

Evidence to inform the Childcare Commission

July 2013

Foreword

In June 2012, the Prime Minister announced a joint Department for Education and Department for Work and Pensions commission on childcare to look at how to reduce the costs of childcare and burdens on childcare providers in England. The commission looked at three key themes in particular: ways to encourage the provision of wraparound and holiday childcare for children of school age; to identify any regulation that burdens childcare providers unnecessarily; and, to examine how childcare supports families to move into sustained employment and out of poverty. This document includes three research reports produced as part of the Commission's evidence gathering, and is intended to help inform the current debate on early education and childcare.

The Department would like to thank the members of the OECD Early Childhood Education and Care Network who responded to our survey on International Evidence on Childcare Policies and Practices (part one of this report) and Miho Taguma for her helpful comments on the report. The Department would also like to thank Professor Chris Pascal, Professor Tony Bertram, Sean Delaney and Carol Nelson from the Centre for Research in Early Childhood for their Comparison of International Childcare Systems (part two of this report), and Caroline Booth, Katya Kostadintcheva, Anastasia Knox and Avraham Bram from Ipsos MORI for their report on Parent's Views and experience of childcare (part three of this report).

Part one explores approaches to the regulation and monitoring of early education and childcare in 15 OECD member countries and to staff:child ratios in particular. It underlines the variation in practice internationally and finds that, compared to France and the Netherlands, England has higher minimum ratios of adults to children for under threes in centre-based care. In England the salary levels for childcare workers and supervisors in more formal settings are lower than in a number of other comparable European countries.

Part two provides a comparison of international childcare systems in 15 countries. It examines a number of structural indicators such as staff:child ratios, staff training and qualifications and levels of regulation, and explores their association with later educational outcomes through their PISA (Programme for International Assessment) outcomes. The report finds that, while the UK is broadly comparable to other countries in terms of these structural indicators, it is performing more poorly in terms of its PISA rankings.

Part three presents parents' views and experiences of childcare from an external survey. The research showed that 17% of parents had experienced work-related difficulties because of childcare. Parents wanted cheaper or more affordable childcare, and after school childcare was the most problematic.

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Readers may also be interested in the OECD report Starting Strong III - A Quality Toolbox for Early Childhood Education and Care which is available <u>here</u>.



Part 1

International Evidence on Childcare Policies and Practices

Research report

July 2013

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The research team would like to express their thanks to the members of the OECD Early Childhood Education and Care Network who responded to our survey and provided informative and detailed responses throughout the study. This research would not have been possible without their assistance. We would also like to acknowledge the support of Miho Taguma from the OECD and express our thanks for her helpful comments on chapter two of the report.

Executive Summary

Early Childhood Care and Education (ECEC) is an important and topical issue because of the reported returns on investment in the early years¹. A growing body of research indicates that high quality ECEC results in a wide range of benefits to society: including better child wellbeing, more equitable child outcomes, a reduction in poverty, increased intergenerational social mobility, more female labour market participation, and better social and economic development². In light of this many countries in the Organisation of Economic Co-operation and Development (OECD) have reviewed and revised their ECEC policies over the last ten years – including in the UK.

In June 2012, the Prime Minister announced a joint Department for Education and Department for Work and Pensions commission on childcare to look at how to reduce the costs of childcare and burdens on childcare providers³. The focus of the commission was threefold: to look at ways to encourage the provision of wraparound and holiday childcare for children of school age, to identify any regulation that burdens childcare providers unnecessarily, and to examine how childcare supports families to move into sustained employment and out of poverty.

In response to this commission, the Department for Education initiated a programme of domestic and international evidence gathering. This report focuses on the international evidence gathered via a special survey of OECD⁴ member states, supplemented by analysis of existing published OECD data, and reviews of the international research literature. This report presents our findings under the following four themes:

- the regulation and monitoring of childcare providers⁵ (including coverage of mandatory staff: child ratios and levels of qualifications) (chapter 2)
- the delivery and funding of wraparound and holiday care (including extent, ethos and nature of provision) (chapter 3)
- the role of public spending in childcare and subsidies available to parents and providers (including the use of fee capping and the extent of private funding) (chapter 4)
- childcare policy and employment amongst parents (covering the range and availability of services, employment benefits and support from employers) (chapter 5)

¹ Heckman, J. & Masterov D., (2007)

² OECD (2012a)

³ Commission on childcare - Children and young people

⁴ A request for information was sent to a selection of 21 OECD countries, of which 15 responded.

⁵ 'Childcare provider' is any individual or businesses which provide a service looking after children that parents/government pay for.

Findings

Regulation and monitoring of childcare services

Findings from our literature review indicate that the meaning of childcare, and the policies that it addresses, are often linked with national values, workforce participation, economic success and child outcomes⁶. This background needs to be borne in mind when considering how countries regulate and monitor their childcare provision. In our research there was variation both within countries and across countries regarding regulation. However there was clear similarity regarding country's intentions for regulation; improving quality through better training and qualifications; and monitoring that quality consistently through a core set of measures.

Findings from our special survey of 15 OECD member countries provides more granular detail on areas of common regulation and indicate that all these countries have regulatory requirements regarding health and safety checks, qualification levels of staff, curriculum, environment and space. In addition, all countries in the survey monitor and assess the quality of childcare, though the extent, frequency and intensity varies, for example from annual inspections in the United States of America (State of Washington), the Netherlands and Northern Ireland to inspections every three years in New Zealand.

Results from our survey also indicate variation between countries regarding regulation and the requirements placed on providers. The majority of countries do have regulations in relation to staff: child ratios, however, with regards to centre-based care at a national level Denmark, Sweden, Germany and Norway do not regulate ratios. Norway does however regulate for the maximum number of pre-school teachers to children, and in Germany, individual Länder (regions) are free to set their own regulations. With regards to childminder provision, the majority of surveyed countries have nationally regulated staff: child ratios, an exception being Sweden.

In terms of the ratios of staff to children in settings, compared with France and the Netherlands, England currently requires higher minimum ratios of staff to children for the under threes in centrebased care (1:3 for the under twos and 1:4 for two-year-olds). This compares to 1:5 for one-yearolds and 1:6 for two-year-olds in the Netherlands and 1:8 for both one-year-olds and two-year-olds in France. For children aged three to five years the minimum required ratios in centre-based care are the same in England, France and the Netherlands.

The current required minimum staff: child ratio for childminders in England is higher for children under five (i.e. fewer children per adult) than the required ratios found for family-based care in the other European countries for which we have detailed information (Denmark, France, Germany, Netherlands, Finland and Norway).

Other examples of variation in childcare provision focus on the number of children present. For example, childminders in the Republic of Ireland are exempt from regulation if they are minding three or fewer pre-school children. In New Zealand childcare providers require a license if more than three children under the age of six are cared for and in Norway regulations apply to settings looking after children for more than 20 hours per week.

⁶ Lokteff, M & Piercy, K (2011)

In England the salary levels for childcare workers in more formal settings and those of supervisors are lower than in a number of other comparable European countries. A childcare worker in England earns 60 per cent of the salary of their Dutch counterpart, supervisors 49 per cent (Table 5). However, the average salary levels of pre-primary teachers are more comparable with, or higher than, those found in the other European countries for whom we have detailed information (Denmark, Finland, France, Germany, Netherlands and Sweden).

Delivery and funding of wraparound childcare

Our review of the literature indicates that out of school hours childcare services (i.e. wraparound services) are very well established in the United States of America (USA), Sweden and Denmark but remain in the early stages of development in many OECD countries. Sweden offers the most comprehensive provision that is fully integrated within schools and similar provision exists in some parts of Austria, Germany and Slovenia. In all countries covered by the review there are a wide variety of providers, funding streams (including subsidies, benefits and charges to parents) and regulatory requirements.

Out of school hours childcare services include a range of activities, but homework tuition/guidance is a key feature of provision in most countries. Australian provision appears to be more heavily focused on recreational and sporting activities whereas in most other countries there is more of a balance between academic and 'all round' development of children.

Findings from our survey indicated different levels of statutory regulation of wraparound services. For example, the provision of activities or childcare out of school hours is a statutory duty on schools in the Netherlands only. In Sweden and Denmark, municipalities are required to ensure after school places for parents who want and/or need them. Statutory duties aside, most countries surveyed provide a range of extra-curricular activities, such as sport and music, after school. Countries offer either wraparound care with a focus on education (Sweden, Finland and Northern Ireland); extra-curricular activities (Australia, Germany and New Zealand); or a mixture of the two (Denmark and England).

In general, where out of school services are used parents have to pay fees. However some countries specify maximum payments that parents are expected to pay for childcare (e.g. Denmark).

Public spending on childcare and subsidies available to providers and parents

OECD comparative data on public spending on childcare and early education of three to five year olds shows that in 2009⁷, overall, public expenditure on pre-primary education accounted for 0.4 per cent of Gross Domestic Product (GDP) on average across 33 OECD countries. The figure for the UK was 0.7 per cent, compared to 0.3 per cent in the USA.

There was variability of spending on formal childcare per child under the age of three. OECD data shows that public expenditure on childcare amongst members of the OECD countries averaged

⁷ These figures are from 2009 and the sources are: Social Expenditure database 2012; OECD Education database; Eurostat for Non-OECD countries.

0.3 per cent of GDP. In the UK the figure was 0.5 per cent, compared to 0.7 per cent in Denmark, 0.9 per cent in Norway, 0.8 per cent in Finland, and 0.5 per cent in the Netherlands.

Findings from our survey found that most countries provide some level of financial support to parents to help with childcare costs. However, there is variation in the extent to which support is paid directly to parents through benefits and/or the tax system, or to providers through subsidies. For example, some countries stipulate a maximum fee that can be charged for childcare and generally this is expressed as a percentage of the operating costs of providers. In Denmark the parents' payment for a place in a daycare facility must not exceed 25 per cent of the gross operating costs. In Germany, Norway and Belgium⁸ parents are entitled to a tax deduction for using childcare, and in the Republic of Ireland (and the UK) support to parents is offered through the funding of some early education for pre-school aged children.

How childcare is used to support employment

Maternal employment rates vary across countries. In 2011 Scandinavian countries (e.g. Denmark, Sweden, Finland) generally demonstrated higher rates of employment⁹, while the Republic of Ireland and Spain generally demonstrated lower rates amongst those countries included in this review. Various factors affect maternal employment including age of children, extent of childcare provision, society's attitude towards working parents and the state of the labour market.

This picture is reflected in the responses to our survey which identified a range of ways countries support parents with employment via their childcare systems. These include: the availability and variety of childcare provision, employment benefits and support from employers. For example, Denmark, Finland and Sweden emerge as having a progressive approach to childcare. All offer guaranteed childcare availability and in Finland and Sweden this guarantee extends to parents who stay at home. Furthermore, in Finland, parents can take partial care leave in which they work a shorter work day or working week than usual. In Australia, employers can sponsor a childcare service, reserve a place with a provider close to the workplace, or use an agency to find suitable childcare or providers.

⁸ This relates to the Flemish Community of Belgium.

⁹ Amongst women aged 20 to 49 years with children.

1. Introduction

In recent decades research has shown the importance of the early years for a child's development and future success, and the benefits that good quality early childhood education and care (ECEC) can bring. International research indicates that the expansion of early education programmes across many countries has been shown to produce benefits for children at school-entry, in adolescence and subsequently in adulthood¹⁰. This, in combination with a drive to enable parents (especially mothers) to enter and remain in the workforce, has led to an increased demand for childcare, and a desire internationally to drive up the quality of childcare and pre-school provision.

In June 2012, the Prime Minister announced a joint Department for Education and Department for Work and Pensions commission on childcare to look at how to reduce the costs of childcare and the burdens on childcare providers¹¹. The focus of the commission was threefold: to look at ways to encourage the provision of wraparound and holiday childcare for children of school age, to identify any regulation that burdens childcare providers unnecessarily, and to examine how childcare supports families to move into sustained employment and out of poverty.

In response to this commission, the Department for Education initiated a programme of domestic and international evidence gathering. This report focuses on the international evidence gathered via a special survey of OECD¹² member states, supplemented by analysis of existing published OECD data, and reviews of international research literature (further detail on the methodology can be found in appendix A). This report presents our findings under the following four themes:

- the regulation and monitoring of childcare providers¹³;
- the delivery and funding of wraparound and holiday care;
- the role of public spending in childcare and subsidies available to parents and providers;
- childcare policy and employment amongst parents.

The data is analysed and presented thematically in line with the topics outlined above, but also in the form of short case studies which provide a more holistic picture of childcare systems in Denmark, Germany, France and the Netherlands. These are found throughout the report.

¹⁰ OECD (2012a)

¹¹ <u>Commission on childcare - Children and young people</u>

¹² A request for information was sent to a selection of 21 OECD countries, of which 15 responded.

¹³ 'Childcare provider' is any individual or businesses that provide a service looking after children that parents/ government pays for.

2. How do countries regulate childcare provision and monitor quality?

Key findings

- Findings from our literature review indicate that childcare policy is often linked with national identity and values, work force participation, economic success and child outcomes.
- Findings from our survey of OECD members indicate that all countries have regulatory requirements regarding health and safety checks, qualifications levels of staff, curriculum, environment and space.
- The majority of countries have regulations in relation to staff: child ratios. However, with
 regards to centre-based care at a national level Denmark, Sweden, Germany and
 Norway do not regulate. Norway does regulate for the maximum number of pre-school
 teachers to children and in Germany individual L\u00e4nder (regions) are free to set their own
 regulations. Of the countries surveyed the majority have nationally regulated staff: child
 ratios for childminder provision, an exception being Sweden.
- Compared with France and the Netherlands, England currently requires higher minimum ratios of adults to children for the under threes in centre-based care (1:3 for the under twos and 1:4 for two-year-olds). For children aged three to five years the minimum required ratios in centre-based care are the same in England, France and the Netherlands. The required minimum staff: child ratio for childminders in England is higher (i.e. more adults to children) than the required ratios found for family-based care in the other European countries for which we have detailed information.
- The literature indicates that countries see improving training and qualifications as a means of raising the quality of childcare provision. Across the OECD the landscape of qualification requirements is complicated, with variations based on type of setting, public or private providers, national or regional/local regulation and grade or staff/job title, as well as the expected variation between countries.
- In England the salary levels for childcare workers in more formal settings and those of supervisors are lower than in a number of other comparable European countries. A childcare worker in England earns 60 per cent of the salary of their Dutch counterpart, supervisors 49 per cent.

2.1 Introduction

In recent decades research has shown the importance of the early years for a child's development and future success, and the benefits that good quality early childhood education and care (ECEC) can bring. A recent review by Ruhm and Waldfogel of international research evidence concluded that the expansion of early education programmes across many countries has been shown to produce benefits for children at school-entry, in adolescence and subsequently in adulthood¹⁴. This, in combination with a drive to enable parents (especially mothers) to enter and remain in the workforce, has led to increased demand for childcare, and a desire internationally to drive up the quality of childcare and pre-school provision. This can be seen in both developed and developing nations as well as in the priorities of international organisations (e.g. OECD, European Commission, United Nations Educational, Scientific and Cultural Organisation, United Nations International Children's Emergency Fund).

Across the international research community there is wide variation in the definition of 'monitoring quality'. There have been numerous studies investigating quality as a construct and as an outcome, and many studies have examined quality issues. Most conceptualisations of quality ECEC in Anglo-Saxon studies are characterised by assessing quality at a process and structural level¹⁵. Studies in Germany, the Netherlands, Sweden and other European countries¹⁶ show similar attention to both structural and process quality. The OECD advises that there is a growing interest amongst OECD countries, who have reached the international average on their public spending, to re-think spending patterns to ensure value for money, while maintaining/enhancing quality (e.g. financing, staff: child ratio, space per child, qualifications, curriculum framework); others, such as New Zealand and Norway, have attempted to design policies that can enhance process quality (e.g. quality in staff-child interactions and attachments, communication between staff and parents, leadership/managers).

For the purpose of this report, we have restricted the analysis to focus on regulations and structural quality on the policy 'input' side. Sections 2.2 to 2.8 of this chapter focus on the ways in which countries regulate and monitor childcare and pre-school provision¹⁷. In particular it examines: governance structures (section 2.2); regulatory and registration requirements (section 2.3); staff: child ratios (section 2.4); staff qualifications and training (section 2.5); the pay of pre-primary teachers and childcare workers (section 2.6); early years curriculum (section 2.7) and finally quality assurance, inspection and enforcement systems (section 2.8).

¹⁴ Ruhm, C & Waldfogel, J, (2012).

¹⁵ Philips, D. & C. Howes (1987); Cryer, D. (1999); Huntsman, L. (2008).

¹⁶ Broberg, A.G et al (1997); Tietze, W. and D. Cryer (2004); Vermeer, H.J et al (2005).

¹⁷ It is important to be aware of the different terms used by countries to describe their childcare provision. This breaks down into four broad categories: 1. centre-based care (includes all childcare outside the home in licensed centres e.g. nurseries, daycare centres, crèches and playschools. Provision can be full or part-time), 2.family daycare (traditionally provided in a home setting, either the provider's or the child's. In the UK this is usually provided by childminders, although in some countries this term is used for all childcare professionals) 3 pre-school early education programmes (also known as kindergarten and includes centre or school based programmes to meet the needs of children prior to entry to primary education), 4. kith and kin care (also known as family, friend and neighbour care. It appears to account for a large proportion of childcare in some countries and is sometimes subject to regulatory controls, especially where state funded childcare subsidies are involved).

2.2 Governance structures

Two key governance models for accountability and quality assurance of ECEC structures are identified in the literature. These models are categorised as 'split systems' and 'integrated systems'. 'Split systems' are where governance of childcare for younger children (typically aged up to three years) is separate from that of older pre-school children (typically from age three to compulsory school age). These systems may also involve different governing ministries for each group, for example, health/social care and education. OECD countries operating this approach include Belgium, Greece, Korea and Poland. 'Integrated systems' are where childcare and pre-school activities are integrated into one governance structure under one ministry. OECD countries which operate an integrated system are: Chile, Denmark, Estonia, Finland, New Zealand, Norway, Slovenia, Slovak Republic, Sweden and the UK.

2.3 Regulatory and registration requirements on providers

Some countries require all providers that look after children to register. This includes the Netherlands, Australia, Belgium, Denmark, USA (State of Washington), Northern Ireland and Sweden. In other countries registration requirements can vary by type of provider. For example:

- In Germany family daycare providers require a care license if care exceeds 15 hours per week and a period of three months. The license allows for up to five children to be cared for. However, all group-based daycare facilities require an operating license in Germany.
- In New Zealand childcare providers require a license if more than three children under the age of six are cared for. Providers of home-based education and care services, along with playgroups where at least 50 per cent of parents attend with their child, are not required to be licensed, but may do so in order to receive government funding.
- In Belgium anyone organising regular childcare for children under 12 must notify the authority (*Kind en Gezin*), whether it is paid for or not, but care in the child's home or by relatives (up to four times removed) is exempt.

Registration requirements can also vary by the number of hours children are being cared for, or the number of children being looked after. Examples include:

- Norway, where regulations for kindergartens apply to settings looking after children for more than 20 hours per week. However providers of care looking after children for more than 10 hours per week are subject to regulation under the Public Health Act.
- The USA which has different regulations by state. In the state of Oklahoma licensing is required for providers that care for children on a regular basis over 15 hours per week.
- In Scotland where any service providing care for children for more than two hours per day and five days per year is required to register.
- In Denmark where 'private' childminders are subject to the local council's approval if more than two children are cared for.

 In the Republic of Ireland childminders are exempt from childcare regulation if they are minding three or fewer pre-school children.

Findings from our survey indicate that the level at which childcare providers need to be authorised varies, from national arrangements through to local authorities and municipalities. For example:

- In Australia there is a national approval framework for most formal providers, but some providers such as occasional, casual and short term services are out of scope of the framework but are still required to register at state/territory levels.
- In France childminders are authorised at local authority level.
- In the Republic of Ireland regulation and inspection is undertaken by the Health Service Executive.
- In Denmark municipalities approve and oversee the private daycare institutions and private childminders. They also ensure that providers meet the national legislation requirements, as well as the level of service of the municipality

The literature review highlights a number of different forms of regulation. These can include: high level overarching legislation or regulation; that relating to compulsory attendance or statutory provision; and those which are designed to increase take-up, improve quality or are related to safety.

Overall, the literature indicates that the driving forces behind regulatory changes are a desire to improve quality and take-up of early childcare and education with a view to improving outcomes for children coupled with, in some but not all countries, the economic benefits of allowing parents to re-join (or join) the workforce.

Licensing requirements

Our review of the literature indicates that most practitioners need a license to work in the ECEC sector and that licensing is obtained through demonstration of appropriate abilities to practice. There is variation in whether the license requires periodic renewal, though more countries require renewal for kindergarten/pre-school teachers than for childcare workers or family daycare staff. License renewal can also be used as a means of monitoring workforce quality.

The case study below focuses on Germany which has a different regulatory system to England.

Germany is a federal republic with 16 regions (Länder) and regional governments. Responsibility for early education and care is shared between the federal government, regional government and municipalities, with the main responsibility being at municipal level. The German childcare system is therefore characterised by diverse organisational structures and regulatory requirements placed on childcare and family day carers.

Childcare providers are required to register their services and need an 'operating license'. Providers must meet minimum standards in order to get a license (e.g. staff: child ratios, qualifications of staff, space required, equipment, hygiene and safety standards) (section 2.3).

There are four types of family daycare. These are a service in the parents' own home, in the family day carers' house (most common), located in a third parties' room, as a family daycare network. A care license is required if care exceeds 15 hours per week and a period of three months, and is provided in places other than in the home of the child or children. The license allows for the care of five children at a time. However, the local Youth Office can restrict the number of children if the facilities do not have enough space available

Childcare providers are responsible for ensuring the quality of provision and operate a wide variety of different quality management systems, including internal and external evaluations. Interestingly there is no external control or oversight comparable to the English Ofsted inspection. Local Youth Offices support providers to develop and safeguard quality. In some Länder, specialised consultancy agencies advise providers on organisational development and pedagogy. In addition networks of childcare services act as models of good practice.

Providers are entitled to subsidies which vary between Länder and local authorities. To be eligible for subsidy payments childcare providers have to be included in local childcare plans. Parent's pay income related fees for childcare places which differ widely, not only between Länder, but also among local communities and among childcare providers. Parents pay between 11 and 29 per cent of the total costs of formal childcare, but low income families in Germany are usually exempt from fees. Several local authorities have introduced childcare vouchers to reduce costs for parents. Alongside this parents can receive tax deductions. For parents, two thirds of childcare costs are deductible from income taxes up to a maximum of EUR 4,000 per year (section 3.3 & 4.4).

2.4 Staff: child ratios

It is widely recognised that three key aspects for ensuring the quality of childcare are the level of staff: child ratios, combined with the qualification levels and competence of childcare staff. Staff: child ratios give one indication of the likely frequency of contact between carers/ educators and children, though the quality of that contact is governed by a range of other factors such as staff training and qualification levels, and good management practices. Evidence¹⁸ is available showing

¹⁸ Siraj-Blatchford, I et al (2003).

that more highly qualified staff have more effective interactions with children, and therefore may be able to work effectively with larger numbers of children.

This section examines the staff: child ratios in different countries but does not currently include auxiliary staff in the analysis¹⁹. The qualification levels of staff are discussed in section 2.5.

The literature review shows there are considerable differences in staff: child ratios across countries. In many countries regulations for minimum ratios vary with the age of children and whether or not services are provided on-site (i.e. in a school). In general, staff: child ratios increase (that is, more children permitted per staff member) with children's age. The maximum permitted number of children per staff member varies from eight in the UK for children aged three to five (or 13 in teacher-led settings), to 25 in Greece irrespective of children's age. In Germany staff: child ratios are regulated by Länder legislation (there are no national regulations for centre-based care).

Currently in England, the following staff: child ratios apply: in centre-based care 1:3 (under twoyear-olds); 1:4 (two-year-olds); and 1:8 (three- to five-year-olds) (or 1:13 if the member of staff has a relevant degree). The same staff: child ratios apply in Wales. Scotland differs from England with regard to the ratios for two-year-olds (1:5 compared to 1:4 in England). Furthermore, in Scotland the maximum ratio for the over threes does not increase to 1:13 if staff members hold a degree. In Northern Ireland the staff: child ratio is 1:8 for three to 12 year old children. In January 2012 Australia introduced a 1:4 staff: child ratio in centre-based care for children aged less than two years. From January 2014, the following staff: child ratios will apply in centre-based care in Australia: 1:5 (two-year-olds); and 1:11 (three- to five-year-olds) and for family daycare 1:7 with no more than four children under school age.

Tables 1 and 2 set out the mandatory minimum staff: child ratios in a selection of European countries²⁰. They present separately the ratios related to centre-based care (Table 1) and childminder care (Table 2). To help with comparison the ratios are presented by individual age year. Interestingly, four of the seven European countries included in Table 1 (Denmark, Germany, Norway and Sweden) do not have national mandatory minimum staff: child ratios for centre-based care. However, Norway does regulate for the maximum number of pre-school teachers to children and in Germany individual Länder (regions) are free to set their own regulations.

Centre-based care ratios

Table 1 shows that, compared with France and the Netherlands, England requires higher minimum ratios of staff to children for the under threes in centre-based care (1:3 for the under twos and 1:4 for two-year-olds). This compares to 1:5 for one-year-olds and 1:6 for two-year-olds in the Netherlands and 1:8 for both one-year-olds and two-year-olds in France. For those aged three to five years the minimum required ratios in centre-based care are the same in England and

¹⁹ The OECD highlight that there are many types of auxiliary staff working in centres that are trained to different levels. These range from auxiliary staff with no formal qualifications in the area to those in the Nordic countries where they often have a couple of years upper secondary vocational training. (OECD Family Database PF4.2 Quality of childcare and early education services.)

²⁰ Information on further OECD countries staff: child ratios that participated in the survey are shown in Appendix C.

France. The Netherlands have a slightly lower ratio of 1:10 for children aged four and five. Finland requires the same ratio as England for two-year-olds (1:4) and 1:7 for full-time staff in centre-based care for children aged three to six.

Family-based care ratios (childminder care)

Table 2 shows the current mandatory minimum staff: child ratios found in family-based care (equivalent to childminder care in England) in the selected countries. The table shows that the required ratio in England is higher (i.e. more adults to children) than the required or actual ratios found in the other European countries for which we have detailed information. For the under threes England requires there to be one adult for every three children (and usually only one of those children can be under one year). In France and Finland the equivalent ratio is 1:4, and in the Netherlands the ratios required for one and two-year-olds are 1:4 and 1:5 respectively. Currently in England, each childminder can only care for a maximum of three children aged under five (though they can also have three older children in addition) whereas in the other countries (with mandatory ratios) the minimum requirements for family-care for children under five-year-olds are lower (i.e. more children per adult).

Table 1 International comparisons of national mandatory minimum staff: child ratios for centre-based care by child age

	Centre-based care							
	Less than one year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	
England	1:3	1:3	1:4	1:8 or 1:13	1:8 or 1:13 ²¹	1:8 or 1:13	N/A	
Denmark ²²			No national	mandatory minim	um ratios			
France	1:5 ²³	1:8	1:8 or 1:12 ²⁴	1:8 or 1:26 ²⁵	1:8 or 1:26	1:8 or 1:26	1:8 or 1:26	
Germany			No national	mandatory minim	um ratios			
Netherlands ²⁶	1:4	1:5	1:6	1:8	1:10	1:10	1:10	
Finland ²⁷	1:4	1:4	1:4	1:7ft 1:13pt	1:7ft 1:13pt	1:7ft 1:13pt	1:7ft 1:13pt	
Norway ²⁸	1:7; 1:8 or 1:9	1:7, 1:8 or 1:9	1:7, 1:8 or 1:9	1:16, 1:17 or 1:18	1:16, 1:17 or 1:18	1:16, 1:17 or 1:18	1:16, 1:17 or 1:18	
Sweden	No national mandatory minimum ratios							

²¹ In England, for teacher-led settings ratios are 1:13 for ages 3-5 and 1:30 in reception classes.

²²In Denmark, there is no legal specification in relation to the staff: child ratios in daycare facilities for children up to school age. In 2011 calculations of average children looked after are: Nursery 1:3, Kindergarten 1:6. In relation to childminders and the staff; child ratios are regulated by law.

²³In France, the following centre-based ratios apply: Crèches – 1:5 children who cannot walk (children aged less than one) and 1:8 children who can walk (children aged one and over).

²⁴ The ratio of 1:12 applies to Jardins d'éveil (= toddler daycare: children between two- and three-years old.)

²⁵ OECD data from Starting Strong III shows the ratio of children to teaching staff in kindergartens and pre-schools (aged three to compulsory schooling) is 1:26.

²⁶Further detail on staff: child ratios in the Netherlands can be found in Appendix C.

²⁷In Finland the maximum group size for pre-primary education is 20 children according to a recommendation given by the National Board of Education.

²⁸ In Norway national regulations only relate to the maximum number of pre-school teachers to children.

Table 2 International comparisons of national mandatory minimum staff: child ratios for childminder care by child age

	Childminder care							
	Less than one year	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	
England ²⁹	1:1	1:3	1:3	1:3	1:3	1:3	1:6	
Denmark ³⁰	1:5	1:5	1:5	1:5	1:5	1:5	1:5	
France ³¹	1:4	1:4	1:4	1:4	1:4	1:4	1:4	
Germany ³²	1:5	1:5	1:5	1:5	1:5	1:5	1:5	
Netherlands	1:2	1:4	1:5	1:5	1:6	1:6	1:6	
Finland ³³	1:4	1:4	1:4	1:4	1:4	1:4	1:4	
Norway ³⁴	1:5	1:5	1:5	1:5	1:5	1:5	1:5	
Sweden	No national mandatory ratios							

²⁹In England, childminders can have a maximum of six children under the age of eight, a maximum of three younger children and a maximum of one child under one.

³⁰No information is available on the variations in ratios that may exist by age of children.

³¹No information is available on the variations in ratios that may exist by age of children.

³² OECD information shows that in Germany the maximum ratio for family daycare is 1:5. However, statistics show that family day carers on average looked after 2.9 children in 2011.

³³In Finland, for family daycare this covers the maximum number of children, This is four children for the full day and one six or seven year old child for half a day that is in practice after school or after pre-primary education which are about four hours a day. In Finland the childminder can provide part-time care for one pre-primary education or school-aged child.

³⁴In Norway, for family kindergartens (home-based) the number of children per home and assistant can be up to five when the majority of children are over three years of age. If majority of children are under three then the number is reduced.

2.5 Staff qualifications and training

The qualifications of staff provide some indication of the quality of staff working in childcare settings, whilst recognising that this is also affected by other factors such as personal aptitude and work experience. The literature shows that countries see improving training and qualifications as a means of raising the quality of childcare provision. Classifications based on qualifications are difficult in large part due to the lack of clear boundaries between what is care and education in many cases, i.e., care is education and education is care³⁵. The International Standard Classification of Education (ISCED) can be used for international comparison, and the OECD's Starting Strong III has helped to establish that different standards are set for childcare workers and pre-school teachers in 'split' system countries, and that the required level of childcare workers is lower than that of pre-school teachers. This is consistent with remuneration standards for these job profiles.

Research evidence confirms that staff quality is associated with child outcomes³⁶. However, statistical analysis on the relationship between qualification levels and child outcomes often presents mixed results. This can be due to the fact that qualification levels are difficult to compare due to national interpretations of standards, specialisation of courses, length of practical experience, and types of providers.

