines accessibility to childcare for approximately 10 million children across nine nations. We use the **definition of a ‘childcare desert’ where there are less than 0.333 places per child, or more than 3 children per place**. All countries have some areas that are classified as childcare deserts.
- There are **significant differences in accessibility across nations**. In broad terms, there are no two nations that have the same levels of access to childcare. Exploring the percentage of children living in ‘childcare deserts’ across the nine nations, France (under three years) has the lowest overall accessibility with 86 per cent of the country living in an area classified as a childcare desert. France has compulsory and non-compulsory childcare for over and under three-year-old children, respectively (see page 11). Next is England with 45 per cent, followed by Northern Ireland with 37 per cent. Access was better in Wales at 27 per cent, Netherlands 25 per cent and Australia at 24 per cent. Scotland has some of the best accessibility scores, with only 10 per cent classified as living in a childcare desert. Norway, Sweden and France (over 3 years) use enrolment data instead of places so comparisons can be difficult, but these countries have the best access.

In some nations, **disadvantaged areas have less accessibility**. Childcare access is not the same for all families living in the same nation. In most nations, the type of neighbourhood families live in matters when it comes to access to childcare.

**For nations like England and Wales, as neighbourhoods become more advantaged, childcare accessibility generally increases. In Australia and Scotland, the lowest socioeconomic decile has slightly higher than average childcare accessibility, but it is the more advantaged areas that enjoy the greatest access. The Netherlands and Northern Ireland follow a pattern where the best access is in the more disadvantaged areas and the lowest access is in the middle to upper socioeconomic deciles. In Norway and Sweden, it is the more disadvantaged neighbourhoods that have the greatest access.**

- The **policy approach impacts accessibility to childcare**. In nations which use a mix of demand- and supply-side funding, greater government provision is associated with better access for disadvantaged areas. Many countries operate a mix of demand-side funding for childcare and a supply-side model for children attending preschools. Supply-side models operate much more like school systems where there is greater government provision, a stronger focus on children aged 3 to 4 years-old, and often centres that are attached to schools. Examples of these nations in our analysis include maintained nursery schools in England and preschools in Wales and Australia. In these cases, accessibility favours neighbourhoods with higher levels of disadvantage.

- **Incentives influence provider locations.** Managing supply and demand can involve a complicated balancing act, which becomes more complex when childcare providers locate themselves in areas that are likely to lead to greater rewards, such as higher profits. The research reveals that government policies can have a major impact on the distribution of accessibility. For example, Australia’s means-based subsidy model may result in more targeted subsidies that encourage a greater distribution of supply, even though there are substantial parts of the country that have low accessibility scores. The situation in England, where government is more likely to offer families ‘free’ hours, results in a more uniform system with less variation in accessibility.

**Hence, incentives clearly matter when it comes to the distribution of supply and childcare accessibility. However, the extent that incentives are impacting accessibility, and how they are doing so, requires more investigation.**

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# Introduction

Access to childcare is an important issue around the world. High-quality childcare is associated with better developmental outcomes for children [1,2] and especially for disadvantaged children [3].

Childcare policies and services can influence many important decisions that parents make after childbirth [4] such as how they approach care and work responsibilities. There can be detrimental flow-on effects for families if they cannot secure a local childcare place for their children.

Workforce participation, particularly for women caring for young children, relies on reliable access to childcare services. Like families around the world, in Australia, parents carefully consider location, as well as cost and quality when making decisions about which provider to use [5].

When affordable and nearby childcare places are not available, families may have to decide for one parent to stay home instead of returning to work. In most cases, this is women [6].

Some families may have to drive long distances to centres offering places, which increases overall commute times between work and other responsibilities. The lack of childcare access can negatively impact family wellbeing in many ways.

Nations are investing more into the early years because of its importance. France has embarked on a 'First 1,000 days' initiative to improve developmental outcomes for young children [7]. As part of the educational disadvantage policy in the Netherlands, there is a focus on child language development and early intervention in the early years [8].

Australia and many other countries are adopting policies that will necessitate an increase in the supply of childcare over the coming years. In 2023, the English government announced 30 hours of free childcare for children aged from nine months to five years if all parents are working [9]. A recent Australian government report recommended 30 hours of free childcare for children aged zero to five years for all working parents in the bottom 30 per cent of income earnings [10].

The design of childcare systems and childcare policies can impact the lives of many families with young children.

The question that remains unanswered is how to provide access to childcare for all children and families, especially those living in disadvantaged and non-urban areas? To answer this, we first need to know how much childcare is currently available and how accessible it is to families.



This research provides a detailed picture of childcare accessibility - how easily people can reach services.

**We measure access as the number of places relative to the number of children living in a neighbourhood.**

An area can have 'good' access if it has better accessibility compared to nearby areas, or to the nationwide average.

**'Poor' access occurs when the children per place far exceeds the nationwide average.**

These areas are more likely to experience issues relating to sufficiency, where there are not enough places. A childcare 'desert' is when there are three or more children to every childcare place [11].

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### **Accessibility and childcare 'deserts'**

This research uses methods from the geography literature to measure the relative access to different services, such as hospitals, parks, banks, food, and childcare.

Describing the results of access measurements can be difficult because the number needs to be interpreted or given context. That is why the term 'deserts' has been used to describe the results of research that measures access to services like fresh food outlets [12] and childcare. Along with other researchers, we have adopted the term when there are more than three children vying for each childcare place, or 0.333 places per child [11].

It is important to note that a 'desert' does not mean that there is no childcare, or that centres will have no vacancies. There are lots of factors that influence whether there is sufficient childcare.

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Access is different to both sufficiency (whether there is enough of something) and participation or enrolment (the number of children who have secured a childcare place). The OECD (Organisation for Economic Co-operation and Development) average participation rate for 3-year-olds has increased to 77 per cent [13], which seems positive; however, access tells a different story because it indicates how easy or difficult it is for families to obtain or travel to a service like childcare.

Access is related to policy and funding settings that shape and frame the childcare market. Access can tell us a lot about the effectiveness of childcare policies, how well systems are designed and how equitable they are to meet the needs of families. Investigating how access varies within and between nine different nations provides insights into how market-driven versus universal systems perform.

Governments around the world take different policy approaches to improving access. By mapping and comparing access as it varies across different areas within Australia and in eight other nations, we can explore how system structures such as funding influence access.

Importantly, investigating access enables us to illuminate which policies can be linked to good and equitable access. This research builds on our previous research of childcare

deserts. Using a similar methodology, we will analyse childcare access in nine nations: England, Wales, Scotland, Northern Ireland, Netherlands, France, Norway, Sweden, and Australia.

These countries were chosen for several reasons. They have different approaches to childcare, making it possible for us to explore different system approaches. These countries also publish data on the location of childcare and the number of places or children enrolled at each childcare centre. Without this information, we would not be able to undertake the analysis.

An international comparative exercise like this can produce a huge amount of evidence. In this paper we outline the high-level findings across nine-countries of analysis. In future publications, we will explore individual countries in more detail, as well as important themes like access in regional and rural areas.

Ultimately, we are interested in how countries should construct childcare policies to improve childcare accessibility. We will achieve this aim by addressing two main research questions:

1. How much childcare is available to families?
  - a. What proportion of the population live in a 'childcare desert'?
2. What aspects of system design seem to be important?
  - a. Are there benefits of demand-side versus supply-side funding models?
  - b. How does access vary across different socioeconomic areas?

# What is childcare and how is it delivered?

**Early childhood education and care (ECEC)** broadly refers to education and care services for children under the compulsory school age. The term childcare is more commonly used than ECEC and so we use the term childcare for ease of reference.

It is important to acknowledge that the term childcare is not a preferred term for many in the early learning sector [14]. This is because it is argued that language like childcare can diminish the understanding and significance of what educators do and the importance of high-quality ECEC in improving children's outcomes. Childcare, however, is the most used term for the services that we are examining in this research.

Within all nations that feature in this study, it is not compulsory for children to attend childcare before they start school (an exception is France, where all three-year-olds attend preschools called *l'école maternelle*). Childcare policies also seek to provide families the ability to choose the types of services they use and the number of hours of care. Childcare services can be delivered in a range of settings to reflect this choice.

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## **Compulsory preschool in France: *l'école maternelle***

French preschools are called *l'école maternelle*. Since 2019, in an effort to close achievement gaps between socioeconomic groups, preschool attendance for children aged three to six was made compulsory. There may be some provision for children under three, depending on the preschool. Children attend preschool for 24 hours per week and hence, France has the youngest age for compulsory education across all nations in this analysis. The preschools are governed and overseen by the municipalities in which they are located.

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Childcare can be delivered in centres. For example, long day care and nursery, which are usually for younger children in Australia and the UK, respectively. There are also preschools and kindergartens that provide care and early education for children aged three to five years.

Childcare services can also be attended at school sites, such as outside of school hours care (commonly referred to as OSHC). This includes before and after school care, as well as vacation or holiday care which is provided to school age and non-school age children during school holidays.

In the UK and Australia, children can also attend childcare in the home of carers and educators. This is known as family day care in Australia, and child minders in the United Kingdom.

Children can also be cared for in their family homes by au pairs or private nannies.

France has a range of different crèches (nurseries) which can be located in areas where parents work. There can also be parent-led childcare centres, as well as parent-organised playgroups.

Providers can be privately owned and operated, not-for-profit (the voluntary sector in the UK) or public, government funded. The composition of provider types varies across each nation.

There are two main approaches to the provision of childcare. Childcare systems can be thought of on a spectrum - universal systems and market-based systems. Most countries are mixed, featuring some elements of both universal and market-based approaches.

