

8. State support for early childhood education and care in England

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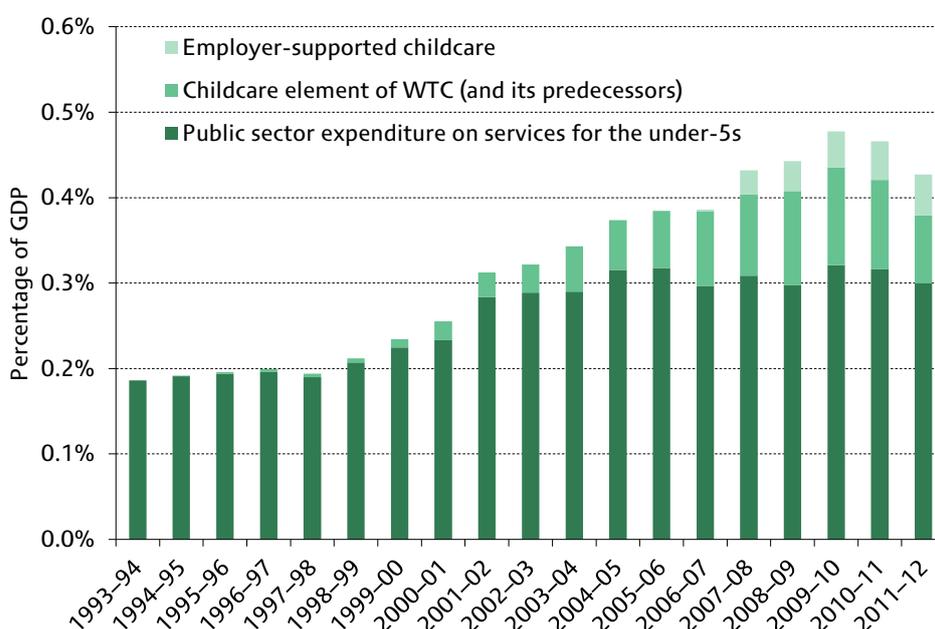
Summary

- Policymakers have devoted increasing attention to the challenge of enabling parents to access high-quality, cost-effective early childhood education and care (ECEC) over the last 15 years. The government currently subsidises childcare costs in England in three major ways: employer-provided vouchers that are tax advantaged; support for low-income working families via tax credits; and access to a free part-time nursery place for all 3- and 4-year-olds and disadvantaged 2-year-olds.
- The last Budget announced that tax relief for employer-provided vouchers would be phased out in favour of a more accessible scheme that is equivalent to making childcare spending free of basic-rate income tax. It also announced a number of changes to the way in which childcare support will be provided via universal credit. Because of the way these two systems will interact, there will effectively be three different regimes subsidising working families' spending on childcare from 2015, each with different rules. It would be simpler if these different schemes were combined into one.
- As well as the government's latest reforms, policies to help families meet the costs of childcare have received increasing attention from other parties, with proposals to extend free entitlement to nursery education (at least for some families) having been made by both Labour and the SNP. Yet despite increasing cross-party support, there is a remarkable lack of clarity over the objectives and evidence underlying the current public debate.
- It is not clear whether the main aims are to improve child development, increase parental labour supply or reduce socio-economic inequalities: a clear overarching strategy would help bring some much-needed focus to the debate in this area. And while there is good evidence that high-quality childcare benefits children's development, especially children from less advantaged backgrounds, robust evidence on the impact of ECEC on parents' employment is surprisingly limited. We also know very little about the impact of the policies to support childcare that have been introduced in England in recent years.
- Given all these uncertainties, the case for further extending universal provision of ECEC is in fact not as easy to make as would seem to be implied by the growing consensus in this area. There is a danger that the current policy bidding war – welcome as it will be to many parents looking for additional support – will result in ill-targeted and inefficient use of scarce resources. We have already stumbled a long way in the dark in this policy area. It is time to stop stumbling, shine a light on the policy landscape, and plot an effective route forward.

8.1 Introduction¹

Over the last 20 years, early childhood education and care (ECEC) – broadly speaking, childcare for the under-5s – has become a major policy priority in the UK. It is difficult to find consistent series on spending on childcare or ECEC over time, but Figure 8.1 shows that government spending on the main programmes we consider in this chapter grew substantially over this period, peaking in cash terms at around £7 billion in 2010–11, before falling back somewhat since then. Despite this substantial increase in government spending to support childcare, however, the public debate on this issue still cites expensive childcare as being a major barrier to work, contributing to the so-called ‘cost-of-living crisis’.

Figure 8.1. Spending on the main sources of childcare support in the UK over time



Note: These figures are lower than OECD figures, which also suggest that spending on childcare and pre-primary education (including 5-year-olds) has been rising, from 0.6% of national income in 1998 to 1.1% in 2009.

Source: *Public sector expenditure on services for the under-5s*: Public Expenditure Statistical Analyses from 2013, 2009, 2004 and 1999 (<https://www.gov.uk/government/publications/public-expenditure-statistical-analyses-2013> and http://webarchive.nationalarchives.gov.uk/20101128151454/http://www.hm-treasury.gov.uk/pespub_index.htm).

Childcare element of WTC (and its predecessors): http://www.hmrc.gov.uk/wftctables/wftc_tables.pdf, http://www.hmrc.gov.uk/wftctables/wftc_nov_02.pdf, <http://webarchive.nationalarchives.gov.uk/20121106034049/http://www.hmrc.gov.uk/stats/personal-tax-credits/final-award-main.htm> and <http://www.hmrc.gov.uk/statistics/fin-main-stats/cwct-awards.xls>. Note that this expenditure covers childcare costs for children of all ages rather than just for the under-5s. The figures for 1993–94 to 2002–03 also cover Great Britain only rather than the whole of the UK.

Employer-supported childcare: <http://www.hmrc.gov.uk/statistics/expenditures/table1-5.pdf>, http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/pbr09_taxreadyreckoner.pdf and http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/pbr08_taxreadyreckoner_287.pdf. Figures before 2007–08 were not immediately available. Again, this expenditure covers childcare costs for children of all ages.

¹ This chapter draws on work supported by ESRC grant ES/K003232/1, ‘The Effect of Free Childcare on Maternal Labour Supply and Child Development’.

The government has used recent Budget speeches to make major announcements about reforms to childcare policy. The Labour Party has promised to subsidise childcare still further were it to win the next general election. The SNP government has promised extensions to free provision in an independent Scotland. This remarkable cross-party support has been accompanied by relatively little critical assessment of the rationale and evidence underpinning the proposals that are being made.

In general, ECEC is thought to be valuable because it can potentially increase parental labour supply and improve children's outcomes, and government intervention in the market – on either the demand side or the supply side – can in principle be justified on the basis of various market failures or concerns about equity. This chapter summarises the current policy framework in England² and examines some of the proposed reforms in light of the underlying economic rationales for subsidising childcare, as well as the existing international evidence on the effectiveness of policies designed to do so.