It is important to note that "specialised and practical training" has been more strongly associated with quality and outcomes in the case of infants and toddlers³⁷. Additionally, professional development and education improves capacity to create rich learning environments³⁸. There is a growing knowledge base which demonstrates that enriched stimulating environments and high quality pedagogy are fostered by better qualified practitioners and that better quality pedagogies facilitate better learning outcomes. However, the OECD advises that it is not the gualification per se that affects outcomes but the ability of staff members to create a better pedagogic environment that makes the difference. The OECD outlines lessons to be learnt from improving gualifications, including cost implications and caution in setting numeric targets for the percentage of gualified workforce. They provide an example from New Zealand where the shift towards a qualified workforce occurred at the same time as a strong increase in demand for ECEC and a rapid expansion of the workforce. When the government established the Diploma of Education (Early Childhood Education) as the benchmark teaching qualification for the newly centralised system, targets were set for the percentage of the workforce that was qualified. The government found that the targets were difficult to achieve due to the increase in the total number of teachers employed. Furthermore, the increased demand for qualified teachers had a strong impact on their salaries. Pay parity for kindergarten teachers with primary and secondary teachers was introduced; and the government policy was to provide funding to meet the cost of quality improvements so that the cost to parents would not increase. New Zealand found that this policy led to a significant increase

³⁵ OECD Family Database PF4.2 Quality of childcare and early education services <u>http://www.oecd.org/social/socialpoliciesanddata/37864559.pdf</u>

³⁶ Huntsman, L. (2008); Loeb, S. et al. (2004); Burchinal, M. R. et al. (2002); Clarke-Stewart, K.A. et al. (2002); Blau, D. M. (2000); Philips, D. et al. (2000); Vandell, D. L., & Wolfe, B. (2000); NICHD (1996).

³⁷ Howes, C et al. (1992).

³⁸ Elliott, A. (2006); Neuman, S.B. (1999).

in the cost of ECEC funding for the government. As a result, the government reduced its target of 100 per cent registered teachers in the sector to 80 per cent, deciding that achieving a minimum level of 80 per cent registered teachers by 2012 would maintain sufficiently high standards across the sector³⁹.

In the OECD Starting Strong III publication, several countries reported "recruit qualified, experienced and diverse candidates into the ECEC workforce" as one of the cost-effective strategies to improve staff quality. In these countries, some deregulation of recruitment processes have been undertaken, while maintaining high quality standards for the qualifications/licensing. The incentives for candidates include saving of the direct costs (of going through the shorter courses with the validation/recognition) as well as saving of indirect costs (with less foregone earnings while taking the courses)⁴⁰.

Types of qualifications

Across the OECD the landscape of qualification requirements is complicated, with variations based on type of setting, public or private providers, national or regional/local regulation and grade or staff/job title, as well as the expected variation between countries⁴¹. A number of factors are associated with the required levels of staff training: types and definitions of roles; the range of qualifications available; the presence, or not, of regulated standards; activities to review and improve staff qualifications; and professional development considerations. In general in those countries that operate a 'split system', different qualifications exist for kindergarten/pre-school teachers and childcare workers⁴². However, countries with integrated services tend to have higher requirements for staff working with younger children. For example, in Sweden and Norway pedagogical leaders have to hold a degree level qualification in early education. Kindergarten and pre-school teachers generally have higher initial education requirements than care centre staff - the majority of countries specify ISCED level 5 for the former and level 3 for the latter. Exceptions to this include Portugal and Japan where the same qualification levels are required (level 5). In Germany qualification requirements are also the same for looking after children aged up to three years and three to six years.

A comparison of childcare services across Europe⁴³ reported a great deal of variation in the required levels of qualification for childcare practitioners between countries, with requirements ranging from personal skills to pedagogical degrees. There is also often a large difference in requirements for nursery schools, pre-schools and crèches on the one hand where requirements are stricter, and for private childminders on the other hand who often have a lower level of education. Lower levels of required qualifications are evident for (private) childminders in Belgium, the Netherlands, Germany and the UK.

³⁹ http://www.oecd.org/edu/school/49360062.pdf

⁴⁰ OECD (2012a)

⁴¹ OECD (2006)

⁴² OECD (2012b)

⁴³ Plantenga, J., &Remery, C. (2009)

Our survey of OECD countries found that qualification levels are particularly difficult to compare due to national interpretations on standards in terms of the level of attainment they represent and the cost of completing courses. Attached at Appendix D is a summary table of the information provided by responding countries on qualification levels of staff working in childcare settings.

Qualifications of certified childcare workers and main field of work⁴⁴

Tables 3 and 4 show the main type of staff, training requirements and age group taught. It is interesting to note that in the UK pre-primary teachers are required to study at university for four years for pre-school teaching compared with just two years of study, post-16, for certified childcare workers. Sweden has a similar distinction, where pre-school teachers are required to undertake three and a half years at university as against childcare workers who are required to undertake three years post-16 study. By contrast in Denmark both pre-school teachers and childcare workers are required to undergo three to five years vocational or tertiary education, depending on prior experience.

⁴⁴ OECD Family Database PF4.2 Quality of childcare and early education services http://www.oecd.org/social/socialpoliciesanddata/37864559.pdf

Table 3 Qualifications of certified childcare workers and main place of work⁴⁵

	Main type of staff	Initial training requirements	Age range	Main field of work	Continuous training
Australia	Early Childhood Educator	2 year vocational training ⁴⁶	ing ⁴⁶ 0-5 Kindergartens; long daycare		Childcare – limited to some services
Austria	Erzieherinnen Kindergarten- pädagoginnen	5 year vocational secondary	0-5	Krippen and Hort Kindergarten	Funding by provinces: 3 – 5 days per year
Belgium	Kinderverzorgster/ Puéricultrice	One supplementary year after vocational secondary	0-3	Kinderdagverbliif/Crèches (or assistant in école maternelle)	
Canada	Early childhood educator	2 year ECE	0-12	Childcare, nursery school, pre-school	
Czech Republic	Detska sestra	4 year secondary nursing school	0-3	Creche	Voluntary – offered by regional centres
Denmark	Paedagog	3 to 5 year vocational, or tertiary education (depending on prior experience)	0-5	Educational, social care, special needs institutions (inc. daycare)	Funding decentralised to municipalities
Finland	Sosionomi (social pedagogues) Lähihoitaja (practical nurses)	3 year secondary vocational	0-6	Päivakoti (children's daycare centre) Avoin päiväkoti	Municipalities have to provide 3 – 10 days annual training
France	Puéricultrices	Nurse/mid-wife +1 year specialisation	0-3	Crèches/assistant in école maternelle	
	Éducateurs de jeunes enfants	27 month post-Bac in training centre	0-6		
Germany	Kinderpflegerinnen	2 year secondary vocational training	0-6	Kindergarten	
Hungary	Gondozó (childcare worker)	3 year post-secondary voc. training or specialist certificate	0-3	Bölcsóde (for children <3)	
Ireland	Childcare practionerr	Wide variation but 1 year vocational training is common	0-6	Childcare centres	
Italy	Educatrice	Secondary vocational diploma	0-3	Asili nido	Municipality or director/inspector decides
Japan	Nursery teacher	Graduation from a nursery training school		Daycare, Crèche nursery	
Korea	Childcare worker	2 year tertiary or 1 year training after high school	0-6	Childcare centre Hakwon (private learning academy)	
Mexico ⁴⁷					
Netherlands	Leidster kinder- centra	3 year post-18 training	0-4	Kinderopvang	Continuous training is funded by childcare organisations
New Zealand	Early childhood teacher	Diploma of Teaching (ECE) a 3 year course or an equivalent approved gualification.			
Norway	Assistents	2 year post-16 apprenticeship	0-7	Barnehager/SFO	
Portugal	Educadora de infäncia	4 year university or polytechnic	0-6	Creches ATL	Offered by regional teacher centres and universities to all teachers
Sweden	Barnskötare	3 year post 16 secondary	0-7	Förskola Förskoleklass	Funding decentralised to municipalities
Switzerland	Childcare worker	Varies per canton		Creches, nurseries	
United Kingdom	Trained nursery teacher Nursery nurse	2 year post-16 secondary 2 year post-16 secondary	3-11 0-5	Nurseries (or assistants in above)	Limited for daycare workers
United States	Childcare teacher	1 year course to 4 year university	0-5	Public schools Head start Childcare centre	Most States require a certain number of hours per year

⁴⁵ OECD Family Database, Table PF4.2.A. Please note that Belgium, Ireland and the Netherlands have updated the published OECD data for this report.

⁴⁶ In Australia, under the new Accreditation Standards for teacher education, graduates will require a minimum 4 years or equivalent.

⁴⁷ Information not available.

Table 4 Qualifications of pre-school teachers and main place of ${\rm work}^{48}$

	Main type of staff	Initial training requirements	Age range	Main field of work	Continuous training
Australia	Early Childhood Teacher	3 to 4 year tertiary training	0-8	Pre-school/pre- primary	Teachers – several funded days/year
Austria	Erzieherinnen Kindergarten pädagoginnen	5 year vocational secondary	0-5	Krippen and Hort Kindergarten	Provincial funding: 3-5 days per year
Belgium	Kleuterondwijzer(es)/ Institutrice de maternelle	3 year pedagogical tertiary	3-6	Kleuterschool/ École maternelle	Funding decentralised to schools
Canada	Teacher	4 year tertiary (not PEI)	0-5/ 5-10	(pre-) Kindergarten and primary school	Provided for kindergarten teachers
Czech Republic	Ućitel mateŕske skoly	4 year secondary pedagogical or 3 year tertiary	3-6	Mateŕská skola	
Denmark	Paedagog	3 to 5 year vocational or tertiary education (depending on prior experience)	0-10	Educational, Social care, special needs institutions (including daycare)	Funding decentralised to municipalities
Finland	Lastentarhanopettaja (Kindergarten teachers)	3 – 4- 5 year university or 3 to 5 year polytechnic	0-7	6-vuotiaiden esiopetus (pre- school class as well as Kindergarten)	Funding decentralised to municipalities
France	Instituteurs Puėricultrices	Bac + 2 years	2-6	Ėcole maternelle	
Germany	Erzieherinnen	3 year secondary vocational training + 1 year internship	0-6	Kindergarten	
Hungary	Pedagogue	3 year tertiary degree	0-7	Óvoda (kindergarten for children 3-7)	
Ireland	Teacher	3 year tertiary degree	4-12	Schools	
Italy	Insegnante di scuola materna	4 year tertiary degree	3-6	Scuola materna	Municipality or director/inspector decides
Japan	Kindergarten teacher	Kindergarten teacher license (junior college, university or graduate school)	3-6	Kindergarten	
Korea	Kindergarten teacher	4 year tertiary degree	3-6	Kindergarten	Offered by regional centres to all childcare kintergarten teachers
Mexico	Teacher	University degree - licentiatura	0-6	Educación inicial Educatión preescolar	Several funded days/year
Netherlands	Leraar basisonderwijs	3 year voc. higher education	4-12	Bassischool	Funding decentralised to municipalities
New Zealand	Kindergarten teacher	Diploma of teaching (ECE) a 3 year course or an equivalent approved qualification	3-5	Kindergarten	
Norway	Pedagogiske ledere	3 year vocational higher education/university college Pre- school teacher education (as of 2013 called Kindergarten teacher education)	0-6	Barnehager	Funding decentralised to municipalities. Funding responsibility of employer. National strategies also in place.
Portugal	Educadora de infáncia	4 year university or polytechnic	0-6	Jardim de infáncia.	Offered by regional teacher centres and universities to all teachers.
Sweden	Förskollärare	3 and ½ year university	0-7	Förskolekclass Förskola	Funding decentralised to municipalities
Switzerland	Kindergarten teacher	Three year upper secondary and tertiary degree	3-6	Kindergarten/centre de vie enfantine/ infant schools	
United Kingdom ⁴⁹	Qualified Teacher	4 year university	4-8 (0-8)	Nursery classes Reception class	Regular access to teachers
United States	Public school teacher Head Start teacher	4 year university CDA = 1 year voc. tertiary	3-5	Most states require a certain number of hours per year.	

⁴⁸ OECD Family Database, PF4.2.B. Norway has updated the OECD information provided in this table. ⁴⁹ For the UK the table shows that qualified teachers can work with 4 to 8 year olds in nursery classes and with children up to the age of 8 in reception classes.

Regulation of qualifications

Across the OECD there is variation in whether regulations stipulate a specific level or type of qualification for childcare and early education workers. For example, in the Republic of Ireland although the regulations do not specify what qualifications staff should hold, any pre-school leader contracted to deliver a free universal pre-school scheme must hold a minimum of a level 5 NFQ qualification (corresponds to UK level 3). In the USA while there are no national regulations, there are state-set levels and qualification levels are stipulated for some specific education programmes, such as early Head Start and PreK ^{50,51,52,53}.

In Finland pre-school staff are considered part of the teaching profession and must attain the same degree level qualifications⁵⁴. With the inception of new regulations in Australia in January 2012 came a range of different qualification requirements for different types of staff ^{55 56}.

Reviewing requirements and improving qualifications

A number of countries have recently reviewed their qualification requirements and initial training of the ECEC staff to improve the quality of the workforce. South Korea and Singapore⁵⁷ have increased their minimum requirements. In Germany degree level programmes have been introduced to raise the profile of the early education workforce, coupled with a quality assessment of training providers. Portugal, the French Community of Belgium and Finland have all moved to align qualification requirements with those for schools.

In order to improve the quality of ECEC, some countries have tightened regulations on the content of the qualifications themselves, in addition to the requirements placed on staff to hold certain qualification levels. In particular this can be seen in revision of curricula to ensure specific content is covered in British Columbia (Canada), Australia, South Korea, Japan, Finland and New Zealand.

Australia is implementing higher qualification requirements from 2014, with larger settings required to have an early years teacher (all settings must have access to one), all educators (including childminders) to hold or be studying towards a Certificate III qualification in children's services, and half of centre-based educators to hold (or studying towards) a diploma level qualification. Furthermore, Belgium (Flemish Community) is drawing up a decree on childcare for babies and pre-school children. With this new decree the Flemish Government wants to ensure the sufficiency and quality of childcare for babies and pre-school children, and that childcare is accessible and affordable. It will lay down the legal basis for the organisation of the landscape (a simpler and

⁵⁰ U.S. Department of Health and Human Services (2004)

⁵¹ OECD (2006) *ibid.*

⁵² Hoffman, E., & Ewen, D. (2007)

⁵³ Ackerman, D.J., & Sansanelli, R. A. (2010)

⁵⁴ Economist Intelligence Unit (2012).

⁵⁵ Cooper, C. (2011)

⁵⁶ Early Childhood Australia (2011)

⁵⁷ Economist Intelligence Unit (2012)

comprehensive organisation of the landscape) and for a more professional childcare.

2.6 Pay of pre-primary teachers and childcare workers

Working conditions in ECEC settings are often referred to as structural quality indicators (e.g., wages, staff-child ratio, maximum group size, working hours, etc.) and other characteristics (e.g., non-financial benefits, team-work, manager's leadership, workload, etc.) that can influence the ability of professionals to do their work well and their satisfaction with the workplace, work tasks and nature of the job. This section examines evidence on staff salaries of pre-primary teachers and childcare workers.

In England evidence shows that staff salary costs are the principal component of the costs of providing early years and childcare services⁵⁸. There are clearly important interactions between staff salary levels, qualifications, and the quality of provision. Table 5 below presents average annual salaries for pre-primary teachers, childminders, childcare workers and supervisors in formal settings for selected countries. Within each category of worker, salaries will vary depending on an individual's level of qualification, level of experience, employment status, and whether they work in the public or private sector. All amounts have been converted to purchasing power parity (PPP) to allow for the different cost of living in each country.

⁵⁸ Brind, R et al (2012)

Table 5 Average annual salaries (gross) for childcare workers (2010)⁵⁹

	Average annual salaries ⁶⁰ GBP £, converted with PPP ⁶¹					
	Average actual pre-primary teachers' salaries ⁶²	Childminders (family daycare)	Childcare workers in more formal settings e.g. crèche or accredited playgroups	Supervisors or managers of the formal settings ⁶³		
Denmark	£30,350	£21,500	£20,350	£32,800		
Finland	£18,450	£14,800	£18,800	£22,300		
France	£25,400	£13,250 ⁶⁴	£16,300	£23,950		
Germany	М	£14,600	£19,150	£28,250		
Netherlands	£31,700	£22,500 ⁶⁵	£22,100	£34,400		
Sweden	£22,050	£20,150	£22,450	£29,250		
England ⁶⁶	£26,000	£11,400	£13,300	£16,850		

M=missing

⁵⁹ Figures for childminders, childcare workers and supervisors have been obtained via a DfE survey of UK Embassies. For England the source is the Childcare and Early Years Provider Survey 2010. For France the data source is: INSEE / déclarations obligatoires des entreprises aux organismes sociaux (màj. extrapolée 2012). Figures for pre-primary teacher salaries have been obtained via a DfE survey of OECD, NESLI members (network for the collection of system level indicators of education).

⁶⁰ The salaries for childcare workers and supervisors/managers are on a full-time basis. The typical working pattern and definitions of full-time will differ by country. For England the definition of full-time used here is 39 hours per week for 52 weeks per year.

⁶¹ Figures are converted using Purchasing Power Parity (PPP). All figures are rounded to the nearest 50.

⁶² Figures for pre-primary teachers in Finland, the Netherlands and England have been obtained via a DfE survey of OECD Network for the collection of system-level indicators of education (NESLI) members. Figures for pre-primary teachers in France, Denmark and Sweden have been obtained from Eurydice (2012) Teachers and School Heads' Salaries and Allowances in Europe, 2011/12.

⁶³ The salary figures for supervisors in England are for staff defined as those who are qualified to supervise a group of children on their own. They do not necessarily supervise other members of staff. This is different from a senior manager who is the person with overall responsibility for managing the provision in a setting. For other countries the salaries are for staff in either a supervisory or a managerial role.

⁶⁴ The childminder salary for France is based on the fee for caring for four children per day, five days per week for 50 weeks per year.

⁶⁵ The childminder salary for the Netherlands is based on £4 per child per hour for a maximum of five children for an average of 21.6 hours per week for 52 weeks per year.

⁶⁶ The childcare worker and supervisory salary figures for England are based on staff in private, voluntary and maintained full daycare settings only.

For pre-primary teachers average salary levels in England are comparable with or higher than those found in the other six selected European countries. The position for childcare workers and supervisors is different. In England the salary levels for these categories of early years workers are lower than elsewhere. A childcare worker in England earns 60 per cent of the salary of their Dutch equivalent, supervisors 49 per cent.

In part these large pay differentials will reflect differences in qualification levels across the different countries. As shown in Table 3, in the Netherlands the initial training requirement for a Dutch 'Leidster kinderdagverblijf' worker is three years of training post-18. In England the initial requirement is two years of post-16 education or training. Data in Table 5 show that childcare workers in England earn 59 per cent of the salary of their Swedish counterparts where the initial training requirement for a 'Barnskotare' is three years post-16 training. Even after taking account of these contributory factors the childcare sector in England does appear to be a low-paid one in comparison with similar types of occupations in continental Europe and Scandinavia.

Staff turnover rates

Evidence from the OECD suggests that staff stability (i.e. low turnover rates) has been found to be positively related to child outcomes. High turnover rates disrupt the continuity of care and make it harder for staff to engage children in appropriate and meaningful activities. Research has suggested that high turnover rates are often linked to the low wages typically found among workers in child care, kindergarten or pre-school⁶⁷, which leads to higher job dissatisfaction and an unstable care giving environment. Research indicates that low wages are often correlated with low education and training requirements for professionals⁶⁸ and the perception that working in the ECEC sector is not perceived as a high status profession⁶⁹. This impacts on professionals' motivation to stay in their job and can lead to higher turn-over rates⁷⁰. Staff turnover is relatively high in the ECEC sector in most OECD countries⁷¹. In England, staff turnover for pre-primary teachers is 5.5 per cent, while that for childcare workers is double (11 per cent). This compares to the Netherlands where staff turnover for pre-primary teachers is 37 per cent and 8.9 per cent for childcare workers. In Denmark staff turnover for pre-primary teachers is 37 per cent.

⁶⁷ Huntsman, L. (2008); Smith, P. R. (2004); Philips, D. et al. (2000).

⁶⁸ Whitebook, M. (2002/2003); Torquati, J.C. et al. (2007).

⁶⁹ Ackerman, D.J. (2006).

⁷⁰ Maslach, C. and A. Pines (1977).

⁷¹ Huntsman, L. (2008); Fenech,M. et al. (2006).

2.7 Curriculum

The literature review established that in most OECD countries some structuring of young children's experience towards educational aims is generally accepted and some form of framework – either a curriculum or standards - is used in early childhood services. This is especially true for older children, from around two and a half or three years to compulsory schooling age. The age groups to which these curricula apply differ across countries.

Many countries aiming to deliver 'integrated' services use a framework that covers from birth or age one to compulsory schooling (*e.g.*, Australia, New Zealand, Nordic Countries, and Prince Edward Island [Canada]). In New Zealand the 'Te Whariki' curriculum covers birth to school entry and offers content that is age appropriate for three age groups: infants (birth to 18 months), toddlers (one- to three-year-olds) and young children (two and a half years to school entry). In 2008 the Slovak Republic merged three curricula for ages three to six into one curriculum.

The early childhood curriculum in Spain features general guidelines for up to age six years. However, this is split into two development cycles from birth to three, and three to six. Both cycles are organised around the same areas which are adapted to the age and development level of the child, and staff can amend and improve the programme to meet the needs of the children and local areas.

Other countries try to capture continuous child development in early years and beyond. For example:

- The Länder of Baden-Württemberg, Bavaria, Hessen, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Sachsen, and Thuringia (Germany) have developed a framework for birth to age 10, and Hessen is now considering extending the framework to age 18;
- The Länder of Hamburg, Rheinland-Pfalz, and Schleswig-Holstein (Germany) have aligned their ECEC curriculum with primary and lower secondary education. Their curricula cover birth to 15 years;
- In Scotland the Curriculum for Excellence covers ages three to 18 years, with age appropriate content for different groups;
- The Italian Guidelines for Curriculum, developed in 2007, is a framework for Infant school ages three to six – and the first cycle of compulsory education – six to 14 years;
- South Australia has a framework for children from birth to 18 years.

A few countries, such as South Korea, Japan and French Community of Belgium, offer parallel frameworks for childcare and early education⁷². In Korea, the Nuri Curriculum focuses on integrating two separate curricula from kindergarten and childcare, so that it ensures fair quality of ECEC services for children in both provisions. Japan is aligning the content and goals of its

⁷² OECD (2011b)

'National Curriculum of Daycare Centres' to its 'Course of Study for Kindergartens'. Both frameworks will be made more consistent to streamline transition from care to kindergarten.

A number of countries are making moves to either have integrated curricula covering from early years to compulsory schooling, or to align curricula to facilitate transition. As might be expected, governance structures are as varied as the countries developing the curricula. A large number of countries allow local flexibility based around central frameworks or regulated curricula. In some cases these varied curricula must be authorised before use. Not all countries have mandatory curricula, providing instead sets of guidelines. The literature did not identify any developed countries where there was no framework at all.

Countries which have reformed their ECEC curriculum indicate that successful implementation includes aligning the reform with staff training and embedding the new curriculum and pedagogy in the contents of staff education/qualifications. Examples in Starting Strong III⁷³ include:

In Australia, a non-government organisation was contracted to provide nationwide training for early childhood educators in the implementation of the Early Years Learning Framework (EYLF). Australia also introduced the framework into undergraduate courses. Australia reported success factors for implementation as: 1) ensuring stakeholder buy-in by involving them in the design process to create a sense of ownership; and 2) using simple and common language when drafting the curriculum so that it can be easily understood by staff and parents.

Good practice examples for effective implementation also include effective alignment of standards, curriculum and assessment. Examples in Starting Strong III⁷⁴ include:

- New Zealand implemented Kei Tua o te Pae, Assessment for Learning, in which teachers are expected to develop effective assessment practices that meet the aspirations of the curriculum Te Whāriki. The national government offers training on this assessment practice to ECEC staff. The curriculum programme is also evaluated in terms of its capacity to provide activities and relationships that stimulate early development. Children and parents can help in deciding what should be included in the process of assessing the programme and the curriculum.
- In the Republic of Ireland, the National Council for Curriculum and Assessment created the Aistear Toolkit, which includes tip-sheets, information leaflets, podcasts, presentations and activities and helps ECEC staff, as well as parents, to understand the framework. The Republic of Ireland also prepared training videos for ECEC staff with an aim to inform them about curriculum changes and train them to effectively implement the changes.

⁷³ OECD (2012a)

⁷⁴ OECD (2012a)

2.8 Quality assurance, inspection and enforcement

To maintain or improve quality standards, the OECD⁷⁵ recommended effective government steering of ECEC systems on the one hand, and participatory and voluntary approaches to quality on the other. The literature review showed three elements in countries' approaches to quality assurance, inspection and enforcement activities. This includes monitoring and inspection; activities to improve processes; and enforcement. This section provides a brief overview of the inspection and quality arrangements that operate in responding countries.

Findings from our survey indicate that all countries surveyed monitor and assess the quality of childcare, and have some form of inspection and quality assurance arrangements. For some countries this involved issuing national guidelines. For example, Australia has a 'National Quality Framework' (NQF) for quality of early childhood education and care services. The NQF includes the National Quality Standard (NQS) that sets a national benchmark for the quality of early childhood education and care services and is accompanied by a national quality rating and assessment process. In Finland there are 'National Curriculum Guidelines on ECEC' and 'Core Curriculum for Pre-Primary Education'. However quality assessment is carried out by local authorities. In New Zealand the 'Education (Early Childhood Services) Regulations 2008' set minimum standards, and the 'Education Review Office' evaluates quality.

Belgium (Flemish Community) has a 'Care Inspection Agency' that visits all facilities accredited and subsidised by *Kind en Gezin*, including those providers who operate with a license (independent providers). The educational approach in independent daycare centres operating with a license is assessed by the 'Care Inspection Agency' using a quality assurance instrument specifically designed for these types of providers. They also make use of self-evaluation tools, with independent daycare providers having to score a certain level to be considered for funding.

Similarly, in the Republic of Ireland the Health Service Executive inspections ensure compliance with statutory requirements. In Sweden the 'Schools Inspectorate' oversees whether the municipalities and schools fulfil their responsibilities in relation to the regulations. However, they do not inspect individual pre-schools but rather the provision in the municipality in general. As part of these inspections interviews are undertaken with pre-school staff and parents.

Other countries monitor quality at a more local level. For example, in Denmark the local council supervises activities of daycare facilities, and approves the pedagogic curriculum. Managers of daycare facilities are responsible for evaluating the pedagogical curriculum on an annual basis. In Germany childcare providers are responsible for ensuring the quality of provision, and are free to choose how this is achieved and run a variety of Quality Management Systems. Local Youth Offices support providers to develop and safeguard quality.

In France childcare providers are monitored at a local level by child protection departments (*départements* = counties) of the local authority. In the Netherlands municipalities are responsible

⁷⁵ OECD (2006)

for the compliance of childcare providers with respect to the regulations, however, inspection and supervision is undertaken by regional health services.

In Sweden and Norway every pre-school must conduct systematic work to improve the quality of provision, and to plan and monitor activities.

However, the extent, frequency and intensity of monitoring, inspection and guality assurance arrangements varied between countries taking part in the survey. Annual inspections with all registered childcare providers are undertaken by the inspectorate in the USA (State of Washington) and Northern Ireland. In the Netherlands daycare centres are subject to annual inspections, however, childminders are inspected on a random basis. In Norway, kindergartens are required to provide annual reports with data on their provision that gives information to the local, regional and national level on regulation compliance, attendance rates and workforce. On a national level this is supplemented by ad hoc surveys to provide information on quality, such as parent satisfaction, and curriculum implementation. In addition, inspections by the local authority are important in monitoring and assessing the quality of provision. Inspecting kindergartens, the municipality makes use of a number of methods: interviewing kindergarten managers and staff, studying planning and reporting documents, internal control routines and statistics from the annual report, as well as onsite inspection of the premises. In Denmark the manager of the childcare provision is responsible for the pedagogical curriculum and evaluating it on an annual basis. In Spain three 'evaluation sessions' are held per school year. In other countries, such as New Zealand inspections occur every three years. In Australia and Scotland frequency and intensity are determined by the assessed risk of a service and history of the services performance. In the USA (State of Oklahoma) there are at least four unannounced inspections per year.

The following case study focuses on Denmark. It has a number of points of comparison and contrast to England, most notably its guaranteed availability of a childcare place to any parent who wants one, no legal specification regarding staff: child ratios in early years settings, better paid childcare workers and a high maternal employment rate.

Denmark has a long history of providing childcare: the first childcare centres date from the 1820s. Legislation ensures that early childhood provision is available for all children, and municipalities are required to provide services to meet the needs of families. In the case of early years provision, this means guaranteeing a place for every child whose parents want one. The Danish childcare system is characterised by flexibility, guaranteed availability and high take-up rates in formal care and pre-schools for three- to five-year-olds (92 per cent). It has one of the most extensive networks of centre-based early education/care and family daycare in the OECD, and there are extensive wraparound care facilities that are heavily subsidised. As a consequence Denmark has a high percentage of mothers in employment with 86 per cent of women aged 20 to 49 with children aged six to 11 years old in employment.

Early childhood care and education for children aged up to six years is part of the social welfare system in Denmark. Daycare provision comprises nurseries, kindergartens, age-integrated centres for up to six-year-olds, and family daycare. Approximately 70 per cent of provision is public⁷⁶, the remainder being provided by non-profit Non-Governmental Organisations or private for profit organisations or individuals - a type of service that has only been legally recognised since 2005. Children start compulsory education at the age of six years.

All childcare providers must be approved and registered in order to care for children and receive subsidy payments. Municipalities are akin to local authorities in England and oversee public and private daycare institutions and childminders. They also ensure quality of public and private provision (section 2.7). Childcare quality is monitored and assessed by the local municipality who supervise the activities of the childcare settings against a published framework. Managers of individual settings are responsible for publishing their curriculum and an annual evaluation. There is no tradition of external inspectors however – unlike Ofsted inspections in England. In Denmark there is no legal specification in relation to the staff: child ratios in centre-based care for children up to school age. In 2011, the average staff: child ratio in nursery settings was 1:3, and in kindergartens 1:6. A childminder can care for up to five children and, on average, each childminder looks after three children (section 2.4).

In Denmark large subsidies are provided to parents for children to attend a childcare setting. When a child attends a publicly funded setting, their local municipality provides a 75 per cent subsidy, with the parents paying the remainder. If parents want their child to attend an approved private provider, they may receive a financial subsidy payable from the time a child is eligible for such provision. Parents with limited income may, in addition to the general subsidy, receive an extra subsidy. Discounts for siblings are available along with subsidies for children with a disability or special educational needs (section 4.2).

⁷⁶ Oberhuemer P, Schreyer I, Neuman M (2010).
3. How countries deliver and fund wraparound childcare for school-aged children

Key findings

- The literature review found that out of school hours childcare services (i.e. wraparound services) are very well established in the USA (most notably after school programmes), Sweden and Denmark but remain in the early stages of development in many OECD countries. Sweden offers the most comprehensive provision that is fully integrated within schools and similar provision exists in some parts of Austria, Germany and Slovenia. In all countries there are a wide variety of providers, funding streams (including subsidies, benefits and charges to parents) and regulatory requirements for the provision of wraparound care.
- Out of school hours childcare services include a range of activities but homework tuition/guidance is a key feature of provision in most countries. Australian provision appears to be more heavily focused on recreational and sporting activities whereas in most other countries there is more of a balance between academic and the all-round development of children.
- Findings from the survey indicate there are different levels of statutory regulation of wraparound services. The provision of activities or childcare out of school hours is a statutory duty on schools in the Netherlands only. In Sweden and Denmark the municipalities are required to ensure after school places for the children whose parents want or need them. Statutory duty aside most countries provide a range of extra-curricular activities, such as sport and music, after school.
- In general, where out of school services are used parents have to pay fees. However some countries specify maximum payments that parents are expected to pay for after school care (e.g. Denmark).