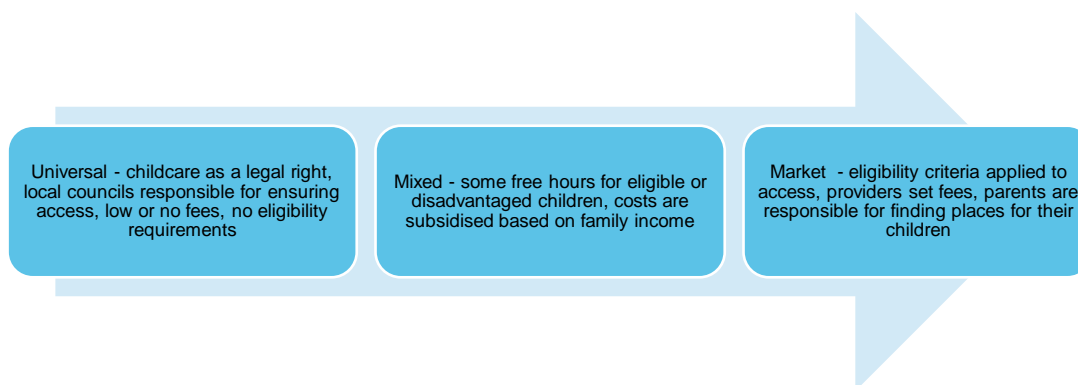


Figure 1. Range of approaches to childcare

Sweden and Norway are examples of universal systems, where childcare access is legally guaranteed and understood as a right for children. These countries have low fees (there are caps on the maximum amount that parents pay per month), no eligibility requirements (although in some instances parents must be working to access higher hours of care), and municipalities are responsible for ensuring that all local children whose families want to use childcare have a place. If municipalities cannot find children a place, they are responsible for making other arrangements or even paying for the child's care in another municipality where there is availability.

In market systems, there is generally no legal right for children to access the care that their families need. Instead, governments subsidise childcare through vouchers, tax deductions and discounted fees. Part of the logic that underpins market-based approaches is that increased competition will lead to higher-quality and more efficient services. A role of government is to ensure some balance between the providers and families that make up the childcare market.

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### **'Funding Follows the Child' reforms in Scotland**

Childcare policies in the UK are devolved and therefore differ across the four nations. Scotland's childcare provision has more elements of universal provision compared to the other parts of the UK. Since August 2022, the Scottish Government has been implementing its 'Funding Follows the Child' reforms, providing families with children aged three and four with access to 1140 hours of childcare each year (30 hours over 38 weeks). All families are entitled to the free hours regardless of parental or guardian employment status. Low-income families or those receiving state benefits with children aged zero to two years can also be eligible for the free hours. Local authorities are responsible for delivering childcare and for providing places for local children.

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Nations within the UK have slightly different approaches to childcare, but most have a mix of both supply- and demand-side funding. England will increase the number of ‘free’ hours for children aged three and four years from five to 30 by the end of 2024 for working parents. All children of working parents over the age of nine months will be entitled to 30 free hours from September 2025.

## What do we know about childcare access?

Nations use various approaches to describe and measure the relationship between childcare supply and demand. There are a number of ways to think about childcare access with a range of different terms used around the world to measure and compare it.

In the UK, it is more common for researchers to investigate childcare sufficiency instead of access. Sufficiency measures whether there is enough childcare (but does not show whether these places are suitable for what parents need). All local authority areas must provide sufficiency assessment reports each year, mapping the supply of, demand for, and gaps in, the childcare market. A recent report that surveyed local authorities in England found only half of areas had sufficient places for under two-year-olds and only 66 per cent of areas had sufficiency to offer the free 30 hours [15].

In many nations, it is commonly reported that parents struggle to find a childcare place for their children, but the extent to which this occurred was relatively unknown. For instance, previous research on [childcare deserts in Australia](#) found evidence to support that childcare access can depend a lot on where families live [11]. Overall, the further families live from large population centres, the worse childcare access becomes.

A recent inquiry by the Australian Consumer and Competition Commission (ACCC) reiterated similar findings, with unequal access for low socioeconomic and non-metropolitan families [5].

In our approach, we are focusing on measuring the supply and demand of childcare. This is a spatial approach to accessibility. Spatial accessibility is a concept that refers to the ease with which people can reach places, destinations, and services [16-18]. This means, how accessible is childcare in a location based on the supply of childcare (usually expressed as the number of registered places) and the potential demand (usually measured through the population of non-school aged children in a particular location).

There are also non-spatial dimensions of childcare accessibility such as financial dimensions (whether the cost of childcare makes it less accessible) and equity dimensions (whether certain groups like children with a disability have appropriate access). Where possible, we explore how spatial accessibility interacts with other issues such as cost and equity.

## Why does childcare access vary?

Childcare access varies enormously, for a number of reasons. Childcare can be very different to other parts of a country’s education system. While governments help subsidise and fund childcare, compared to schools, they can be less involved in the planning and delivery of services.

If childcare were compulsory, like schools, then the demand for childcare would closely equate to the number of children under-compulsory school age. Childcare enrolment, however, is not compulsory and is variable depending on family needs and preferences. This means the demand for childcare can depend on a range of different factors. This can include the length of parental leave available to families. In many systems, governments usually exercise less control on location, meaning they have limited options if they want to increase the supply of childcare. As a result, where a childcare centre operates can vary enormously in a city, in a region and in a country.

In the nine nations we examined for this report, all have a mix of publicly funded and private providers, which can operate under for- or non-profit models. There are generally more private for-profit providers offering care services compared to other provider types.

How childcare is funded determines how much families pay for services, which influences whether they choose to enrol their children. There are two main funding models that underpin how childcare is supported: demand-side and supply-side funding. Most countries use a mix of the two. The following table outlines the current funding models, but this will change in some nations. For example, in the UK by 2025 80 per cent of places will be government funded.

**Table 1. Main forms of funding for childcare**

<b>Nation</b>	<b>Govt Supply funding</b>	<b>Parental subsidies</b>	<b>Employer contributions</b>
Australia	Limited to public kindergarten	Main form	Yes, tax
United Kingdom	Limited to public early education, nurseries and targeted programs	Yes, but mostly parental contributions	Yes, tax
France	Main form	Mixed for childcare outside of <i>l'école maternelle</i>	Yes, employer levy
Netherlands	Main form in pre-primary and targeted	Yes, but high parental contributions	Yes, tax to nearly 30% of costs
Norway	Main form	Mixed	Yes, tax
Sweden	Main form	No	No

Source: adapted from the OECD [19].

**Demand-side subsidies** aim to reduce the financial barriers for families to access childcare by making it cheaper. They cover part or all the costs for a childcare service, which is either paid to families or to providers who then offer a discounted rate. In so doing, it increases the demand for childcare services by reducing the financial barriers.

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### **The Australian Child Care Subsidy (CCS)**

The CCS is a demand-side subsidy that is that is paid to the service provider, who then pass it on to families as a fee reduction.

The CCS depends on family income and the number of non-school aged children accessing childcare. The CCS has increased since July 2023, aiming to reduce out of pocket costs for families who are working, studying, caring or volunteering, as determined by an eligibility test (the Activity Test<sup>1</sup>). Currently, families earning below A\$80,000 receive up to 90 per cent in subsidies for the cost of childcare, which is up from 80 per cent in previous years.

The Australian Government uses the CCS to pay a percentage of childcare fees up to an hourly rate cap.

The out-of-pocket costs for childcare depend on how much childcare a family uses, their CCS, the hourly rate set by the provider (if above the rate cap then this will not be subsidised), and the number of children.

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**Supply-side subsidies** describe public funds paid directly to providers to cover the costs of providing their services. For example, subsidies can be paid to providers to cover the cost of staffing. The ACCC [5] outlines that supply-side funding can go towards providers on a per child basis, or via block funding, where a grant or bulk amount of funds is paid for operating expenses.

Supply-side funding often underpins universal childcare systems, where children are entitled to a place (usually enshrined into law), there are few or no eligibility requirements and low or no fees. When childcare is supply-funded, it becomes more open to families from diverse socioeconomic backgrounds because the financial and eligibility conditions are substantially reduced. In this research, Sweden and Norway are example of supply-side funded systems.

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<sup>1</sup> The Activity Test determines the number of subsidised hours of childcare and is intended to promote parents to work or study. Parents working less than 8 hours per fortnight can access 24 hours of care if they earn less than \$80,000 per year. Parents working between 8 and 16 hours per fortnight can access 36 hours, up to 100 hours if they work more than 48 hours. The parents or guardian with the lowest number of working hours is used in the Activity Test from each a family.

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### **Supply-side funding and capped prices – the Swedish maxtaxa**

From the age of one, Swedish children are provided with at least three hours of care a day up to 15 hours per week. All parents can access childcare for their children regardless of how many hours they work or their employment status. As part of the universal approach to childcare provision, the supply is directly funded. Whereby public funding goes to municipalities which are responsible for providing preschool for children and families.

Outside of the free hours offered to families, providers set their own fees. Saliiently, childcare providers, even those that are privately owned, can only charge a maximum amount for their services – called the maxtaxa (adjusted yearly).

In 2023 [20] the maximum costs per number of children in preschool were:

- For the first child, the fee ceiling is 3 percent of household gross income but a maximum of SEK 1,645 (A\$234; £120).
  - For the second child, the fee ceiling is 2 percent of household gross income but a maximum of SEK 1,097 (A\$156; £80).
  - For the third child, the fee ceiling is 1 percent of household gross income but a maximum of SEK 548 (A\$78; £40).
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## **Policies**

As previously mentioned, childcare is different to schools. While access to primary and secondary education is regarded as a right for all children around the world, only some countries, such as Sweden and Norway, regard access to childcare in this way.

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### **‘Cash for Care’ benefit scheme in Norway**

Families can receive the Cash for Care benefit for 11 months if they have children one to two years of age who do not attend kindergarten full time. It began in 1998 with the intention to provide families with choice in how they make care arrangements for their children. Families must have lived in Norway or a European Economic Area for at least five years to be eligible for the benefit.

Parental leave is paid at 100 per cent of pay for 49 weeks or 80 per cent for 59 weeks. After this period of leave, parents can apply for the Cash for Care benefit to support themselves while they are caring for children in their homes until the child is assigned a place in kindergarten.

The full benefit is NOK 7,500 (A\$1060; £545) per month. This decreases based on the amount of time the child attends kindergarten. It is paid to the parent(s) living with the child, and is divided in the case of shared custody.

Importantly, if a child has been granted an available place at a kindergarten, their family does not qualify for the Cash for Care benefit. For example, “your child has been granted a full-time place in kindergarten, but only attends one day a week. In this case, you will not be entitled to cash-for-care benefit, since your child has the opportunity to attend kindergarten full time” [21].

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In countries that are market-based such as Australia, the UK, France (for children aged under 3) and the Netherlands, policies around eligibility criteria often go hand-in-hand with access. Non-universal systems often have eligibility criteria commonly related to parents' employment status and income – parents usually have to be working at least part-time but earning under a certain amount to qualify for free or subsidised hours of childcare. These policies can restrict access to some families.