Section 8.2 describes the current policy environment and critically assesses some of the government's recent reforms. Section 8.3 calculates the costs of extending free entitlement to nursery provision (as has been suggested by Labour, the SNP and the Liberal Democrats). Section 8.4 summarises the economic rationale for government intervention to support childcare and the evidence on the effectiveness of such policies. Section 8.5 discusses some of the big issues that have received relatively less attention in the current policy debate. Section 8.6 concludes.

8.2 Current policy environment

Background

The large increase in government spending to support the use of formal childcare in the UK has coincided with a big rise in the proportion of families with all adults in paid work and with pre-school children that use formal childcare (Figure 8.2).

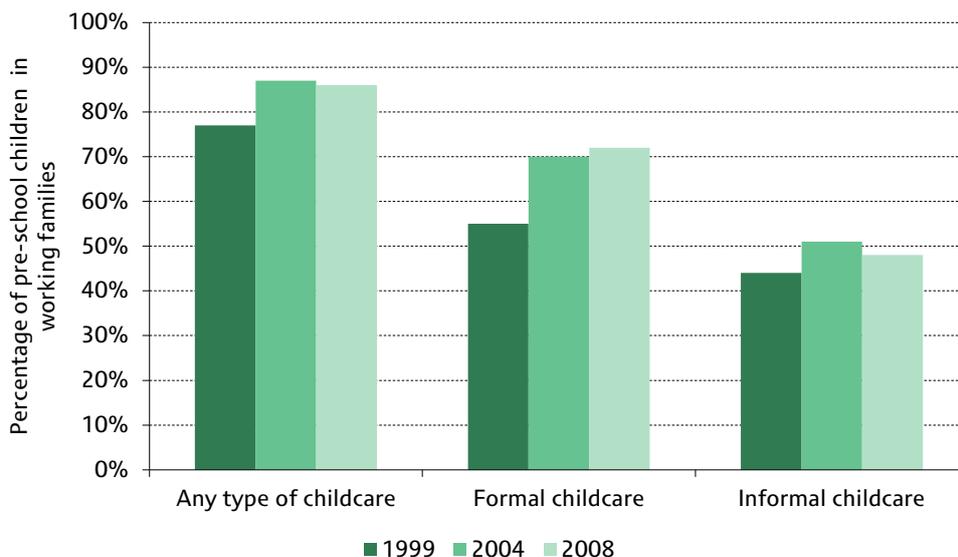
It is also clear that older pre-school children – those who, as we shall see below, are eligible for the largest childcare subsidies – are substantially more likely to use formal childcare than younger pre-school children: 86% of 3- to 4-year-olds use formal childcare compared with just 36% of 0- to 2-year-olds.³

The proportion of mothers in paid work has also increased substantially over this period, particularly amongst those with pre-school children (Figure 8.3).

² Childcare is a devolved matter, and this chapter mostly considers policies in England only (although some schemes are common across the UK). It also does not consider childcare policy for older children.

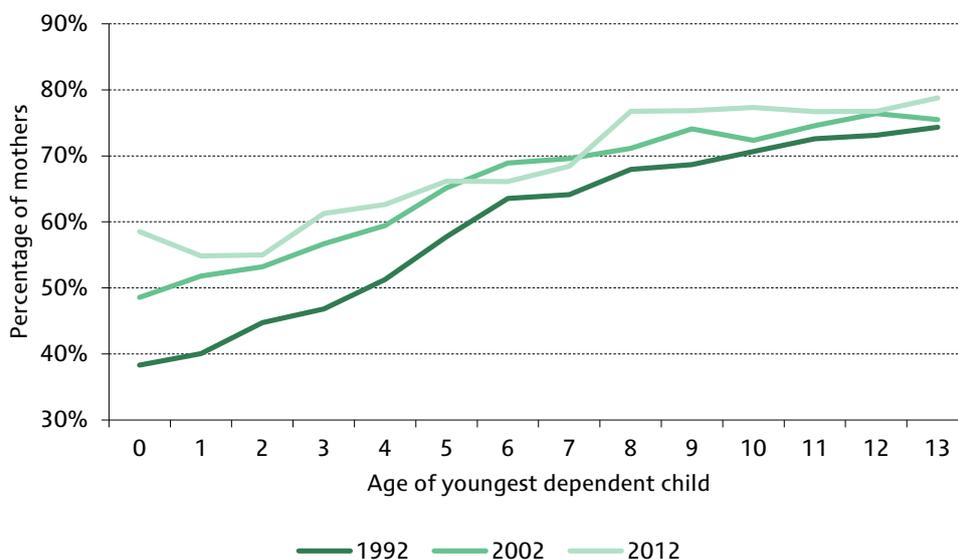
³ Table 2.4 of Childcare and Early Years Survey of Parents 2011, Department for Education.

Figure 8.2. Percentage of pre-school children in working families using different types of childcare over time



Source: Table 3.9 of C. Bryson, M. Brewer, S. Butt and L. Sibieta, *The Role of Informal Childcare: A Synthesis and Critical Review of the Evidence*, Report to the Nuffield Foundation, London, 2012, http://www.nuffieldfoundation.org/sites/default/files/files/The_role_of_informal_childcare_FULL_REPORT.pdf.

Figure 8.3. Maternal employment by age of youngest dependent child in household in 1992, 2002 and 2012



Source: Labour Force Survey, April–June 1992, 2002 and 2012, for mothers aged 16–64 living in the UK.

Government support for childcare in England

Central government support for ECEC in England has taken three main forms:⁴

- tax and National Insurance relief on childcare vouchers provided by employers for employees to spend on registered childcare for dependent children of any age (by definition, this is limited to working parents) at an annual cost of £800 million;⁵
- subsidies, delivered through in-work benefits or tax credits, paid to low- to middle-income working families with dependent children of any age, offsetting some of their spending on formal childcare at an annual cost (in 2011–12) of £1.2 billion;⁶
- entitlement to a free, part-time, place at an ECEC setting for pre-school children of various ages, regardless of parents' employment status or family income,⁷ at an annual cost of £2.2 billion.⁸

Annex 8.1 shows the evolution of policies in these three areas.

The current government has announced or enacted reforms in all three areas, and we discuss current policy and the changes announced by this government below.