3.1 Introduction

Our review found that an increasing number of mothers in paid work has led to a growing demand for care and/or leisure services outside regular school hours⁷⁷. However, out of school hours childcare services are in the early stages of development in many countries and coverage is by no

⁷⁷ OECD Family Database PF4.3 Out of school-hours care services. http://www.oecd.org/els/socialpoliciesanddata/42063425.pdf

means comprehensive. The OECD indicator (2011)⁷⁸ on 'out of school hours (OSH) care services' provides the most comprehensive and up-to-date picture of the key characteristics of out of school hours childcare provision in OECD countries.

OECD define 'OSH care services' as: 'a range of activities for children in pre-schools and primary schools before, between (lunch) and after school hours, as well as during school holidays'. These services are frequently, but not always, based in school facilities or youth centres, and provide safe care to children who may use them to do homework and/or engage in recreational activities, while at the same time helping parents to find a better match between school and working hours⁷⁹.

Providers of out of school hours childcare services include schools, community organisations, private, not for profit and for profit entities. A range of academic, sports, recreational and cultural activities are offered during out of schools hours childcare services, including homework tuition/guidance, careers advice, music, arts and drama. Homework tuition/guidance is a key feature of provision in the majority of countries.

In this chapter we examine what wraparound care is on offer (section 3.2); how wraparound care is funded (section 3.3); and length of the school day and year (section 3.4).

3.2 Wraparound care before/after school care and holiday provision

Countries participating in our survey were asked whether their schools are expected to provide activities for their pupils outside of school hours, either before or after school, and/or in the school holidays. In the Netherlands schools have a statutory duty to provide activities and childcare out of school hours. This does not appear to be a statutory duty on schools in most other countries, although schools do offer (or are encouraged to offer), a wide-range of extra-curricular activities, such as sport and music, after school.

This was also found in the literature review where around half of OECD countries now offer provision in the school holidays as well as before and after school. In the remaining countries provision usually occurs during term time, before and after school hours⁸⁰. Providers of out of school hours childcare services include schools, community organisations, private, not for profit and for profit entities.

Table 6 below shows that in most countries, children between the ages of six to ten years have access to out of school hours childcare services with some countries offering services to younger and/or older children. The OECD suggests that the proportion of children attending OSH care services is generally highest among children aged six to eight years. In Denmark and Sweden

⁷⁸ The Indicator was last updated on 14/06/11 with data for programmes operating in 2008. except for Belgium (2007), France (2007), Germany (2006), Greece (2007), Hungary (2009), Italy (2005), Korea (2009), Netherlands (2007), New Zealand (2005), Portugal (2006) and the Slovak Republic (2007).

⁷⁹ OECD Family Database PF4.3 *ibid.*

⁸⁰ OECD Family Database (2011) PF4.3: Out of school hours care services. <u>http://www.oecd.org/els/socialpoliciesanddata/42063425.pdf</u>

more than 80 per cent of children of this age group use an OSH-care service. In Estonia and Hungary coverage is above 50 per cent, but in other countries coverage remains low. Analysis of data from the Department for Education's Childcare and Early Years Provider and Parent Surveys shows that around 30 to 40 per cent of children in England attend out of school care.⁸¹

Country	Year	Ages	Enrolment rate (per	Types of services offered
			cent)	
Australia	2008-9	5-8	16.0	Combination
		9-12	18.5	
Austria	2008	3-5	86.4	Combination
		6-8	15.5	
		9-11	5.7	
Belgium	2007	0-6	22.1	n/a
Canada	2006-7	4-5	20.7	Combination
		6-7	19.1	
		8-9	15.4	
Cyprus	2007	3-12	2.4	After school
Czech Republic	2008	3-5	12.0	After school
		6-14	16.7	
Denmark	2009	6-8	87.8	Combination
		9-11	54.4	
Estonia	2007	6-8	64.0	After school
		9-11	13.1	
Finland	2008	7-9	26.0	Before and after school
France	2007	3-6	20.8	Before and after school
		7-11	n/a	
Germany	2006	5-8	7.4	Before and after school
		9-11	4.9	
Greece	2007	4-5	40.8	Before and after school
		6-11	22.9	
Hungary	2009	6-8	58.1	Combination
		9-11	43.0	
Italy	2005	6-10	3.8	After school
		11-13	10.0	
		14-17	22.1	

Table 6 Key characteristics of Out of School Hours Care Services in OECD countries ⁸²

⁸¹ Brind et al (2012) & Smith et al (2013)

⁸² Source: OECD Family Database Indicator PF4.3 Out of School Hours Care (2011). Data has been formulated from National Authorities and the Canadian National Longitudinal Survey of Children and Youth (2006-2007).

Malta	2007	3-5	5.1	Combination
		6-8	8.9	
		9-11	10.0	
Japan	2008	6-11	11.2	After school and during holidays
Korea	2009	6-8	2.6	After school and during holidays
		9-11	2.1	
Netherlands	2007	4-12	43.7	Before and after school
New Zealand	2005	5-8	n/a	Combination
		9-11	n/a	
Poland	2006	3-5	40.3	n/a
		6-11	3.8	
Portugal	2006	3-5	74.2	Combination
		6-11	15.1	
Romania	2007	3-11	n/a	Combination
Slovak Republic	2007	6-14	21.3	Combination
Spain	2006	3-5	7.4	Mainly before school
		6-11	3.7	
Sweden	2008	6-8	84.2	Before and after school
		9-11	34.8	
UK (England)	2008	0-14	22.3	Combination
	1	1	1	1

Notes: Combination includes activities before and after school hours, and during holidays; n/a = not available. Where more than one care arrangement was being used, the primary care arrangement was selected for the analysis.

Out of school hours provision

The literature review identified 11 out of 26 OECD countries in which OSH care providers offer a combination of services, including before school and after school hours as well as during holidays. This broad offer is available in Australia, Austria, Canada, Denmark, Hungary, Malta, New Zealand, Portugal, Romania, the Slovak Republic, and the UK. In the other countries out of school activities are mainly available during school-term.

Statutory duty on schools or municipalities

Findings from our survey found that providing activities for pupils outside of school hours or in the holidays is a statutory duty only in the Netherlands. Here the school board is responsible for ensuring that parents have access to childcare between 7.30am and 6.30pm and during school holidays at the request of parents. Schools can provide the care themselves on school premises or they can co-operate with other registered childcare providers. In practice, parents approach schools about a place for their child and schools approach school boards who contact private childcare providers. Whilst this can mean that the school board has carried out its legal obligation by contacting a childcare provider, the reality, for parents, can be that a childcare provider is not

available, resulting in children being placed on a waiting list. As childcare provision in the Netherlands is run privately, school boards cannot be responsible for overall capacity within the market.

In Sweden it is a responsibility of the municipality to offer out of school centres for all children six to 12 year olds who have parents working or studying. If an independent school does not run an out of schools centre (which is rare and parents expect them to), the municipality has to offer a place at one of their out of schools centres. Similarly, in Denmark and Norway municipal councils are required to ensure that places are available in after school centres, club facilities or after school facilities for the children whose parents so wish and/ or need such services.

Non-obligatory approaches

Other examples of the way in which out of school care is delivered include:

- In Finland before and after school activities are provided for children in grades one to two of basic education and for children admitted or transferred to special needs education in all grades. Although there is no obligation on the local authorities to organise these activities 98 per cent do, at least to some extent. Before and after school activities are offered for three or four hours each school day.
- In Northern Ireland most schools provide extended services beyond the school day and have a clear focus on improving educational attainment. All schools in Spain offer extended-day programmes which allow children to receive services before the day starts (an hour and a half) and after school (up to two hours) in the afternoon.
- In New Zealand schools sometimes work with other providers to offer these services to parents. However, the Out of School Care and Recreation (OSCAR) scheme provides before school, after school and school-holiday programmes for children aged five to 13 years and fulfils a similar function.
- In Scotland the situation appears to be similar to England, where a range of delivery models exist and may include breakfast clubs, after school clubs, holiday clubs as well as extracurricular activities such as sport and music.

In some countries the focus of out of school care is primarily to support the children's education. For example, in Norway many municipalities provide eight hours of homework help within the framework of after school care. In France schools are not expected to provide activities outside of school hours, although teachers must spend two hours per week with struggling pupils and this usually takes place after school.

Holiday care

Responding countries who specifically mentioned holiday care include Norway where most municipalities also provide daycare facilities in holidays within the school year. Furthermore, in New Zealand the Out of School Care and Recreation scheme provides holiday programmes for school-aged children (aged five to 13 years). In Germany it is not common that schools offer holiday provision but there are local exceptions.

Programme content and activities delivered

The literature review identified a range of academic, sporting, recreational and cultural activities offered during out of schools hours childcare services, including homework tuition/guidance, careers advice, music, arts and drama.

A number of the countries involved in the survey provided information on the over-arching principles that guide the programme content of their out of school care. Countries offer either wraparound care with a focus on:

- 1. education policy:
- In Finland, the National Core Curriculum for before and after school activities is defined by the Finnish National Board of Education.
- Out of school activities in Northern Ireland have a clear focus on improving educational attainment.
- In Sweden the aim of out of school centres is to build on the learning undertaken in schools, as well as to support children's development and learning and provide them with meaningful activities. It operates the most comprehensive out of school hours childcare provision that is integrated within the school system of the countries surveyed. Activities are developed around a holistic view of the child and the child's needs. Out of school centres apply the Curriculum for School.
- 2. childcare policy based on extra-curricular activities:
- In Australia 'Outside School Hours Care' services focus on the provision of stimulating developmental, social and recreational activities for children, while meeting the care requirements of families. Sports and recreational activities feature prominently in provision (although help with homework is also provided)
- In Germany full-day schools offer a wide range of extra-curricular activities (sport, music and arts, theatre etc.). These activities are usually organised in co-operation with youth welfare providers and local sports clubs.
- In New Zealand the Out of School Care and Recreation scheme offers children a range of activities and experiences in a safe and supportive environment.

- 3. or a mix of the two:
- In Denmark after school care is developed to focus on supporting the children's well-being, development and learning. After school centres must include both educational based activities, as well as allowing time for children to choose their own activities. After school centres must also support children's language development, as well as their knowledge of health and nature.
- In Scotland most local authorities will support provision of a range of extra-curricular activities that will align with the delivery of the Curriculum for Excellence, providing opportunities for achievement and attainment outside the formal classroom environment. These may stand alone or complement a more formal programme of out of school hours care.

3.3 Funding wraparound care

The literature review showed that out of school hours programmes access a diverse range of funding streams including public, private and parental contributions. In general the survey found that where services are offered, parents have to pay fees. However, a number of countries also provide subsidies to providers and/or councils who offer out of school services to cover the cost of places.

The following are examples of countries that provide subsidies to providers to cover the cost of places.

- In Denmark when a child is admitted to an after school centre, the local council grants a subsidy covering the costs of the place. The local council's subsidy must constitute 70 per cent of the budgeted gross operating costs⁸³. The payment from parents must not exceed 30 per cent of the gross operating costs.
- Local authorities in Finland receive government transfers for before and after school activities.
- In Norway out of school care is part funded by the municipality, and in part by parents. On average municipalities finance one third of the total costs.
- In the USA out of school childcare is funded by local, state, federal and private sources, including through the US Department of Education 21st Century Community Learning Centres. Funds are provided to each state, using a formula, and then they make sub-grants to schools districts.
- In Northern Ireland, the Extended Schools programme provides a recognised funding stream for those schools operating in the most deprived and disadvantaged areas.

⁸³ For under school age children the local council's subsidy is 75 per cent.

 In the Republic of Ireland, in designated disadvantaged areas, some funding is provided which may be used for after school activities.

As well as subsidies to childcare providers, a number of countries offer subsidies and/or benefits to parents to cover the cost of after school care. Some examples include:

- In Scotland resources are available to local authorities as part of the overall block grant given but are not ring-fenced to allow councils maximum flexibility in terms of meeting local needs and priorities.
- In the Netherlands for children who go to school (four to 12 years old) parents receive a childcare premium for 70 per cent of the hours worked by the parent that earns the least.
- In New Zealand families may be eligible to receive the Out of School Care and Recreation Subsidy' for children aged five to 13 years old (18 years if a parent also receives a Child Disability Allowance). They must attend for three hours or more a week.
- In Belgium the tax-deductibility of childcare costs is limited to EUR 11.20 per day per child and the Parliament has recently extended this to children younger than 12 years old. However, parents pay full costs for childcare in fully independent providers.
- In Australia Child Care Benefit and Child Care Rebate help families with the cost of quality childcare. They can either be paid directly to an approved childcare service on behalf of a family as fee reduction or directly to a family.

Charges to parents

In general, parents have to pay for services. As with childcare costs the amount varies, and a number of countries set maximum amounts that parents can be charged. For example:

- In Finland moderate fees can be charged for the activities. The monthly fee may be EUR 60 (maximum) for 570 hours or EUR 80 (maximum) for 760 hours.
- In Norway fees vary by municipality. The average price for a full-time (every day, both before and after school) is NOK 2,084 per month. Some municipalities have chosen not to charge parents while others charge extra for school holidays.
- In Spain extended day activities are paid for by the family. In Spanish public schools parents pay according to their financial means.

3.4 Length of the school day and school year

In addition to building up an understanding of the different models of wraparound, holiday care and out-of-school-hours provision, our survey also gathered information about the amount of time pupils spend in school, both in terms of the school day and year. Schools play a key role in

offering activities either side of core teaching hours and during school holidays that improve pupil's attainment and support working parents to manage their work and childcare arrangements.

Findings from our OECD survey indicate that around half of the countries offer a school day of between five and a half to six hours per day, on a par with English schools. Other countries varied between three hours for under eights in Northern Ireland, seven hours in Spain and up to eight hours in some states in the USA.

Until recently half day schools in Germany were the norm. However, since 2002 the Ministry of Education and Science launched a programme to increase the number of full-day schools. In 2010, 44 per cent of primary schools offered full-day classes (a minimum of seven hours at least three days per week). This was done explicitly both to improve educational attainment and to ensure school hours supported parents (particularly mothers) who wanted to work.

In Northern Ireland, school hours appear lower than most other countries surveyed and vary by the age of the child. Children under the age of eight should be in attendance for a minimum of three hours, and a minimum of four and a half hours for any other pupils. The hours of a normal school day are also lower in Norway. For primary school children (six to 12 years) the normal week is an average of 19.7 hours over five days.

England has a higher total number of intended instruction hours in public institutions between the ages of seven and 14 in comparison with Finland, Sweden, Germany and Japan, all of which are below the OECD average. However, when considering the length of the average school year, Germany and Japan have a higher number of instruction days than England, while Finland and the USA have fewer. Furthermore, although the OECD have aimed to identify principles and practices that may be universally instructive, it is important to recognise that individual models are context specific, dependent on wide ranging and complex histories, policies and cultures.

With regards to the number of weeks per year that the school is open, the survey found little variation across the countries. Countries reported schools being open between 37 and 40 weeks per year. In the Netherlands schools are open 41 weeks each year. Appendix E provides more granular detail on average school opening hours per day and per year.

Evidence is available about the hours offered by schools in England. For instance, data collected through the extended services programme in 2010 shows that at that time the majority of schools were offering activities and/or childcare after school⁸⁴. A significant minority of pupils (around three in ten) were doing at least two hours of activities a week during term time. Where pupils had taken part in holiday activities they had participated in an average of 33 hours of activities across the year. The way in which these activities were arranged, funded and staffed depended on the nature of the activities themselves and the pupils within the school at whom the activities are targeted.

⁸⁴ Carpenter, H et al (2010)

4. Role of public spending in early years and childcare and financial support available to providers and parents

Key findings

- The literature review found that in all OECD countries, governments are responsible for funding the majority of the costs of public pre-primary education from the ages of three, four or five. Overall public expenditure on pre-primary education accounts for 0.4 per cent of GDP across 33 OECD countries. OECD data shows that public expenditure on childcare amongst OECD countries averaged 0.3 per cent of GDP. Private funding varies widely between countries, ranging from five per cent or less in Belgium, Estonia, Luxembourg, the Netherlands and Sweden, to 25 per cent or more in Argentina, Austria and Germany, and to over 48 per cent in Australia, Japan and Korea.
- Findings from our survey found that most countries surveyed provide some level of financial support to parents to help with childcare costs. However, there are variations in the extent to which financial support is paid directly to parents through benefits and/or the tax system, or to providers through supply-side subsidies.
- Most countries surveyed provide a mixture of both universal and means-tested support to help parents with the cost of childcare. Only in Sweden and Norway is all support given universally.
- The role of employers in funding or providing childcare varies greatly in survey responses. In the Netherlands, employers pay 21 per cent of the total costs of childcare. In contrast Germany and Ireland employers do not normally contribute to childcare costs.

4.1 Introduction

The OECD define public expenditure⁸⁵ on childcare and early educational services as all public financial support (in cash, in-kind or through the tax system) for families with children participating in formal daycare services (e.g. crèches, daycare centres and family daycare for children under three) and pre-school institutions (including kindergartens and daycare centres which usually provide an educational content as well as traditional care for children aged from three to five, inclusive).

⁸⁵ Public spending on childcare support per child relates to the expenditure on childcare divided by the number of children in that country aged under three, while public spending on pre-school care and education per child is calculated by dividing public spending on educational institutions by the number of children enrolled in those programmes.

In Australia, Canada, Republic of Ireland, South Korea, the Netherlands and the USA publicly funded pre-primary education⁸⁶ starts at age four or five, whereas in other European OECD states it starts from age three and in a few cases from age two. When these services fall within the remit of a ministry of education the central government bears almost total responsibility for funding. Examples of this include Belgium, France, Italy, the Netherlands and the UK – in England the UK government funds early education for all three and four year olds, soon to be extended to two year olds from low income families.

Chart 1 shows comparative data on spending from the OECD Family Database. Overall, public expenditure on pre-primary education accounted for 0.4 per cent of GDP across 33 OECD countries. The figure for the UK was 0.7 per cent, compared to 0.3 per cent in the USA.

There was greater variation in spending on formal childcare. OECD data show that public expenditure on childcare amongst OECD member countries averaged 0.3 per cent of GDP. In the UK the figure was 0.5 per cent, compared to 0.7 per cent in Denmark, 0.8 per cent in Finland, 0.9 in Norway, and 0.5 per cent in the Netherlands.



Chart 1 Selected OECD countries: Public expenditure on childcare and early education services, per cent of GDP, 2009⁸⁷

Most OECD countries provide financial support to help parents with the costs of childcare (as distinct from pre-primary education). However, there are considerable variations in the extent to

⁸⁶ The OECD define pre-primary education as the initial stage of organised instruction designed primarily to introduce very young children to a school-type environment, i.e. to provide a bridge between the home and a school-based atmosphere.

⁸⁷ Data sources are: Social Expenditure database 2012; OECD Education database; Eurostat for Non-OECD countries.

which that financial support is paid either directly to providers (i.e. supply-side subsidies), or to parents through benefits and/or the tax system (demand-side subsidies), or through employers.

Table 7 below illustrates the different modes of funding of childcare and early educational services in 17 selected OECD countries. The analysis is based on 2005 data, so it is possible that some of the funding mechanisms described may have changed.

Table 7 Main forms of funding	for early education and childcare services (birth to six years) in selected
OECD countries ⁸⁸	

	Supply funding to services	Subsidies to parents	Employer
			contributions
Australia	Limited to pubic kindergarten	Main form	Yes, tax
Belgium	Main form	Mixed in childcare	Yes, employer levy
Canada	In public kindergarten and community	Mixed. Supply-side funding	No
	services mainly. Main form in Quebec	to community services	
Denmark	Main form	No	No
Finland	Main form	Mixed	No
France	Main form	Mixed for ECEC outside the 'ecole matermelle'	Yes, employer levy
Germany	Main form	Mixed in childcare	No
-		No	No
Hungary Ireland	Main form in childcare and kindergarten		
Ireland	Limited to social nurseries and public early education	Limited, mostly parental contributions	No
Italy	Main form	No	Yes, employer levy
Korea	Limited to public kindergarten, and to	Main form of government	In some cases
	public targeted programme in childcare	support, but parental	
	centres	contributions are high	
Netherlands	Main from in pre-primary and targeted	Main form in childcare but	Yes, tax to nearly
		high parental contributions	30 per cent of
			costs
Norway	Main form	Mixed	Yes, tax
Portugal	Main form	Yes	Yes
Sweden	Main form	No	No
United	Limited to part-time early education for all	Main form for childcare but	Yes, tax
Kingdom	three- and four-year-olds, and targeted	mostly parental contributions	
	programmes		
United States	Limited to public kindergarten, targeted	Main form but mostly	Yes, tax
	programmes and Head Start	parental contributions	

⁸⁸ Source: OECD (2006), using data from Education at a Glance, 2005.

Evidence from OECD reviews⁸⁹ suggests that in most of the countries surveyed direct public funding of services (supply-side funding) is associated with more effective control, advantages of scale, better national quality, better training for staff, and a higher degree of equity in access and participation, compared to consumer subsidy models (demand-side funding).

The OECD review identified that uneven quality of provision could be due to weaker regulation, the high use of family childcare, and the lack of highly qualified staff in private settings. A comparison of 'marketised' childcare models and the publicly funded ones in the Nordic countries highlights differences in coverage and quality. However, a publicly funded model can include private providers when the latter are properly contracted, regulated and supported by public funding, as it is the case in Norway and Sweden⁹⁰.

A review of the subsidised childcare system in Belgium found that a larger supply of childcare places is positively associated with an increase in take-up by low-income families, whereas tax deduction strategies have a mixed impact on the take-up of services⁹¹.

4.2 The role of public spending on childcare

Sections 4.2 to 4.5 of this chapter focus on the different arrangements for funding childcare in other countries – by government, parents, employers or a combination of these including any subsidies available for low-paid workers or other disadvantaged groups. In particular it examines: the role of public spending on childcare (Section 4.2); financial support to providers (section 4.3) and parents (section 4.4); and finally the role of employers (section 4.5).

⁸⁹ OECD (2006)

⁹⁰ (OECD, 2006)

⁹¹ Farfan-Portet et al (2011)

The third case study focuses on France and examines in depth the childcare arrangements. As can be seen in Table 7, France operates a mainly supply side funding of services whereas in the UK supply side funding to services is currently limited to part time funding of early education for all three-and-four year olds.

There is a well-established system of publicly funded childcare in France. Childminders working in a crèche, at the child's home or at the childminders house must be authorised by the President of the General Council and also be approved by the childcare department of the local authority. Local authorities have different requirements on childcare facilities. In order to gain authorisation, facilities must meet requirements for space as well as interior and exterior security. Only childminders registered with the President of the General Council (local authority) will be eligible for subsidy payments. If the parents hire a non-authorised childminder, they will not benefit from the financial assistance provided by government.

In France most of the benefits to help parents with childcare costs are means-tested (section 4.4). Whilst they are generally targeted to help families with lower income, financial support covers most families. *Prestation Allocation Jeune Enfant* is the main benefit. This benefit is means-tested and consists of a payment at birth, a monthly benefit up to the child's third birthday, a benefit partially covering childcare costs and an additional benefit for parents who decided to reduce their working hours up to the child's third birthday. Up to six years old, the cost of childcare is subsided by the Caisse d'Allocations Familiales – the Family Benefits Fund. The state covers up to 50 per cent of the cost of certain types of childcare, such as nannies (section 4.2).

For childminders and nannies, parents have to pay a minimum of 50 per cent towards the social contributions (NICs) and a minimum of 15 per cent of the childminder's salary. The rest, depending on the family's income will be paid by the State. Parents can also get a tax credit as they are effectively the employers. By contrast, if an employer opens a company crèche, they can benefit from a 50 per cent tax credit (sections 4.4 & 4.5).

The OECD (2006) has argued that the following broad patterns of funding can be found across member countries, though individual countries may use a combination of these approaches:

- Childcare subsidies to parents such as cash benefits, vouchers, tax reductions as the main mode of financing. This approach is found in countries such as Australia, Canada, Ireland, Korea, the Netherlands, the UK and the USA. In these countries, with the important exception of state-funded programmes provided for disadvantaged groups, the parental share of funding is significantly higher, up to 82 per cent of costs in some Canadian provinces and full costs in many US states.
- Supply-side subsidies paid directly to service providers, with public subsidies covering over half of the cost. This system is common in the European continental countries. Tax credits and direct municipal provision of daycare services (including family daycare) are

also being used. In these countries parents typically pay 25-30 per cent of the costs. Countries such as Belgium, France and the Netherlands, subsidise costs for infant and toddler services in a variety of ways. In addition, they are also providing universal and free early education to children from a young age: from two years in France, two and a half years in Belgium, and from three years in the Czech Republic, Hungary, Italy; and from four years in the Netherlands.

Local government subsidies. In Norway, Finland and Sweden, state and local government subsidies meet over 85 per cent of the costs of childcare. In Finland and Sweden childcare is highly subsidised with parents paying much less than 15 per cent of the costs (for Sweden it is just nine per cent). In Denmark parents normally pay 25 per cent of the childcare costs though poorer parents may receive extra subsidies. In Denmark, Finland and Sweden public provision of high quality care for children from their first year is considered an entitlement for a child, on an equal footing with services for older children. In these countries, and in Norway also, parental fees are charged up to the year before entry into compulsory schooling, though since 2002, Sweden has provided a free three-hour session daily for four- to six-year-olds. Costs to parents are low compared to non-Scandinavian countries and, though based on means-testing, are capped. Low-income groups pay only token fees (OECD, 2006).

Analysis undertaken in the literature review of the patterns of coverage and spending suggests that high levels of public spending are not the only way to increase coverage. The same analysis also found a strong relationship between the level of female employment and spending on childcare. A large representation of women in parliament is also associated with an increase on spending on childcare and was found to be the strongest determinant of childcare spending. Furthermore, countries that spend proportionately more on the elderly spend less on childcare.⁹²

4.3 Support to childcare providers

Findings from our survey indicate that public financial support to childcare providers is only available if they are registered with the relevant authorities. However, depending on how childcare services are organised, public funding is only directed to particular settings. Table 8 below summarises the financial support available to providers in a number of countries which responded to our survey. This shows the range of approaches to financial support, for example in Belgium government subsidies are paid directly to childcare providers, whereas in Germany, providers are entitled to subsidies from the Länder and local authorities.

⁹² Bonoli, G & Reber, F (2010)

Table 8 Countries financial support to childcare providers by nature of support

Australia	<i>Community Support Programme (CSP)</i> provides a range of payments directly to childcare service providers with the aim of improving access to childcare, especially in areas where the market or services might be otherwise unviable.
Belgium	Government subsidies are paid directly to childcare providers supervised by <i>Kind en Gezin</i> . A fixed amount for working costs is guaranteed so that the charging of a low parental contribution does not disadvantage the provider. Fully independent providers do not receive a subsidy, although since 2001 small, independent crèches receive an annual subsidy per place
Denmark	to promote quality and management. When a child is admitted to a daycare facility under local authority allocation the local authority grants a subsidy for the costs related to the place, while the parents pay their own payments. The price for a place in a daycare facility is thus comprised by both the local authority's subsidy and the parents' own payment The local council's subsidy must account for at least 75 per cent of gross operating costs for operating the individual daycare facility, or of the average gross operating costs of operating similar daycare facilities in the local authority.
Finland	The municipality uses local tax revenue to finance the daycare services. Central government transfers covered 31 per cent of the daycare expenditure in 2012.
Germany	Providers are entitled to subsidies from the Länder and local authorities if they are part of local childcare plans. The costs of institutional childcare places vary between states but the ranges are as follows: 47- 67 per cent of costs are financed by local authorities; Länder contribute 15-38 per cent; 11-29 per cent of the costs have to be borne by parents. 'Licensed family day carers' are entitled to a low level subsidy (e.g., EUR 2.70 per child per hour) though in recent years local authorities have matched fees in day facilities and family daycare.
Republic of Ireland	A capitation fee is payable directly to service providers in respect of eligible children enrolled under the free pre-school year in Early Childhood Care and Education. Childcare Education and training Support (CETS) – childcare payments are made directly to the providers for the duration of the course the parent is attending.
New Zealand	Funding is provided for children aged 0-5 years to attend ECE for a maximum of 30 hours per week. Rates vary depending on age, family circumstances and the type of service attended. All funding is claimed by ECE providers on behalf of the parents. These subsidies are a co-payment that meet part of the cost of providing ECE, the remainder is made up by a parental fee.

4.4 Support to parents

Most countries responding to our survey offer some level of financial support to families to help cover the cost of childcare. This support includes: specifying a maximum parental fee for childcare services and offering parents tax relief. Table 9 below provides a list of the countries surveyed which specify a maximum parental fee for childcare services.

Table 9	Countries with a maximum fe	e covering childcare services
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Belgium	Parents pay according to income. On average in the subsidised care sector, parental fees amount to 21 per cent of the actual care costs in centre-based care, 48 per cent in family daycare. However, fully independent providers do not receive a subsidy, and parents pay the full costs.
Denmark	For children under school age, the parent's payment of a place in a daycare facility must not exceed 25 per cent of the gross operating costs, or of the average gross operating costs for similar daycare facilities in the local authority.
Finland	Client fees in daycare are regulated by law and are based on the size and income of the family. Client fees account for some 14 per cent of the daycare expenditure. The maximum fee is EUR 264 per child per month. The fee is lower for the second child and for each additional child. The minimum fee is EUR 4/child/month (as from August 2012). Where a fee would be EUR 24 or less it is not collected.
Germany	Although there is some variation between the 16 states, the cost of institutional childcare places for parents is between 11-29 per cent of the total costs. Low-income families in Germany are usually exempt from certain fees.
Netherlands	Employers pay 21 per cent of the total costs of childcare, the Government pays 52 per cent and parents pay 27 per cent.
Norway	Parental fees cover between 15-18 per cent of the running costs of kindergartens. In 2004 a regulation was introduced covering maximum fees for kindergartens, and the fee is decided by Parliament in the annual National Budget.
Sweden	 The share of cost met by parental fees is about eight per cent for pre-school and 10 per cent for family daycare. A maximum fee applies to pre-school and family daycare. These fees are recommended by the Government and agreed by municipalities. The maximum fees are dependent on income, and the number of siblings. Maximum fee: <i>Pre-school and family daycare 1-5 year olds.</i> Child 1: 3 per cent of income – maximum SEK 1260/month you reach maximum/the roof at a salary, before tax, SEK 42 000/ month Child 2: 2 per cent of income – maximum SEK 840 /month Child 3: 1 per cent of income – maximum SEK 420/month Child 4: no charge
	Out of school centre and family daycare 6-12 year olds. Child 1: 2 per cent of income – maximum SEK 840/month you reach maximum/the roof at a salary, before tax, SEK 42 000/ month Child 2: 1 per cent of income – maximum SEK 420 /month Child 3: 1 per cent of income – maximum SEK 420/month Child 4: no charge

Offering parents tax relief for using childcare

A number of responding countries offer parents certain forms of tax relief for using childcare. For example:

- In Germany two-thirds of childcare costs are deductible from parents' income taxes up to a maximum of EUR 4,000 per year.
- In Belgium when provision is under the supervision of *Kind en Gezin*,⁹³ tax benefits are granted to parents to recuperate the fees paid for services, though this is limited to EUR 11.20 per day per child.
- In Norway parents are entitled to a tax deduction for documented costs for childcare limited upwards in 2011 to 25,000 Norwegian kroner (NOK) for one child and 15,000 NOK for additional children.
- In France parents using childminders can access a tax credit as they are effectively employing the childminders. However, it should be noted that for childminders and nannies, the parents have to provide for a minimum of 50 per cent of the social contributions and a minimum of 15 per cent of the childminder's salary. The rest, depending on the family's income will be paid by the State (*Caisse d'Allocations Familiales*).