In addition, it is also common for nations to have policies that seek to address disadvantage by increasing access based on criteria such as where families live or their income. For example, in Wales the Flying Start program provides children up to four years with 12 hours of childcare if they live in a disadvantaged area. England and Scotland also provide more free hours to children if their families receive benefits.

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### **The Netherlands: Differentiated approaches to addressing disadvantage**

The childcare system in the Netherlands refers to all settings that provide care and early education to children under the age of four, but it is made up of two parts: childcare, which aims to facilitate parents' abilities to combine work and care, and early childhood education, which consists of special targeted programmes for children aged two and a half to four years.

Children from disadvantaged backgrounds can participate in targeted early childhood education programmes for 16 hours a week provided in all childcare settings called *voor en vroeg schoolse educatie* (VVE) [22].

The programs focus on developing children's language, preparatory arithmetic, and motor and social-emotional skills. Different providers use different curricula and teaching approaches to support the various needs of children.

Dutch municipalities receive money from the central government to deliver VVE. Each municipality is responsible for deciding the eligibility criteria for its children. For example, some municipalities require referrals through a child health clinic, and can also include the number of years the child has lived in the Netherlands or financial hardship experienced by the family.

Contrary to universal provision where care is provided 'to all', childcare in the Netherlands is a differentiated system that provides targeted interventions through care and education to meet the needs of different groups of children and parents.

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## **Workforce**

Another important factor limiting supply and influencing accessibility to childcare is the available workforce. There are many challenges associated with the childcare workforce and staffing that can limit the number of places available in some locations. Providers need to enact minimum staff-to-child ratios to operate within policy guidelines. Challenges with recruiting qualified childcare staff in non-urban areas and geographically remote regions can reduce the number of places offered to local families. This can be a problem in geographically large countries such as Australia.

In our research we have found numerous examples of the childcare workforce facing challenges.

England is currently in the process of expanding the number of free hours provided to families with working parents from 15 to 30 hours (for 38 weeks of the year) over the next few years. However, insufficient staffing means that childcare centres are increasingly operating under capacity by reducing places and or hours, and there are reports of centre closures linked to challenges in retaining appropriate staff [23]. It has also been reported that about half of childcare providers experiencing challenges related to workforce shortages try to manage this by reducing opening hours [15].

The childcare industry is predicted to experience major workforce shortages in the coming years in Australia [24].

## How was the research conducted?

We use an approach known as an extended two-step floating catchment area, which has been used extensively to measure the relative access to services such as hospitals, parks, schools, and medical doctors. The approach we have used in this study has been used by researchers in the United States [25, 26] and by us in our 2022 research *Deserts and Oases: How accessible is childcare in Australia* [11].

This approach places a catchment area around the demand (where children live) and the supply (where childcare centres are located) and distributes the number of available places according to how far children live from centres. It means that for every population centre or neighbourhood, which is usually one of the most detailed statistical building blocks, a number is produced that shows how many childcare places are available per child in that area.

To illustrate a two-step floating catchment area process, the tables below show a travel matrix between three population centres (where children live) and three supply locations (childcare centres). The population for each centre is shown, as is the number of available childcare places. The distance, shown in kilometres, is listed in the travel matrix.

**Table 2. Travel matrix of populations centres relative to childcare centres**

	<b>Childcare centre 1 (100 places)</b>	<b>Childcare centre 2 (50 places)</b>	<b>Childcare centre 3 (200 places)</b>
<b>Population centre 1 (30 children)</b>	20km	5km	10km
<b>Population centre 2 (20 children)</b>	5km	10km	5km
<b>Population centre 3 (10 children)</b>	10km	16km	10km

In this example, we will use the catchment area of 15 km (9.3 miles) for the two-step floating catchment area. This means that population centres more than 15km from the childcare centre will not receive any of the available places.

As shown in Table 3 below, the first step involves distributing the number of places in the childcare centres according to how many children fall within the catchment area (made up of the three population centres). For instance, there are 90 places for childcare centre one and 30 children that fall within the catchment area, made up of 20 children in Population centre 2 and 10 in Population 3 (Population centre 1 is excluded based on distance). This means that each population in the catchment area receives three places per child. The same method is applied to Childcare centres 2 and 3.

**Table 3. Two step floating catchment area, step one**

	<b>Childcare centre 1 (90 places)</b>	<b>Childcare centre 2 (25 places)</b>	<b>Childcare centre 3 (100 places)</b>
<b>Population centre 1 (30 children)</b>	0 (more than 15 km away)	0.5 places per child	2 places per child
<b>Population centre 2 (20 children)</b>	3 places per child	0.5 places per child	2 places per child
<b>Population centre 3 (10 children)</b>	3 places per child	0 (more than 15 km away)	2 places per child

The second step involves adding up the number of available childcare places per child for each population centre. For instance, the final score for population centre one equals 2.5 places per child, 0.5 (Childcare centre 2) plus 2 (Childcare centre 3), and so on for the other two population centres.

**Table 4. Two step floating catchment area, step two**

	<b>Childcare centre 1 (90 places)</b>	<b>Childcare centre 2 (25 places)</b>	<b>Childcare centre 3 (100 places)</b>	<b>Final score</b>
<b>Population centre 1 (30 children)</b>	X	0.5 places per child	2 places per child	<b>2.5 places per child</b>
<b>Population centre 2 (20 children)</b>	3 places per child	0.5 places per child	2 places per child	<b>5.5 places per child</b>
<b>Population centre 3 (10 children)</b>	3 places per child	X	2 places per child	<b>5 places per child</b>

In this example, population centre 1 has the lowest accessibility score. Population centre 2 receives the highest as it falls within the catchment area (a 15km radius) of all childcare centres.

More recently, researchers have built on the floating catchment area method to include a weighting, known as an Extended Two Step Floating Catchment Area. In this approach, a weighting is applied to the distance or travel time between the supply and demand, so

populations that are closer to centres receive a greater score. In our research, that means that populations that are closer to childcare centres receive a greater proportion of the places.

Figure 2 shows the weighting applied to the calculations. Population centres close to childcare centres receive a full weighting, while childcare centres further away receive less. For instance, a population centre four kilometres (2.5 miles) away from a childcare centre receives about half the weighting that a population centre next door to a childcare centre would receive.

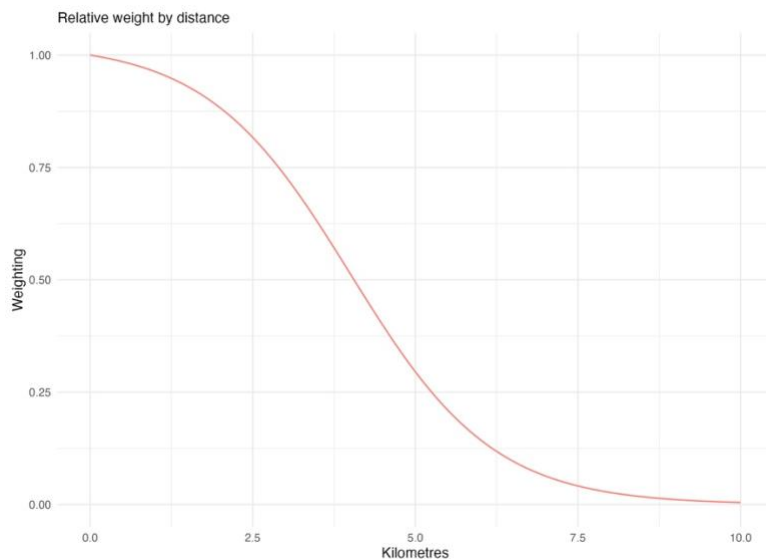


Figure 2: Relative weighting by distance

For regional areas, the catchment areas are larger. This is because families experience accessibility differently in these regions and can usually travel further in the same amount of time compared to urban areas. In regional areas, the catchment area is set at approximately 20 kilometres (12.5 miles). A population centre 10 kilometres (6.25 miles) away from a childcare centre receives about half the weighting that a population centre next door to a childcare centre would receive.

The two-step floating catchment area has been used extensively because of its strengths compared to other spatial techniques that can artificially skew boundaries and results. For example, if we were to use postcodes as catchment areas, there may be 100 places across the road from where a child lives, but if it is in a different suburb, it would not be counted. This means using certain geographies such as postcodes or local government areas can provide misleading results.

This approach also accounts for competition effects because it apportions availability according to how many children are vying for places.

**For instance, a population of 10 children might be able to access a centre with 100 places five kilometres (3.1 miles) away, but this method takes into account all the other hundreds of children vying for the same places.**

There are some important caveats.

The measure is based on where someone lives not where they work. It excludes some forms of childcare because it is not formal care or may involve school age children. It excludes services where the address is not publicly available, such as childminders and family day care. It does, however, include the bulk of childcare services in each country.

Different ways of measuring supply can mean that caution is required when making comparisons. For instance, the data on the supply of childcare for Sweden, Norway and France (for children aged three to five years) comes from enrolment data. For England, Wales and Australia, parts of the data on supply (usually preschool) also originate from enrolment data. This can make comparisons between countries more difficult as enrolments can differ from places. Where these comparisons are difficult, we outline below such as in Table 5.

Because the approach is spatial and at a very detailed level, it also means we can explore the relationship to other spatial data, if available, such as socioeconomic status/levels of deprivation, workforce participation and cost.

We have also developed on our previous approach by improving accessibility measures in sparsely populated parts of countries. We use the centre-point (centroid) of a statistical building block as a proxy for where children live. Most statistical building blocks are small - sometimes only containing a few streets in an urban area.

For instance, Figure 3 shows the statistical building blocks for England, known as Output Areas, for a town called Royal Leamington Spa in England. There are about 180,000 Output Areas in England. The red dot is the centroid for each Output Area and the figure refers to the total number of children living in an area.