Tax relief on childcare vouchers provided by employers

Since 2005, employers have been able to provide their employees with childcare vouchers with which to purchase childcare from a registered provider. These schemes usually operate via a salary sacrifice, whereby workers forgo a certain amount of gross earnings per week in return for a voucher of equivalent value on which they do not have to pay income tax or employee National Insurance contributions (NICs). Employers, who have to administer the scheme (or more commonly pay another company to do this for them), do not have to pay employer NICs on the value of these vouchers. Since 2005, employees have been able to receive a voucher of up to £55 per week (£28 for higher-rate taxpayers and £22 for additional-rate taxpayers since 2010). It is estimated that 17% of employers take part in the voucher scheme, benefiting around 500,000 workers, at an average annual cost of around £800 million, working out at an average tax subsidy of £30 per recipient per week.⁹

⁴ Central government intervenes in the market for childcare in other ways, such as by setting up the regulation and inspection regime and by influencing the way that childcare workers are trained. The government has also announced various changes to the way in which childcare is regulated and inspected (see Department for Education, *More Great Childcare*, January 2013, <https://www.gov.uk/government/publications/more-great-childcare-raising-quality-and-giving-parents-more-choice> and Department for Education, *More Affordable Childcare*, July 2013, <https://www.gov.uk/government/publications/more-affordable-childcare>), but we do not discuss these in detail, as it is not yet clear which of these reforms is going ahead. Our classification of ways in which ECEC is supported also disregards money spent by government improving the skills and qualifications of ECEC workers.

⁵ HMRC, 'Estimated costs of the principal tax expenditure and structural reliefs', 2013, <http://www.hmrc.gov.uk/statistics/expenditures/table1-5.pdf>.

⁶ Derived from figures in HMRC, *Child and Working Tax Credits Statistics Finalised Annual Awards 2011-12*, 2013, <http://www.hmrc.gov.uk/statistics/fin-main-stats/cwtc-awards.xls>.

⁷ Note that we use the word 'parent' to refer to the adult(s) in the family who are deemed to have responsibility for the dependent children.

⁸ National Audit Office, *Delivering the Free Entitlement to Education for Three- and Four-Year-Olds*, Report by the Comptroller and Auditor General, HC 1789, Session 2010–2012, 2012, <https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/>; Department for Education, 'Impact assessment of two year olds' entitlement to early education: options for extended eligibility in the first phase of the entitlement', 2012, http://www.legislation.gov.uk/ukia/2012/392/pdfs/ukia_20120392_en.pdf.

⁹ Laing and Buisson, *UK Day Nurseries Market Report*, London, Laing and Buisson, London, 2011; H. Waldegrave, *Quality Childcare: Improving Early Years Childcare*, Policy Exchange, London, 2013, <http://www.policyexchange.org.uk/images/publications/quality%20childcare.pdf>.

In Budget 2013, the government announced that it would introduce a new scheme providing tax-free childcare for working families from Autumn 2015, with the aim of reducing the cost of childcare for working parents.¹⁰ To be eligible, all parents need to be in paid work, neither parent can be paying income tax at the additional (45%) rate, and the family cannot also be receiving support for childcare costs through tax credits or universal credit (see below). To benefit, parents will have to open an online account with a voucher provider; the government will then 'top up' payments into this account at a rate of 20p for every 80p that families pay in, subject to an annual limit of a £1,200 contribution from the government for each child. Technically, the scheme does not actually provide tax-free childcare, as non-taxpayers who are in work can also benefit from these top-ups, but the size of the government top-up is such that it is equivalent to receiving an income tax break on spending on childcare of up to £6,000 a year (or £115 a week) for a basic-rate taxpayer.

From Autumn 2015, all children up to age 5 (i.e. those born on or after 1 September 2010) will be eligible. These children (as well as all born in the future) will continue to be eligible until the September after their 11th birthday.¹¹ The government estimates that around 2.5 million working families in the UK will ultimately be eligible, and that the cost will initially be £750 million a year but is expected to rise to some £1.5 billion a year.¹² The scheme of employer-supported childcare vouchers will be phased out, although existing recipients will be able to choose whether to remain on their current scheme or move to tax-free childcare.

The companies that administer the voucher schemes will need to be paid for their efforts, and it is not yet clear who will bear these costs. The government's consultation says: 'Whatever market option is chosen, it will need to genuinely deliver Tax-Free Childcare and a net 20 per cent support for parent's childcare costs. The Government wants to deliver Tax-Free Childcare without parents paying fees that erode the value of the Government's support.' (para. 5.17); if this means that parents will not be paying any fees to voucher companies, or seeing the value of their online accounts reduced in any way, then the burden will fall either on government or on childcare providers.

Box 8.1 analyses the likely winners and losers from replacing the existing tax relief on vouchers with this new tax-free childcare scheme.

¹⁰ The opening two paragraphs of the recent consultation (see the next footnote) read: 'The Government is committed to promoting aspiration, rewarding work, and supporting households' standard of living. It is determined to support those who are in work and those who want to work. The high cost of childcare is one of the biggest financial challenges that parents face. It is often so high that it simply does not pay for parents to work. And so at the Mid-Term Review in January 2013, the Government announced its intention to support working families with their childcare costs.' The fact that the scheme is limited to families in which all parents work is consistent with the scheme's aim being to make childcare cheaper for parents who work, rather than to improve child development.

¹¹ These and other details come from HM Treasury and HMRC, *Tax-Free Childcare: Consultation on Design and Operation*, 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226460/tax-free_childcare_consultation_on_design_and_operation.pdf.

¹² Paragraph 5.4 of HM Treasury and HMRC (2013, op. cit.) says they expect the annual voucher turnover to reach £7.5 billion, and £1 in every £5 of this will come from government top-ups.

Box 8.1. Winners and losers from the new tax-free childcare scheme

Overall, the government eventually expects to spend more money on its new scheme than the cost of the existing tax relief on employer-provided vouchers, but some families will find that they benefit more from the new scheme and some will benefit more from the existing scheme (although existing beneficiaries of the tax relief on vouchers will be able to continue receiving vouchers and so will not lose out). There are several factors leading to a complicated pattern of ‘winners’ and ‘losers’:

Role of employers: Families whose employer does not operate the employer-supported childcare scheme (including the self-employed) do not benefit from the current scheme, and so can only benefit more from the new scheme.

Age of children: The current scheme allows parents to spend vouchers on the childcare of any child under 16, but the new system initially allows parents to use tax-free childcare only for children aged under 5 (or disabled children under age 17), rising to 12 over time.

Whether both parents in a couple are working: Couple families with only one person in work will not be eligible for support under the new system, but the employed parent in such a family can currently receive support through employer-supported childcare.

Size of subsidy at the margin: For those whose childcare spending is below the cap, the new tax-free scheme provides a smaller subsidy for childcare spending at the margin than the current scheme, as existing childcare vouchers are free of both (basic-rate) income tax and NICs, but the new system effectively provides a relief against only (basic-rate) income tax (the new top-up scheme would need to pay 38p for every 80p of parental spending if it were to be equivalent to childcare spending being free from both income tax and employee NICs). This difference is even more marked for higher-rate taxpayers.

Cap on support that can be received: The new scheme imposes a cap on the amount of support that can be provided for each child, whereas the current scheme effectively imposes a cap for each parent in work. Accordingly, families with two or more qualifying children will face a higher, more generous, cap on the support they can receive under the new system than under the current one, and families with just one qualifying child that have two parents in work will face a lower cap. Obviously, the increase in these caps does not benefit families that are spending relatively small amounts on childcare.