Financial support – universal versus targeted

Countries were asked in our survey whether financial support was universally available, or targeted to help low-income families. Most countries provide both universal and means-tested support to help parents with the cost of childcare. Table 10 below provides examples of means-tested financial support to cover the cost of childcare. Only in Sweden and Norway is all support given universally, and not targeted.

⁹³ Kind en Gezin (Child and Family) is an agency that works actively in the 'Public Health, Welfare and Family' policy area. This Flemish agency focuses on preventive treatment and guidance of young children geared to good outcomes in the future.

Table 10 Means-tested financial support for the cost of childcare

Australia	A 'Child Care Benefit' that is designed to assist families with balancing work
	and family commitments, and is based on a family's income. This benefit is
	available to eligible families using approved or registered care.
	'Child Care Rebate' is not income tested.
Belgium	When a family experiences financial difficulties, the provider can decide to
	alter the fee. This amount can be 75 per cent or 50 per cent, or 25 per cent
	of the normal fee that has to be paid. In exceptional circumstances the
	provider can decide to take care of the child for free.
Denmark	Parents with low-income may receive an extra subsidy from the local
	authority to reduce their own payment.
France	Most of the benefits are means-tested. Therefore, they are generally
	targeted to help families with lower income. However, financial support
	covers most families. The main benefit is PAJE (prestation allocation jeune
	enfant), and partially covers childcare costs up to the age of three. CAF
	(Caisse d'Allocations Families) covers up to 50 per cent of the cost of certain
	types of childcare.
Republic of	The CETS (Childcare Education and Training Support) programme schemes
Ireland	are targeted. The CETS scheme provides childcare for parents who are
	undertaking further training/up skilling with a view to entering the workplace.
Netherlands	Means-tested 'childcare premium' if the parents have 1 child (or more) and
	they spend at least EUR 408 per trimester on childcare. For children aged
	birth to four years old parents receive a premium for 140 per cent of the
	hours worked by the parent who earns the least. For children who go to
	school (ages four to 12) parents receive a premium for 70 per cent of the
	hours worked by the parent who earns the least.
	Only parents who work, study, follow a work-finding-course or integration
	course are entitled to financial support for childcare.
Northern	Working tax credit is means-tested and aimed at families who are earning
Ireland	less than £26,000 (one child) or £32,000 (two or more children).
Spain	Financial support is not universal but provided according to specific criteria,
	including financial resources and parents' employment circumstances.

4.5 The role of employers

Our survey found that the role of employers in childcare provision and the incentives they offer or benefit from varies across countries. For example:

- In France employers can benefit from a 50 per cent tax credit if they open a company crèche.
- In Northern Ireland employers can participate in the Childcare Vouchers scheme which allows parents to choose to receive vouchers up to the value of £280 each month. The cost of these is deducted from the parent's gross pay and therefore they do not pay tax or national insurance contributions on their value. Each parent receives childcare vouchers and can make savings of up to £900 per year using this scheme.

 However, in Germany employers do not contribute to costs of childcare on a regular basis. Similarly, in the Republic of Ireland employer support is not the norm and is not incentivised by the government.

4.6 Alternative approaches to funding for early years and childcare

The literature identified a variety of strategies employed by countries to maximise funding for ECEC⁹⁴. Some countries have pooled resources and cost-sharing across ministries, social partners, local communities and users. For example in Belgium, France and Italy, about one per cent of social security and/or corporate tax is directed towards children's services. Other countries have supported private sector involvement in the childcare market. Examples include Australia, Canada, Republic of Ireland, the Netherlands, the UK and United States. In the United States about 90 per cent of childcare is provided by the private sector, over half of whom work on a non-profit basis.

The OECD also identified cost-effective co-ordination of early childhood policies at central level and integration of services at local level, in particular for the three- to six-year-olds as a means of bringing new resources into the ECEC field. They argue that integration under one ministry is more efficient in terms of vision and planning, and removes the duplication of administrative and regulatory frameworks that split or multiple auspices impose. At local level, a rationalisation of services can also be operated, again at administrative level.

Other strategies include public-private partnerships, involving sharing responsibilities between the voluntary, community and private sector. In some countries some employers in the corporate and business sectors meet part of the childcare costs of their own employees. Examples include the Netherlands, South Korea, Mexico, France, Belgium, Australia, Republic of Ireland and the UK.

Other funding sources include grants from large corporations and special taxes. In the United States, for example, a tax on tobacco in Los Angeles County is used to fund early childhood programmes. In the US state of Georgia state lottery funds go to early childhood programmes as well as students who need support to attend college.

⁹⁴ OECD, (2006)

5. How childcare is used to support employment

Key findings

- Maternal employment rates vary across countries. Denmark, Sweden and Finland generally demonstrate high rates of maternal employment. Various factors affect employment rates, including age of children, extent of childcare provision, society's attitude towards working parents and the state of the labour market.
- This picture is reflected in analysis of our survey data which identified a range of ways that countries childcare systems support parents with employment. These include the availability of a range of different forms of childcare that meet parental needs, the hours childcare provision is available, employment benefits and support from employers.
- Denmark, Finland and Sweden offer a guarantee that childcare will be available to those parents that want it. In Finland and Sweden this guarantee extends to parents who stay at home. In Finland, parents can take partial care leave in which they work a shorter work day or working week than usual. In Australia, employers can sponsor a childcare service, reserve a place in service close to the workplace or use an agency to find suitable childcare or providers.

5.1 Introduction

Female labour force participation has increased in most OECD countries over the last few decades. Empirical analysis found that policies which stimulate female participation include tax benefits for second earners (relative to single individuals), childcare subsidies, and paid parental leave. Specifically, analysis established that childcare subsidies and paid parental leave tend to stimulate full-time rather than part-time participation. This finding should be viewed in the context that the availability of part-time work opportunities also raises participation, at least in countries with a strong female preference for part-time work⁹⁵.

The emphasis governments place on the importance of childcare and its potential benefits is reflected in strategic policy⁹⁶. For example the Netherlands has a high rate of working mothers, especially part-time, compared with other OECD countries. During the 1990's the Netherlands actively supported the expansion of services in the welfare system both for young children and for school-age children. Central government funds were used to set up a variety of services, often in conjunction with employers. These measures are linked to the labour market, where services for young children help meet labour supply demands. On this basis, playgroups were not included in the above policy strategy as they were not considered a viable care alternative for working

⁹⁵ Jaumotte, F. *(2004)*

⁹⁶ Oberhuemer et al (2010)

mothers. Childcare in the Netherlands is generally available from 7.30am-6.00pm for birth to 12 year olds. This makes it easier for parents to combine work and family responsibilities.

This chapter examines the ways in which countries use childcare systems to support parents with employment in a number of different ways: providing different types of childcare (section 5.2); guaranteed daycare availability (section 5.3); provider opening hours (section 5.4); costs of childcare (section 5.5); employment benefits (section 5.6); role of employers (section 5.7); and parental employment (section 5.8)

5.2 Different types of childcare

Responses to our survey showed that providing a range of childcare to support parent's employment in a way that is flexible gives parents a range of childcare options from which to choose. For example, in Australia, parents can choose between Long Daycare; Family Daycare; Outside School Hours care; Occasional care; In-Home care. In Belgium, pre-school childcare is available all day, and out of school care is also available. In Denmark, daycare facilities must provide families with flexibility and options with regard to various types of provision and subsidies. Parents are free to choose the daycare facility, and may choose a daycare facility in another municipality. In Scotland the provision for three- and four-year-olds assists parents financially and in choosing to work.

5.3 Guaranteed daycare availability

Denmark, Finland and Sweden offer a guarantee that daycare will be available to those parents that want it. Local authorities must provide childcare that meets local needs. But it is important to note that this is not a guarantee for access to a place in a specific daycare facility. If a place is not available in any facility locally the local authority must fund alternative arrangements. In Finland and Sweden this extends to parents who stay at home.

- In Denmark the individual local authority must offer a place in an age-appropriate daycare facility to all children from age 26 weeks to school age. If the parents want a place immediately after their child reaches 26 weeks and have applied for a place in a daycare facility within the deadline for applications, the local council must be able to offer a place to the child at least four weeks after the child has reached the age of 26 weeks. The guaranteed daycare availability does not guarantee a place in a specific daycare facility. If the guaranteed daycare availability is breached, the local authority must offer to cover either the parents' expenses for a private care scheme or the expenses for a place in another local authority.
- In Finland all parents are entitled to obtain daycare for their child, and the right also applies to children whose parents are staying at home. It is not necessary that parents work outside home or study in order that their children have access to daycare. The local authorities must provide child daycare to the extent and in such forms as is presently

needed in the municipality. The child's parents must apply for a place in childcare at the latest four months before the child will need it. If the need for daycare is due to finding employment, starting studies or education and the point of time when the need emerges cannot be foreseen, the entitlement has to be applied for at the latest two weeks before the child needs the place.

 In Sweden, municipalities have an obligation to provide pre-school for children whose parents work or study, or for children with a particular need for such activities. This obligation also extends to children of unemployed persons or persons on parental leave, for a minimum of three hours per day or 15 hours per week.

5.4 Provider opening hours

Childcare 'opening hours' are an important means of helping parents with employment. Specific approaches used included opening times, duration of opening hours and accessibility of opening hours for parents. This includes:

- In the Netherlands childcare is generally available from 7.30am to 6.00pm.
- In Finland providing daycare centres that are open between 6.00am and 6.00pm as well as during the evening, nights and weekends if necessary.
- In Denmark legislation does not set specific requirements for hours in daycare under the municipal supply. However, the setting of hours of daycare must take into account the specific purpose of provision of daycare. This means that the daily hours should constitute a real option for the parents to have their children taken care of and hours together must be fixed so it is suitable to meet the local need for flexible care services in daycare. In 2010, the average opening hours of daycare was 51.6 hours per week.
- In the Republic of Ireland full daycare services are available all day (anything from 7.30am to 6.00pm hours generally).

In addition to the above approaches that use childcare opening hours to help parents with employment, countries also took into consideration how opening hours complemented the school day and the time parents needed to work or study. For example:

- In Sweden pre-school and family daycare should be offered according to the time parents need to work or study. Pre-schools are generally open 5 days a week from 6.30am to 6.30pm. The same applies to out of school centres and childminders. Municipalities also strive to offer care for children who need care outside pre-school hours, on evenings, nights and weekends.
- In Germany childcare services for children aged three to six years were traditionally
 organised on a half-day basis and there is an on-going trend towards full-day provision.

Overall, 88 per cent of children used childcare in 2006 increasing to 94 per cent in 2011. Between 2006 and 2011 the share of full-day provision (exceeding seven hours per day) increased from 25 per cent to 40 per cent, while half-day provision (maximum of five hours) decreased from 30 to 20 per cent. Analyses of data of the AID: A Survey of the German Youth Institute (2009) indicates that childcare services only provide limited support to the employment of parents. With regard to children aged up to three years, 62 per cent of mothers working full-time used public childcare services. Among mothers working part-time the respective rate was 45 per cent. Many parents relied, or had to rely, on private care arrangements including grandparents and informal networks, but also privately organised family daycare.

 In New Zealand the Childcare Survey (2009) reported that 15 per cent of parents experienced difficulties getting childcare. The most common difficulties cited were a lack of available care on the days or at the times needed (29 per cent) and that care was too expensive (24 per cent).

5.5 Cost of childcare

Sweden reported in their survey response that a lower child care fee encourages use of childcare. Studies of childcare systems focus on changes in parental fees and how it affects female labour participation rates. Since 2002 the enrolment rates for pre-school have risen from over 80 per cent of all children aged one to five to 86 per cent in 2011. Parental insurance covers some income losses during the child's first 13 months which means that many families need childcare when the child is between one and two years old.

5.6 Employment benefits

Finland reported that employment benefits are used to support parental employment. In Finland, parents can take partial care leave, in which case they have a shorter work day or working week than usual. Parents of children under three years and those of children at the first and second grades of comprehensive school are entitled to a partial care allowance. The Social Insurance Institution pays the parents' partial care allowance (EUR 90 per month) when they are taking partial care leave.

5.7 The role of employers⁹⁷

Employers can play an important role in childcare provision through the direct provision of childcare, sponsoring a childcare service or employee benefits. In our survey countries reported the following examples of childcare provision that suited the needs of employees:

⁹⁷ Also see section 4.5 The Role of Employers

- In Australia employers can sponsor a childcare service, reserve places in a service or services close to the workplace or use an agency to find suitable childcare or provider. Furthermore, non-cash benefits that employers provide to employees, such as the provision of childcare, are taxed through the fringe benefits tax (FBT) system at the top personal marginal tax rate. However, there are some tax exemptions provided to employers for certain childcare arrangements as an incentive to provide, or assist with securing, childcare for their employees. There appears to be limited use of the FBT exemption for childcare and this is likely to be because for most families, childcare fee assistance is more generous.
- In Norway when there was insufficient childcare some employers established kindergarten places in order to cover the need for their employees. The strategic plan for Developing the Kindergarten Sector from 1995 to 1997 encouraged co-operation and involvement of several parties at the local level in order to increase capacity.
- In France employers can benefit from a 50 per cent tax credit if they open a company crèche. It can represent a saving of EUR 500,000.
- In the Netherlands employers pay 21 per cent of the total costs of childcare (the government pays 52 per cent, and parents pay 27 per cent).

By contrast, in other countries the role of employers appears more limited. Employers do not always contribute towards the costs of childcare on a regular basis and some governments do not offer incentives or special arrangements. However, survey responses indicate that there may be employer engagement, such as public-private partnerships, which should be recognised as playing an important contribution. For example:

- In Germany, the role of employers in childcare provision is limited and employers do not contribute to the costs of childcare on a regular basis. According to official statistics the share of employer-based childcare facilities amounts to four per cent with regard to children up to three years and one per cent for children three to six years in the former West Germany and is even lower in the former East Germany (2011). However, this figure may underestimate the role of employers since it does not necessarily include forms of public-private partnerships which have emerged over recent years. Some local authorities promote co-operation between non-profit welfare providers and employers in the provision of services. At the national level, the Ministry for Families, Senior Citizens, Women and Youth (BMFSFJ) has been running a programme since 2008 which provides start-up funding for employer-supported services drawing on money from the European Social Fund.
- In Denmark, employers can establish private daycare institutions for their employees' children, subject to the approval the local council.
- In the Republic of Ireland and New Zealand, employers do not tend to provide childcare and there are no incentives or special arrangements.

 In Finland employers seldom provide daycare, as access to municipally provided daycare is good and comprehensive. Employers can promote the reconciliation of work and family life by flexible working hours arrangements and by agreeing to reduced working hours (i.e. partial care leave).

The fourth case study focuses on the Netherlands. One key characteristic of the Netherlands is the high rate of working mothers, especially part-time, compared with other OECD countries.

During the 1990's the Netherlands actively supported the expansion of services in the welfare system both for young children and for school-age children. Central government funds were used to set up a variety of services, often in conjunction with employers. These measures are linked to the labour market, where services for young children help meet labour supply demands. Childcare in the Netherlands is generally available from 7.30am-6.00pm for catering for children from birth to 12 year olds. This makes it easier for parents to combine work and family responsibilities (section 3.4).

All providers who care for children aged less than 12 years (and get paid by parents to do so) are required to register their services in the LRKP (National Register of Child Care). Requirements for day-care from birth to four years are, for example the sizes of groups, the educational levels of staff, the ages of the children, accommodation safety requirements. The number of children and their age defines the number of employees and educational requirements for the staff. For playgroups of children of non-working parents (age two to four years) the requirements are that a group contains a maximum of 16 toddlers for every two employees. Requirements for playgroup accommodation are regulated by municipalities.

Childcare quality is monitored and assessed (section 2.7). Municipalities are responsible for provider compliance with the rules concerning childcare. The municipality assigns inspection/supervision responsibilities to the regional health service. Every registered daycare provider is inspected yearly, and childminders are inspected on a random basis. The inspectorate can also perform incidental inspections. When providers don't meet the required standards, the municipality can close them down. In extreme cases the ministry of social affairs can step into the place of the municipality (section 2.7.3).

Only parents who work, study, follow a work-finding-course or integration course are entitled to financial support for childcare.

5.8 Maternal employment

The OECD Family database shows maternal employment rates by the number of children under 15. Table 11 shows the employment rate of women with one, two, three or more children.

	Employment rate of women with one, two, three or more children (per cent)		
	1 child	2 children ⁹⁹	3 children or more
Australia	66	64	50
Belgium	71	72	58
Denmark	N/A	N/A	N/A
Finland	77	82	69
France	76	74	52
Germany	74	70	45
Ireland	63	56	45
Netherlands	78	80	71
New Zealand	62	63	46
Norway	N/A	N/A	N/A
Slovenia	81	86	77
Spain	61	57	46
Sweden	76	86	77
USA	N/A	N/A	N/A
United Kingdom	70	67	41
OECD average	69	66	51

Table 11 OECD data on maternal employment rates by number of children under 15, 2009⁹⁸

The data has been displayed in green for above average and red for below the average percentage.

In the Netherlands the employment rates for women with children irrespective of number are above the OECD average. Finland and Sweden also have above average employment rates for women with children. In UK the employment rate of women with either one or two children is just above the OECD average and below average for women with three children or more. All countries

⁹⁸ OECD Family Database, Chart LMF1.2.C

⁹⁹ Data for Denmark, Sweden refer to mothers with a youngest child aged between 6 and 16.

indicate a decline in the employment rate of women with three children or more, compared to those who have two.

These trends are confirmed in the responses to our survey on maternal employment rates in which Finland, Sweden, the Netherlands and Denmark reported high female participation rates in employment, alongside high participation rates of children in daycare or pre-school family daycare. In Finland, the difference between the employment rates of women and men is the second lowest within the EU (Equality between women and men in the European Union (2005)). In response to the survey Denmark reported that 97 per cent of children between three and five years of age and 91 per cent of children between one and two years of age are in daycare.

Appendix A: Background, scope and methodology

On 19 June 2012 the Prime Minister announced a commission on childcare to look at how to reduce the costs of childcare for working families and burdens on childcare providers. It will look broadly at relevant issues and particularly consider three key themes:

- Ways to encourage the provision of wraparound and holiday childcare for children of school age.
- Identifying any regulation that burdens childcare providers unnecessarily because it is not needed for reasons of quality or safety.
- How childcare supports families to move into sustained employment and out of poverty.

In response to this commission the Department for Education initiated a programme of domestic and international evidence gathering to build our evidence base on international comparisons of regulatory requirements, wraparound provision and funding for the provision of childcare in a number of countries, compared to England. This report focuses on the international evidence gathered via (i) a special survey of OECD member states, and (ii) analysis of existing OECD data, and reviews of the international research literature. This paper aims to summarise the available evidence on four key areas of interest:

- i. Regulation: the legal requirements on childcare providers in other countries;
- ii. Wraparound childcare provision;
- iii. Financial support for childcare; and,
- iv. How childcare helps with employment.

Survey of OECD member states: methodology.

A request for information was sent to a selection of 21 OECD countries, of which fifteen responded. A list of countries who responded is provided below. The countries were selected for a number of reasons: to provide a spread of countries from the OECD network on Early Childhood Education and Care (ECEC), as well as from across the whole OECD and based on them having a good outcome for children based on the following three measures: EIU ranking ('Starting Well Index'¹⁰⁰); childcare costs as a per cent of net family income; and public spending on childcare as

¹⁰⁰ Economist Intelligence Unit (June 2012)

http://www.managementthinking.eiu.com/sites/default/files/downloads/Starting%20Well.pdf

a per cent of GDP. The countries also provide a spread in terms of factors such as staff: child ratios and types of provision. However, they are not representative of the range of models that operate within the OECD. These countries were asked to provide information on: how they regulate childcare for both pre-school children and wraparound childcare for school-aged children; on any financial support available; and how childcare is used to support employment. Appendix B provides a copy of the questions that were sent to countries in August 2012.

When interpreting the information it is important to remember:

- There are significant differences between countries in the systems in place for delivering and regulating childcare and early years provision. It is not always evident from the data of the selected countries whether the definitions of 'childcare' and 'early education' are directly comparable;
- The countries we have selected are not a representative sample of OECD countries or those countries with minimum requirements;
- The information presented is intended to be illustrative of the childcare systems in the selected countries.

Countries who responded to the survey

A total of 21 countries were selected and requested to provide information on the childcare systems in their countries. The following countries responded: Australia, Belgium, Denmark, Finland, France, Germany, Republic of Ireland, Netherlands, New Zealand, Northern Ireland, Norway, Scotland, Spain, Sweden and the USA.

International literature review methods

A review of the international literature was commissioned to answer three questions:

- 1. What regulatory requirements on pre-school and childcare provision exist in other countries? This included information on staff: child ratios, staff qualifications, training, quality assurance/inspection, national registration arrangements/ requirements, licensing/licenses, and curriculum.
- 2. What types of out of school hours and holiday childcare provision exists in different countries and how is it paid for? This included: availability, entitlement, opening hours, school site, legal requirements/ entitlement; role of schools; length of normal school day/year and link with after school provision, and take-up.

3. How is childcare paid for in different countries – by Government, parents, employers or a combination of these? This included: funding, vouchers, grants, allowances, subsidies, childcare entitlements, financial caps, tax credits, benefits, free, universal, affordability, targeting, low income families or other children (e.g. disabled children), impact on behaviour of these subsidies (e.g. on take-up), labour market participation rates/employment rates, demand-side, supply-side, cost, salary sacrifices, private, and public.

The search was conducted by specialists at the Childhood Wellbeing Research Centre who considered literature relating to children aged 0-16, with no search restrictions on country, between 2004 and the present.

The databases searched included: Applied Social Sciences Index and Abstracts (ASSIA), Education Resources Information Center (ERIC),International Bibliography of the Social Sciences (IBSS), British Education Index, Social Care Online, Sociological Abstracts, Social work abstracts, World Wide Political Science Abstracts. The search strategy combined terms for:

- Setting such as: nursery, kindergarten, Daycare, Playgroup, Childminder, Pre-schooling, playschool, pre-kindergarten, crèche, toddler group, early years centre.
- Care such as: Childcare, Daycare, Childminding, Nannies, Early years care, Early years provision, infant care, informal care, ECEC, Early Childhood Education and Care.
- Wraparound such as: Wraparound, Out of hours, Out of school, Holiday care, holiday club, Vacation scheme, Vacation care, After school, breakfast club, before school, holiday scheme, extended school, summer scheme, latchkey, integrated care.
- Regulation such as: Standards, authority, directive, Legislation, Regulatory, Restrictions, Guidelines, Licensing, oversight, staff: child ratios, qualifications, curriculum, enforcement, governance, policy, agency, strategy.
- Funding such as: Financing, Financial aid, financial assistance, financial incentives, affordability, allowance, financial award, bursary, cash benefit, childcare benefit, Childcare entitlement, costs, demand-side, employment rate, entitlement, fees, financial support, free place, Grant, incentive, labour market, loan, low-income, salary, Social welfare, sponsorship, subsidies, supply-side, Tax benefit, Tax credit, voucher

Variations and synonyms of the above terms were also used. Records were grouped into clusters by EPPI reviewer text mining software. As the studies in the clusters were not mutually exclusive, the most relevant clusters were selected and screened for relevance on title and

abstract. Included studies were uploaded into Endnote for duplicate checking. Once the most relevant titles and abstracts had been identified by the research centre DfE analysts reviewed the titles and abstracts, rejecting those that were not relevant to the specific questions.

Papers that were freely available on the internet or could be obtained through the research centre were read. Some additional papers identified through emails to relevant academics, reference searching and other searches and other papers already known to us were also included.

Appendix B: Commission on childcare: questions

1. In what circumstances are childcare providers required by law to register their services (for example with an inspectorate)?

2. What are the standards or other requirements providers must meet/ demonstrate in order to register?

3. Are requirements the same for all providers, or different for different types of care (for example, home-based care/ childminders compared to nursery care)? Please explain any differences.

4. How is the quality of childcare monitored and assessed?

5. Do you specify in law the staff: child ratios that childcare settings must abide by? If so, we would be grateful if you could provide information about:

- whether you have different ratios for different aged children (and what the different requirements are);
- whether and how ratio requirements vary for other reasons (for example because of the qualifications held by the carer, or the size of the childcare setting);
- any evidence you have on the relationship between staff: child ratios and children's safety.

6. How does your government provide financial support to help parents with childcare costs, through subsides paid to early education and childcare providers, parents and/or employers?

7. Is financial support made universally available, or targeted to particularly help some families – for example those on lower incomes, or to encourage employment?

8. Do childcare providers have to be registered with a government body to be eligible for subsidy payments and/or for parents to be able to purchase childcare from them using financial assistance provided by government?

9. How does available childcare help parents with employment (is childcare generally available all day and/or before and after school, for example)? Are you able to provide any evidence that you have which shows the impact of childcare provision on parent employment?

10 What role do employers play in childcare provision and what incentives, if any, does government offer to encourage this?

11. What are the hours of a normal school day in your country?

12. For how many weeks are schools usually open each year?

13. Are schools expected to provide activities for their pupils outside of school hours (before and after school, and/or in the school holidays?

14. If so, how are such activities funded/ paid for?

15. We would welcome any further information you are able to provide about legal requirements relating to activities/ childcare provided on school sites outside of normal school hours and demand for those services from parents, and of any evidence you have on the impact of these activities on children's educational attainment.

Appendix C: Staff: child ratios results from the OECD survey

Staff: Child Ratios				
	Centre-Based	Childminders		
England	<i>Centre-based:</i> 1:3 (for under 2 year olds); 1:4 (2 year olds); 1:8 (3-5 year olds); Nursery schools and classes: 1:13.	<i>Childminders:</i> Max of six children under the age of 8; 3 of which may be young children (until 1 st September following his/her 5 th birthday); No more than 1 under 1		
Australia	<i>Centre-based:</i> 1:4 (for under 2 year olds); 1:5 (2 year olds); 1:11 (3-5 year olds)	<i>Childminders:</i> Not more than seven children at one time, of whom no more than four may be under school age. (applies from 1 January 2014).		
Belgium (Flemish Community)	Accredited family daycare The ratio is 4:1. Maximum group size is 8. Accredited crèche The ratio 1 to 6.5 places. Providers in crèche may apply their own quality policy regarding maximum numbers of children per assistant. Accredited out of school care The ratio is 14:1, but a specified group sizes is not obligatory for either group. Independent daycare centres and local neighbourhood services The ratio is 1:7 (if children are max 18 months old), 1 per 10 children (if children are older than 18 months) and 1: 14 if children are between three and 12 years old.	<i>Childminders:</i> On average, childminders can only look after a maximum of four children on a full-time basis (this figure includes their own children who are not attending nursery school yet). Childminders are not allowed to mind more than 8 children at any one time (including their own children up and until the time they start primary school).		
Denmark	Daycare There is no legal specification in relation to the number of children per adult in day care facilities for children up to school age. In 2011 calculations of average children looked after are provided below: Nursery 1:3 Kindergarten 1:6	Childminders: A childminder may care for up to five children. Data shows that on average in 2011 one childminder looked after 3.3 children.		
Finland	Centre-based:	Childminders:		

	Under 3 years olds: 1:4 3-6 years olds full-time: 1:7	The staff: child ratio in family daycare is one to four, including childminder's own under
	3-6 years olds part time: 1:13	school-aged child. Additionally, the
	In pre-primary education	childminder can provide part-time care for
	maximum group size is 20	one pre-primary education or school-aged
	children according to a	child.
	recommendation given by the	
-	National Board of Education.	
France	Crèches – 1:5 children who cannot walk and 1: 8 children	Assistantes maternelles (= childminders). They can look after up to four children under
	who can walk.	six in their own home or at the childminder's house.
	Jardins d'éveil (= toddler	
	daycare: children between two	
	and three years old.), the ratio is 1:12.	404
Germany	The staffing (staff: child ratio) in	OECD information ¹⁰¹ shows:
	day facilities is ultimately not	Family Daycare
	comparable between the Länder as there are no national ratios.	The maximum ratio is 1:5 (however, statistics show that family day carers on average
	Generally, staffing varies with the	looked after three children in 2011.
	age of the children (between 0-3	
	and 3-6) and with opening hours.	
	Examples of variations:	
	0-3 years	
	1:3 (Saarland) and 1:6	
	(Brandenburg)	
	3-6 years	
	1:7 (Bremen) and 1:13 (Mecklenburg-Vorpommern)	
Republic of	Sessional Pre-school Service	Childminders
Ireland	0 - 1 years old 1:3	Age range covered by regulations is birth to
	1 - 2.5 years old 1:5	six years olds.
	2.5 years – 6 years old 1:11	1:5 (including his/her own children & no
	<i>Full / Part-time Daycare</i> 0 – 1 years old 1:3	more than two children under 15 months).
	1 - 2 years old 1:5	
	2 - 3 years old 1:6	
	3 - 6 years old 1:8	
	Drop in centres	
	0-6 years old 1:4 (only 2 or less	
	under 15 months)	
	Overnight Pre-school Service	
	0-1 years old 1:3	
	1-6 years old 1:5	
Netherlands	Daycare (0-4 years)	Childminders may look after no more than six
1	0-1 years old 1:4 children	children aged 0 to 13, including their own

¹⁰¹ OECD Starting Strong III, International Comparisons: minimum standards
	 1-2 years old 1: 5 children 2-3 years old 1:6 children 3-4 years old 1:8 children A group contains max 12 children from 0-1 years old and max 16 children in combined groups from 0-4 years old. <i>Care after school (4-12 years old)</i> 1:10 children Groups with children aged 4-13 years contain max 20 children Groups with children aged 8-13 years contain max 30 children Groups with children aged 8-13 years are allowed two educated employees and one non-educated adult. 	children up to the age of 10. No more than 5 children younger than four years of age, including their own children up to the age of four. No more than 4 children aged 0 and 1, with a maximum of two children aged 0, including their own children.
New Zealand	Daycare Under 2 years 1:5 Children 2 and over 1:10	<i>Home-based services</i> Requirements are one teacher for up to four children, for all ages.
Northern Ireland	Daycare settings 0-2 years = 1:3 2-3 years = 1:4 3-12 years = 1:8 Sessional care Over two years and 10 months =1:8 as long as no more than four children of this age are in the setting at any time. If more than four children of this age are present, the ratio must be reviewed to 1:4.	1:6 – six children under 12, of whom no more than three are under compulsory school age. Normally no more than one child under a year old.
Norway	There is no regulation specifying group sizes or staff: child ratios. However, statistics show that staff: child ratios in Norwegian Kindergartens is 1:3.9	Family kindergartens (home-based) The number of children per home and assistant can be up to 5, when the majority of children are over three years of age. If majority of children are under three then the number is reduced.
		 Childminders looking after children are obliged to seek approval as kindergarten when: a) the undertaking operates on a regular basis, and one or more children spend more than 20 hours or more per week there; and, b) the number of children who are present at the same time is ten or more when the children are three years old or older, or five or more when the

Scotland	Centre-based	 children are less than three years old, as the case may be; and, c) the activity is carried out in return for remuneration. It follows hereof that there is a nationally regulated limit but not a ratio set to the number of children that can be minded by a childminder. <i>Childminders</i>
	Under 2 years 1:3 2– 3 years 1:5 3 and over 1:8 If all children over 8 years 1:10	Children under 12 years 1:6
Spain	Under 1yo: 1:8 1 to 2 years olds: between 12 and 14 pupils per unit 2 to 3 years olds: between 16 and 20 pupils per unit 3 to 6 years olds: 25 pupils per unit	Not available.
Sweden	-	be operated in groups of children with considering the needs of the children in the
United States	Oklahoma Centre-based Single age groups 1:4 (0-12 months, max 8) 1:6 (12-23 months, max 12) 1:8 (2 years olds) 1:12 (3 years olds) 1:15 (4 & 5 years olds) 1:20 (6 +) Ratios vary if mixed age groups.	Oklahoma Childminders (Family Childcare) Max of seven children (including children under 5 who live in the home and are present). For one caregiver: Seven children (with no more than two children under 2); Six children (with no more than three children under 2); or Five children of any age.
		Washington State Childminders Max of 12 children, but the ratios depend on the age of children and the amount of experience of the licensee, and whether other staff/ volunteers are also present. For example, a licensee can take children between birth and 11 years of age: A max of 6 children when there are two children under the age of two. A licensee with one years' experience is not allowed to look after children under two years of age (unless they have one other staff person or volunteer).