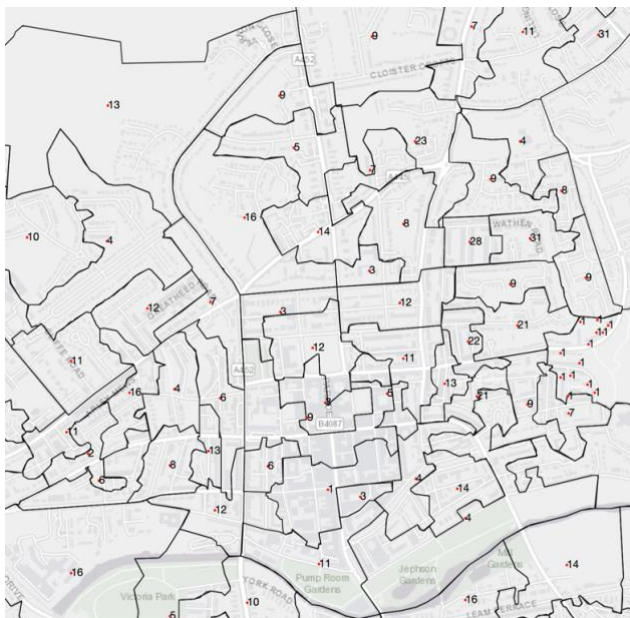


Figure 3: Example of centroids and population of children by Output Area in England

In regional areas, some statistical building blocks are very large, and include forests, lakes, or uninhabitable areas. Sometimes using the centroids of these statistical building blocks as

a proxy for the location of children can result in an inaccurate picture. To overcome this, we used Open Street Map to identify residential areas in statistical building blocks with an area over two square kilometres (1.2 square miles). We then used residential locations as proxies for where children reside within these large areas. This means we get a more accurate picture of available childcare in regional areas.

All the data sources we use are from official databases usually managed by a government authority. Enrolment or childcare information is usually published by government regulators and population data usually comes from the government statistics authority. We use Open Street Map to calculate the distances between where children live and childcare locations.

## What did we find?

When it comes to access to childcare, we found that where you live matters. We also found that government policies have a very big impact on the accessibility of childcare. Some of our findings are outlined below.

Accessibility varies by country – a lot

Table 5 shows the high-level results of our analysis, expressed as the number of children per available place. It also includes how many children are living in a ‘childcare desert’, where there are .333 places per child, or more than three children per place.

**Table 5: Places per child by nation**

Country	Average places per child	Children per place	Per cent living in a childcare ‘desert’
<b>France (aged under 3 years)</b>	0.126	7.937	86%
<b>England</b>	0.348 (0.390 with childminders)	2.874 (2.56 with childminders)	45% (30% with childminders)
<b>Northern Ireland</b>	0.396 (0.451 with childminders)	2.523 (2.22 with childminders)	37% (23% with childminders)
<b>Wales</b>	0.435 (0.472 with childminders)	2.299 (2.11 with childminders)	27% (19% with childminders)
<b>Netherlands</b>	0.378	2.646	25%
<b>Australia</b>	0.475	2.870	24%
<b>Scotland</b>	0.519 (0.552 with childminders)	1.913 (1.811 with childminders)	10% (7% with childminders)

**Data below is for enrolments instead of places**

<b>Sweden</b>	*		7%
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<b>Norway</b>	*		6%
<b>France (aged 3 to 5 years)</b>	*		1%

\*Note: Data for median places per child includes nations that have 'registered places' and excludes Sweden, Norway and France (for children aged over 3 years) as these nations count childcare in a way that makes comparisons to overall places less relevant.

France essentially has two systems. A demand-side subsidy model for children aged zero to two years, and a compulsory preschool system, known as *l'école maternelle*, for children aged three to five years, which is supply focused and much more integrated into the school system.

Accessibility for childcare in France for children aged zero to two years is the worst in our study. Overall, there are about eight children vying for every available place and there are vast swathes of the country – and 200,000 children - with no access to childcare at all. For the *l'école maternelle*, almost every child aged three to five years has good access and only one per cent of children live in areas we classify as a childcare desert.

The four nations that make up the UK deliver childcare in different ways and the figures show that the overall supply of childcare is very different depending on the context. After France (for children aged under three years), England has some of the lowest levels of accessibility with 45 per cent of the country living in an area classified as a childcare desert. Northern Ireland also has relatively poor access, with 37 per cent living in childcare deserts. Better access is observed in Wales with 27 per cent living in childcare deserts. Scotland has some of the best accessibility scores, with only 10 per cent classified as living in a childcare desert.

Figure 4 shows distribution of access in each nation where the main measurement of available childcare is by places (instead of enrolments). The figure is a density plot, which is the probability that a neighbourhood has a particular accessibility score. A density plot is like a histogram, where every neighbourhood is placed on the graph to show the number of children per place. The height of the line indicates that more neighbourhoods have a certain score.

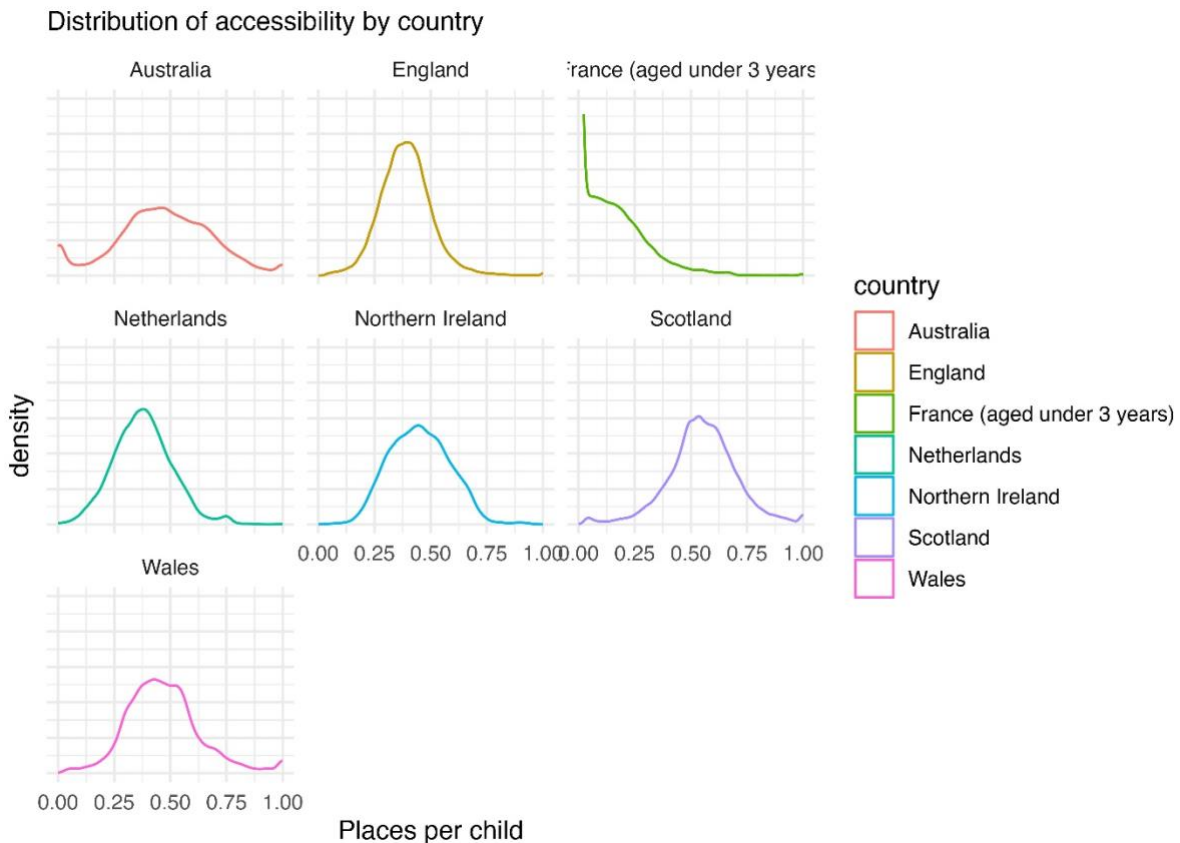


Figure 4: Distribution of accessibility by country

This figure is useful because it helps show the distribution of accessibility scores in each nation. For instance, Australia has a relatively flat line, which indicates that it has more even distribution of available places.

France, for children aged under three years, has a very high line at zero children per place. This means there are lots of neighbourhoods that have no accessible childcare. The relatively low line above 0.5 places per child indicates that in France, for children aged under three years, there are very few neighbourhoods with accessibility scores above 0.5 places per child.

There can be many reasons for why there are differences in the distribution of accessibility. It is an area that requires further research, particularly when trying to determine the impact of different policy approaches.

It is also important to note that a low accessibility score may not necessarily mean insufficient childcare. For instance, the cost of childcare may be prohibitive for many families meaning that there is simply not enough demand for providers to respond by offering supply.

It is part of the reason why the level of government support for childcare is so important. The size of subsidies available to families or the amount of funding that providers receive from government will influence how much childcare is available.

High accessibility scores can also mean some families still struggle to find the care that they need. This is why the model in some countries where there is a regional authority to match families with services, like in Nordic countries, can be beneficial.

## Access differs markedly within countries

As expected, the experience of accessing childcare is not the same for all families living in the same country. When we explored each of the nine nations, we found that families living in the same city can experience completely different levels of access. For instance, the image below (Figure 5) shows Bristol in England's south-west.

The green in Figure 5 is the centre of the city and its more affluent northern areas. This area has some of the highest childcare accessibility scores in England. The lower-income regions in red in the south and east of the city have much poorer access.

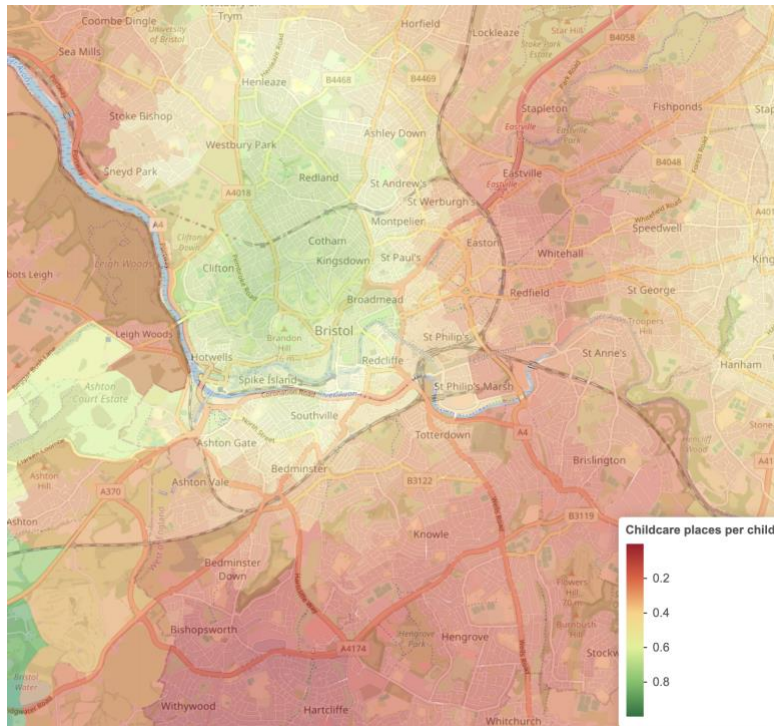


Figure 5: Childcare access in Bristol, England (where red equals poor access)

Another example is seen in Figure 6 which shows accessibility in London, where red denotes relatively poor access and blue denotes better access. This map shows that it is the wealthier parts of London near the city centre and in the inner-west of London that have the best childcare accessibility. The more disadvantaged east has relatively poorer access. Overall, the outer boroughs appear to be underserved.