Costs of operating the scheme: Under the current employer voucher scheme, private sector voucher companies typically charge employers for the costs of administering their scheme, a cost that is usually offset by the savings employers make by not paying employer NICs on the value of the vouchers. It is not yet clear who will effectively be compensating the various private sector companies that will provide an online voucher system, but it seems that it has to be government and/or childcare providers, as employers will not have a role in the new system and the government has said that it wants parents to see a net 20% support for their childcare costs.

Given the objective of reducing the extent to which childcare costs deter parents from working, the way that support relates to family circumstances seems more sensible under the new scheme than under the existing scheme, since under the new scheme:

- support will be greater for those with more than one child than for those with one child (presumably reflecting that the cost of childcare increases with the number of children);
- support will not be reliant on employer involvement;
- support will not be available to couples where only one adult is in paid work (reflecting the desire to focus on families that need the childcare to facilitate paid employment);
- support will be provided at the same rate to couples with two earners as to lone parents (rather than at a higher rate for couples, as is the case at present), reflecting that the cost of providing childcare to a child with two working parents is no higher than the cost of providing childcare to a child with a working lone parent.

On the other hand, although the government is still consulting on the precise details of implementation, the more complicated eligibility criteria of the new scheme (i.e. the fact that support is not available to recipients of universal credit) suggest that it will be more costly to administer.

Subsidies to low- to middle-income working parents through tax credits and universal credit

Since 1994, the government has provided some form of subsidy to low- to middle-income working parents who spend money on formal childcare, through in-work benefits or tax credits.¹³ The scope and generosity have increased markedly over time: only around 45,000 parents benefited in the late 1990s (at a cost of some £52 million in cash terms).¹⁴ In 2011–12, 416,000 families benefited from the childcare element of the working tax credit (WTC), on average receiving £55.91 per week, implying an annual cost of £1.2 billion (some of which will be being received in respect of school-age children).¹⁵ There is also an equivalent scheme that is part of the housing benefit system, which means that low-income working families receiving housing benefit and the childcare element of WTC receive an effective subsidy of 96% on their spending on childcare (subject to the same caps on spending as in the childcare element of the WTC).

The government has said that there will be a broadly equivalent scheme to the childcare element of WTC under universal credit (UC), the new means-tested benefit that is intended to replace income-related tax credits and means-tested benefits. Most UC

¹³ This is intended to be complementary to the tax-free vouchers because parents cannot claim a subsidy on childcare that they have bought using a voucher. In general, a family entitled to the childcare element of working tax credit will be better off paying for childcare themselves and claiming additional tax credits than accepting a tax-free voucher from their employer.

¹⁴ August 1999 figures (the last under the family credit programme) taken from Inland Revenue, *Working Families' Tax Credit and Family Credit Statistics Quarterly Enquiry November 1999, 2000*, http://www.hmrc.gov.uk/wftctables/wftc_tables.pdf.

¹⁵ HMRC, *Child and Working Tax Credits Statistics Finalised Annual Awards 2011-12, 2013*, <http://www.hmrc.gov.uk/statistics/fin-main-stats/cwtc-awards.xls>. This statistic is based on families that are assessed to have had an entitlement to the childcare element of tax credits when their annual income is eventually known for certain. HMRC also estimates how many families are currently in receipt of the childcare element of tax credits, and latest statistics run to December 2013, but some of these families are later found to have been ineligible and will have to repay some of their tax credits. However, these data on receipt of the childcare element (HMRC, *Child and Working Tax Credit Statistics December 2013, 2013*, <http://www.hmrc.gov.uk/statistics/prov-main-stats/cwtc-dec13.pdf>) show that the number in receipt is now 13% below its peak, achieved in December 2010, something which probably reflects the real cuts in tax credit entitlement made by this government.

recipients will be entitled to a subsidy of 70% of their spending on childcare: compared with the childcare element of WTC, this represents a more generous scheme for families where parents are working fewer than 16 hours a week (which are currently not eligible at all for childcare support through tax credits) but a less generous scheme for working parents also receiving housing benefit. There will also be a higher subsidy rate of 85% applying to families where both parents pay income tax (expected to benefit about 200,000 families): this is intended to compensate these families for not being able to benefit from the tax-free childcare scheme (as the two are mutually exclusive).

Considered in isolation, this final change introduces a 'cliff edge' into the amount of support for ECEC that the government provides to individuals, as taxable income of an extra £1 (to bring a parent from below to above the income tax personal allowance) immediately brings with it an additional 15% subsidy on the family's childcare spending (or up to £2,340 extra support per year). Cliff edges exist in the current childcare element of WTC (as all parents have to work 16 or more hours to be eligible for the childcare element), but it is not clear what the rationale is for having a cliff edge aligned with the personal tax allowance, and we note that one of the intentions behind UC was to remove these sorts of cliff edges.

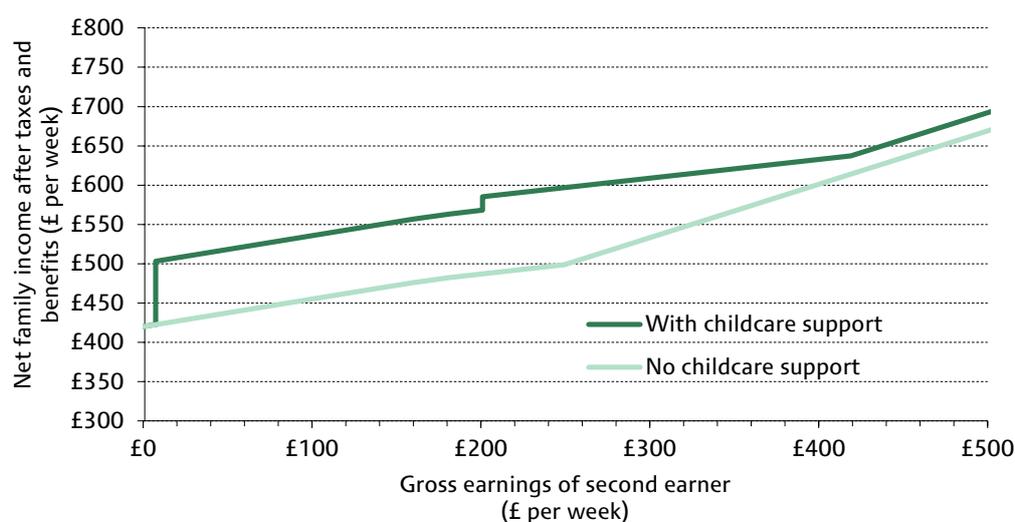
Combining the tax-free childcare and UC schemes described above, from 2015 there will be three different levels of subsidy available to parents who spend money on childcare (assuming UC is rolled out and excluding those families still receiving tax credits):

- Parents in a family where all adults work and which is not receiving UC can receive support through the tax-free childcare scheme of 20% of each pound they spend on childcare, up to a maximum level of support of £1,200 per child per year.
- Parents in a family receiving UC and where all adults work and earn enough to pay income tax can receive support of up to 85% of each pound they spend on childcare, up to a maximum level of support of $85\% \times £175$ a week (with one child) or $85\% \times £300$ a week (with more than one child), although the size of this subsidy will fall as income rises.
- Parents in a family receiving UC and where all adults work but where some earn too little to pay income tax can receive support of up to 70% of each pound they spend on childcare, up to a maximum level of support of $70\% \times £175$ a week (with one child) or $70\% \times £300$ a week (with more than one child), although the size of this subsidy will fall as income rises.