Appendix D: Staff qualifications results from the OECD survey

	Staff Qualifications
England	 The manager has at least a level 3 relevant qualification and 3 years relevant experience. At least half of all staff working with children in the setting have a relevant childcare level 2¹⁰² qualification. At least one person working with a group of children has a level 3¹⁰³ qualification.
Australia	 Centre-based educators must hold (or be actively studying towards) a Certificate III qualification in Children's services, with at least 50 per cent of educators holding (or actively studying towards) a Diploma level qualification (from 1 January 2014) Centre-based services must have access to an early childhood teacher, with larger services required to have an early childhood teacher in attendance (from 1 January 2014) A family day carer must hold (or be actively studying towards) a Certificate III qualification in Children's Services (from 1 January 2014).
Belgium (Flemish Community)	 Specific qualifications are required for staff working in accredited childcare. No specific qualifications are required of staff working in independent daycare facilities. No detailed information was provided.
Denmark	 The proportion of trained staff in daycare is not regulated by law. It is up to municipalities to determine this so that the daycare can comply with the regulatory framework and local service level. The pedagogue education is a medium higher education which lasts 3.5 years, and it consists of a combination of theory and practice.
Finland	 <u>Daycare Centres</u>: A vocational qualification of at least a secondary-level degree in the field of social welfare and health care is required (ISCED 3). One in three of the staff must have a higher education level degree (ISCED 5) (Bachelor of Education, Master of Education or Bachelor of Social Services). <u>Family Daycare (Childminders)</u>: The family childminder is required to have a suitable education (Qualification for Family Childminders of 2000). This competence-based vocational qualification is recommended. Exception: in group family daycare with three childminders one minder must have a suitable vocational qualification. <u>Pre-Primary Education</u>: Pre-primary education kindergarten teachers should have university qualifications (lower university degrees, Bachelor of Education (ISCED 5) or Master of Education, about 5 years). Primary school teachers need a higher university degree (about 5 years). Assistants need at least an upper secondary level training (ISCED 3).
France	 The required qualifications for carers depend on his/her occupation in the organisation. The director must be qualified as a nursery nurse or éducateur (= youth worker). The other carers are auxiliary nursery nurses

¹⁰² Level 2 equates to 1 GCE 'A' level, 2 SCE highers, 2 or 3 GCE 'AS' levels, NVQ level 2, GNVQ intermediate, 5 GCSEs at grade C or better as their highest qualification (equivalent to ISCED level 3C long).

¹⁰³ Level 3 equates to 2 or more GCE 'A' levels, 3 or more SCEs, 4 or more GCE 'AS' levels, NVQ level 3, GNVQ advanced, OND/ONC or an Access to HE qualification (equivalent to ISCED level 3A/3B).

	 or youth workers specialised in infants. Childminders are required to obtain 120 hours of training, of which 60 hours must take place before the childminder can take care of a child, with the remaining 60 hours completed in the two following years.
Germany	 Certified childcare workers in Kindergarten (0-6) - 2 year secondary vocational training. Childcare workers are assisting pre-school teachers and are not allowed to lead a group. Pre-school teachers (0-6) - 3 year secondary vocational training + 1 year internship. (ISCED 5B)
	 Childminders are required to hold qualifications equivalent to those of nursery teachers. However, in privately organised family daycare in principle anybody – and not only those who are properly qualified – may offer their services since no care license is required to care for up to three children. A wide range of formal requirements is made of the childminder if they are to be placed with clients by local public youth welfare organisations. They range from criteria such as <i>personal aptitude</i> and <i>experience with children/own children</i> through to the need for a basic qualification taking in 160 lesson hours.
Republic of Ireland	 Pre-school leaders involved in ECCE scheme must hold a nationally accredited Major award at Level 5 on the National Framework of Qualifications (NFQ) in childcare/ early childhood care and education to qualify for the standard capitation rate. Level 5 on the NFQ equates to Level 3 on the UK system.
	• Pre-school leaders who hold a Level 7 Major Award in early childhood care and education (equates to Level 5 on the UK Framework) quality for a higher capitation rate once other conditions are met, i.e., their assistants must hold a Level 5.
	 At the moment, there is no requirement for early years practitioners who, for example, work with young babies in an early years service to hold any qualification but this will change in the years ahead.
	 The Early Start Programme operates in 40 Primary Schools and can cater for up to 1,650 children. Each class as part of the Early Start Programme is staffed by a fully qualified Primary School teacher (currently Level 7 on the NFQ) and a Childcare Worker (Level 5 on the NFQ). There is no other qualification requirement for childminders.
New Zealand	 Teachers are required to have a level 7 tertiary qualification in ECE (on the New Zealand Qualification Authority's Register of Quality Assured Qualifications in New Zealand).
	 All teacher-led services to have a minimum of 50 per cent of staff to be qualified. In all other services only the person responsible must hold a qualification.
Northern Ireland	 Full Daycare The person in charge/manager and deputy should have at least a qualification at QCF Level 5 Diploma in Childcare, Learning and Development or Playwork; or a relevant occupational qualification in early years' education, social work, nursing, teaching or health visiting; and 2 years' experience working with children aged between birth and four years. Team leaders or supervisors should have at least a qualification at QCF Level 3

	
	Diploma in Childcare, Learning and Development or Playwork.
	At least 50 per cent of all other childcare staff should have a minimum
	qualification at QCF
	Level 2 Diploma in Childcare, Learning and Development or Playwork. Other staff should be in the process of gaining this qualification within a
	reasonable time.
	Pre-school sessional care or crèches,
	 The person in charge and deputy should have at least a qualification at
	QCF Level 5 Diploma in Childcare, Learning and Development or
	Playwork; or a relevant occupational qualification in early years' education,
	social work, nursing, teaching or health visiting; and 2 years' experience
	working in a play, education, youth or daycare setting.
	Team leaders or supervisors should have at least a qualification at QCF
	Level 3
	Diploma in Childcare, Learning and Development or Playwork.
	 At least 50 per cent of all other childcare staff should have a minimum
	qualification at QCF
	Level 2 Diploma in either Playwork or Childcare, Learning and
	Development. Other
	staff should be in the process of gaining this qualification within a
	reasonable time.
	Childminders
	 Childminders are encouraged to attain QCF Level 2 or 3 Diploma in Childcare,
	Learning and Development according to previous learning and experience.
	 Childminders are not required to have a minimum qualification, however,
	they are
	required as part of these standards to obtain and maintain training in core
	areas
	 including safeguarding, first aid, health and safety as required by HSC
	Trusts.
Netherlands	 The required professional qualifications are included as part of the
	Childcare collective labour agreement (CAO). Daycare providers and
	childminders should have at least a pedagogic grade (or comparable).
	Education takes a minimum of three years. Childminders must also have a
	registered and valid first aid certificate that focuses on children. A copy of
	the diploma and the first aid certificate must be available at the
Nonway	childminding location.
Norway	 Kindergarten head teachers are required to be trained teachers, or have other college education that gives qualifications for working with children
	and pedagogical expertise.
	 Pedagogical leaders must be trained pre-school teachers.
	 Other three-year pedagogical programmes at college level with further
	education in teaching in kindergartens shall be equated with pre-school
	teacher education.
	The qualifications of assistants are not specified in the legislation,
	however, the kindergarten owner is required to recruit staff that can
	contribute to fulfil the requirements on quality and content.
Scotland	The qualifications of staff are regulated by the workforce regulator (Scottish
	Social Services Council – SSSC). There are three parts of the SSSC

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	 register: Support worker, Practitioner and Manager. Each has a slightly higher minimum qualification level requirement. The list of qualifications that are accepted for registration are available on the SSSC website. In summary, Support workers are minimum of SVQ 2, Practitioners minimum of SVQ 3 /HNC, and Managers a minimum of Ordinary Degree (SCQF level 9). <u>http://www.sssc.uk.com/sssc/all-about-registration/qualification-criteria-day-care-of-children-service-workers.html</u>
Spain	 Professionals, who hold the Bachelor's degree in Pre-primary education, are responsible for drawing up and monitoring the pedagogical plan, as well as for teaching the children. They are supported by other staff qualified to teach children of this age.
Sweden	 Pre-school teachers must hold degree in early education. In the Swedish system standards and requirements are not specified. The Swedish system is a goal-based system with a high degree of local responsibility. In pre-schools you must have educated pre-school teachers, while family daycare must have childminders with education or experience to give the childcare and good pedagogical activity according to the needs of the child.
United	Oklahoma
States	Centre-based
	 All directors of childcare must be at least 21 years of age and bronze level in <i>Oklahoma Director's Credential</i>. Directors must obtain 20 hours of training each year. All master teachers¹⁰⁴ staff must be at least 18 and obtained level III or higher in '<i>Professional development Ladder</i>'. All teachers must be at least 18 years of age and have a high school diploma or General Education Development (GED). Each person who is counted toward meeting the staff: child ratio is required to obtain 12 hours of training per year. <i>Childminders</i> Primary caregivers applying for a license must have obtained a high school diploma or GED. Must also complete 12 clock hours of training annually.
	Washington
	Centre-based
	 The Director must be: At least 21 years of age; Have knowledge of child development as evidenced by professional reference, education, experience, and on-the-job performance; have written proof of education either by child development associate certificate (CDA); or minimum number of college quarter credits.
	 The Lead Teacher must have: completed high school education; documented child development education or work experience; and Complete STARS training within six months of becoming a lead teacher.
	Complete STARS training within six months of becoming a lead teacher. Childminders
	 High school diploma or equivalent. Must also complete 10 hours of on going training per year.
	 Must also complete 10 hours of on-going training per year.

¹⁰⁴ Master teacher means a staff person who supports other teaching staff with responsibilities such as programme development.

Appendix E: Daily school hours and weeks results from the OECD survey

	Daily School Hours and weeks						
	Daily school hours	Weeks per year					
Australia	School hours vary, but are generally from 9.00am to 3.30pm each school day.	Generally the school year is divided into three or four terms and runs from late January/early February until December. There is a short holiday between terms and a long summer holiday in December and January					
Belgium (Flemish Community)	Usually school starts between 8.00am and 9.00am and stops between 3.00pm and 4.30pm.	37 weeks					
Denmark	The Ministry does unfortunately not have any information about the number of school hours per day.	In general most children have winter vacation in week seven or eight, that the three days before Easter are public holidays, that the day after Ascension is kept free, that summer holidays lasts about seven weeks, and that most schools have autumn holiday in week 42.					
Finland	An average 19 hours a week for pupils in the first and second grades, in third grade at an average at least 22 hours a week, fourth grade at least 24, in fifth and sixth grades at least 25, seventh and eighth grades at least 29 and in ninth grade at least 30 hours a week.	The academic year ends the last weekday in week 22. The academic year consists of 190 working days.					
France	The maximum number of hours per day is six.	36 weeks					
Germany	Until recently, German schools have been half-day, and first graders often have short school hours. In 2002 began increasing the full- day schools - minimum seven hours on at least three days a week.	School holidays extend to approx.14 weeks per year					
Republic of Ireland	The school day in Primary Schools (four to 12 year olds) normally begins at 9.00am and finishes at 2.30pm.	Each Primary School opens for a minimum of 183 days per year					
Netherlands	In general children go to school from 8.30am till 3.00pm.	Approximately 41 weeks open each year.					
New Zealand	9.00am to 3.00pm	There are four terms in a year starting at the beginning of February finishing mid-late					

		December. Terms usually run for 10-11 weeks at a time.
Northern Ireland	Pupils should be in attendance for a minimum of three hours in the case of pupils under the age of 8 years and a minimum of four and a half hours in the case of any other pupil.	Schools are required to be in operation for 200 days in each school year
Norway	Primary school (age six to 12) the normal school week (five days) is 19,7 hours (average) Lower Secondary school (age 13- 16) the week is 23 hours.	38 weeks, within a period of 45 weeks.
Scotland	Widely accepted norm of 25 hours and 27.5 hours for primary and secondary schools respectively	38 weeks
Spain	Schools are generally open from 9.00am until 4.00pm with a lunch and recess break in between.	40 weeks
Sweden	Pre-school (six year old) approx. 3-4 hours per day Grade 1-3 (7-9 year olds) approx. 4-5 hours per day Grade 4-6 (10-12 year olds) approx. 5-6 hours per day Grade 7-9 (13-16 year olds) approx. 6-7 hours per day	40 weeks
United States	School days vary from 8:00am- 2:30pm to as long as 8:00am- 5:00pm. These are local decisions.	Schools days vary from 165 days to over 200 days. These are local decisions.

Appendix F: Participation rates in formal and pre-school care

Table 12 below summaries the information on participation rates in formal and pre-school care, child poverty rate, and funding of pre-primary and childcare as a percentage of GDP.

Table 12 OECD data on participation rates in formal and pre-school care, child poverty rates and funding of pre-primary and childcare as a percentage of GDP

	Participation in formal care and pre-school for children 3 to 5 (per cent) ¹⁰⁵	Child poverty rate (per cent) ¹⁰⁶	Expenditure on pre- primary education per cent of GDP ¹⁰⁷	Expenditure on childcare per cent of GDP ¹⁰⁸
Australia	55	14	0.3	0.3
Belgium	99	11	0.6	0.1
Denmark	92	4	0.7	0.7
Finland	74	5	0.3	0.8
France	100	9	0.7	0.4
Germany	93	8	0.4	0.1
Ireland	56	11	0.4	0.0
Netherlands	67	10	0.4	0.5
New Zealand	94	12	0.9	0.1
Norway	95	6	0.3	0.9
Slovenia	78	7	0.5	0.0
Spain	99	18	N/A	0.5
Sweden	91	7	0.5	0.9
USA	56	22	0.3	0.1
United Kingdom	93	13	0.7	0.5

¹⁰⁵OECD family Database, 2008

¹⁰⁶ibid

¹⁰⁷ OECD Family Database, 2009

¹⁰⁸ ibid

Appendix G: Longitudinal employment rates of women with children

In the UK the employment rate of women (aged 20 to 49) with children less than six years old has increased since 2005 by three per cent. The largest increases were seen in Germany (13 per cent) and the Netherlands (7 per cent).

	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	67	68	68	70	69	70	69	69
Denmark	N/A	N/A	N/A	N/A	N/A	83	80	77
Germany	47	51	52	53	55	55	61	60
Ireland	N/A	57	58	58	56	55	56	57
Spain	56	58	59	60	58	58	57	58
France	63	63	64	67	66	66	65	66
Netherlands	70	72	73	77	78	78	76	77
Slovenia	80	82	83	83	82	82	82	78
Finland	61	61	62	64	63	61	60	62
Sweden	N/A	N/A	N/A	N/A	78	75	74	78
United Kingdom	57	57	57	58	58	59	60	60

Table 13 Employment¹⁰⁹ rates of women (aged 20 - 49) with children aged less than six years old (Eurostat, 2013)

The employment rate of women (aged 20 to 49) with children aged six to 11 years old in the UK was fairly stable between 2005 and 2011 but increased in 2012 in contrast to most other countries. Germany and the Netherlands again showed some of the largest increases since 2005 along with France and Belgium.

Table 14 Employment¹¹⁰ rates of women (aged 20 - 49) with children aged six to 11 years old (Eurostat, 2013)

	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	73	73	75	77	76	77	77	77
Denmark	N/A	N/A	N/A	N/A	N/A	83	86	87
Germany	68	71	71	74	75	76	76	77
Ireland	N/A	62	64	65	61	58	57	56
Spain	59	62	64	65	61	63	61	59
France	75	76	79	80	80	80	79	79
Netherlands	73	74	75	79	78	77	78	78
Slovenia	88	88	88	89	88	86	85	84
Finland	85	86	87	89	88	88	88	88
Sweden	N/A	N/A	N/A	N/A	84	82	89	86
United Kingdom	73	73	73	73	73	72	72	75

 ¹⁰⁹ Not explicitly for full-time employment
 ¹¹⁰ Not explicitly for full-time employment

Finland has consistently had the highest employment rates of women (aged 20 to 49) with children over 12 years old since 2005. In 2012 the rate was 90 per cent, just higher than Sweden at 89 per cent. Spain has consistently had the lowest rate, with a rate of just 58 per cent in 2012.

	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	74	75	77	79	76	79	78	78
Denmark	N/A	N/A	N/A	N/A	N/A	88	87	85
Germany	77	78	81	79	80	81	82	84
Ireland	N/A	71	75	73	70	67	66	65
Spain	61	65	67	66	64	62	62	58
France	80	80	82	81	80	82	81	80
Netherlands	77	76	80	81	81	80	80	80
Slovenia	85	85	88	90	87	87	85	84
Finland	90	89	91	91	90	89	91	90
Sweden	N/A	N/A	N/A	N/A	85	86	91	89
United Kingdom	80	79	79	82	79	79	77	77

Table 15 Employment ¹¹¹ ra	ates of women (aged 20 - 49)) with children aged over 12	years old (Eurostat, 2013)
---------------------------------------	------------------------------	------------------------------	----------------------------

Compared to the full-time employment rates in the previous three tables, the part-time employment rates are comparatively low in most countries. The Netherlands had the highest percentage in employment from 2005 to 2012, consistently around 86 per cent, compared with the lowest rate in Slovenia which was 10 per cent in 2012.

	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	47	47	46	46	46	46	47	47
Denmark	N/A	N/A	N/A	N/A	N/A	25	31	28
Germany	63	65	65	66	66	65	65	65
Ireland	N/A	39	40	40	41	41	41	40
Spain	28	28	28	28	29	28	29	29
France	36	35	35	34	35	34	35	33
Netherlands	87	86	87	86	85	87	86	86
Slovenia	6	6	5	6	8	9	8	10
Finland	12	12	13	12	13	14	13	14
Sweden	N/A	N/A	N/A	N/A	40	41	39	37
United Kingdom	56	56	55	53	54	54	54	55

Table 16 Part-time employment rates	of women (aged 20 -	- 49) with children	(Eurostat, 2013)
	er nemen (agea ze		(

The employment rate of women with no children is higher than for women with children for most countries, although this depends on the age of the children. In Finland in 2012 the employment rate for women with children aged six to 11 years old was 88 per cent compared to 79 per cent for

¹¹¹ Not explicitly for full-time employment

women without children. This contrasts with Spain where the employment rate in 2012 for women with children aged six to 11 was lower than for women without children at 59 per cent compared to 67 per cent.

	2005	2006	2007	2008	2009	2010	2011	2012
Belgium	75	75	77	78	78	77	77	75
Denmark	N/A	N/A	N/A	N/A	N/A	78	75	75
Germany	80	81	82	82	82	84	84	83
Ireland	N/A	83	83	84	80	78	77	77
Spain	73	76	77	76	72	70	69	67
France	76	76	78	78	76	76	75	75
Netherlands	84	84	86	86	86	84	84	82
Slovenia	78	77	79	83	79	78	77	78
Finland	77	78	80	80	80	78	78	79
Sweden	N/A	N/A	N/A	N/A	75	74	76	74
United Kingdom	84	84	83	84	83	82	82	82

Table 17 Employment ¹¹² rates of women (aged 20 - 49) with no children (Eurostat, 2013	Table 17 Employment ¹	¹² rates of women (aged	l 20 - 49) with no child	ren (Eurostat, 2013)
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¹¹² Not explicitly for full-time employment

In the Netherlands the age of the child has little impact on the employment rate. Whereas in UK the younger the child the less likely women will be in employment. This trend can be seen with most countries in the table below. Table 18 has been rated green for average or higher and red for below average percentage.

	Maternal employment rates by age of youngest child, 2009 ¹¹³ Age of youngest child (per cent) ¹¹⁴				
	< 3 years	3-5 years ¹¹⁵	6-14 years ¹¹⁶		
Australia	N/A	49	74		
Belgium	61	69	74		
Denmark	71	78	78		
Finland	52	76	76		
France	59	74	80		
Germany	59	66	76		
Ireland	55	53	61		
Netherlands	78	77	78		
New Zealand	42	61	78		
Norway	N/A	N/A	N/A		
Slovenia	78	82	86		
Spain	54	61	61		
Sweden	72	81	76		
United States	54	63	73		
United Kingdom	56	58	74		
OECD average	51	64	73		

Table 18 OECD data on materna	l employment rates by age of	voungest child 2009
	i employment rates by age of	youngest child, 2003

¹¹³ For Sweden; 2006; 2005 for the United States; 1999 for Denmark.

¹¹⁴ OECD Family Database: Chart LMF1.2.B

 ¹¹⁵ Data for Australia refer to mothers with a youngest child aged less than five.
 ¹¹⁶ Data for Denmark, Sweden and the United States refer to mothers with a youngest child aged between 6 and 16.

Appendix H: Expenditure on childcare and pre-primary education (2009)

	Childcare spending as a per cent of GDP	Pre-primary spending as a per cent of GDP	Total spending as a per cent of GDP
Iceland	0.93	0.79	1.71
Denmark	0.72	0.71	1.43
Sweden	0.89	0.54	1.43
Norway	0.88	0.35	1.23
United Kingdom	0.46	0.67	1.13
France	0.44	0.68	1.12
Finland	0.83	0.25	1.09
New Zealand	0.10	0.92	1.02
Netherlands	0.52	0.41	0.93
Israel	0.14	0.79	0.93
Bulgaria		0.76	0.76
Romania		0.76	0.76
Korea	0.60	0.11	0.71
Belgium	0.07	0.59	0.66
Hungary	0.10	0.55	0.66
Italy	0.18	0.48	0.66
Latvia		0.63	0.63
Mexico	0.10	0.53	0.63
Chile	0.00	0.61	0.61
Lithuania		0.60	0.60
Australia	0.30	0.26	0.56
Spain	0.55		0.55
Slovenia	0.00	 0.50	0.50
Germany	0.09	0.39	0.49
Malta		0.48	0.48
Ireland	0.00	0.43	0.43
Luxembourg	0.41	0.00	0.41
Japan	0.31	0.10	0.41
Czech Republic	0.00	0.41	0.41
Austria	0.40	0.00	0.40
Portugal	0.00	0.39	0.39
United States	0.07	0.32	0.38
Estonia	0.00	0.35	0.35
Slovak Republic	0.00	0.35	0.35
Cyprus		0.34	0.34
Poland	0.00	0.33	0.33
Switzerland	0.09	0.15	0.23
Canada	0.00	0.17	0.17
Greece	0.12	0.00	0.12
OECD 33- average	0.32 n cannot be disaggregated by	0.39	0.69

Source: OECD Social Expenditure Database 2012; OECD Education Database; Eurostat for non-OECD countries

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Part 2

A Comparison of International Childcare Systems

Research report July 2013

Professor Chris Pascal, Professor Tony Bertram, Sean Delaney & Carol Nelson

Centre for Research in Early Childhood (CREC)

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Executive Summary

This report by the Centre for Research in Early Childhood (CREC) builds on and extends work already completed for the Economist Intelligence Unit (EIU) on international comparisons between centre-based preschool provision in 45 countries:

www.lienfoundation.org/pdf/publications/sw_report.pdf

and also uses the PISA (Programme for International Student Assessment) 2009 school outcomes data. This study aimed to:

- 1. provide a short contextual commentary for 15 selected study countries plus the UK on changes in the 5 structural indicators of their early education system over the last 5 years and also on the child physical wellbeing data for each country;
- 2. analyse patterns within, and between, the set of 5 structural indicators in centre-based **preschool provision** across the 15 selected study countries, plus the UK;
- 3. explore any associations of these structural indicators with later educational outcomes for children, looking at 'top performing', 'above average' and 'average' performing countries, as defined through the most recent PISA rankings data (2009)

The structural indicators which form the basis of this study of 15 countries plus the UK are:

Indicator 1: staff: child ratios

Indicator 2: staff training and qualifications

- Indicator 3: regulation and data collection
- Indicator 4: government strategy and investment

Indicator 5: national preschool curriculum requirements

A methodology statement of how the EIU scores for each of the qualitative indicators were calculated can be found in Appendix 2. It should be noted that the data used in this report is not able to be statistically analysed to establish correlations between structural indicators and school performance. Its strength lies in its capacity to describe how both European and non-European countries are responding to demands for a more highly structured, professionalised and regulated early education system which has the capacity to address socio-economic disadvantage, provide strong economic returns on investment and create more inclusive, stable and higher achieving societies. The data in this report begins to map out possible associations and patterns in how these structural mechanisms are working and makes some tentative analysis of differences between high and average performing countries, as measured by the PISA 2009 assessments.

Analysis of the patterns and associations between the indicators and the PISA school outcome results reveal:

- 1. European countries consistently show:
- Higher staff: child ratios (i.e. Higher number of staff to number of children)
- Relatively higher levels of training and qualifications
- Higher levels of regulation
- More national curriculum guidelines for preschool
- Stronger government strategy and investment in preschools

Non-European countries often have a very different pattern to European countries and we can see in all the non-European countries in the study:

- Lower staff: child ratios (i.e. Lower number of staff to number of children)
- Relatively lower levels of training and qualifications
- Lower levels of regulation
- Relatively less national curriculum guidelines for preschool
- Lower government involvement in strategy and investment in preschools
 - 2. The current pattern of response to each structural indicator in all the non-European study countries (and many European countries) should be viewed as dynamic and fluid. There is evidence to show that countries are converging in their systemic approach, with the non-European countries in this review putting in place reforms to match levels of structural quality with the best in European countries.¹¹⁷ ¹¹⁸ ¹¹⁹ ¹²⁰ ¹²¹
 - 3. High performing European countries in terms of school outcomes appear to have:
- Higher staff: child ratios (higher number of staff to number of children) than other European countries
- higher levels of staff qualification and training
- relatively higher levels of regulation than other European countries
- middle to high range response to the existence of a Government-led strategy and the level of investment

Disadvantage: A report for Ofsted

¹¹⁷ Carnegie Corporation of New York and The Sutton Trust (2012) *The Social Mobility Summit: Report of the Summit held at the Royal Society London 21-22 May 2012*

¹¹⁸ Carnegie Corporation of New York and The Sutton Trust (2008) Social Mobility and Education: Academic Papers presented at a high level summit sponsored by the Carnegie Corporation of New York and the Sutton Trust, 1-3 May 2008.

¹¹⁹ OECD (2012) Starting Strong III - A Quality Toolbox for Early Childhood Education and Care

¹²⁰ Economist Intelligence Unit (2012), *Starting Well: Benchmarking early years education across the world* ¹²¹ Pascal, Bertram et al (2012), *The Impact of Early Education as a Strategy in Countering Socio-economic*

- 4. The UK is either performing at the same level or higher than the other countries in the study on the structural indicators but more poorly in terms of its PISA rankings. It should, however, be noted that the links with later school performance and these structural outcomes are hard to tease out because of the time lag in the data. The UK has gone through a rapid period of system development over the last 10 years and its impact on later outcomes would not be evident in the current outcomes data.
- 5. More research is needed, using child outcomes evidence recorded on exit from preschool, which can show more definitively the impact of changes to the structural indicators on school outcomes.

1. Introduction

On 19 June 2012 the Prime Minister announced a commission on childcare to look at how to reduce the costs of childcare for working families and burdens on childcare providers. The commission has said that it will draw on the knowledge and views of a wide range of experts in the field, together with international evidence on high-quality, affordable childcare.

The Centre for Research in Early Childhood has been commissioned by the Department for Education to undertake a review of comparative international data to identify patterns and associations between different structural and systemic preschool approaches and later educational outcomes.

The impact of early education as a strategy in enhancing children's educational outcomes and countering socio-economic disadvantage has been well documented in the research literature. Recent evidence¹²² reveals that the potential of the system to make a difference to children's lives is fundamentally affected by certain key systemic and structural aspects of early education provision. Yet, at present the way that these structural elements impact on the longer term educational achievement of children is not well understood. Further work is clearly needed which explores what structural aspects of early education operate to improve educational outcomes for all children, and particularly, the disadvantaged. How far do early years' systems in different countries adopt these successful strategies? What systemic and structural aspects of early education require more supporting evidence? Is there any evidence on the impact of changing any of these structural aspects e.g. staff: child ratios?

This paper:

- Examines how 15 OECD countries plus the UK have responded to the challenge of implementing a set of structural mechanisms within their early education systems and how far these can be seen to be related to enhanced educational attainment for children.
- Sets out recommendations for action and further innovation.

This report by CREC builds on and extends work already completed by CREC for the Economist Intelligence Unit (EIU) on international comparisons between centre-based preschool provision in 45 countries <u>www.lienfoundation.org/pdf/publications/sw_report.pdf</u> (N.B. Home-based provision e.g. Childminding was not included in this data).

The EIU Study was commissioned in 2012 by the Lien Foundation in order to assess the extent to which OECD and major emerging market countries provide *"a good, inclusive early childhood education (ECE) environment for children between the ages of three and six. In particular, it*

¹²² Pascal C, Bertram A et al (2012), *The Impact of Early Education as a Strategy in Countering Socio-economic Disadvantage: A report for Ofsted*

considers the relative availability, affordability and quality of such preschool environments." ¹²³ The overarching thrust of this study was to analyse and benchmark the quality and inclusiveness of the EC system in 45 countries using a set of agreed structural and systemic indicators.

It should be noted that the EIU study did not concern itself specifically with educational outcomes, or child performance data, which might be seen as a limitation of the study. However, the strength of its data lies in its primary focus on a country's performance with regard to embedding those EC system characteristics. Research has revealed the importance of these in achieving a well educated, inclusive and equitable society which provides opportunities for all its members to succeed, especially its less advantaged. This study was based on the belief that the quality and inclusiveness of the EC system was possibly a more helpful way of comparing countries, and offered a sharper indication of how well a system might be functioning in relation to best system practice. In this way it is quite different from other ranking or benchmarking systems like PISA, which largely focus on educational outcomes data to determine country ranking positions.

Another recent review conducted by the authors¹²⁴ provides convincing evidence of the validity of the 5 structural indicators used in this cross national review (and others). Robust research has shown that these 5 indicators appear to be associated with enhanced educational outcomes, particularly for the less advantaged. The review also highlights the fact that these indicators are key levers within an early education system for reducing inequality, educational underachievement and social exclusion. The indicators explored cross nationally in this study are:

Indicator 1: staff: child ratios
Indicator 2: staff training and qualifications
Indicator 3: regulation and data collection
Indicator 4: government strategy and investment
Indicator 5: national preschool curriculum requirements

A summary of the supportive evidence for each of the 5 structural indicators is provided in Appendix 1.

 ¹²³ Economist Intelligence Unit (2012), Starting Well: Benchmarking early years education across the world p6
 ¹²⁴ Pascal, Bertram et al (2012), The Impact of Early Education as a Strategy in Countering Socio-economic Disadvantage: A report for Ofsted

2. Methodology

2.1 Country Sample

From an initial list of 21 countries identified and covered by the EIU report, in conjunction with the DfE, 15 plus the UK have been chosen to be the focus of this study. The 15 countries plus the UK are:

European:	Rep Ireland
Belgium	Spain
Czech Republic	Sweden
Denmark	Non-European:
Finland	Australia
France	Canada
Germany	Singapore
Netherlands	China
Norway	

2.2 Data Sets

Two sets of data were used in this report to analyse and interrogate the early education system performance in these target countries.