Accessibility of childcare (children per place) by Middle-Super Output Area in London

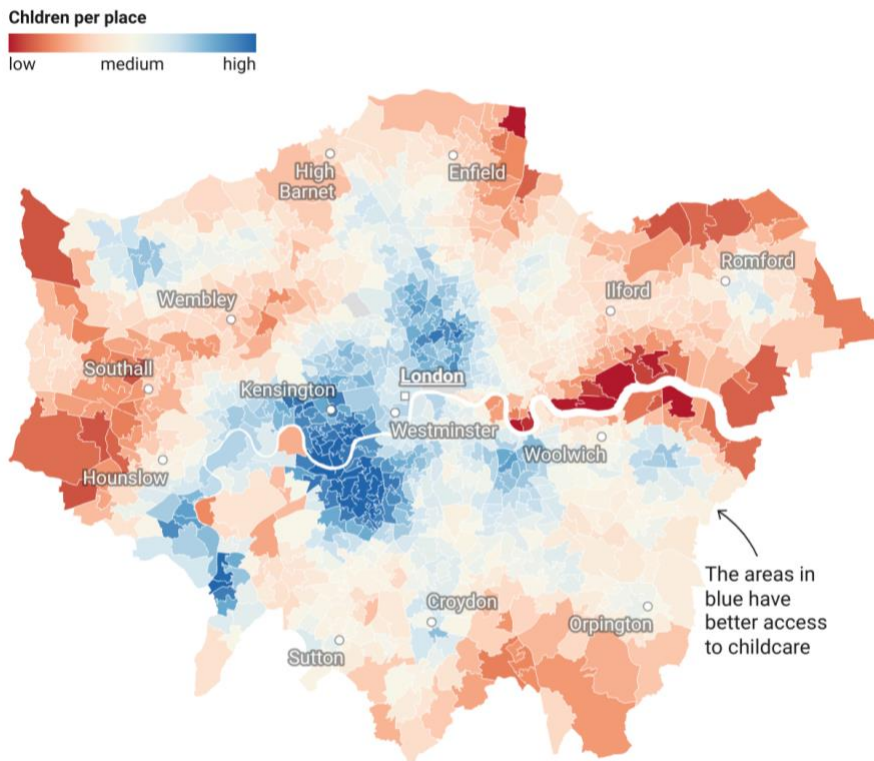


Figure 6: Childcare access in London (where red equals poorer access and blue is better access)

A similar picture emerges in many cities in Australia. Figure 7 below shows the childcare accessibility for Melbourne, Australia. It is the regions in blue closer to the city and in the city's inner east and south-east that have the best access. These are also the wealthier parts of the city.

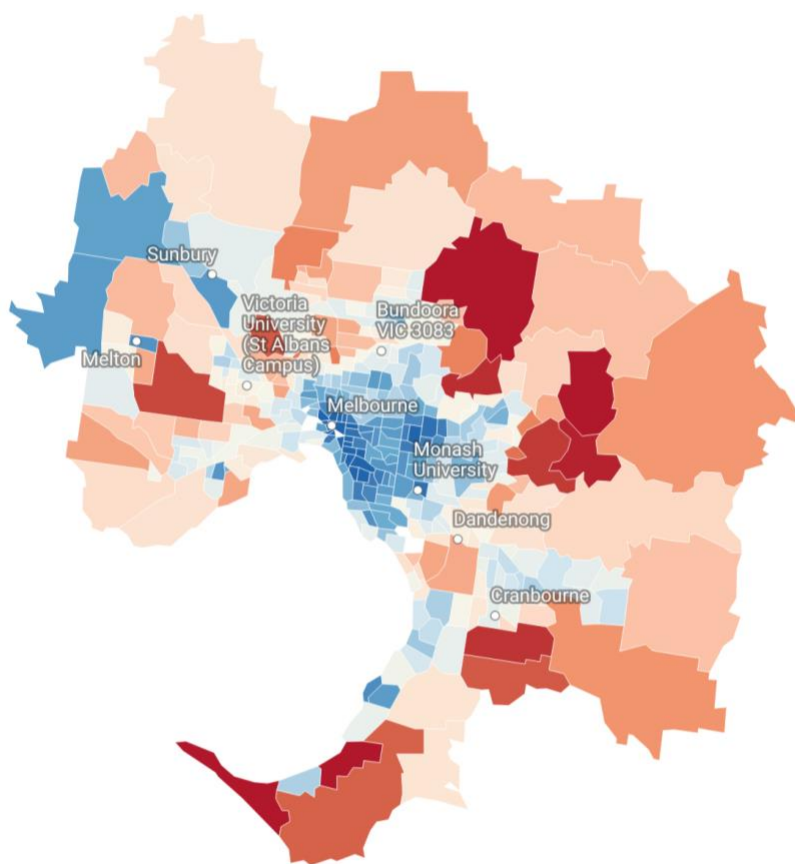


Figure 7: Childcare accessibility in Melbourne, Australia

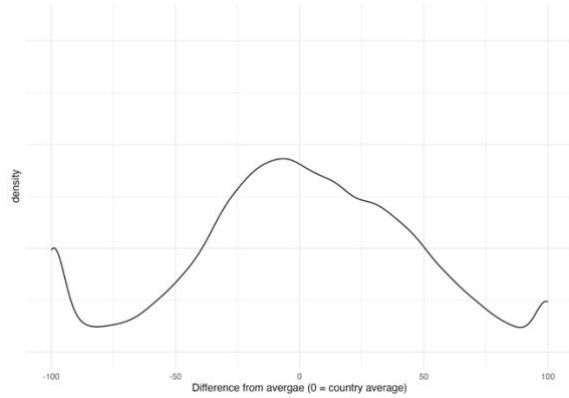
As previously mentioned, not all countries count childcare places the same way. In Norway and Sweden, the supply of childcare is measured through enrolments, not places. This can make overall comparisons between countries difficult. But it still enables comparisons of relative access within countries.

One way of accounting for these differences is to make comparisons using the average amount of childcare in each country. To do this, we divided the accessibility of neighbourhoods in each country by the average childcare accessibility for that country. We then converted the results to a score, where the average amount of childcare was 0.

If a neighbourhood scored 90 per cent, this means it has 90 per cent more childcare than the average for that country. If a neighbourhood scored -50 per cent, this means it has 50 per cent less childcare than the average for that country. To enable better comparisons, we made the maximum score 100 per cent, so that all neighbourhoods with more than double the average received a score of 100 per cent.

The figures below show the outcomes for each nation and include a discussion of the results.

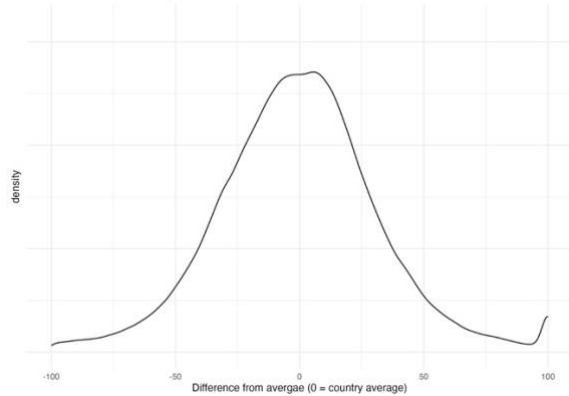
Distribution of accessibility - Australia



## Australia

Australia has the flattest curve of all the nations, the lower peak compared to other nations suggests a more even distribution. This means that it had the most variation. The raised line at the start of the curve suggests there are many regions with very poor childcare access.

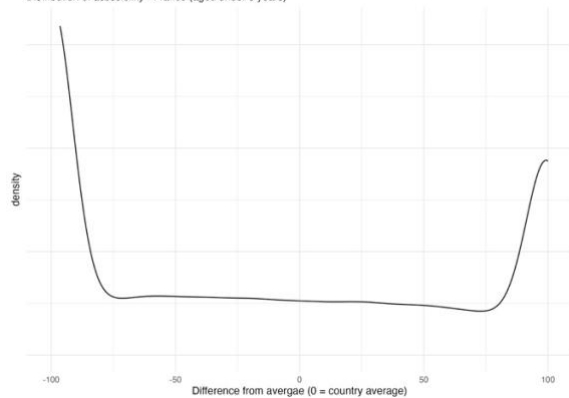
Distribution of accessibility - England



## England

England has a high peak with most neighbourhoods clustered around the average. This suggests that there is relatively little variation in childcare accessibility in England. Compared to a country like Australia, there are more neighbourhoods that are closer to the national average.

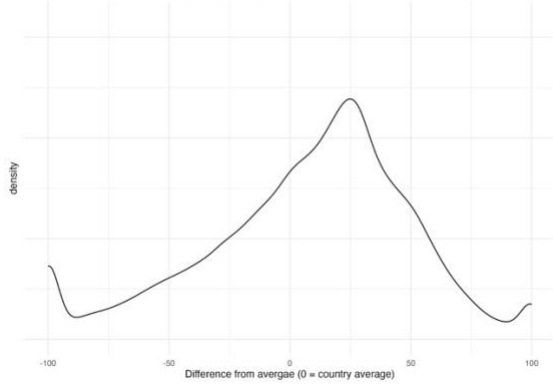
Distribution of accessibility - France (aged under 3 years)



## France (aged under 3 years)

France, for children aged under 3 years, has the most striking distribution. This graph shows the part of the French early childhood system that is demand-side driven with relatively less government intervention. It shows two peaks, one at minus 100% and one at 100%. This means that neighbourhoods are likely to have very low or no childcare accessibility, or at least twice the national average. It highlights a system that is most divided when it comes to childcare accessibility.