This can be seen in Figure 8.4, in which the gap between the two lines represents the amount of support the family receives towards childcare. The figure depicts the situation for a second earner with a relatively low-paid partner, as the gap jumps up when the second earner becomes an income tax payer (at around £200 per week in 2016), before falling from around £250 p.w. (as childcare support through UC begins to be tapered away) until earnings of around £420 p.w., when the family would be better off switching to the tax-free childcare system.

There are three reasons why this situation is far from ideal. First, although it is reasonable that the support for ECEC should fall as family income rises (both because low-income families are more likely to be credit constrained and because ECEC is likely to be of more benefit to children in such families than in better-off families), it is difficult to see why the size of subsidy for ECEC paid to working families should rise (from 70% to

Figure 8.4. Net income in April 2016 for a specimen family with and without support for childcare through UC and tax-free childcare



Note: Authors' calculations using TAXBEN. The figure shows the situation facing the second earner in a couple family with two pre-school children that spends £6,000 a year on ECEC. The first earner is assumed to earn £15,600 a year.

85%) and then fall (to 20%) as a family's income rises. Second, each of the three regimes is aimed at different sorts of families, depending on their individual and combined taxable income and the number of eligible children. But family circumstances change frequently: children age, new children are born, incomes fluctuate, and couples split up and are formed. The recent consultation on the new tax-free childcare support makes it clear that it will be the responsibility of families to report changes in their relevant family circumstances to voucher providers; because eligibility to the tax-free childcare is based on more criteria than the current voucher scheme, the reporting requirements will become more onerous. Third, some 50,000 recipients of UC could find themselves in a situation where they would be better off stopping a claim of UC and instead paying for their childcare through the new tax-free childcare system.¹⁶

One way to avoid these perverse design features and expensive-to-administer and confusing eligibility rules would be to scrap support for childcare through UC and operate a single scheme, open to all parents (or all working parents), where the government tops up payments made by parents (like the proposed tax-free childcare scheme), but where the size of the top-up varies with family circumstances. For example, families eligible for support under UC will receive a subsidy of 70% of their spending on childcare, and this would be equivalent to the government adding 70p to every 30p that parents paid into an account (or equivalent to a £1.87 top-up for every 80p paid in by parents, to compare with the 20p top-up for every 80p paid in by parents that is currently proposed for non-UC parents under the tax-free childcare system). Such a system could, if desired, be designed to be as precisely targeted as is the proposed regime (for example, the size of the top-up could depend on the income of the family, the age of the children and the work status of all the parents, as the system under UC and tax-free childcare will) but without

¹⁶ See paragraph 6.19 of HM Treasury and HMRC, *Tax-Free Childcare: Consultation on Design and Operation*, 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226460/tax-free_childcare_consultation_on_design_and_operation.pdf.

the confusion and additional administration and compliance costs caused by operating three mutually-exclusive regimes. Such a system might also reduce some of the unfortunate timing issues inherent in the current tax credits and proposed UC system, whereby parents have to pay out their full childcare costs to providers and then wait to be reimbursed by the government.

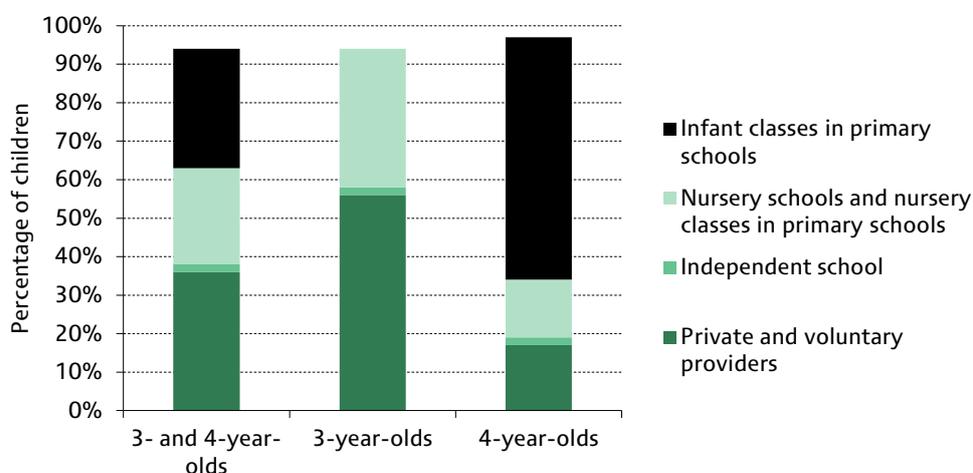
Entitlement to a free place at an ECEC provider

Parents of pre-school children in England have been entitled to a free, part-time place at an ECEC provider since 1998 for 4-year-olds, 2004 for 3-year-olds, and 2013 for 2-year-olds looked after by the local authority or in families who would be eligible for free school meals (broadly, those claiming out-of-work benefits, or those claiming child tax credit with a gross annual family income of no more than £16,190).¹⁷

The entitlement for 3- and 4-year-olds is universal, in the sense that it does not depend upon the income or employment status of the parents, but for 2-year-olds it is related to family income. Parents are free to take up their entitlement at any registered provider; Figure 8.5 shows that the majority of 3-year-olds are in free places provided by private, voluntary and independent (PVI) providers and the majority of 4-year-olds are in the maintained sector, mostly in reception classes in infant or primary schools.¹⁸

After various extensions, children are now entitled to 15 hours a week of free provision for 38 weeks a year beginning the term after their third birthday (or second birthday, if they meet the above criteria). It is currently estimated that the government's free entitlement programme benefits 864,590 3- and 4-year-olds at an average annual cost of

Figure 8.5. Percentage of 3- and 4-year-olds benefiting from free early education, by type of provider, 2013