2.2.1 School Outcomes Data

The first data set we used was the *Program for International Student Assessment (PISA)* which is a system of international assessments that focuses on 15-year-olds' capabilities in reading literacy, mathematics, and science. PISA also includes measures of general or cross-curricular competencies such as problem solving. PISA emphasizes functional skills that students have acquired as they near the end of compulsory schooling. PISA is co-ordinated by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries. Begun in 2000, PISA is administered every 3 years. Each administration includes assessments of all three subjects, but assesses one of the subjects in depth. The most recent administration was in 2009 and focused on reading literacy. The PISA 2009 frameworks are available at http://www.oecd.org/pisa/pisaproducts/44455820.pdf. To date, over 70 countries and economies have participated in PISA, so it offers a rich and comprehensive

data set of school outcomes in a wide range of countries, providing a useful tool to inform policy making.

PISA ranking data were chosen ahead of other available international educational performance data for several reasons:

- Date of publication collated in 2009 this data is more current than the most recent TIMMS (*Trends in International Mathematics and Science Study*) (2007) and PIRLS (*Progress in International Reading Literacy Study*) (2006) data;
- Coverage All countries in the study group participated in the most recent PISA rankings exercise as opposed to the most recent TIMMS and PIRLS rankings;
- Scope of data PISA aims to evaluate education systems worldwide every three years by assessing 15-year-olds' competencies in the key subjects of reading, mathematics and science, rather than in just one subject area.

It should be noted however that there are important limitations and issues relating to the use of the PISA rankings in this report. Critically, the PISA rankings are based on assessments undertaken in 2008 when children were 15 years old. There is, therefore, a time gap between the child's preschool experience in the mid 1990's and their assessment as a measure of current system performance. During this period, the early education system in all countries will have gone through some measure of innovation and change, which in some cases was significant and radical, as will be shown later in the report. Also, in some countries the aims of their early education systems are far broader than the development of a relatively narrow set of educational outcomes at 15 years of age and so these wider outcomes may not be captured through the PISA assessments. These limitations in the data source must be noted when looking at patterns and trends in this report as the impact of the early childhood contextual changes on school/system performance are yet to work through the data.

Noting these limitations, in this study the PISA data was used to organise the 15 chosen countries plus the UK into 3 groups ('top performing', 'above average' and 'average') according to their most recent performances on the PISA rankings (2009, 3 yearly test for 15 year olds (65 countries in sample)). The results of this grouping of countries by PISA rankings are as follows:

Figure 1 Study countries grouped by performance in PISA (2009) rankings.

	Country	PISA ranking (2009)
Тор	China	1
performing	Finland	3
	Singapore	5
	Canada	6
	Australia	9
	Netherlands	10
	Belgium	11
	Norway	12
Above	Germany	19
average	Sweden	20
performance	France	21
	Republic of Ireland	22
	Denmark	24
	UK	26
Average	Spain	33
performance	Czech Republic	34

N.B. Countries in italics requested for inclusion in the sample of 15 plus the UK by DfE. Other countries selected from EIU data by agreement with the aim of providing a spread of countries by PISA ranking and geographically

2.2.2 Structural Indicators Data

The indicator evidence used in this report is based on data collected for the Economist Intelligence Unit in 2012, which led to the publication of **Starting Well: Benchmarking Early Years Education across the World**. This study aimed to analyse and benchmark the quality and inclusiveness of the early education system in 45 countries using a set of agreed structural and systemic indicators. These indicators included the 5 structural indicators used with this report and we drew on the EIU evidential data base to compare the system profile and performance of the 15 countries plus the UK in relation to each of these indicators of system quality, exploring patterns and associations between these indicators both within and between countries.

According to the *Starting Well Index*, the 15 countries in our study group plus the UK, were ranked in the table below (Fig 2). This table also reveals the relative ranking of countries between the PISA ranking and the EIU ranking and illustrates the differences in approaches and results of the two ranking scales: one of which focuses on system quality and the other which focuses on system outcomes. This comparison shows that a country may do well on one ranking system and not so well on the other. For example, the UK is ranked 26th on PISA ranking but 4th on the EIU ranking; China is ranked 1st on PISA ranking but 42nd on the EIU ranking. This difference may be explained by system lag on outcomes; on cultural differences in the functioning of very different systems; on the accuracy of both ranking systems and on the mismatch between measured

educational outcomes and system preferred outcomes in some countries, amongst other possible explanations.

Country (listed in order of PISA	EIU ranking
rankings)	(2012) out of 45
China	42
Finland	1
Singapore	29
Canada	26
Australia	28
Netherlands	8
Belgium	5
Norway	3
Germany	11
Sweden	2
France	7
Republic of Ireland	18
Denmark	6
UK	4
Spain	14
Czech Republic	17

Figure 2 Study countries and their EIU Starting Well (2012) ranking positions

The EIU rankings were derived from Index scores which were given across 4 categories: Social Context, Availability, Affordability and Quality. Within each category the overall score is calculated through a combination of quantitative and qualitative data. For the qualitative evaluations, criteria were provided for a 'best–fit' descriptor, based on 5 possible statements. For example, to rate 'staff training and qualifications' a score of **1** would be given if there were "no formal eligibility qualifications mandated for pre-school teachers". To merit a score of **5**, there would need to be evidence of "well-defined eligibility qualifications for preschool teachers" which are "adequately enforced" and "reviewed routinely"

Inevitably, in a 'best-fit' descriptor, there has to be some parts of the description which may not be totally fitting, and an overall judgment has to be made. In order to arrive at a fair and informed judgement of each of the 10 areas, a leading academic researcher or author in each country was interviewed to give a detailed picture of the area to be evaluated. All judgements were made after examining, in detail, all the available contextual evidence and the scores were moderated across teams. Where there was uncertainty, a second expert opinion was sought from a leading Early Years expert in the country concerned. A full list of the assessment criteria used for these indicators is attached in Appendix 2

In order to complete this report, selected data gathered for the EIU 'Starting well: Benchmarking early education across the world' (2012) report, was consolidated into a matrix for analysis (see

section 3.1) to compare the structural characteristics of systems for 3-5 year olds across all 15 countries plus the UK, looking at 5 key indicators:

Indicator 1: staff: child ratios¹²⁵

Indicator 2: staff training and qualifications

Indicator 3: regulation and data collection

Indicator 4: government strategy and investment

Indicator 5: national preschool curriculum requirements

The evidence gathered in support of the EIU ranking scores has also been drawn upon to provide the short contextual summary for each country.

¹²⁵ It should be noted that when a country is referred to as having a 'high' staff: child ratio it would have a greater number of staff per same sized group of children than a country with a 'low' staff: child ratio.

3. Analysis

The data from the EIU study in relation to the 5 chosen structural indicators has been analysed and considered in relation to the PISA study results in the 15 focus countries plus the UK. This analysis is presented in three sections:

- Country contexts
- Patterns (of indicators between countries/groups of countries)
- Associations (with PISA rankings)

3.1 Country Contexts

This section will provide a short contextual commentary for the 15 selected study countries plus the UK on changes to the 5 structural indicators of their early education system over the last 5 years. It also presents a summary of the level of child physical wellbeing for each country.

Contextual Changes Data

The table below provides a summary of information on recent structural changes to the early education system in the study countries. For each of the 5 structural indicators we have shown where change has taken place over the last 5 years or is currently taking place.

Figure 3 A table to show against which indicators each country is enhancing in its early years system according to EIU data.

	China	Finland	Singapore	Canada	Australia	Netherlands	Belgium	Norway	Germany	Sweden	France	Ireland	Denmark	UK	Spain	Czech Republic	Totals
Indicator 1: staff to child ratios																	4
Indicator 2: staff																	
training and																	
qualifications																	8
Indicator 3: level of																	
regulation and data																	
collection																	11
Indicator 4:																	
government strategy																	
and investment																	12
Indicator 5: national																	
preschool curriculum																	
requirements																	9

The Child Physical Well Being Data

The data presented in the table below provides a score for each country calculated using the following indicators:

- Malnutrition prevalence
- Under 5 mortality rate
- Immunisation rate, DPT (Diphtheria, Pertussis, Tetanus)

The Child Physical Well being score is on a scale of 1-5, with 5 indicating high levels of child physical well being and health.

Figure 4 A table to show how each country performs in terms of physical well being

_		China	Finland	Singapore	Canada	Australia	Netherlands	Belgium	Norway	Germany	Sweden	France	Ireland	Denmark	UK	Spain	Czech Republic
Physical	Well																
Being (1-5)		4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

These contextual data indicates that:

- All countries in this study have relatively healthy, nourished children coming into the early
 education system, with only China still having variable child well being due to poor health
 services for children in rural and remote areas and amongst the poor.
- All of the countries in this study (with the exception of France) have made significant changes to at least one of the 5 structural indicators over the last 5 years, with 10 of the countries making changes to two or more of the structural indicators, and 7 making changes to at least four of the indicators, including four countries in the top performing group (China, Australia, Netherlands and Norway). Singapore also has major changes planned to improve all of these indicators, following the publication of the EIU Report, and their poor ranking in this Index. Significant changes to all five indicators have been, or are being, implemented in China, Australia, Norway and Sweden. China, Australia and Norway in particular, are making significant improvements across the structural indicators explored in this review despite already being in the highest performing group of countries.
- The most common improvement in these indicators is the development of a national early years' strategy with significantly increased investment at government level. 12 of the countries are increasing the level of investment in early education, and this is across all the three performance groups, including top performing countries. The aim is to ensure greater
access to early education, especially to socio-economically disadvantaged children, and to improve the quality of provision for all.

- The second most common improvement is increased regulation and data collection for the sector. The development of quality assurance systems, regulations to ensure agreed standards are met, and closer monitoring of provision and access are aspects of these changes. 11 of the countries in this study have introduced greater regulation of the sector, and this is across all three performance groups, including high performing systems.
- Improvements to staff training and qualifications (which includes eligibility qualifications on entry, enforcement and review (see appendix 2 for full criteria)), and the introduction of a national preschool curriculum, have taken place in about in half of the study countries over the last 5 years, indicating that greater consistency of pedagogic practice and a focus on the quality of educational programme are seen as important elements of an early education system.
- The indicator which has been subject to least change in the study settings is staff: child ratios. Increasing the number of staff to the number of children is evident in only 4 of the study countries, but it is interesting to note that 2 of these 4 are high performing, non-European countries (China and Australia), in which historically the number of staff to children has been much lower and class sizes have been much larger than in other OECD countries. The other two countries are Norway and Sweden which have had historically high staff: child ratios (i.e. high number of staff to the number of children) but are working to increase this ratio further.

In summary, it would appear from this analysis that there is a convergence underway for all 15 countries plus the UK on each of the 5 structural indicators. Ongoing innovation in all the study countries, both European and non-European, other than France and Germany, reveal that they are all aiming over time to make progress on all or at least some of the structural indicators as follows:

- More state investment in preschool to secure more equitable access
- Higher staff: child ratios (higher number of staff to the number of children)
- Better trained and qualified preschool workforce
- A regulated and data evidenced system
- A national preschool curriculum for all providers

These reforms appear to be in line with international research evidence¹²⁶ that these factors are correlated with later academic success. Policy makers around the world are taking this research evidence seriously as they develop their national strategies for education from birth.

3.2 Patterns (of indicators between countries/groups of countries)

This section of the analysis sets out patterns within and between the 5 structural indicators in early education provision across the 15 selected study countries plus the UK. Using the EIU data and assessment framework, the table below sets out the level of response in each country for each structural indicator:

Rankings	China	Finland	Singapore	Canada	Australia	Netherlands	Belgium	Norway	Germany	Sweden	France	Rep Ireland	Denmark	NK	Spain	Czech Republic
PISA (2009) 3 yearly test for 15 year olds (65 in sample)	1	3	5	6	9	10	11	12	19	20	21	22	24	26	33	34
EIU Preschool report 2012 (45 in sample)	42	1	29	26	28	8	5	3	11	2	7	18	6	4	14	17
Indicators																
Indicator 1: Average number of children per teacher in preschool classrooms	24	11	22	18	14	8	16	14	13	6	22	20	9	13	13	14
Indicator 2: Staff Training & Qualifications	1	5	4	4	3	4	5	4	3	5	4	3	4	5	4	4
Indicator 3: Level of regulation and Data Collection	2	5	2	3	2	4	5	3	3	5	3	3	4	4	2	2
Indicator 4: Government Strategy & Investment	3	4	4	3	4	3	5	5	3	5	4	4	4	5	4	3
Indicator 5: National Preschool curriculum requirements	1	5	4	3	4	2	5	4	4	5	5	4	4	5	4	4

Figure 5 Table showing indicator scores for each country, ranked by PISA scores.

The table shows that there is a considerable range in responses to each of the 5 structural indicators both within and between countries. For example, the highest and most consistent scores across all the structural indicators are found in Finland, France, Belgium, Sweden Denmark, and the UK– all European countries and all scoring particularly well on these five indicators. The lowest and least consistent scores are found in China.

When we look at the pattern of response to each indicator we see that there is quite a large variation on the **staff: child ratios**, stretching from 1:6 to 1:24 with the smallest number of children to a teacher being found in Sweden and The Netherlands and the highest number of children to a teacher in China, Singapore and France. The UK currently sits around midpoint in relation to staff: child ratio with 13 children to each teacher.

¹²⁶ Jacob B.A and Ludwig J (2008) 'Improving Educational Outcomes for Poor Children' in *Social Mobility and Education: Academic Papers presented at a high level summit sponsored by the Carnegie Corporation of New York and the Sutton Trust, 1-3 May 2008.*

When we look at **staff training and qualifications** we see that the large majority of countries in this study have an approach of putting in place high quality staff training and qualifications in their early education services. The UK scores well here with China standing out as the poorest in this respect, and Germany and Ireland doing least well of the European countries.

Level of regulation and data collection provides a more mixed picture, with some countries having highly regulated early education systems (Finland, Netherlands, Belgium, Sweden, Denmark and the UK) and others having much lower levels of regulation (China, Singapore, Australia, Spain and Czech Republic). The UK scores 4 out of 5 on this indicator.

The existence of a **Government strategy with a high level of investment** provides a more consistent picture, with 11 of the countries scoring highly on this indicator, and in particular, Belgium, Norway, Sweden and the UK. Countries with less central direction and investment are China, Canada, The Netherlands, Germany and Czech Republic.

Finally, the implementation of **national**, **preschool curriculum guidelines** can be found in 13 of the countries, with Finland, Belgium, Sweden, France and the UK scoring the highest on this indicator and China scoring the lowest.

When we look at patterns in this data we can see that some countries score well on PISA and not on the EIU Index and vice versa. The data reveals a complex picture when we look at the patterns between indicators. For example, if we look at the relationship between staff: child ratio and staff training and qualification we see that there are some countries that have fairly average staff to child ratios but high qualifications (Belgium), some have low staff: child ratios (i.e. low number of staff to number of children) and low qualifications (China and Ireland). However, overall we can say that countries with higher staff: child ratios (i.e. higher number of staff to number of children) tend to have largely better qualified staff.

3.3 Associations (with PISA rankings)

This section of the analysis looks at the associations between each structural indicator and the PISA rankings. When we looked for patterns across the countries for each indicator's association with PISA rankings, we found clear differences in the patterns between European and non-European countries, i.e. the patterns in Australia, Canada, China and Singapore were different to the rest of the study group across all five structural indicators. It is interesting that all these non-European countries were in the top performing group. The exact reasons for the difference in patterns between European and non-European countries are not possible to tease out from the data sets available and further research is needed in this area.

Given this observation, we wanted particularly to explore in what ways Finland, Netherlands, Belgium and Norway, which generally fitted the European pattern of response but were performing as well as these non-European countries (and were in the top performing group), were similar or different to their European neighbours. We also wanted to explore what they might be doing that was different to other European countries in the study that could be a factor in their relatively high performance. We felt this might be a more useful way of identifying useful pointers for policy. In a similar vein, we have also considered the group of average performing European countries (Czech Republic and Spain) in order to assess whether they might be doing anything that was different from other European countries in the study that could be a factor in their relatively lower performance.

We have therefore analysed and presented the evidence in two groupings for each indicator. One chart displays the Europe only data and then we present the data for all the study countries in a second chart, with a short commentary for each, which explores possible patterns and associations between the indicator at preschool level and the PISA ranking.

Finally, as an additional focus we have considered the data for the UK against a DfE selected group of European countries (Germany, France, The Netherlands and Denmark) in order to draw out any key similarities or differences in approach.

Indicator 1: Staff: child ratio

This indicator reveals the average number of staff to the number of children in centre-based preschool classrooms in the study countries, presented as a ratio, and sets these against PISA rankings.¹²⁷ Home-based provision e.g. childminding is not included in the data. The results are set out in the charts below:



Figure 6 Graph showing the no. of staff to children v. PISA rankings for the European study countries.

¹²⁷ It should be noted that due to different school starting ages across the globe the ages of 'preschool' children can vary between 3 to 6 years of age. The data, as with all other data in the report is derived from the EIU report. For this indicator data was drawn from OECD and UNESCO figures as well as independent EIU analysis.

This chart shows that for European countries the range of staff to child ratios for preschool classes is from 1:22 in France to 1:6 in Sweden. Across the study group there does appear to be a consistent association between high staff: child ratios and high performance on PISA rankings as demonstrated by the blue trend line. The Netherlands, Sweden, Denmark and Finland all have high staff: child ratios (equivalent to one teacher for no more than between 6 - 12 children) and all score well in the PISA rankings ('Top Performing' or 'Above Average'). The UK staff: child ratio places it within the middle of the pack with similar ratio levels to Czech Republic, Spain and Germany.





When we include non-European countries in the data set, the association between high ratios and high PISA performance is no longer evident; the trend in fact reversing to reflect the low staff: child ratios but high PISA performance of the Non-European countries, particularly China and Singapore. The UK remains within the middle group of countries for ratios. China and Singapore are currently working to increase their staff: child ratios.¹²⁸

Indicator 2: Staff Training and Qualifications

This indicator reveals the quality and level of staff training and qualifications in the study countries and sets these against PISA rankings. The results are set out in the charts below:

¹²⁸ Pascal, Bertram et al (2012), *The Impact of Early Education as a Strategy in Countering Socio-economic Disadvantage: A report for Ofsted*

Figure 8 Graph showing the EIU scores for staff training & qualifications v. PISA rankings for the European study countries



This chart shows that most of the European countries in the study have implemented strategies to provide a highly qualified and trained preschool workforce, with only two European countries (Germany and Republic of Ireland) having a less well implemented and integrated policy in this respect (and they are currently planning to change this). The European data reveals a consistent association between the quality of preschool staff training and qualifications and later school performance. The UK sits in the top four in this respect, alongside Finland, Belgium and Sweden, all of whom are in the 'above average' or 'top performing' groups.





When we include non-European data in the above chart we can see that this trend is reversed, with an apparent disassociation between the quality of preschool training and qualifications and

later school performance. This data is highly skewed by China's low score on this ranking (1/5): without China in the data set, the graph would show no overall pattern.

Indicator 3: Level of Regulation and Data Collection

This indicator reveals the presence and efficiency of regulation and data collection mechanisms and sets these against PISA rankings. The results are set out below.



Figure 10 Graph showing the EIU scores for regulation & data collection v. PISA rankings for the European study countries

This chart shows that the presence and efficiency of regulation and data collection varies widely across the European countries in the study, with Czech Republic and Spain, the two 'average' performing countries according to PISA, having the least regulated preschool systems and Finland, Denmark and Sweden having the most regulated systems. This chart shows a strong association between the presence and efficiency of preschool regulatory systems and data collection and later performance in PISA rankings. The UK has high levels of regulation and data collection similar to Denmark and the Netherlands, although not quite as high as Belgium, Sweden and Finland who obtained a maximum score of 5/5 in this category.

Figure 11 Graph showing the EIU scores for regulation & data collection v. PISA rankings for all study countries



When we include non-European data in the above chart the associations are less clear. The UK sits in the middle of the spectrum in terms of regulation and data collection, alongside Canada, Germany, Ireland, Norway and France but behind other Scandinavian countries and Belgium. Australia, China and Singapore all have similar levels of regulation and data collection as the poorest performing European countries of Czech Republic and Spain.

Indicator 4: Curriculum Requirements

This indicator reveals the presence of a national framework of curriculum guidance for preschools and sets these against PISA Ranking. The results are set out in the charts below.

Figure 12 Graph showing the EIU scores for Preschool curriculum requirements v. PISA rankings for the European study countries



This chart shows that most of the European countries in the study have, or are developing, national preschool curriculum guidelines. The Netherlands seems to stand out as not having these in place for all their settings, yet being in the 'top performing' group on PISA rankings. This chart shows no consistent association between the presence of national preschool curriculum guidelines and later school performance.





When we include non-European data in the above chart it can be seen that the vast majority (13/16) score 4 or 5 out 5 against this indicator. The exceptions to this are Netherlands (as discussed above) and Canada and China (Australia and Singapore both score 4/5). The UK sits in the top 5, alongside Finland, France, Belgium and Sweden in providing curriculum guidelines, all of whom are in the higher or medium performing groups. Again, if China is removed from the selection it can be seen how much this data skews the overall trend.

Indicator 5: Government Strategy and Investment

This indicator reveals the existence of a well funded, government-led, national early years strategy and sets this against PISA rankings. The results are set out in the charts below.

Figure 14 Graph showing the EIU scores for Government Strategy v. PISA rankings for the European study countries



This chart shows that most of the European countries in the study have, or are developing, a funded, government-led, early years strategy. Germany, The Netherlands and Czech Republic have made less investment at state level. The UK performs strongly at this indicator alongside Norway and Sweden in this respect. The chart shows no clear association between the existence of a funded, government-led, early years' strategy curriculum and later school performance.





When we include non-European data in the above chart it can be seen that China and Canada join the lowest scoring European countries with scores of 3/5, which changes the overall trend to suggest that there is no association between the existence of a funded, government-led, early years strategy curriculum and later school performance. Australia and Singapore, however, score 4/5 which places them on a par with the majority of European countries ranging from 'top performing' Finland and 'average' performing Spain which suggests that this data is inconclusive.

3.4 Summary of Findings

The evidence does reveal some interesting associations between the structural indicators at preschool level and later school performance (as demonstrated via PISA rankings) as a measure of system effectiveness. In particular:

- 1. Finland and The Netherlands are high performing European countries judged on later (PISA) school performance and when we look at their pattern of provision in respect of the structural indicators compared to other European countries we can see:
 - a. They both have higher numbers of staff to children than most other European countries
 - b. They both have relatively higher levels of regulation than other European countries
 - c. They are both in the low or middle range as regards the existence of a Governmentled strategy and the level of investment compared to other European countries
 - d. They have very different responses to levels of staff training and qualification, with Finland scoring more highly than most European countries and The Netherlands much lower

- e. They have very different responses to national curriculum guidelines for preschool, with The Netherlands not having national curriculum guidance and Finland having national preschool curriculum guidelines
- 2. If the average performing (PISA) countries are considered, (Czech Republic, Spain) it can be seen that they share similarities across the indicators. Although each country scored lower in terms of regulation and data collection (2,3), their main association is the way that, although they score reasonably well across most structural indicators, they never score maximum points in any one area, and can, at best, be found within the middle section of the wider European dataset. Across the board they perform less well than those European countries that rank higher according to PISA.
- 3. When we look at the pattern of policy response to each indicator by non-European countries we can see that they often have a very different pattern to European countries and we can see in all the non-European countries:
 - Lower number of staff to children
 - Relatively lower levels of training and qualifications
 - Lower levels of regulation
 - Relatively less national curriculum guidelines for preschool
 - An average level of government policy and investment in preschools (scoring either 3 or 4 out of 5 on par with most European countries although lower than Belgium, Norway, Sweden and UK who all score 5 out of 5)
- 4. The current pattern of response to each structural indicator in all the non-European study countries (and many European countries) should be viewed as fluid (See Fig. 3) as many are significantly reforming their preschool systems currently to achieve:
 - Higher staff: child ratios (higher number of staff to number of children)
 - Higher workforce qualifications and training
 - Higher regulation
 - Establishment and enforcement of national preschool guidelines
 - Increased investment in preschool to expand access, especially for the poor and disadvantaged
- 5. The UK is either performing at the same level or higher than the other countries in the DfE selected sample group of 4 European countries (France, Germany, Denmark, and The Netherlands) in 4 of the 5 of the indicators. The UK received the highest score (5) in Staff Training and Qualifications, Government Strategy and Investment, and Curriculum Requirements and a score of 4 in Regulation and Data Collection, putting it ahead of the other countries across these data sets. The UK does however rank 4th out of the 5 for the size of its Staff: Child ratios.

In supplying clear National Preschool Curriculum guidelines, the UK is judged to be on a par with France and higher than all others, and in Regulation and Data Collection, it ranks highest alongside Denmark and the Netherlands. Germany scores lower than the UK on each indicator. Netherlands receives no top scores and is behind UK in all 4 of the 5 indicators although it does have a considerably higher Staff: Child ratio (higher number of staff to children). Denmark scores highly (4) against each indicator but falls behind UK in terms of provision of a National Preschool Curriculum, and in the presence of high quality Pre-school Training and development.

4. Recommendations for Action and Further Innovation

The patterns and associations identified in the above analysis reveals some interesting trends within and between the study countries. To understand better how these structural factors impact on system performance requires:

- More robust research evidence which can definitively look at the impact of each of these systemic indicators on system performance in relation to child outcomes;
- Earlier and more robust evidence of the social and educational outcomes of preschool;
- More qualitative and fine grain national and international comparisons to examine how different cultural contexts affect the impact of the structural decisions made e.g. raising the number of staff to children; introducing national preschool guidelines; enhancing practitioner qualifications etc;
- Experimental, well documented and controlled innovations to explore the impact of lower and higher staff: child ratios on children's social and educational outcomes;
- Experimental, well documented and controlled innovations to explore the impact of enhancing staff qualifications and different kinds of professional training on children's social and educational outcomes;
- A study of how regulation works to improve outcomes for children;
- An examination of how these structural and systemic indicators vary internationally for children from birth to three years.

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Appendix 1: A summary of the supportive evidence for each of the 5 structural indicators

This evidence comes from a recent review of the current evidence base on the impact of early education as a strategy in countering socio-economic disadvantage undertaken by Pascal, Bertram et al¹²⁹. The aim of this review was to:

- 1. Summarise and evaluate significant research in this area conducted over the last 10 years
- 2. Summarise key interventions and actions over the last 10 years and evaluative evidence on what has worked
- 3. Identify current issues and changes since 2000 in policy and practice in early education
- 4. Highlight key findings which will inform further action

This review explored the current evidence in relation to the impact of certain structural indicators in early education system on outcomes for children and a summary is set out below.

Staff: child ratios: There is some evidence that a higher adult: child ratio (ie a smaller group of children per adult) in early education programmes, particularly those working with less advantaged children, is helpful in ensuring the quality of interactions between educators and children¹³⁰ ¹³¹ ¹³². Higher ratios are seen to help to create a climate of emotional security, allow practitioners to be responsive to the needs of children and able to support them when they have needs or are in distress.

Staff training and qualifications: There is strong evidence that a well trained early years workforce, with high levels of qualification and access to ongoing professional development, is vital to close the achievement gap between children from poorer homes and their peers. There is a consensus that working in early years should not be seen as a less well paid, lower status and less skilled job than working with older children. Research from the UK, the US, Canada and Australia shows that well targeted investment in training those who work with disadvantaged young children is a crucial strategy in countering educational underachievement. The education of the workforce matters because practitioners can do a lot to improve vocabulary, and enhance the cognitive and social skills of young children, particularly when they are not gaining these skills at home. The EPPE study makes a powerful case that teachers should be involved as part of a well qualified team of professionals working with young children, and particularly those who come from less advantaged homes. The evidence indicates that qualified staff provide children with more curriculum-related activities (especially in language and mathematics) and encourage children to engage in challenging play. Less qualified staff have also been shown to be better at supporting learning when they work with qualified teachers. The presence of well educated, professional staff

¹²⁹ Pascal, Bertram et al (2012), *The Impact of Early Education as a Strategy in Countering Socio-economic Disadvantage: A report for Ofsted*

¹³⁰ Howes C, Phillips D and Whitebrook M (1992) 'Thresholds of Quality: Implications for the development of children in center-based care' in *Child Development* 63 449-460

¹³¹ Jacob B.A and Ludwig J (2008) 'Improving Educational Outcomes for Poor Children' in Social Mobility and Education: Academic Papers presented at a high level summit sponsored by the Carnegie Corporation of New York and the Sutton Trust, 1-3 May 2008

¹³² OECD (2012) Starting Strong III - A Quality Toolbox for Early Childhood Education and Care

who use extended vocabulary and replicate what well educated mothers can do has been shown to be crucially important in improving school readiness.

Regulation and Data Collection: There is emerging evidence that reform to bring in better regulation and accountability in the early years sector can foster changes in behaviour and improve outcomes for disadvantaged children (although we must note that it can also lead to unintended consequences e.g. cutting corners, focusing on certain students, inflating test scores, narrowing the curriculum). The development of enhanced statutory standards, a comprehensive regulatory framework and more efficient systems to manage data, measure quality and evidence the impact of practice is associated with better quality, more effective targeting, the efficient deployment of resources at all levels and improved outcomes for the less advantaged.

Government strategy and investment: The evidence we have reviewed in the core documents supports the thrust of advice given in the Marmot Review 'Fair Societies, Healthy Lives' (2012)¹³³, calling for a second revolution in the early years to increase the proportion of overall expenditure allocated to them, starting in pregnancy. The cost benefit analysis of investment in high quality early years programmes¹³⁴ demonstrates that the highest per child benefits stem from programmes that focus on economically disadvantaged children. Indeed, studies¹³⁵ have shown that these children make significant gains in cognitive, social-emotional development, and educational performance when they participate in high-quality early education programmes relative to children who do not participate. The economic benefits of these gains include increased earnings of the participants and public savings due to reduced crime and reduced need for rehabilitation and treatment. Cost benefit analysis¹³⁶ also shows that these benefits are higher than those from public investments like sports stadiums or office towers. Investments in early education are thus vital to the success of later investments made in primary schools. The consensus is that, when faced with a fixed budget, policymakers should reallocate their investments from later years to early years.

National preschool curriculum requirements: Recent research has indicated that there are some areas of learning and development that are particularly vital in the foundation years of life, and that a nationally agreed set of curriculum guidelines is helpful in ensuring an equal entitlement for all children.^{137 138} This evidence indicates that to support a child to be 'school ready' and able to operate as an effective learner, the early years curriculum needs to focus on both cognitive and non-cognitive aspects of early learning and, importantly, give the child a sense of their own capacity to be a successful learner. The evidence indicates that certain pedagogical practices are more effective than others in improving attainment for less advantaged children. The most effective pedagogy combines both 'teaching' and providing freely chosen yet potentially

¹³⁵ Barnett, W. Steven and Belfield, Clive R. (2006): Early childhood development and social mobility. Published in: *The Future of Children*, Vol. 16, No. 2 pp. 73-98.

¹³⁷ Pascal, C and Bertram, A (2008) Accounting Early for Lifelong Learning Amber Publications, Birmingham

 ¹³³ Marmot M (2012) Fair Society, Healthy Lives. Strategic review of health inequalities in England post 2010
 ¹³⁴ Heckman J (2012) The Case for Investing in Young Children in Defending Childhood ed. Falk B

¹³⁶ Heckman J (2012) The Case for Investing in Young Children in *Defending Childhood* ed. Falk B

¹³⁸ Tickell C (2011) The Early Years: Foundations for life, health and learning. An Independent Report on the Early Years Foundation Stage to Her Majesty's Government

instructive play activities. Effective pedagogy for young children is less formal than for primary school but its curricular aims can be academic as well as social and emotional.