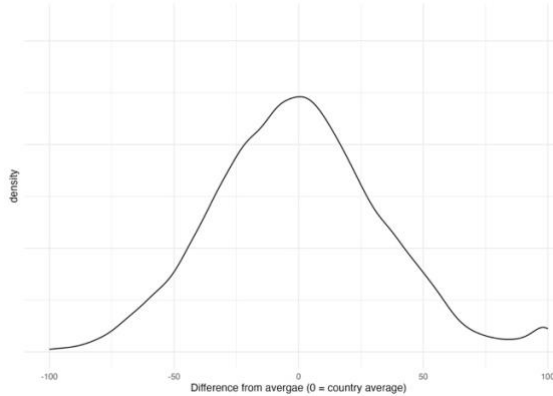
Distribution of accessibility - France (3 to 5 year olds)



### France (aged over 3 years)

France appears twice because it is essentially two systems. This figure shows results for the compulsory and universal preschools known as *l'école maternelle*, attended by children aged 3 to 5 years. This figure shows there are some places with relatively low levels of accessibility before a gradual peak above the national average.

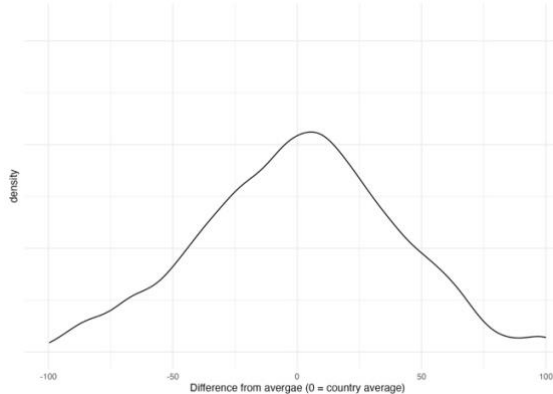
Distribution of accessibility - Netherlands



### Netherlands

Netherlands shows a typical distribution. It has a high peak and largely symmetrical line around the national average, with most neighbourhoods falling within the range of 50% less or 50% more of the national average.

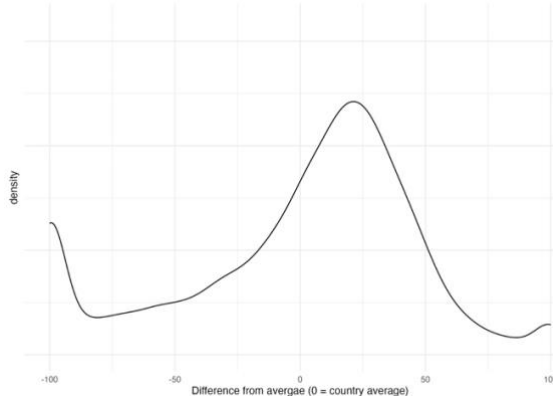
Distribution of accessibility - Northern Ireland



### Northern Ireland

Northern Ireland has the most pyramid-like shape of the countries in our analysis. This shape shows a gradual increase and decrease in a straight line. About 21% of neighbourhoods have - 50% to -100 % less or 50% to 100% more than the national average in Northern Ireland, compared to 12% of neighbourhoods in England.

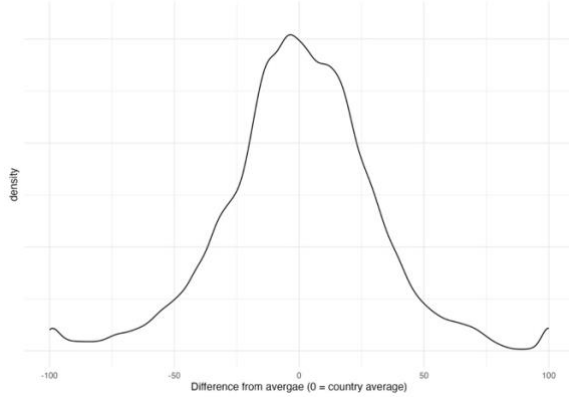
Distribution of accessibility - Norway



### Norway

This figure for Norway displays enrolment data, like Sweden and France (children aged over 3 years). This figure shows that there are many areas in Norway with very low levels of access, which is indicated by the higher line at minus 100 %. This figure highlights that while there is universal access, accessibility can still be better in some places than others.

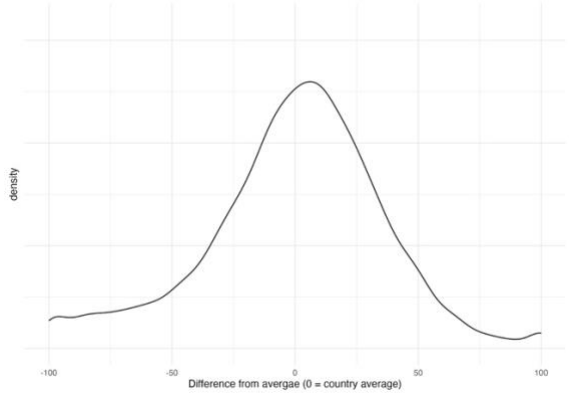
Distribution of accessibility - Scotland



### Scotland

Scotland has the highest peak, indicating significant clustering around the national average. The slight increases at the start and end of the line suggest that there are some areas in Scotland which suffer from very low access and some that enjoy relatively high access.

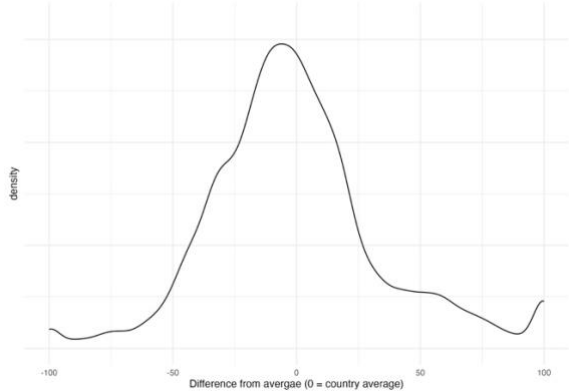
Distribution of accessibility - Sweden



### Sweden

Accessibility in Sweden is normally distributed. This figure again highlights that even in supply-side systems, accessibility can still be better in some places than others. However, because there is more childcare in Sweden than countries like the UK or Australia, families are still much more likely to be able to access a place.

Distribution of accessibility - Wales



### Wales

Wales is like other countries in the UK in terms of distribution and there is significant clustering around the average. Of note is the differences in the shape of the line below and above the national average. While 5% of neighbourhoods in Wales have less than 50% the national average, 10% of neighbourhoods have more than 50% the national average.

Figure 8: Distribution of childcare accessibility by country based on the average (where 0 = country average)



## **In many nations, more advantaged areas have greater levels of access**

We found that for most nations, the type of suburb you live in matters when it comes to access to childcare. In England, Australia and France (for children aged under three years), it was the wealthier and more advantaged areas that had much better access to childcare. In Sweden, Norway, and the Netherlands it was the more disadvantaged suburbs that had the best access.

Figure 9 below shows results of our analysis of childcare access by socioeconomic decile, where 1 is the most disadvantaged 10 per cent of neighbourhoods, and 10 is the most advantaged 10 per cent of neighbourhoods (note: for Sweden, France and Norway, median income in each neighbourhood is used as a proxy for socioeconomic status). To construct this figure, we calculated the average amount of childcare for all neighbourhoods by socioeconomic decile. We then compared the average in each socioeconomic decile to the nation-wide average, which appears as the thicker black line in the graphs below.

Difference from mean childcare places per child by country (1 = most disadvantaged regions and 10 = most advantaged).

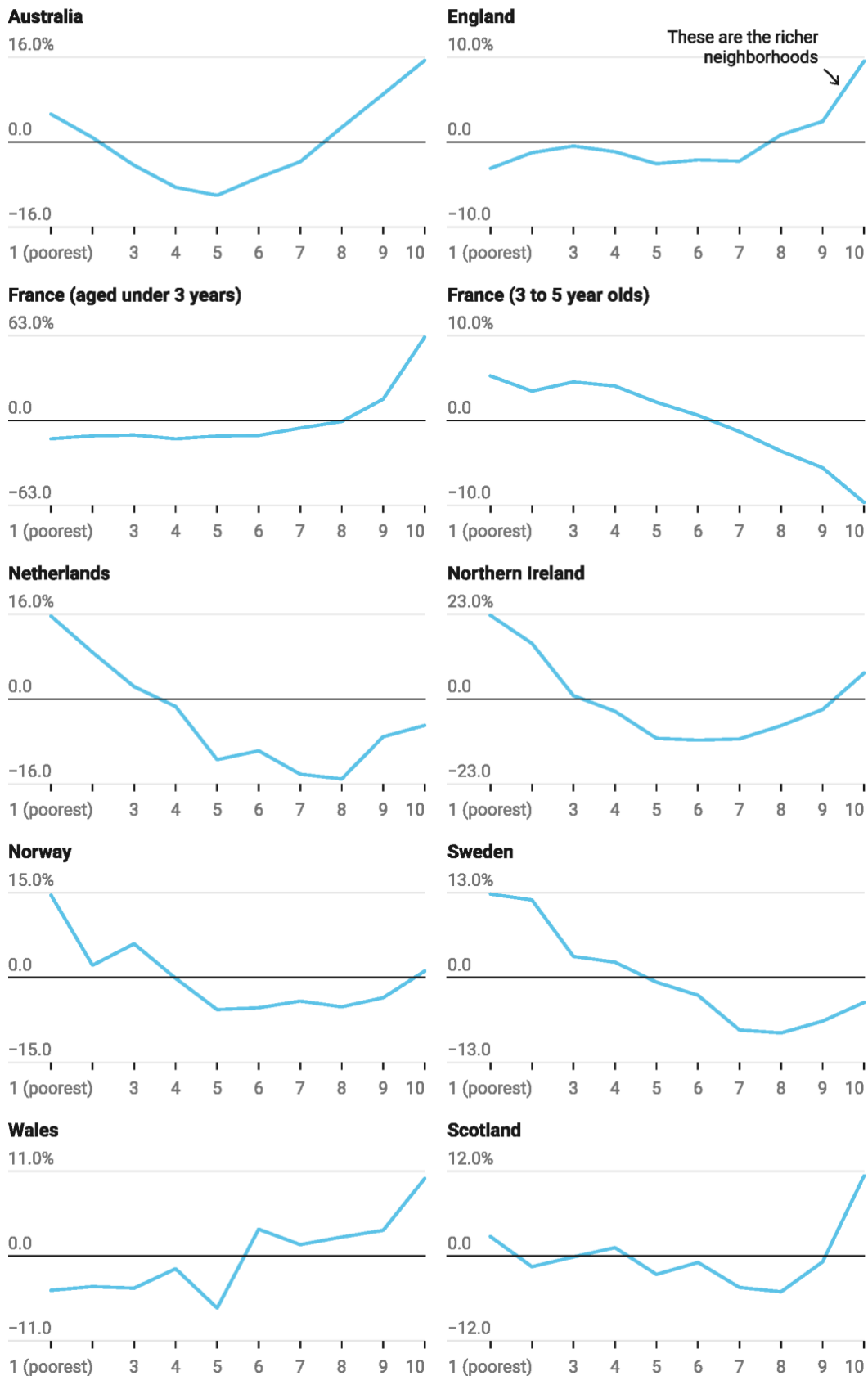


Figure 9: Some countries have more childcare in richer areas

This figure shows that for countries like England and Wales, the more disadvantaged areas have lower accessibility compared to the more advantaged areas. As neighbourhoods become more advantaged, childcare accessibility generally increases.