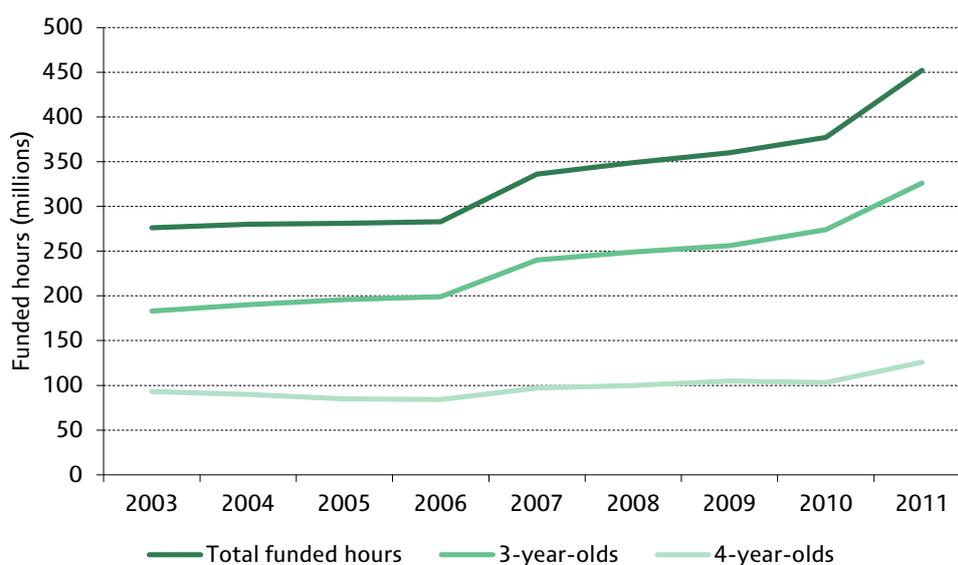


Source: Department for Education, 'Provision for children under five years of age in England: January 2013', Statistical First Release, <https://www.gov.uk/government/publications/provision-for-children-under-5-years-of-age-in-england-january-2013>.

¹⁷ Source: <https://www.gov.uk/apply-free-school-meals>.

¹⁸ It is in principle possible for childminders to benefit from this scheme, but this is rare in practice.

Figure 8.6. The number of funded entitlement hours taken up by 3- and 4-year-olds over time



Note: Excludes 4-year-olds in reception classes, as they are not funded as part of the entitlement. Numbers may not sum due to rounding.

Source: National Audit Office, *Delivering the Free Entitlement to Education for Three- and Four-Year-Olds*, Report by the Comptroller and Auditor General, HC 1789, Session 2010–2012, 2012, <https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/>.

£1.9 billion.¹⁹ Figure 8.6 shows how the number of funded entitlement hours taken by 3- and 4-year-olds has increased over time.

Recent estimates suggest that around 92,000 of the 130,000 eligible 2-year-olds are currently accessing a free place; assuming they take up their full entitlement of hours throughout the year, this means that around £267 million (£2,900 per child) per year must be paid out to providers to cover the cost of these places.²⁰

The free entitlement for 2-year-olds is due to be extended to cover the 20–40% most disadvantaged children from September 2014. The government recently announced that this group would comprise children from low-income working families (those whose parents receive working tax credit but have gross annual family income of no more than £16,190). Recent estimates suggest that around an extra 285,000 2-year-olds will benefit from this policy. The government has announced that it will provide £755 million to local authorities to cover the cost of the free places for all eligible 2-year-olds in 2014–15.²¹

¹⁹ The number of 3- and 4-year-olds is based on Department for Education, 'Provision for children under five years of age in England: January 2013', Statistical First Release 23/2013, June 2013, <https://www.gov.uk/government/publications/provision-for-children-under-5-years-of-age-in-england-january-2013>. The cost of extending the free entitlement to 3- and 4-year-olds is based on National Audit Office, *Delivering the Free Entitlement to Education for Three- and Four-Year-Olds*, Report by the Comptroller and Auditor General, HC 1789, Session 2010–2012, 2012, <https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/>.

²⁰ Column 627 of House of Commons, *Official Report: Parliamentary Debates (Hansard)*, Oral Answers, 11 November 2013, <http://www.publications.parliament.uk/pa/cm201314/cmhansrd/chan74.pdf>. The government has separately said that it has set aside £534 million in financial year 2013–14 to cover the cost of these places (see Department for Education, *More Affordable Childcare*, July 2013, <https://www.gov.uk/government/publications/more-affordable-childcare>).

²¹ Department for Education, 'Funding for learning for 2-year-olds', letter from Elizabeth Truss, Parliamentary Under Secretary of State for Education and Childcare, 2013, <https://www.gov.uk/government/publications/funding-for-learning-for-2-year-olds-letter-from-elizabeth-truss>.

8.3 Extending children's entitlement to ECEC

Various political parties and others – as we summarise in Box 8.2 – have suggested increasing children's entitlement to free, or low-cost, ECEC. Table 8.1 gives our estimates of the cost to central government of funding additional entitlements to ECEC in England. An online appendix provides the details behind our calculations, but we stress two points here:²²

- The costs are for England only and ignore any Barnett consequences (in other words, they represent the amount of savings that the Department for Education would need to make within its existing budget in order to fund an expanded entitlement).
- We have estimated the direct cost to central government of providing or funding this additional entitlement. But the net cost to central government would be a little lower. First, there is a mechanical effect that arises because making childcare free for parents who would otherwise pay for it reduces the cost of providing tax-free childcare and subsidising childcare through tax credits or universal credit if those parents would have used those programmes. Second, there may be increased tax revenue and reduced spending on benefits if parents work more in response (although, as we discuss in Section 8.4, we think this effect is likely to be small, at best).

The key points to take away from Table 8.1 are:

- Extending the free entitlement to 1- and 2-year-olds would be a lot more expensive than extending it to 3- and 4-year-olds – even though the take-up rate is lower for 1- and 2-year-olds – for two reasons. First, the cost of provision is about £1 per hour (around 20%) higher for children aged 2 and under than for children aged 3 and over; this difference in cost mostly reflects the higher staff-to-child ratios that are required for children aged 2 and under. Second, the number of additional hours that would need to be funded to offer, say, a full-time, full-year childcare place would be a lot lower for 3- and 4-year-olds, because they already receive a substantial number of hours free of charge.
- The cost of extending entitlement to children in all types of families is clearly more expensive than if entitlement were to be restricted in some way. For example, if the government wanted to provide free full-time childcare to all 2-, 3- and 4-year-olds (that is, offer 25 hours per week, 38 weeks a year), we estimate that it would cost an additional £3.5 billion per year. This cost could be approximately halved by targeting children in working families (about 55% of children aged 2–4) or the 40% most deprived children – although, of course, those benefiting from these two approaches would probably differ, and they might have different effects on parental labour supply.
- Another approach to keeping costs down would be to make parents pay a small proportion of the cost of provision. As indicated in Box 8.2, the Resolution Foundation has proposed a scheme in which parents would pay £1 an hour for any additional hours provided via this scheme. According to our estimates, such a scheme would, on average, cut the cost to the government by around 20%.

²² The appendix is available at http://www.ifs.org.uk/budgets/gb2014/gb2014_ch8_appendix.pdf.

Box 8.2. Proposals to extend entitlement to free (or low-cost) ECEC

Labour

Labour has pledged to increase entitlement to free ECEC for 3- and 4-year-olds from 15 to 25 hours per week where all parents in the family are in work. It would appear that the entitlement would not be means-tested and so would benefit families across the income distribution.