Appendix 2: A methodology statement of how the EIU scores for each of the qualitative indicators were calculated

Indicator 2: staff training and qualifications

Attributes to assess: Presence and scope of qualifications (basic, general certifications versus specialised degree programmes), and enforcement/monitoring and review mechanisms

- 1. There are no formal eligibility qualifications mandated for preschool teachers.
- 2. There are 'broad and general' eligibility qualifications required for preschool teachers but these are poorly defined and enforced.
- 3. There are well-defined eligibility qualifications for preschool teachers but these are poorly enforced.
- 4. There are well-defined eligibility qualifications for preschool teachers but there is limited and uneven enforcement.
- 5. There are well-defined eligibility qualifications for preschool teachers and these are adequately enforced. The qualification requirements are reviewed routinely.

Indicator 3: regulation and data collection

Attributes to assess: Presence and coverage of data collection mechanisms, regular reviews and dissemination

- 1. There are no data collection mechanisms related to early childhood care and education.
- 2. There is limited data collection on early childhood care and education, but this is not regularly updated and/or there are large data gaps.
- 3. There is adequate data collection on early childhood care and education, but this is not regularly updated and there are some data gaps. Public dissemination and sharing of data is poor.
- 4. There is adequate data collection on early childhood care and education and this is regularly updated. Public dissemination of data is limited.
- 5. There is a comprehensive and efficient data collection system in place for preschool or early childhood care. Data is regularly collected and updated. Public dissemination of data is good.

Indicator 4: government strategy and investment

Attributes to assess: Comprehensiveness of strategy in terms of vision, goals and objectives; effectiveness of strategy in terms of implementation mechanisms; presence of specific milestones and provision for regular review and improvement

1. There is no government-led national early childhood education (ECE) development and promotion strategy.

- 2. There is a government-led strategy on ECE development and promotion. However, it is merely a statement of broad intent. It does not contain a clear vision or specific milestones to achieve. There are no clear mechanisms in place to achieve the strategy.
- 3. There is a government-led national strategy on ECE development and promotion in place. This has a broad vision, and loosely defined milestones (no specific targets). There are limited mechanisms in place that aim to achieve milestones. In federal-structure countries, states are not mandated to follow the national strategy i.e. it is only prescriptive in nature.
- 4. There is a well-defined, government-led national strategy on ECE development and promotion. It has a clear vision and specific milestones. There are mechanisms in place and guidelines on implementation.
- 5. There is a comprehensive strategy on national ECE development and promotion. It has a clear vision, clearly defined targets, action plan and strong mechanisms in place to achieve targets. In federated-structure countries, there are strong and clearly defined strategies that individual states must follow. These mechanisms and milestones are regularly reviewed and updated.

Indicator 5: national preschool curriculum requirements

Attributes to assess: Presence, scope and comprehensiveness of curriculum guidelines (basic education and care versus cognitive and intellectual needs), and enforcement/monitoring and review mechanisms

- 1. There are no curriculum guidelines for preschool education.
- 2. There are broad and general guidelines that address children's basic education and care, but there are no specific curriculum guidelines that cover individual's cognitive and intellectual needs.
- 3. There are broad and general guidelines that cover children's basic education, care, cognitive and intellectual needs. There are, however, no enforcement/monitoring mechanisms in place.
- 4. There are well-defined guidelines that cover children's basic education, care, cognitive and intellectual needs. There are, however, limited enforcement/monitoring mechanisms in place.
- 5. There are well-defined guidelines that cover children's basic education, care, cognitive and intellectual needs. There are adequate enforcement/monitoring mechanisms in place. Curriculum guidelines are routinely reviewed.



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Any enquiries regarding this publication should be sent to us at John Simes, Level 5, 2 St Paul's Place,125 Norfolk St, Sheffield, S1 2FJ Email: john.simes@education.gsi.gov.uk

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Part 3

Parents' views and experiences of childcare

Research report

July 2013

Caroline Booth, Katya Kostadintcheva, Anastasia Knox & Avraham Bram

Ipsos MORI

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Summary

This report covers findings from a telephone survey among 1,000 parents of children aged under fifteen in England¹³⁹. It was commissioned to inform the work of the joint Department for Education and Department for Work and Pensions commission on childcare. The commission, announced by the Prime Minister on 19 June 2012, looked at how to reduce the costs of childcare for working families and the burdens on childcare providers.

Key Findings

Use of childcare

- Fifty nine per cent of parents who took part in this survey said they regularly received childcare in the past six months¹⁴⁰.
- Usage of childcare was highest between 3pm and 5pm (56 per cent). Around two in five parents used childcare between 9am and noon, between noon and 2pm and between 2pm and 3pm (44 per cent, 40 per cent and 37 per cent respectively).
- Nearly a third of parents (32 per cent) said that they have used childcare during the school holidays and three in ten (30 per cent) at short notice, with parents of school-aged children being more likely to use these times than parents of pre-school children. Lone working parents were significantly more likely to use childcare between 7am and 9am, between 3pm and 7pm and during school holidays.
- Parents who used formal childcare (that is childcare for which the parent or the Government pays) were more likely to do so between 9am and 3pm. In contrast, those who used informal childcare (such as family members, friends or babysitters) were more likely than average to do so in the evening, at weekends, at short notice, and during the school holidays.

Difficulties with childcare arrangements

 All parents were asked if they had experienced any difficulties with childcare arrangements that have prevented them from doing paid work, or from doing paid work during the hours they would like to. Seventeen per cent of all parents had experienced these difficulties: 11 per cent in terms of the hours they would like to work and 6 per cent in terms of working at all.

¹³⁹ The sample was randomly selected from parents who were willing to be contacted again after taking part in the 2011 Childcare and Early Years Survey of Parents. For more information see the link below. https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011

¹⁴⁰ Note that this figure is based on a generic question, which asks about using <u>regular</u> childcare in the last six months and its main purpose in this survey is to establish whether respondents use childcare or not so that the correct followup survey questions were asked. As such, this question is not a comprehensive measure of childcare usage and should not be used as a comparison to data on childcare usage in the Childcare and Early Years Survey of Parents.

- The 17 per cent of parents who had experienced work-related difficulties because of childcare said that the main two issues were related to unavailability of childcare (mentioned by 35 per cent among those who say they have experienced difficulties or 6 per cent of <u>all</u> parents) and cost (mentioned by 31 per cent among those who say they have experienced difficulties or 5 per cent of <u>all</u> parents).
- Among some of the solutions for childcare difficulties experienced by parents, the most frequently suggested included cheaper or more affordable childcare (mentioned by 24 per cent of parents who had experienced difficulties or 4 per cent of <u>all</u> parents) and extended hours of childcare providers (19 per cent or 3 per cent of <u>all</u> parents).
- Working parents using childcare were asked if there were any particular times of the day when they needed to use childcare to enable them to do paid work, but have found it difficult or impossible to do so. The most common time periods mentioned were at the end of the working day between 3pm and 5pm (11 per cent) and between 5pm and 6pm (9 per cent).

Wrap-around childcare

- Nearly two-thirds of parents (62 per cent) with children aged five or over who were working, or seeking work, required some form of wrap-around care (most often after school care). The majority (67 per cent) of these parents were able to find the wrap-around care they needed.
- Working parents with a child over five who had an unmet need for available and affordable wrap-around care said they were most likely to use after school clubs (49 per cent), followed by holiday clubs/schemes (41 per cent), breakfast clubs (34 per cent) and sports clubs (28 per cent).

Regulation of child to adult ratios

- Seven in eight of parents (87 per cent) agreed that the Government should set rules for formal childcare providers on how many children each adult can look after at any one time.
- For children aged under two, the majority of parents (72 per cent) agreed that the maximum limit (three children to be looked after by one adult) was right. There was also agreement that the maximum limit for two-year-olds (four children per one adult) was right (80 per cent of parents agreed). In addition, there were high levels of support for childminders caring for up to six children under eight at any one time (59 per cent).
- For three to five-year-olds, 59 per cent of parents said that the maximum limit (13 children to one carer when a teacher is present) was too high. The limit drops to 8 children per carer when a teacher is not present; just over half (51 per cent) said this was too high but 46 per cent said it was about right.

Parents rated 'whether children have special needs' and 'the age of the children' as the two
most important factors affecting how many children a formal childcare provider should be
allowed to look after (95 per cent and 93 per cent). There was also strong support for
considering the experience and qualification level of the carer when setting maximum
levels.

Cost of childcare

- The cost of childcare statistics in this report are estimates based on parents' 'top of mind' understanding of their household's finances and are not produced by a detailed examination of more precise information they might hold.
- Over a fifth (22 per cent) of parents estimated that they paid up to £80 per month for childcare for all their children. Just under a fifth (19 per cent) said they paid between £81 and £241 per month. A similar proportion (22 per cent) paid between £241 and £640 per month, and one in seven (14 per cent) said they paid £641 or more per month. Around one in six parents (18 per cent) said that they did not pay anything for childcare, which was mainly due to the 15 hours Government funded early education covering their childcare costs.
- Six in ten parents (61 per cent) said they spent up to 10 per cent of their total monthly household income on childcare, nearly three in ten (28 per cent) parents said they spent between 11 per cent and 29 per cent, with the remainder (12 per cent) saying they spent 30 per cent or more on childcare.
- The proportion of monthly income spent on childcare was highest among lone working parents, parents living in London, those on lower income, parents using day nurseries and parents of children aged under three. In addition to different levels of household income, these proportions are likely to reflect variation in: the number of children in the family who use childcare; the number of days and hours of childcare bought by parents for each child; and variation in fees charged by different types of providers.
- This is supported by the findings from the 2011 Childcare and Early Years Survey of Parents. While there were some differences in the costs paid by different types of families and families living in different areas of the country, most differences appear to be accounted for by the ages of the children and different patterns of childcare use. For example, families spent the most on settings that offered childcare for a full day¹⁴¹.

¹⁴¹ Childcare and Early Years Survey of Parents 2011, SFR08/2013 <u>https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011</u>

1. Introduction

1.1 Background

This research was commissioned to inform the work of the recently established joint Department for Education and Department for Work and Pensions commission on childcare¹⁴², which was tasked with looking at how to reduce the costs of childcare for working families and the burdens on childcare providers.

The commission has three key themes:

- Considering ways to encourage the provision of wrap-around and holiday childcare for children of school age;
- identifying any regulation that burdens childcare providers unnecessarily because it is not needed for reasons of quality or safety; and
- how childcare supports families to move into sustained employment and out of poverty.

1.2 Research objectives

The specific aims of the study were to explore:

- the demand for childcare during particular times of the day or particular periods during the year;
- any difficulties with childcare arrangements preventing parents from working, or from working the hours they would like to;
- the demand for different types of wrap-around and school holiday care for children of school age;
- parents' views on the regulation of childcare providers; and
- the proportion of household income spent on childcare.

1.3 Methodology

The results are based on 1,000 telephone interviews carried out with parents of children aged under fifteen, between the 4th and the 23rd of September 2012. All parents who took part in the

¹⁴² Commission on Childcare Terms of Reference <u>http://media.education.gov.uk/assets/files/pdf/c/childcare_commission_terms_of_reference_july_2012.pdf</u>

survey had previously taken part in the 2011 Childcare and Early Years Survey of Parents¹⁴³ and had agreed to be re-contacted for further research. The respondents were originally sampled¹⁴⁴ from Child Benefit records¹⁴⁵.

The final data has been weighted by region, household income, ethnicity of respondent, household working status and whether there is a child of pre-school or school age in the household, to the known profile of the eligible sample from the 2011 Childcare and Early Years Survey of Parents, published January 2013¹⁴⁶.

1.4 Conventions for presenting data

Unless otherwise stated, all percentages quoted are based on weighted data and all base sizes are unweighted. The symbols below have been used in the tables and figures, and they denote the following:

- n/a this category does not apply (given the base of the table)
- [] percentage based on fewer than 50 respondents (unweighted)
- * percentage value of less than 0.5 but greater than zero
- 0 percentage value of zero.

Unless stated otherwise, differences highlighted in the text of the report are significant at the 95 per cent confidence interval.

Where a base contains fewer than 50 respondents, particular care must be taken, as confidence intervals around these estimates will be very wide and the results should be treated with some caution.

1.5 Calculation of childcare costs and proportion of income spent on childcare

Within the report there are references to how much parents spend on all of their childcare and to the proportion of their households' income spent on childcare. It should be noted that these figures

¹⁴⁶ Childcare and Early Years Survey of Parents 2011, SFR08/2013,

¹⁴³ Childcare and Early Years Survey of Parents 2011, SFR08/2013,

https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011

¹⁴⁴ Two-stage random probability clustered design was used, involving selecting sampling points (postcode sectors) first and then selecting children within each of the sampled sampling points. The sample points were stratified prior to selection.

¹⁴⁵ Child Benefit Records are an ideal sampling frame for the Childcare and Early Years Survey of Parents because the benefit has high take-up (98 per cent) providing a comprehensive database of parents/carers.

https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011

are estimates only as they are based on parents' 'top of the mind' understanding of their household's finances and not a detailed examination of more precise information they might hold.

Cost of childcare

To record the cost of childcare, parents were asked how much, on average, they spend on formal childcare per month, or per week, for all of their children living with them. Where parents were unsure, they were prompted to select from a list of banded figures (see Appendix A for more information).

Household income

The estimate on income includes total household income from all sources, including benefits, before tax and other deductions. Parents were asked to estimate their household income in bands using a 'below/above' staging approach.

Proportion of income spend on childcare

The proportion of income spent on childcare was calculated using the total annual cost of childcare as a proportion of the total annual household income. The income estimates were banded and a mid point for each band was selected for the calculation of proportion. The midpoint for the lowest range for household income was set at £5,000 per year and the midpoint for the highest range of income was set at £110,000 per year.

2. General childcare usage

Fifty nine per cent of parents who took part in this survey said they had used childcare regularly in the past six months. As mentioned earlier, this figure is based on a generic question on using regular childcare in the last six months. Its main purpose in this survey was to establish whether respondents use childcare or not, so that the correct follow-up survey questions were asked. As such, this guestion is not an exhaustive measure of childcare usage and is not comparable to data on childcare usage from the Childcare and Early Years Survey of Parents¹⁴⁷.

To help distinguish between different childcare needs, parents in the survey were asked about formal childcare usage (described as childcare for which they or the Government paid, for example a childminder or a nursery), and informal childcare usage (provided by family, friends and babysitters). Over three in ten parents (32 per cent) who used childcare regularly in the past six months said that they used formal childcare only, and nearly two in five parents (38 per cent) said they used informal childcare only. The remainder (31 per cent) said they used both formal and informal childcare.

Figure 1

General childcare usage

Q. Has your child or children living with you regularly received any childcare in the past six months? This could be care provided by a nursery or childminder, or by family members, friends or babysitters?

Q. What kind of childcare was that?



Base: All who regularly received childcare in the past six months (635); fieldwork dates: 4-23 September 2012

¹⁴⁷ Childcare and Early Years Survey of Parents 2011, SFR08/2013, https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011

2.1 Times when parents use childcare the most

Amongst parents who used *any* childcare during the last term time week, typical usage varied throughout the course of the day. The most often used childcare periods were: after school hours between 3pm and 5pm, when over half (56 per cent) of parents said that they typically used childcare; followed by morning usage between 9am and noon (44 per cent). Usage dropped off considerably after 6pm.

When asked about other times at which they might use childcare, around three in ten of parents said that they used childcare during school holidays (32 per cent), and a similar amount (30 per cent) used childcare at short notice, on an *ad hoc* basis or in an emergency.

One in seven (14 per cent) parents said that they used childcare at weekends, whilst a small proportion (2 per cent) used it overnight.

Figure 2



Base: All respondents who regularly received childcare in the past six months (635); fieldwork dates: 4-23 September 2012

There were a number of variations in childcare usage amongst parents. Those who used formal childcare (that is childcare for which the parent or the Government pays) were more likely to do so between 9am and 3pm, which is probably because these are the times when childcare providers are typically open and/or parents are at work. This was true for distinct periods of time between 9am and 3pm:

- 9am and noon (60 per cent typical use among formal childcare users compared with 44 per cent overall);
- noon and 2pm (57 per cent compared with 40 per cent); and
- 2pm and 3pm (53 per cent compared with 37 per cent).

In contrast, those who used informal childcare (such as family members, friends or babysitters) were more likely than average to do so in the evening, at weekends, at short notice, and during school holidays, as illustrated in Figure 3:

- one in five (19 per cent) users of informal childcare used childcare between 7pm and 9pm (compared with 10 per cent overall);
- one in ten (9 per cent) used it between 9pm and midnight (compared with 5 per cent overall;.
- one fifth (21 per cent) used it at weekends (compared with 14 per cent overall);
- two fifths (41 per cent) used it at short notice (compared with 30 per cent overall); and
- just under two fifths (37 per cent) used it during school holidays (compared with 32 per cent overall).

Figure 3

Typical childcare usage for formal and informal childcare users

Q Considering all your children living with you, when do you typically use childcare?



Base: All respondents who regularly received childcare in the past six months (635); fieldwork dates: 4-23 September 2012

Figure 4 illustrates that parents with children of pre-school age are more likely than those with children of school age to use any childcare during the hours of 8am to 3pm.





Base: All respondents who regularly received childcare in the past six months (635); fieldwork dates: 4-23 September 2012

Turning to household type, childcare is more likely to be used before and after normal school hours in households where parents are working. This is particularly the case for working lone parents. Table 1 overleaf shows differences in childcare usage by household working status. All statistically significant subgroup differences (in relation to the total) in the table have been marked with the cell highlighted in grey.

Table 1

	Total	Couple both working	Couple one working	Couple neither working	Lone parent working	Lone parent not working
Base: All who regularly received childcare in the						
past six months	635	353	151	[23]	69	[39]
Between 7am and 8am	15%	16%	5%	6%	28%	7%
Between 8am and 9am	33%	36%	16%	25%	53%	24%
Between 9am and noon	44%	41%	47%	51%	44%	47%
Between noon and						
2pm/lunchtime	40%	38%	39%	54%	42%	44%
Between 2pm and 3pm	37%	36%	33%	59%	40%	36%
Between 3pm and 5pm	56%	66%	34%	36%	73%	21%
Between 5pm and 6pm	32%	39%	15%	9%	50%	8%
Between 6pm and 7pm	13%	12%	11%	6%	24%	1%
Between 7pm and 9pm	10%	9%	15%	8%	12%	5%
Between 9pm and midnight	5%	5%	8%	8%	4%	1%
Between midnight and 7am	2%	1%	1%	6%	4%	1%
At the weekends	14%	12%	17%	5%	15%	19%
At short notice/ad hoc/in an emergency	30%	28%	27%	53%	30%	42%
During the school holidays	32%	37%	20%	19%	43%	10%
Other	3%	3%	4%	0%	3%	3%
Never	4%	2%	7%	9%	0%	9%
Finally, parents with school-aged children (aged five to fourteen) were more likely than those with younger children to use childcare at short notice (33 per cent compared with 26 per cent of those with children aged under five), or during school holidays (36 per cent compared with 21 per cent of those with children aged under five).

2.2 Difficulties with finding childcare at specific times

The majority of parents (68 per cent) who have used formal or informal childcare in the past six months said that there was no time of the day when they, or their partner, needed to use childcare to enable them to do paid work but found it difficult, or impossible, to do so. Around a third (32%) of parents have experienced such difficulties.

Amongst those who have found it difficult or impossible to find childcare, the most common time periods in which they experienced difficulties were: at the end of the working day between 3pm and 5pm; between 5pm and 6pm; and during school holidays (11 per cent, 9 per cent and 8 per cent respectively).

Figure 5

Times when needed to use childcare in order to work and found it difficult or impossible

Q. Are there any particular times of the day when you need to use childcare to enable you (or your partner) to do paid work but have found it difficult or impossible to do so?



Base: All respondents who regularly received childcare in the past six months (635); fieldwork dates: 4-23 September 2012

Lone parents in work were more likely to have found it difficult, or impossible, to secure childcare in the early morning. One in seven said that they had had difficulties securing childcare between

7am and 8am (13 per cent compared with an average of 6 per cent overall). This group was also more likely to have had problems during weekends (10 per cent compared with an overall figure of 3 per cent). It should be noted that small base sizes for this question (69 lone parents in work) mean that these figures should be treated with caution.

Turning to geographic variation, parents in the East Midlands reported particular difficulties in using childcare throughout the working day. Higher than average proportions of parents in this part of the country said that they had needed to use childcare during the following periods but found it difficult or impossible to do so: between 9am and noon (14 per cent compared to 6 per cent), noon and 2pm (14 per cent compared to 5 per cent), and 2pm and 3pm (14 per cent compared to 5 per cent). Nearly a quarter found it difficult or impossible to find childcare between 3pm and 5pm (23 per cent compared with an overall figure of 11 per cent). Parents in the North West were more likely to experience difficulties in finding childcare during school holidays (20 per cent compared to 8 per cent overall). Once again, small base sizes (51 parents in the East Midlands and 65 in the North West) mean that these differences are indicative only and that figures should be treated with caution.

Parents with children of pre-school age only (those aged under five) are more likely than parents with children of school age (five to fourteen years) to have difficulties finding childcare between 9am and noon (12 per cent compared to 3 per cent respectively) and between noon and 2pm (9 per cent and 2 per cent respectively). On the other hand, parents of children of school age are more likely than those with children of pre-school age to have difficulties finding childcare during the school holidays (12 per cent compared to 5 per cent) and between 5pm and 6pm during the day (10 per cent compared to 3 per cent).

Finally, finding childcare cover during the school holidays is more likely to be an issue for parents of children with special educational needs than average (17 per cent compared to 8 per cent overall).

2.3 Childcare difficulties preventing parents from working

The majority of all parents (83 per cent) said that they have not experienced any difficulties with their childcare arrangements that have prevented them from doing paid work, or from doing paid work in the hours that they would like to. However, as illustrated in figure 6, 11 per cent said that they had experienced difficulties that have prevented them, or their partner, from doing paid work during the hours they would like to, and six per cent from doing work at all.

Whether childcare difficulties have prevented parents from doing paid work, or working the hours they would like to

Q. Have you experienced any difficulties with your childcare arrangements that have prevented you (or your partner) from doing paid work, or from doing paid work during the hours you would like to?



Base: All respondents (1,000); fieldwork dates: 4-23 September 2012

Those who were already in work (including households comprised of a couple, both of whom are in work, and those with a lone working parent) were more likely to say that they had not been able to work the hours they would like to because of problems with childcare (14 per cent and 20 per cent respectively, compared with an average of 11 per cent).

There are no statistically significant subgroup differences between parents with a child of preschool or of school age.

2.4 Types of childcare difficulties

Amongst the 17 per cent of all parents who have experienced difficulties with their childcare that had prevented them from either doing paid work, or from doing paid work in the hours they would like to, the most common reasons were: childcare was not available at the times that they needed it (35 per cent or 6 per cent of all parents); and childcare was too expensive, relative to what they would have earned (31 per cent or 5 per cent of all parents).

The figure below includes all issues mentioned by three per cent of parents or more who have experienced difficulties with childcare that have prevented them from doing paid work, or from working the hours they would like to.

Difficulties experienced with childcare arrangements

Q. What difficulties did you experience?



Base: All respondents who have experienced difficulties with childcare that have prevented them from doing paid work, or from doing work during the hours they would like to (173); fieldwork dates: 4-23 September 2012

There are no statistically significant subgroup differences between parents with a child of preschool or school age in relation to type of difficulties experienced with childcare arrangements.

2.5 Solutions to childcare difficulties

The 17 per cent of parents who said that they have experienced difficulties with childcare arrangements were also asked a follow-up question about what would help them solve this problem. The most commonly suggested solutions were the provision of cheaper or more affordable childcare, and extending childcare hours so that it is available earlier, later or at weekends (24 per cent or 4 per cent of all parents and 19 per cent or 3 per cent of all parents).

Solutions to difficulties with childcare

Q. What would have solved that difficulty for you?



Base: All respondents who have experienced difficulties with childcare and who indicated the type of difficulties that they experienced (172); fieldwork dates: 4-23 September 2012

3. Wrap-around and school holiday childcare

3.1 Demand for wrap-around and school holiday childcare

Parents of children aged five or over, where at least one of the parents in the household was working, or searching for work, were asked what form of wrap-around care they most needed to enable them to do paid work and manage their parental responsibilities. The majority (62 per cent) required some form of wrap-around care, most commonly after school only, followed by a combination of before and after school and holiday care, and holiday care only (15 per cent, 13 per cent and 10 per cent respectively). Other combinations were less popular.

Overall, 43 per cent of respondents selected options which included after school care, followed by 29 per cent who selected options with school holiday care and 28 per cent who selected options including breakfast club care.

Figure 9



Base: All with a child aged 5 or over and who are or have a partner who is working or seeking work (752); fieldwork dates: 4-23 September 2012

3.2 Ability to find wrap-around care

The majority of those who had a need for wrap-around care were able to find it (67 per cent). However, almost three in ten who had a need for wrap-around care could not find it (28 per cent).

Figure 10



Base: All those who named a form of childcare they most need in order to do paid work and manage their parental responsibilities (450); fieldwork dates: 4-23 September 2012

Amongst parents who did not use any form of childcare, 43 per cent said they were not able to find any suitable wrap-around care, compared to 28 per cent overall. The lack of availability of wraparound childcare may be related to this group of parents not using any childcare.

Parents with children of primary school age were more likely than parents with children of secondary school age (up to the age of 14) to say they were able to get the wrap-around care they needed (71 per cent compared to 62 per cent respectively).

3.4 Type of wrap-around childcare parents need

After school clubs were the most sought-after form of available and affordable wrap-around care for parents who were <u>unable</u> to find the care they needed at the time of the survey. This was followed by holiday clubs/schemes, breakfast clubs and sports clubs, as illustrated in Figure 11.

Figure 11



Base: All respondents who are not able to get the help they need (142); fieldwork dates: 4-23 September 2012

Owing to the small base size it is not possible to do extensive subgroup analysis for this question. However, there is a significant difference between those who reported difficulties with their current childcare arrangements, and those who did not. Of those who reported difficulties, 51 per cent would use a holiday club / scheme if it was available and affordable, compared with 32 per cent of those who did not report difficulties.

Parents with children of primary school age were more likely than average to say that they needed a childminder if one was available and affordable in their area (17 per cent compared to 13 per cent overall).

4. Parents' views on childcare regulation

4.1 Views on the regulation of the number of children allowed per carer (ratios)

Parents overwhelmingly (87 per cent) support the regulation of child to adult ratios in formal childcare, as shown in figure 12.

Figure 12



Base: All (1000); fieldwork dates: 4-23 September 2012

4.2 Views on rules for the number of children per carer (ratios) according to age

Having informed parents of the current maximum numbers by age group (see figure 13 below), there was broad agreement with the current ratios for children under two years old and children aged two (72 per cent and 80 per cent of parents said the ratios were 'about right') and, on balance, there was agreement with regards to the rules for childminders (59 per cent agreed that the ratio was about right).

However, the legal maximum for children aged three to five with a teacher present was considered too high (that is parents thought there were too many children in the care of one adult) by a

majority (59 per cent vs. 37 per cent who thought it was about right). Parents were almost evenly split as to whether the number of three- to five-year-old children per adult without a teacher present was about right or too high (46 per cent versus 51 per cent).

Figure 13



Base: All (1000); fieldwork dates: 4-23 September 2012

There are no statistically significant subgroup differences between parents with a child of preschool or school age in relation to views on Government regulation of child to adult ratios.

4.3 Factors affecting the children to carer ratio

As shown in figure 14, the overwhelming majority of parents said that special needs requirements and the age of the children should be taken into account when setting adult to children ratios in formal childcare. There was also strong support for considering the experience of the carer and the qualification level of the carer when setting maximum levels. Over two-thirds of parents (68 per cent) said that the provider's Ofsted rating should affect how many children a formal carer is allowed to look after at any one time.



Base: All (1000); fieldwork dates: 4-23 September 2012

5. Childcare costs

5.1 Cost of childcare

The final section of the report provides details on how much, on average, parents pay for childcare and what proportion of their household income is spent on childcare. Where parents were unsure about the cost of childcare or the proportion of their income spent on childcare, they were prompted to select from a list of banded figures.

It should be noted that these figures are estimates only as they are based on parents' 'top of the mind' understanding of their household finances, rather than a detailed examination of more precise information they might hold. In addition, the costs cover childcare for <u>all</u> children in the household (and not per child). Therefore it should be taken into account that any differences in costs do not take into account the number of children in the household who are in childcare.

We also asked parents who received the childcare element of Working Tax Credit whether they had counted it in the estimate of their expenditure on childcare they had just given. The majority (68 per cent) said that their estimated childcare expenditure included the amount received from the childcare element of working tax credit, over two in ten (22 per cent) said it excluded it and the remaining one in ten (10 per cent) said they did not know.

The distribution of the monthly childcare costs for the parents who used formal childcare for all children in the household is illustrated in Figure 15. Around one in six parents said that they did not pay anything for formal childcare (18 per cent). The majority of this group said that the reason for this was that the cost was covered by the 15 hours of Government funded early education (71 per cent).

Figure 15

Cost of formal childcare for all children in household – per month



Base: All who regularly received formal childcare in the past six months (416); fieldwork dates: 4-23 September 2012

As would be expected, parents of children aged under three were more likely to be spending more on childcare, compared to parents of children aged three and four who were likely to be using the 15 hours Government funded early education, or be in full time education and not needing many hours of childcare. Over a fifth of parents of children aged under three (22 per cent) said they paid £641 or more per month, compared to 16 per cent of parents of three- to four-year-olds and 13 per cent of parents of five- to fourteen-year-olds. Twenty-six per cent of parents with children aged five to fourteen said they were paying up to £80 per month for childcare, compared to only 17 per cent among those with younger children aged under three.

The subgroup differences are summarised in table 2. A number of parents who took part in the survey have children of different ages and, in these cases, the parents have been counted in all relevant categories, depending on the age range of their children.

Table 2

Differences in cost of childcare by age of children						
		Age of child				
	Total	0-2	3-4	5-10	11-14	5-14
Base: All who have received						
formal childcare in the past						
six months and the cost of						
childcare can be calculated	416	157	257	252	79	283
I don't pay anything	18%	15%	28%	13%	12%	13%
Up to £20 a week or £80 a						
month	22%	17%	21%	25%	38%	26%
£21 - £60 a week or £81 -						
£240 a month	19%	19%	14%	22%	24%	23%
£61 - £160 a week or £241 -						
£640 a month	22%	23%	17%	20%	17%	20%
£161 + a week or £641 + a						
month	14%	22%	16%	14%	4%	13%
Don't know	4%	4%	3%	6%	5%	5%

The cost of childcare did not appear to vary significantly by region (which may be due to the small base sizes for this question), with the exception of the Midlands/East of England where parents were more likely than average to be paying less for childcare: three in ten said they paid up to £80 per month for childcare compared to two in ten overall.

Parents who were using day nurseries and childminders were more likely to be spending more on childcare (£641 or above) than average (25 per cent among parents who were using day nurseries and again 25 per cent among parents who were using childminders compared to 14 per cent overall). This is likely to be related to parents using more hours in the day at day nurseries compared to nursery schools/classes/pre-school, which are typically open for half days or during school time hours only.

Parents who received the childcare element of Working Tax Credit were more likely than average to be paying between £21 and £60 a week, or £81 and £240 a month, for childcare (table 3 shows significant differences in grey).

Table 3

Differences in cost of childcare	e by receip	ot of childcare eleme	nt of working tax	
credit				
		Receive		
		childcare element	Do not receive	
		of working tax	childcare element of	
	Total	credit	working tax credit	
Base: All who use formal				
childcare	416	81	276	
I don't pay anything	18%	9%	17%	
Up to £20 a week or £80 a				
month	22%	17%	23%	
£21 - £60 a week or £81 -				
£240 a month	19%	29%	17%	
£61 - £160 a week or £241 -				
£640 a month	22%	30%	22%	
£161 + a week or £641 + a				
month	14%	15%	17%	
Don't know	4%	1%	4%	

5.2 Proportion of income spent on childcare

The proportion of household income spent on childcare was calculated using data on household income and childcare costs. Overall, six in ten parents (61 per cent) spent up to 10 per cent of their total household monthly income on childcare, including four in ten (40 per cent) who spent up to 5 per cent on childcare and two in ten (21 per cent) who spent between 6 and 10 per cent.