In Australia and Scotland, the lowest socioeconomic decile has slightly higher than average childcare accessibility, but it is the more advantaged areas that enjoy the greatest access.

The Netherlands and Northern Ireland follow a pattern where the best access is in the more disadvantaged areas and the lowest access is around the 5<sup>th</sup> to 8<sup>th</sup> socioeconomic deciles.

In Norway and Sweden, it is the more disadvantaged neighbourhoods that have the greatest access.

Again, the most striking result is France for children aged under three years. The top socioeconomic decile (measured using median income) has much higher access. The 10 per cent most advantaged neighbourhoods are generally 60 per cent above the national average. For French children aged over three years accessibility is much more evenly distributed.

## **Demand-side or supply-side: which is the best system?**

A focus of our research is on the strengths and weaknesses of different system-level approaches to childcare. This is to help better understand how countries should design and manage their childcare systems.

France offers a powerful example of different system-level approaches because it operates with two very different models. One is a demand-side model with disparate government intervention for children aged zero to two years, and the other is a universal preschool model with compulsory attendance for children aged three to five years. As the figures and tables above demonstrate, this results in very different levels of access.

France's childcare system for children aged zero to two years has extremely uneven access with low levels of supply relative to other countries. While the universal preschool system for children aged three to five years has variation in access, the overall supply is very high, indicated by only one per cent of the country classified as a childcare desert (Figure 8).

Many countries operate a mixture of systems, with a demand-side model for childcare and a supply-side model for children attending preschools. Supply-side models operate much more like school systems where there is greater government provision with a greater focus on children aged three to four years old, often in centres that are attached to schools. Examples of these nations in our analysis include England, Wales and Australia.

It is possible to separate these two approaches within countries to examine differences in accessibility. Figure 10 below explores the question of difference in access by socioeconomic decile according to different approaches.

The figures on the left of the graph are for the parts of the childcare system that operate on a demand-side subsidy model. The figures on the right of the graph are usually preschools and operate on a supply-side model.

## In countries with mixed systems, it is the parts that are most like schools that have better access in disadvantaged areas

Difference from mean childcare places per child by country and system (1 = most disadvantaged regions and 10 = most advantaged).

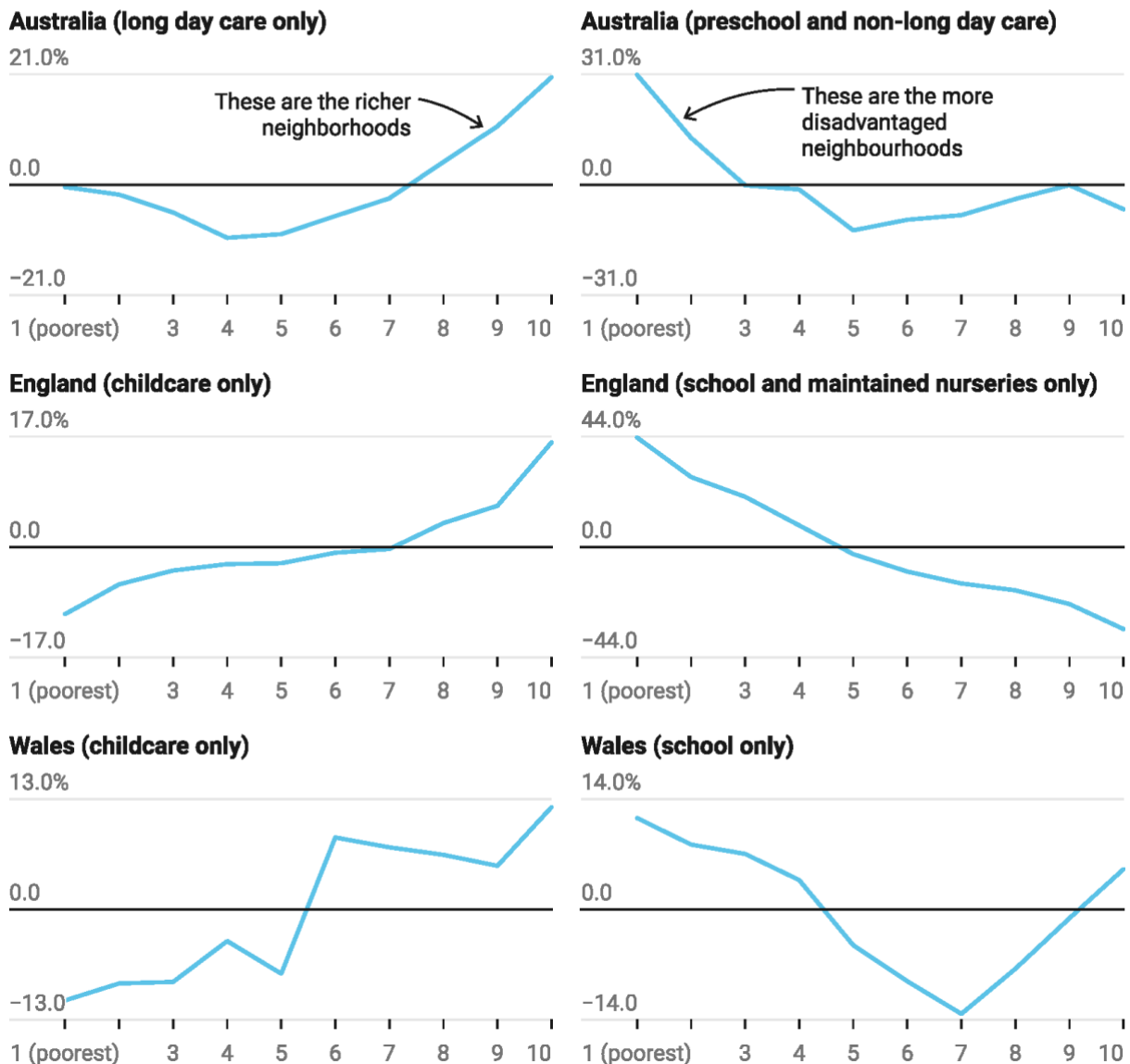


Figure 10: In countries with mixed systems, it is the parts that are most like schools that have better access in disadvantaged areas

This figure shows that in countries with mixed systems, it is the parts of the system that operate more like schools that have better access in more disadvantaged areas. The parts of the system that use a demand-side subsidy model, usually those that are long day care centres for children aged under five, have more provision in advantaged areas.

This suggests that demand-side subsidy models can favour provision in more advantaged areas.

There are other factors that also need to be examined when weighing up the relative benefits of different system approaches. Cost, for instance, is not considered in this analysis.

It is likely that demand-side subsidy models are cheaper for governments, as the cost can be borne by the families. However, it is not clear whether demand-side subsidy models are more efficient in the sense that they can produce higher amounts of provision at a lower overall cost to both families and government.

Issues of quality also need further investigation. Supply-side models which involve direct public funding can have an association with higher quality provision. This was noted by a report by the OECD [27] that said:

The evidence suggests that direct public funding of services brings more effective governmental steering of early childhood services, advantages of scale, better national quality, more effective training for educators and a higher degree of equity in access compared with parent subsidy models (p. 3).

There is a need for further research to explore this important issue and the strengths and weaknesses of different system-level approaches.

## Incentives influence provider locations

One feature of demand-side models is that there is less central or government involvement in the planning and location of childcare places. For instance, in school systems, governments usually have a greater role in the delivery and management of school locations, at least for government-run schools.

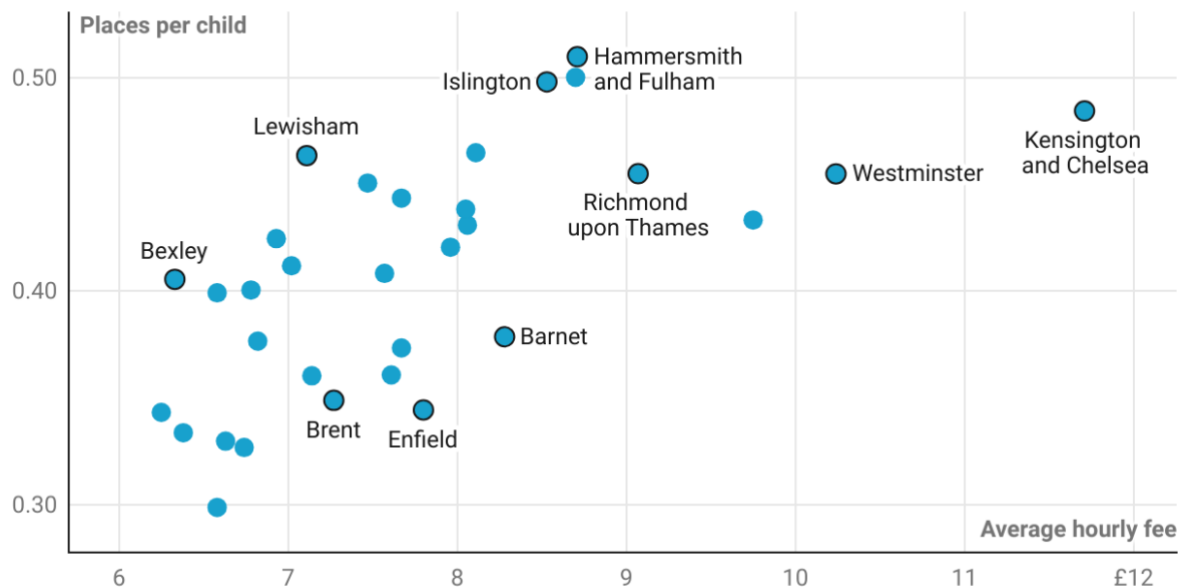
Childcare can be different because providers usually decide where to operate. Because of this, it is important to explore the different incentives relating to where childcare centres choose to operate.