According to a report in the *Independent*,^a Labour has estimated that its policy would benefit 440,000 children (about a third of all 3- and 4-year-olds), that it would be worth about £1,500 per child per year and hence that the gross cost of providing these places would be £674 million a year (notionally funded via an £800 million bank levy). These figures imply that Labour has assumed an hour of care to cost £3.95. This is in line with the National Audit Office's 2012 estimate of average hourly funding per child by local authorities implementing the local funding formulae in 2010–11.^b However, if we account for the fact that fees have been rising in real terms over time (the Childcare Cost Survey estimates that fees for 3- and 4-year-olds have been rising by 4.2% a year above the rate of inflation, or 5–7% in nominal terms), then a more realistic estimate of the gross cost of providing these places in 2013–14 prices would be £763 million.

Liberal Democrats

In a policy paper,^c the Liberal Democrats have proposed a set of reforms to the childcare market, focused around a substantial extension of the free entitlement to 10 hours of free care for children aged 1, 15 hours for those age 2, 20 hours for those aged 3 and 25 hours for those aged 4. These increases over the current provision would be limited to families whose household income is under £100,000 a year (although with transitional protection for those currently enjoying free ECEC), excluding a very small fraction of children in very well-off families.

Scottish National Party

The Scottish National Party has pledged that, in its first Budget after independence, it would commit £100 million to extend 600 hours of childcare a year to nearly half of Scotland's 2-year-olds.^d With a further £600 million investment by the end of the first parliament, it would ensure that all vulnerable 2-year-olds and all 3- and 4-year-olds are entitled to 1,140 hours of childcare a year (or 30 hours a week for 38 weeks a year). According to the same policy paper, this would be funded from the savings and increased revenues laid out in *Scotland's Future – Your Guide to an Independent Scotland*,^e including reducing defence and security spending to £2.5 billion per year and ending the married couple's tax allowance. In the longer term, the SNP says it would provide 1,140 hours a year of free childcare to all children from age 1 until starting school.

Resolution Foundation

In its 2012 report,^f the Resolution Foundation Commission on Living Standards recommended that free places should be extended to 25 hours a week, 47 weeks a year, with the new hours charged at a regulated £1 an hour and provided flexibly. According to the report's authors, such a policy would ensure that the new hours are valued, while improving work incentives by making the equivalent of three days a week of childcare cost just £10 a week.

^a <http://www.independent.co.uk/news/uk/politics/labour-party-conference-ed-balls-pledges-25-hours-free-childcare-for-working-parents-8834313.html>.

^b National Audit Office, *Delivering the Free Entitlement to Education for Three- and Four-Year-Olds*, Report by the Comptroller and Auditor General, HC 1789, Session 2010–2012, 2012, <https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/>.

^c Liberal Democrats, *A Balanced Working Life: Policies for Low and Middle Income Households*, Policy Paper 108, September 2013, <http://www.libdems.org.uk/siteFiles/resources/Autumn%20Conf%202013/108%20-%20A%20Balanced%20Working%20Life.pdf>.

^d Scottish Government, ‘Childcare and female labour market participation’, November 2013, <http://www.scotland.gov.uk/Resource/0043/00439259.pdf>.

^e <http://www.snp.org/referendum/documents>.

^f *Gaining from Growth: The Final Report of the Commission on Living Standards*, London, 2012, <http://www.livingstandards.org/our-work/final-report/>.

Table 8.1. Direct cost to central government of extending the entitlement to ECEC in England in 2015–16, £ million per year

	For all parents	All working parents	Poorest 40%	All parents paying a £1/hour charge
Entitlement for 4-year-olds				
20 hrs/wk, 38 wks/yr	201	117	80	156
25 hrs/wk, 38 wks/yr	401	234	161	313
25 hrs/wk, 48 wks/yr	1,155	673	462	899
Entitlement for 3-year-olds				
20 hrs/wk, 38 wks/yr	565	101	226	440
25 hrs/wk, 38 wks/yr	1,130	201	452	880
25 hrs/wk, 48 wks/yr	1,873	334	749	1,458
Entitlement for 2-year-olds				
15 hrs/wk, 38 wks/yr	912	480	0	748
20 hrs/wk, 38 wks/yr	1,419	746	507	1,164
25 hrs/wk, 38 wks/yr	1,925	1,013	1,013	1,580
25 hrs/wk, 48 wks/yr	2,592	1,363	1,680	2,127
Entitlement for 1-year-olds, low cost per hour				
10 hrs/wk, 38 wks/yr	919	464	368	754
15 hrs/wk, 38 wks/yr	1,379	696	552	1,132
Entitlement for 1-year-olds, high cost per hour				
10 hrs/wk, 38 wks/yr	1,084	547	434	919
15 hrs/wk, 38 wks/yr	1,626	821	650	1,379

Note: See the online appendix (http://www.ifs.org.uk/budgets/gb2014/gb2014_ch8_appendix.pdf) for assumptions and details of workings. We assumed a take-up rate of 98% for 4-year-olds, 94% for 3-year-olds, 70% for 2-year-olds and 60% for 1-year-olds. For calculations involving 4-year-olds, we have assumed that 63% of 4-year-olds attend reception class for 25 hrs/wk, 38 wks/yr and therefore would only benefit from extending the free entitlement to 25 hrs/wk, 48 wks/yr (for 25 hours, 10 weeks a year). Finally, we have assumed that 58% of 4-year-olds, 56% of 3-year-olds, 53% of 2-year-olds and 50% of 1-year-olds are in working families (based on authors’ calculations using the Labour Force Survey, April–June 2012). Our low-cost scenario for 1-year-olds assumes that the cost of provision for a 1-year-old is the same as the cost for a 2-year-old (£5.57 per hour). Our high-cost scenario assumes it is £1/hr more expensive.

In producing these costings, we have overlooked any problems that might occur in actually supplying these additional places, either in the maintained or PVI sector. It is not clear that there are enough places in existing providers to accommodate some of the larger extensions of entitlement discussed above, especially in disadvantaged areas and for children below age 3, let alone enough high-quality places. Indeed, concerns have been expressed about whether there are enough high-quality places to cover the planned extension of entitlement for disadvantaged 2-year-olds due in September 2014.²³ Whether new providers are willing to enter the market, or whether existing maintained or PVI providers are keen to expand their services to fulfil this new demand, will depend critically on the price paid by local authorities to providers (itself constrained in part by the amount of funding that central government gives to local authorities).

The motivation behind the extensions that have been proposed is also not always clear, making it difficult to judge whether there may be other, better ways in which to achieve their objectives. For example, if the objective is to increase parental labour supply, then the relative lack of flexibility in how the offer can be taken – often in half-day sessions – may mean it is not the optimum way to achieve this goal. On the other hand, if it is to improve child outcomes, then more evidence is needed on whether a greater number of hours per week or weeks per year reaps additional rewards, and on whether the quality of the ECEC on offer would be sufficiently high to generate these benefits.