Proportion of total household income spent on formal childcare for all children in the household



Base: All who pay for formal childcare and have provided relevant information (336); fieldwork dates: 4-23 September 2012

Thirty per cent or more of income spent on childcare can be used as a threshold to indicate who is spending more proportionately. Overall 12 per cent of parents fell into this category. This proportion varied by parents' circumstances and geography.

Those who were more likely to spend 30 per cent or more on their income on childcare included:

- Ione working parents (34 per cent compared to 12 per cent overall);
- parents on household annual income of less than £26,000 (26 per cent);
- parents using day nurseries (21 per cent); and
- parents of children aged under three (19 per cent).

The figures vary by region with parents living in London being twice as likely than average to be spending 30 per cent or over of their income on childcare (25 per cent compared to 12 per cent overall). By contrast, parents living in Northern England were most likely to be spending the least on childcare: 71 per cent of this group said they spent up to 10 per cent on childcare compared to 60 per cent overall.

In addition to levels of household income, these figures are likely to reflect variation in: the number of children in the household; the number of days and hours of childcare bought by parents; and variation in fees charged by different types of providers. This is supported by the findings from the

2011 Childcare and Early Years Survey of Parents¹⁴⁸. Whilst there were some differences in the costs paid by different types of families, and families living in different areas of the country, most differences appear to be accounted for by the ages of the children and different patterns of childcare use. Families paid the most for settings that offered childcare for a full day¹⁴⁹.

Parents who receive the childcare element of Working Tax Credit are more likely than average to be paying 30 per cent or more of their income on childcare. The base size for this finding is too small to disaggregate and analyse in any more detail. Significant differences are shown in table 4.

Table 4

Differences in proportion of income spent on childcare by receipt of childcare element of working tax credit

	Total	Receive childcare element of working tax credit	Do not receive childcare element of working tax credit
Base: All who use formal childcare and the cost can be calculated	298	79	181
Up to 10% of income spent on childcare	60%	40%	69%
11-29% of income spent on childcare	28%	29%	27%
30% or more of income spent on childcare	12%	31%	4%

¹⁴⁸ Childcare and Early Years Survey of Parents 2011, SFR08/2013, <u>https://www.gov.uk/government/publications/childcare-and-early-years-survey-of-parents-2011</u>

6. Conclusions

This research was commissioned to help understand: demand for childcare during particular times; difficulties with childcare arrangements preventing parents from working; demand for wrap-around and school holiday childcare; parents' views on regulation of childcare providers; and the proportion of household income spent on childcare for different groups of parents.

The research highlights that there is most demand for after school childcare and school holiday childcare. Among the 62 per cent of parents who required some form of wraparound care, 43 per cent required some form of after school care, followed by 29 per cent who selected some form of school holiday care and 28 per cent who selected breakfast club care. After school clubs (49 per cent) were the most sought-after form of available and affordable wrap-around care for parents who were <u>unable</u> to find the care they needed at the time of the survey, followed by holiday clubs/schemes (41 per cent).

The most frequently used childcare slot by parents was in the afternoon between 3pm and 5pm (56 per cent) with this also being the slot that parents said they most needed childcare to enable them to do paid work but have found it difficult or impossible to find (11 per cent). This is in line with demand for affordable after school childcare, which was also the most sought-after type of childcare for parents who were unable to find the care they needed at the time they were surveyed.

Almost a third of parents (32 per cent) say they already use childcare during school holidays. Among the 28 per cent of parents who were not able to access the wrap-around provision they needed, two in five (41 per cent) say that they would like to see more affordable holiday clubs/schemes in their area.

Nearly nine in ten parents (87 per cent) supported the regulation of adult to child ratios in formal childcare. There was broad agreement with the current ratios for children under two and children aged two (72 per cent and 80 per cent said it was 'about right'). However, parents were split on the ratio for three- to five-year-olds, without a teacher present (46 per cent said it was 'about right' vs. 51 per cent who thought it was too many children) and on balance they said the number of three- to five-year-olds with a teacher present was too high (59 per cent vs. 37 per cent who though it was 'about right).

Whether any of the children have special needs, the age of the children, the carer's experience, the qualification level of the carer, and to a lesser extent, the provider's Ofsted rating, were all factors parents said should affect how many children a formal carer is allowed to look after (95 per cent, 93 per cent, 89 per cent, 75 per cent and 68 per cent said 'yes' respectively).

Six in ten parents (61 per cent) spent up to 10 per cent of their total household income on childcare. The proportion spent on childcare as part of the income was highest among: lone working parents; those living in London; parents using day nurseries; and parents of

children aged under three. This reflected variations in: household income; the number of days and hours of childcare bought by parents; and fees charged by different types of providers. This is in line with findings from the 2011 Childcare and Early Years Survey of Parents, which shows that spend is higher for families using settings where full day care is provided and that number of children in a household is a key factor behind costs.

Appendix A. The questionnaire

Parents' views and experiences of childcare

Final questionnaire

07/09/12

12-058071-01

INTERNAL USE ONLY

Start

Can I speak to [Resp_name] please?

{If unavailable}

When would be a good time to call [Resp_name]?

RECORD TIME AND DAY AND ENTER APPOINTMENT

Hello, my name is [*interviewer*] and I'm calling from Ipsos MORI on behalf of the Department for Education.

You took part in a survey we carried out in [*Month of f2f interview*] [Year of f2f interview] about childcare and agreed to be contacted again about further research on this subject. We are now carrying out a short follow-up telephone survey, which will take approximately fifteen minutes, on behalf of the Department for Education, looking at various aspects of childcare.

The findings of the research will help the Department to identify ways to improve childcare.

[INTERVIEWER – IF APPROPRIATE OFFER TO SEND LETTER EXPLAINING RESEARCH TO RESPONDENT. CHECK NAME, ADDRESS, POSTCODE AND RECORD ANY CHANGES. MAKE APPOINTMENT TO CALL BACK IN A FEW DAYS].

{Ask all}

TkPtYN

Are you happy to take part in the research?

1. Yes

- 2. No
- 3. Not sure

{If TkPtYN = code 1 (Yes), continue to Opening questions, Question S1}

{If TkPtYN= code 2 (No), thank for time and close interview, code as refusal}

{If TkPtYN = code 3 (Not Sure) go to Later}

{Ask if TkPtYN=3 (Not Sure)

Later

Would you like to think about taking part and I'll get someone to call in a few days?

TRY TO AVOID HARD REFUSAL

- 1. Yes, will think about it
- 2. No, will not take part

{If Later = 1 (YES), thank and close, make appointment for call back in a few days}

{If Later = 1 (NO), thank for their time, close call and code as refusal}

[INTERVIEWER – IF APPROPRIATE OFFER TO SEND LETTER EXPLAINING RESEARCH TO RESPONDENT. CHECK NAME, ADDRESS, POSTCODE AND RECORD ANY CHANGES. MAKE APPOINTMENT TO CALL BACK IN A FEW DAYS].

NOTE FOR SCRIPTING: DO NOT READ OUT SECTION NAMES

Section 1: Opening questions

ASK ALL

S1. Has your child or have your children living with you regularly received any childcare, that could be care provided by a nursery or childminder, or by family members, friends or babysitters in the past six months, that is since [DATE]?

- 1. Yes [GO TO S2]
- 2. No [GO TO S5]

ASK IF S1=1 (YES). OTHERS GO TO SECTION A.

S2. What kind of childcare was that?

SINGLE CODE ONLY

1. Only formal childcare - childcare for which you or the Government pays e.g. childminder or nursery

2. Only Informal childcare - family members, friends, babysitters

3. Both informal and formal childcare

ASK IF S2=1 OR 3. OTHERS GO TO S5.

S3. What kind of formal childcare was that?

For each, code:

Yes

No

READ OUT, RANDOMISE ORDER OF 1-11.

- 1.Nursery school
- 2. Nursery class attached to primary or infants' school
- 3. Reception class at a primary or infants' school

4. Special day school or nursery or unit for children with special educational needs

- 5. Day nursery
- 6. Playgroup or pre-school
- 7. Childminder
- 8. Nanny or au pair
- Breakfast club
 After school club/ activities
 Holiday club/scheme
- 12. Other nursery education provider (PLEASE DESCRIBE)
- 13. Other childcare provider (PLEASE DESCRIBE)

ASK IF S2=2. OTHERS GO TO S5.

S4. Can I ask why you didn't use any formal childcare?

What else?

- 1. The childcare was full/ could not get a place
- 2. The childcare was too expensive/ can't afford it/ other cost factors
- 3. The childcare was not of suitable quality
- 4. I couldn't find a childcare provider I was happy with
- 5. Childcare not in suitable location
- 6. Child(ren) didn't want to go
- 7. Child(ren) tried going along but didn't like it
- 8. I don't need to be away from my child(ren)
- 9. I'd rather look after my child(ren) at home
- 10. A family member or friend looks after child(ren)
- 11. I'd have transport difficulties
- 12. The times available are not suitable for me
- 13.Other

Don't know

Refused

ASK IF S1=2. OTHERS GO TO SECTION A.

S5. Can I ask why you didn't use any childcare?

DO NOT READ OUT.

What else? The childcare was full/ could not get a place

- 1. The childcare was too expensive/ can't afford it/ other cost factors
- 2. The childcare was not of suitable quality
- 3. I couldn't find a childcare provider I was happy with
- 4. Childcare not in suitable location
- 5. Child(ren) didn't want to go
- 6. Child(ren) tried going along but didn't like it
- 7. I don't need to be away from my child(ren)
- 8. I'd rather look after my child(ren) at home
- 9. I'd have transport difficulties
- 10. The times available are not suitable for me
- 11.Other

Don't know

Refused

SECTION A: Household questions

ASK ALL

I will begin with some questions about your household.

ChldChk

From our records of the last interview, you said that you had [number] children living with you between the ages of 0 and 14?

INTERVIEWER NOTE: This includes children under the age of 15.

AgeChk

Is that information correct?

1. Yes

2. No

{If AgeChk = NO}

AMEND INFORMATION:

Number of children

Months and Years of birth

ASK ALL

Work

When we last spoke to you, you told us you were [WORK STATUS FROM SAMPLE]. Is this still the case?

1. Yes

2. No

ASK IF CODE 2 (NO) AT WORK. OTHERS GO TO WORKP

WorkNew.

What were you doing in the week beginning Monday [date] and ending Sunday [date]. Which of these things were you doing that week- were you...?

[Programming – the "Sunday" will be the last Sunday before the interview; if the interview takes place on a Sunday, it will be the previous Sunday]

READ OUT AND CODE ALL THAT APPLY. PROBE

IF THE RESPONDENT SAYS HE/SHE WAS ON ANNUAL LEAVE OR MATERNITY/PATERNITY LEAVE IN THAT WEEK, PLEASE CODE USUAL WORKING STATUS.

INTERVIEWER: PROBE AS IF HAS FULL-TIME AND PART-TIME JOBS, PLEASE CODE ONLY FULL-TIME. IF RESPONDENT HAS MORE THAN ONE PART TIME JOB MAKE SURE AN APPROPRIATE CODE IS SELECTED FOR THE TOTAL NUMBER OF WORKING HOURS.

- 1. Working full-time (30 or more hours per week), including self-employed
- 2. Working part-time (16-29 hours per week), including self-employed
- 3. Working part-time (1-15 hours per week), including self-employed
- 4. On a Government training scheme (e.g. New Deal)
- 5. Unemployed and looking for work
- 6. Unemployed and not looking for work
- 7. Looking after the home or family
- 8. Retired
- 9. Student
- 10. Long term sick or disabled
- 11. Something else? (SPECIFY)

(NoDK, NoRef)

ASK IF RESPONDENT HAS PARTNER IN THE HOUSEHOLD FROM SAMPLE. WorkP

When we last spoke to you, you told us that your partner was [WORK STATUS]. Is this still the case?

- 1. Yes
- 2. No
- 3. Does not have a partner any longer.

ASK IF RESPONDENT DOES NOT HAVE A PARTNER IN THE HOUSEHOLD FROM SAMPLE.

ChckNewP

Do you currently have a partner or a spouse living with you?

1. Yes

2. No

ASK IF RESPONDENT HAS A NEW PARTNER OR THERE HAS BEEN A CHANGE IN WORKING STATUS OF EXISTING PARTNER (ChckNewP=1 or Workp=2)

WorkPNew

I would like to ask you about what your partner was doing in the week beginning Monday *[date]* and ending Sunday *[date]*. Which of these things was your partner doing that week? Was your partner...

READ OUT AND CODE ALL THAT APPLY. PROBE:

IF THE RESPONDENT SAYS THAT HIS/HER PARTNER WAS ON ANNUAL LEAVE OR MATERNITY/PATERNITY LEAVE IN THAT WEEK, PLEASE CODE USUAL WORKING STATUS.

- 1. Working full-time (30 or more hours per week), including self-employed
- 2. Working part-time (16-29 hours per week), including self-employed
- 3. Working part-time (1-15 hours per week), including self-employed
- 4. On a Government training scheme (e.g. New Deal)
- 5. Unemployed and looking for work
- 6. Unemployed and not looking for work
- 7. Looking after the home or family
- 8. Retired
- 9. Student
- 10. Long term sick or disabled
- 11. Something else? (SPECIFY)

(NoDK, NoRef)

Section B: Childcare arrangements and hours

ASK IF S1=1. OTHERS GO TO DIFFCH.

UseFChd

Considering all your children living with you, when do you typically use childcare?

READ OUT EACH

Between 7am and 8am

Between 8am and 9am

Between 9am and noon

Between noon and 2pm/lunchtime

Between 2pm and 3pm

Between 3pm and 5pm

Between 5pm and 6pm

Between 6pm and 7pmBetween 7pm and 9pm

Between 9pm and midnight

Between midnight and 7am

At the weekends

At short notice/ad hoc/in an emergency

During the school holidays

Other

Never

ASK IF S1=1 AND RESPONDENT OR PARTNER WORKING OR SEEKING WORK FROM THE SAMPLE AND NOT CORRECTED TO NOT WORKING OR SEEKING WORK AT WORK OR WORKP. SO IF WORK=1 OR WORKNEW=1-3, 5 OR WORKP=1 OR WORKPNEW=1-3, 5. OTHERS GO TO DIFFCH.

TimesUse

Are there any particular times of the day when you need to use childcare to enable you [INCLUDE TEXT WHERE THERE IS A PARTNER IN THE SAMPLE AND WORKP<>3 or your partner] to do paid work but have found it difficult or impossible to do so?

READ OUT

MULTICODE

Between 7am and 8am

Between 8am and 9am

Between 9am and noon

Between noon and 2pm/lunchtime

Between 2pm and 3pm

Between 3pm and 5pm

Between 5pm and 6pm

Between 6pm and 7pm

Between 7pm and 9pm

Between 9pm and midnight

Between midnight and 7am

At weekends

At short notice/ad hoc/in emergency

During the school holidays Other (specify)

None

ASK ALL

DiffCh

Have you experienced any difficulties with your childcare arrangements that have prevented you from doing paid work, or from doing paid work during the hours you would like to?

INTERVIEWER: PLEASE CLARIFY 'YES' ANSWERS.

- 1. Yes, prevented from doing paid work at all
- 2. Yes, prevented from doing paid work during the hours I would like to
- 3. No

ASK IF DIFFCH=1 OR 2. OTHERS GO TO Section C

TypeDiffCh

What difficulties did you experience?

MULTICODE

What else?

- 1. No childcare in a convenient location
- 2. Not found good enough quality childcare
- 3. I didn't know where to start to look for childcare
- 4. I couldn't find childcare when my child was ill
- 5. I couldn't find substitute childcare when the person taking care of my child was ill
- 6. I couldn't afford the deposit
- 7. Cost of childcare is too high compared with what I would earn
- 8. Childcare not available at the times I need it
- 9. My child has SEN or a disability and I couldn't find a suitable childcare provider
- 10. The provider/setting had no extra sessions available
- 11. Childcare provider sessions are too short
- 12, Not available during school holidays but only during term time
- 13. Provider not offering the free hours (free entitlement to early education)
- 14. My child(ren) couldn't get used to the provider(s)
- 15. Nothing you considered suitable/ what you wanted
- 16. Other

ASK IF CODE1-16 AT TYPEDIFFCH. OTHERS GO TO SECTION C.

SolveDiff

What would have solved that difficulty for you?

Please be as specific as possible:

What else?

OPEN ANSWER

Don't know

Section C: Wrap-around and holiday care for school aged children

ASK PARENTS OF CHILDREN AGED 5 OR OVER FROM THE SAMPLE AND RESPONDENT OR PARTNER WORK OR ARE SEEKING WORK (SAMPLE AND WORK=1, OR WORKNEW=1-3, 5, OR SAMPLE AND WORKP=1, OR WORKPNEW=1-3, 5). OTHERS GO TO SECTION D.

From our records you have at least one child aged 5 or over living with you.

Is that information correct?

1. Yes 2. No	
Continue	ASK CHLDAR
No child aged 5 or over	GO TO SECTION D

Hlp

Which of the following forms of childcare [INCLUDE TEXT WHERE RESPONDENT OR PARTNER ARE WORKING FROM SAMPLE AND WORK=1 OR WORKNEW=1-3 OR WORKP=1, OR WORKPNEW=1-3 do you] [INCLUDE TEXT WHERE RESPONDENT AND PARTNER ARE NOT WORKING FROM SAMPLE AND WORK=1 AND WORKP=1 OR EITHER WORKNEW=5 OR WORKPNEW=5 would you] [INCLUDE TEXT WHERE THERE IS A PARTNER IN THE SAMPLE OR CHCKNEWP=1 AND WORKP<>3 or your partner] **most** need to enable you to do paid work and manage your parental responsibilities?

READ OUT

SINGLE CODE ONLY

- 1. Breakfast club / before-school care
- 2. After school club / activities / After school care
- 3. Holiday club / scheme / care
- 4. Before and after school care
- 5. Before school and holiday care
- 6. After school and holiday care
- 7. Before, after and holiday care
- 8. Something else (specify)

None of the above

ASK IF HIp=1-7. OTHERS GO TO SECTION D.

GotHlp

You said you most need [answer to Hlp] so you can do paid work and manage your parental responsibilities. Are you currently able to get the [answer to Hlp] you need?

- 1. Yes
- 2. No
- 3. Don't know

ASK IF GOTHLP=2 or 3. OTHERS GO TO SECTION D.

ImprCh

What type, if any, of [answer to Hlp] would you use if it were available and affordable in your area, for example [IF HLP=1 a breakfast club or childminder, IF HLP=2 an after school club/sports club or a childminder, IF HLP=3 a holiday club/scheme or childminder, IF HLP=4 a breakfast, after school or sports club or a childminder, , IF HLP=5 a breakfast holiday club or scheme or a childminder , IF HLP=6 an after school or sports club, holiday club or scheme, or a childminder IF HLP=7 OR 8 a breakfast, after school, sports or holiday club or scheme or childminder]

DO NOT READ OUT

MULTICODE OK

- 1. Breakfast club
- 2. After school club
- 3. Holiday club/scheme
- 4. Summer school
- 5. Summer camp
- 6. Something at my child's school
- 7. Childminder
- 8. Sports club
- 9. Cadets
- 10. Cubs/Scots/Brownies/Guides
- 11. Music lesson
- 12. Art club
- 13. The same childcare for all my children (e.g. with a childminder)
- 14. Other (specify)

I wouldn't use anything else

Don't know

Section D: Parental choices about childcare & regulation

ASK ALL

Agrm

Now moving on to something else.

As you may be aware, the Government sets rules for formal childcare providers such as childminders and nurseries on how many children each adult can look after at any one time. To what extent do you agree or disagree that the Government should do this?

Strongly agree Tend to agree Neither agree nor disagree Tend to disagree Strongly disagree Don't know

MaxNo

The Government would like to know what parents think about these rules. I'm going to read out the current maximum number of children per adult that normally applies for each age group. For each age group, please can you let me know whether you think that it is about the right number, too few children or too many children.

In situations involving groups of children, e.g. nurseries and playgroups the current rules are:

RANDOMISE STATEMENT ORDER

A For children under 2 years old – normally one adult per 3 children

B For children aged 2 years old- normally one adult per 4 children

C For children aged 3-5 years old where at least one teacher is present – normally one adult per 13 children

D For children aged 3-5 years old where there isn't a teacher present – normally one adult per 8 children

E Childminders may care for a maximum of six children under eight at any one time. Normally this involves three children under the age of five, where only one can be a baby.

NOTE FOR INTERVIEWER: THE INCLUSION OF 'NORMALLY' IS INTENTIONAL BECAUSE WHILE THIS IS A RULE, CHILDCARE PROVIDERS HAVE THE RIGHT TO APPLY FOR EXCEPTIONS, SUCH AS LOOKING AFTER TWINS UNDER THE AGE OF 1. Is this...

- 1. About right
- 2. Too few children
- 3. Too many children
- 4. [JUST FOR STATEMENT E] Shouldn't matter what age the children are Don't know

Factors

In your opinion, what factors, if any, should affect how many children a formal carer is allowed to look after at any one time?

IF NECESSARY: By formal childcare we mean childcare for which you or the Government pays e.g. childminder or nursery.

MULTICODE, RANDOMINSE ORDER 1-5.

READ OUT

- 1. The age of children
- 2. The experience of the carer
- 3. The qualification level of the carer (e.g. a teacher rather than somebody with no qualifications)
- 4. The provider's Ofsted rating
- 5. Whether any of the children have special needs/care requirements

Other

None of the above

Don't know

Section E: Household income and childcare spend

ASK ALL

HHInc FIRST SENTENCE ONLY FOR FORMAL CHILDCARE USERS (S2=1 OR 3) We want to know if income affects people's use of childcare. ASK ALL Is your total household income, that is income from all sources including benefits, before tax and other deductions above or below £26,000 per year?

[PROGRAMMING – for CATI, this question is being asked in stages using a below/above (higher/lower) approach. The final code will be a single code 1 to 11 (or REF or DK)]

IF RESPONDENT SAYS "ABOVE £26,000"

And is your total household income from all sources, including benefit, before tax and other deductions, above or below £41,600?

If respondent says "above £41,600" THEN READ OUT REMAINING POSSIBLE INCOME BANDS.

So is that...

9. £41,600 to £45,799

10. £46,800 to £51,999

11. £52,000 to £81,999

12. £82,000 to £99,999

13. or £100,000 or more

If respondent says "below £41,600" THEN READ OUT REMAINING POSSIBLE INCOME BANDS.

So is that...

6. £26,000 to £31,199

7. £31,200 to £36,399

8. or £36,400 to £41,599

IF RESPONDENT SAYS "BELOW £26,000"

And is your total household income from all sources, including benefit, before tax and other deductions, above or below £15,600?

If respondent says "above £15,600" THEN READ OUT REMAINING POSSIBLE INCOME BANDS.

So is that...

4. £15,600 to £20,799

5. or £20,800 to £25,999

If respondent says "below £15,600" THEN READ OUT REMAINING POSSIBLE INCOME BANDS.

So is that...

1. Up to £5,199

2. £5,200 to £10,399

3. or £10,400 to £15,599

SINGLE CODE.

- 1. Up to £5,199
- 2. £5,200 to £10,399
- 3. £10,400 to £15,599
- 4. £15,600 to £20,799
- 5. £20,800 to £25,999
- 6. £26,000 to £31,199
- 7. £31,200 to £36,399
- 8. £36,400 to £41,599
- 9. £41,600 to £45,799
- 10. £46,800 to £51,999
- 11. £52,000 to £81,999
- 12. £82,000 to £99,999
- 13. or £100,000 or more
- 14. Refused
- 15. Don't know

ASK IF RESPONDENT OR PARTNER WORKING FROM THE SAMPLE AND NOT CORRECTED TO NOT WORKING AT WORK OR WORKP OR IF WORK=1 OR WORKNEW=1-3, OR WORKP=1, OR WORKPNEW=1-3. OTHERS GO TO QUALITY CONTROL Qs.

In the past 6 months, that is since [DATE], have you [INCLUDE TEXT WHERE THERE IS A PARTNER IN THE SAMPLE AND WORKP, CODE1-3 or your partner] used any of the following for your child or children living with you:

UseCV

Employer Supported Childcare or 'Childcare vouchers'

IF NECESSARY: A voucher from your employer to meet some of your childcare costs – either on top of your salary or instead of part of it. You do not pay tax on some or all of the value of the voucher.

- 1. Yes
- 2. No
- 3. Don't know

ASK ALL USECV=1, OTHERS GO TO USETC.

Could you tell me how much money from [SUBSTITUTE BASED ON RESPONDENT/PARTNER/BOTH WORK] your salary/your partner's salary/both you and your partner's salary you put into childcare vouchers?

£ RECORD AMOUNT (ONE PERSON CAN BE £0-£55 A WEEK OR £0-£243 A MONTH. FOR RESPONDENT AND PARTNER THAT WOULD BE £0-£110 A WEEK, OR £0-£486 A MONTH).

- 1. Per month
- 2. Per week
- 3. Don't know

UseTC

The childcare element of the working tax credit

- 1. Yes
- 2. No
- 3. Don't know

Use4SE. Childcare that your employer provides freely or subsidises. This does not include employer-supported childcare vouchers.

- 1. Yes
- 2. No
- 3. Don't know

ASK IF S2 = 1 OR 3. OTHERS GO TO QUALITY CHECK Qs.

CcSpnd

In an average month or week, how much do you think you spend on formal childcare for all your children living with you?

£ RECORD AMOUNT

- 1. Per month
- 2. Per week
- 3. Don't know
- 4. I don't pay anything

ASK IF CODE 3 AT CCSPND. OTHERS GO TO CCSPNDIN.

CcSpndBd

READ OUT

Would you say:

A Up to £10 a week or £40 a month

B £11-£20 a week or £44-£80 a month

C £21-£40 a week or £84-£160 a month

D £41-£60 a week or £164-£240 a month

E £61-£100 a week or £244-£400 a month

F £101-£160 a week or £404-£640 a month

G £161+ a week or £644+ a month

ASK IF CODE 4 AT CCSPND. OTHERS GO TO CCSPNDIN.

WhyNoSpnd

Can I just check, why do you say you do not pay anything for the childcare you use?

- 1. The cost is covered by the 15 free hours/free entitlement
- 2. Childcare cost covered by employer
- 3. Someone else pays for it
- 4. Other (specify)

Include DK and Not stated

CcSpndIn

Could I just check does that amount...

ASK IF USECV=1, OTHERS GO TO CCSPNDIN B)

a) ... exclude the amount covered by your childcare vouchers?

- 1. Excludes the amount covered by my childcare vouchers
- 2. Includes the amount covered by my childcare vouchers
- 3. Don't know

ASK IF USETC=1, OTHERS GO TO CCSPNDIN C)

b) (Does it) ...include the amount you receive from the childcare element of the working tax credit?

- 1. Includes the amount received from the childcare element of the working tax credit
- 2. Excludes the amount received from the childcare element of the working tax credit
- 3. Don't know

b1) ASK IF USETC=1, OTHERS GO TO QUALITY CONTROL CHECKS.

What proportion of your childcare costs do you think is covered by the childcare element of the working tax credit?

- 1 % (Code)
- 2 Don't know

b2) If 1- How sure are you about this:

- 1. Very sure
- 2. Fairly sure
- 3. Not very sure
- 4, Not at all sure

PropIncm

PROGRAMME TO CALCULATE PROPORTION OF TOTAL HOUSEHOLD INCOME SPENT ON CHILDCARE COST USING MID-POINT OF BANDS AS NECESSARY.

DP NOTE: WE WILL NEED TO TAKE NUMBER OF CHILDREN AND THEIR AGES INTO ACCOUNT ALONGSIDE ESTIMATES FOR THE VARIOUS BENEFITS/ENTITLEMENTS AT THE DP STAGE.

- 1. Under 10%
- 2. 11-20%
- 3. 21-30%
- 4. 31-40%
- 5. 41-50%

- 6. 51-60%
- 7. Over 60%
- 8. Don't know

Close

Thank you for taking the time to talk to us today.

Recontact

The Department for Education may be conducting follow up research about childcare among participants in this survey during the next 18-24 months. Would you be willing to take part in this follow up research? If you agree, Ipsos MORI will pass your name and contact details, including your address and telephone number(s), together with some of the answers you've given today, to the Department for Education so they can contact you about the research.

IF NECESSARY ADD: You do not have to say now whether you would actually take part in the research, just whether you would be happy to be contacted about it.

1. Yes 2. No

INTERVIEWER CHECKS CONTACT DETAILS

CLOSE

Appendix B. Survey response figures

The telephone survey was designed as a follow-up to the 2011 Childcare and Early Years Survey of Parents. The key eligibility criteria were that the respondent:

- is a parent of children aged under fifteen;
- agreed to be re-contacted for research; and
- provided a telephone number.

The table shows the response analysis for the total initial sample, broken down by whether the telephone numbers were working, whether contact was made and whether an interview was achieved.

Table 5

		Percentage of whole	
Response category	Number	sample	
Total sample initially identified	2,497	100%	
Successful contact but not eligible (deadwood)	4	*	
No contact – bad or suspect telephone number	286	11%	
			Percentage of contactable numbers
Contactable numbers	2,207	88%	100%
No contact but number	672	27%	30%

appears to be working

Percentage of numbers successfully contacted

Numbers successfully contacted	1,535	61%	70%	100%
Successful contact but no interview possible because of language problem	20	1%	1%	1%
Successful contact but no interview achieved in the fieldwork period	386	15%	17%	25%
Refusal	129	5%	6%	8%
Completed interview	1,000	40%	45%	65%

Appendix C. Statistical reliability

The final data are based on a sample of parents, rather than the entire population of parents, so the percentage results are subject to sampling tolerances. These vary with the size of the sample and the percentage figure concerned. For example, for a question where 50% of the 1,000 respondents give a particular answer, the chances are 95 in 100 that this result would not vary more or less than 3.1 percentage points from the true figure – the figure that would have been obtained had the entire population of parents responded to the survey. The tolerances that may apply in this report are given in the table below.

Table 6

Size of sample on which survey result is based	Approximate sampling tolerances applicable to percentages at or near these levels			
	10% or 90%	30% or 70%	50%	
	±	±	±	
1,000 (all respondents)	1.9	2.8	3.1	
635 (all who use childcare)	2.3	3.6	3.9	
185 (all with a child of pre- school age)	4.3	6.6	7.2	
		Sol	ırce: Ipsos MORI	

Tolerances are also involved in the comparison of results between different elements of the sample. A difference must be of at least a certain size to be statistically significant. The following table is a guide to the sampling tolerances applicable to comparisons between subgroups for this survey.

Table 7

Size of sample on which survey result is based	Differences required for significance at or near these percentage levels			
	10% or 90%	30% or 70%	50%	
	±	±	±	
1,000 versus 635 (comparing all to those who use childcare)	3.0	4.6	5.0	
1,000 versus 185 (comparing all to those with a child of pre- school age)	4.7	7.2	7.9	
635 versus 365 (comparing users of childcare to non-users of childcare)	3.9	5.9	6.4	
Source: Ipsos MORI				

It is important to note that, strictly speaking, the above confidence interval calculations relate only to samples that have been selected using random probability sampling methods. However, in practice it is reasonable to assume that these calculations provide a good indication of the confidence intervals related to this survey.



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Any enquiries regarding this publication should be sent to us at Michael Dale, Mowden Hall, Staindrop Road, Darlington Email: <u>michael.dale@education.gsi.gov.uk</u>

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Any enquiries regarding this publication should be sent to us at Steve Hamilton, Ground Level, Sanctuary Buildings, Great Smith Street, London, SW1P 3BT Email:<u>steve.hamilton@education.gsi.gov.uk</u>

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