One way to explore incentives is through price, or the amount of money that providers receive in a certain location. Some countries collect data on the average price in a region and this makes it possible to explore the relationship between accessibility and price.

Figure 11 below is one example. It shows the average hourly fee (in British pounds) by the number of children per place in local authorities in London.

## In London, there are more providers where there are higher fees

Children per place by hourly fee in London local authorities



Created with Datawrapper

Figure 11: In London, there are more providers where there are higher fees

This figure shows that there are higher fees in locations in London where there are more providers. It suggests that providers operate in areas that are likely to lead to the greatest rewards.

This is similar to findings we made in a previous report focusing on Australia as well as those by the Australian Competition and Consumer Commission (ACCC). The ACCC report [5] stated,

The Mitchell Institute also researched the relationship between fees and childcare accessibility and found that there is greater supply of childcare in areas where higher fees are charged. This research supports our finding that providers are incentivised to supply in socio-economically advantaged areas with higher willingness to pay (p. 161).

How financial incentives operate in a system can have a big impact on the distribution of accessibility. Not all demand-side subsidy models are the same. In Australia, for instance, the rate of the subsidy is means-tested, which means greater subsidies are directed to families with a lower income. There are no caps on the amount a provider can charge a family, however, there is a cap on the total per hour subsidy that the government will provide families. Families are liable to pay the full amount above the cap, regardless of how much income they earn.

This contrasts with other nations like England, Wales and Scotland, where government provides 'free hours' of childcare up to a certain number and according to a set criteria. Government essentially acts as the largest purchaser in these instances. Prices are usually set at a local authority level. Providers can charge ancillary fees for services like meals, with media reports suggesting that this is done to cover the shortfall in government funding. Outside of these purchasing arrangements, childcare costs can be tax-deductible which can help defray the costs to families. The demand-side model also means that capital costs fall to individual providers rather than to the government.

To explore the possible impact of incentives on the distribution of accessibility, Figure 12 below compares the distribution of childcare places across England, Scotland, Wales, Northern Ireland and Australia. This figure plots the difference from the average amount of childcare for hundreds of thousands of neighbourhoods. Like Figure 8 it is used to make comparisons based on what is average for each country.

Distribution of accessibility - four nation comparison

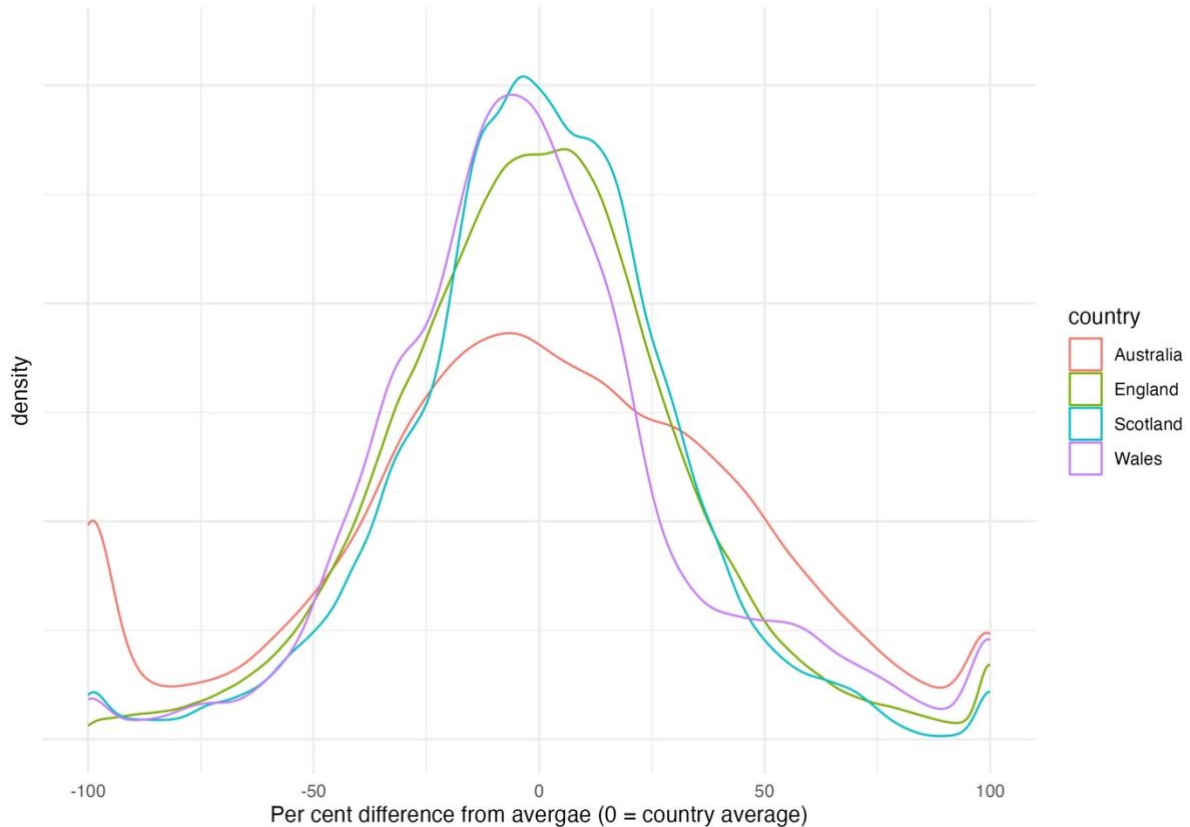


Figure 12: Distribution of children per childcare place – four country comparison

Like in the analysis of Figure 8 previously outlined, Figure 12 shows that in England, Scotland and Wales there is less variation in accessibility scores, which is why the peak of line is more pronounced for these nations.

In Australia, the line is flatter, which means there is much greater distribution of accessibility across the country.

A goal of managing childcare systems can be matching supply to demand. Subsidies create demand (from parents by making it cheaper to access a service) and encourage supply (from providers offering places to meet the demand). Managing the supply and demand can involve a complicated balancing act.

The above figure suggests that the incentives that operate in a system can have an impact on the distribution of access. Australia's means-based subsidy model may result in more targeted subsidies that encourage a greater distribution of supply, even though there are substantial parts of the country that have low accessibility scores.

The situation in the three UK nations shown in Figure 12, where government purchases hours, seems to result in a more uniform system with less variation in accessibility.

Incentives clearly matter when it comes to the distribution of childcare supply and accessibility. However, the extent to which incentives are impacting accessibility and how they are doing so requires more investigation. The relative merits of different demand-side approaches, like those used by Australia and nations in the UK, also requires more research.



# Conclusion

*International Childcare: Mapping the deserts* aims to help fill a major gap in our understanding about childcare.

This report shows that when it comes to childcare supply and accessibility, system design matters and government policies have major impact.

Common amongst many nations is that childcare access differs depending on the socioeconomic status of the area, with more disadvantaged neighbourhoods experiencing lower levels of access.

This socioeconomic relationship is evident in most market-based systems where providers set fees and families are required to navigate often complex price and subsidy mechanisms to access childcare. This means that, coupled with the need to meet eligibility criteria, some childcare markets can create exclusionary effects for families living in disadvantaged neighbourhoods.

The lack of available places in disadvantaged areas means that not all families can 'choose' to access childcare, despite the notion of 'choice' being central to many childcare policies.

Access to childcare shapes many of the choices families make following the birth of their children. The fewer available childcare places in lower socioeconomic areas often means that families are forced into making more difficult decisions such as staying home instead of returning to work or travelling long distances to obtain care.

This research highlights the many more areas that require further investigation, including:

- What type of government intervention is most effective in improving childcare accessibility?
- What is the best practice in linking childcare accessibility to other policy areas such as paid parental leave?
- How does accessibility impact quality?
- What are the costs of different models and how can further investment be directed to where there is the greatest need?
- How have changes in government policy affected overall accessibility and what lessons can be learned from these changes?

The detail in this study means it is not possible to cover all the stories that emerge from this analysis. The data is available for you to explore thanks to Victoria University and the Mitchell Institute on our website, [www.mitchellinstitute.org.au](http://www.mitchellinstitute.org.au)

We intend to keep exploring the data and releasing further analysis into this vitally important area of research.

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## About the Mitchell Institute

The Mitchell Institute at Victoria University is one of Australia's leading policy research think tanks and trusted thought leaders.

We are informed, independent and influential, with a proven ability to identify current and emerging issues and find achievable solutions.

With a particular focus on improving the educational opportunities of all Australians, we monitor the performance of our education system to develop and advocate for policies that reduce inequality and support a fairer and more productive society.

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**Our mission is to develop and advocate for improved evidence-based policy that addresses the barriers of disadvantage and increases access to opportunity for all.**

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### WHAT WE DO

To inform and influence public policy, we:

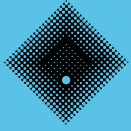
- **Analyse evidence and data** to understand how our policies and systems are performing, who they are supporting well and who they are failing, and the extent to which international evidence and experience can contribute to how we can improve the current system.
- **Stimulate public discussion and debate** to increase policymakers' and the public's understanding of the key challenges we face, the benefits to society of fairer and more responsive policies and systems, and how these policies and systems can be improved through evidence-based approaches.
- **Assist and advise policymakers** in designing and implementing reform by translating complex data into clear policy ideas and by engaging directly with decision-makers, service providers, and service users to provide deep and well-rounded perspectives on the systems-level challenges that Australia is working to overcome.

### WHO WE ARE

Established in Melbourne in 2013, the Mitchell Institute is part of Victoria University (VU), one of Australia's six dual-sector universities that offer university degrees as well as vocational education and training. Our close links with academics and institutes from across VU allow us to draw on cutting-edge research to inform our work.

The Mitchell Institute is also home to, and works collaboratively with, the world leading Centre for International Research on Education Systems (CIRES), and the impactful place-based Pathways in Place program.

Our influential work is supported by generous contributions from the Harold Mitchell Foundation, Victoria University, our project partners, funders, and commissioners.



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