We return to these issues in more detail below.

8.4 Why might the government want to subsidise ECEC (and what is the evidence that it will work)?

The policies enacted or proposed in the preceding sections are all designed to reduce the cost of ECEC to parents. In doing so, the government presumably hopes to encourage greater use of ECEC in order to (a) improve the long-term social and educational outcomes of children and (b) achieve higher levels of labour supply amongst parents of young children (principally mothers). These aims have been stated more or less clearly when different policies have been introduced.²⁴

For such interventions to achieve their aims, there must be a *causal* link between making childcare cheaper or more plentiful and improving children's outcomes and/or increasing parents' labour supply (i.e. that doing one leads to the other). This is often taken as read in discussions surrounding the provision and subsidisation of childcare, but in fact the international evidence – especially on the link between childcare availability and/or price and parental (usually maternal) labour supply – is not always clear-cut.

²³ See, for example, J. Gibb, H. Jelacic, I. La Valle, S. Gowland, R. Kinsella, P. Jessiman and R. Ormston, *Rolling Out Free Early Education for Disadvantaged Two Year Olds: An Implementation Study for Local Authorities and Providers*, DfE Research Report DFE-RR131, Department for Education, London, 2011, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181502/DFE-RR131.pdf and S. Mathers, N. Eisenstadt, K. Sylva, E. Soukakou and K. Ereky-Stevens, *Sound Foundations: A Review of the Research Evidence on Quality of Early Childhood Education and Care for Children under Three – Implications for Policy and Practice*, Sutton Trust, London, 2014, <http://www.suttontrust.com/our-work/research/download/255>.

²⁴ For example, in its *More Affordable Childcare* proposal, the government states that it 'will increase childcare support to improve work incentives and ensure it is worthwhile for parents to work up to full-time hours'. It also says that it is extending funded early education as it 'supports children's development and also helps parents with childcare costs'. (Department for Education, *More Affordable Childcare*, July 2013, <https://www.gov.uk/government/publications/more-affordable-childcare>.)

The link between ECEC and children's outcomes

Studies have shown that intensive, high-quality (and usually, therefore, expensive) ECEC interventions targeted at very disadvantaged children can have significant impacts on children's outcomes in later childhood and adulthood.²⁵ But these estimates are unlikely to be a good guide to the effectiveness of the types of policies described above, most of which are less intensive and are targeted on large numbers of children from a wider range of backgrounds and, in the case of tax credits or tax-free childcare, are not designed to increase the quality of ECEC at all.²⁶

There is currently no evidence available on the impact on children's outcomes of the main policies designed to support childcare in the UK described in Section 8.2.²⁷ Nor is there much international evidence on the effectiveness of policies designed to improve child outcomes through subsidising childcare for working parents via vouchers or tax credits – although the balance of evidence suggests that there is a positive impact of income on child outcomes.²⁸

There is, however, an emerging body of international evidence about the effects of large-scale interventions designed to increase the supply (or reduce the cost) of childcare. The evidence on the short-term effects of these interventions, particularly in terms of cognitive outcomes, is mixed – but the limited evidence available on their longer-term effects is broadly positive, emphasising the potential importance of childcare for children's non-cognitive skills.²⁹ The benefits are, however, fairly small and tend to be concentrated amongst children from disadvantaged families. This should not be surprising: it is entirely plausible that the scale of the benefits of ECEC to children is related to the magnitude of the difference between a child's home (or informal care) environment and the formal care environment; attending ECEC may well stimulate, engage and develop a child from a high-income family, but the child may have benefited just as much from spending the time with parents or informal carers.

²⁵ Much of this evidence is based on the Perry Preschool and Abecedarian interventions in the United States. These policies were implemented in the 1960s and 1970s and were targeted on very small numbers of extremely disadvantaged children. The evidence on such interventions is robust: see, for example, J. Heckman, S. Moon, R. Pinto, P. Savelyev and A. Yavitz, 'The rate of return to the HighScope Perry Preschool Program', *Journal of Public Economics*, 2010, 94, 114–28.

²⁶ It is conceivable that subsidising parents' spending on ECEC will lead to them using higher-quality ECEC, but what little evidence there is on this subject suggests any impact will be small (see D.M. Blau and A.P. Hagy, 'The demand for quality in child care', *Journal of Political Economy*, 1998, 106, 104–46).

²⁷ Although researchers at IFS, together with colleagues at the Institute for Social and Economic Research, the University of Surrey and the Institute of Education, are currently evaluating the impact of the free hours of care offered to 3- and 4-year-olds in England, and the Effective Provision of Pre-School Education (EPPE) study has provided non-experimental evidence of the benefits of childcare – especially high-quality care – for children more generally; see, for example, K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, *Effective Pre-School, Primary and Secondary Education 3-14 Project (EPPSE 3-14) – Final Report from the Key Stage 3 Phase: Influences on Students' Development from Age 11–14*, Department for Education Research Report 202, 2012, <https://www.gov.uk/government/publications/effective-pre-school-primary-and-secondary-education-3-to-14-project-eppse-3-to-14-final-report-from-the-key-stage-3-phase-influences-on-students>.

²⁸ See, for example: D. Almond and J. Currie, 'Human capital development before age five', in D. Card and O. Ashenfelter (eds), *Handbook of Labor Economics*, Volume 4b, Elsevier Ltd, 2011; K. Cooper and K. Stewart, *Does Money Affect Children's Outcomes? A Systematic Review*, Report to the Joseph Rowntree Foundation, 2013, <http://www.jrf.org.uk/publications/does-money-affect-childrens-outcomes>.

²⁹ See, for example, Almond and Currie (2011, op. cit.) and T. Havnes and M. Mogstad, 'No child left behind: subsidized child care and children's long-run outcomes', *American Economic Journal: Economic Policy*, 2011, 3, 97–129.

The link between ECEC and parental labour supply

Parents often report childcare costs to be a significant barrier to work,³⁰ and making it easier for parents to work has been a key motivation underlying government childcare policies over the last 20 years. (A significant proportion of support available has been focused solely on working parents in the form of tax credits and employer vouchers, for example.) This aim has also been used to motivate some of the recent policy changes.

For a variety of reasons, the impact of cheaper or more widely available ECEC on parents' labour supply is much harder to estimate than is its impact on children's outcomes. The most robust evidence tends to come from studies that compare situations in which similar parents face different prices or different availability of ECEC³¹ – though they can sometimes be highly specific to a particular country at a particular time with a particular set of institutions. Looking across the available evidence, a decade-old review of mostly US studies concluded that, when childcare is made cheaper, parents do buy slightly more formal childcare, but that the impact on labour supply (mostly of mothers) was negligible.³² An IFS study written at around the same time agreed.³³ More recent studies have tended to corroborate these conclusions – mostly finding zero or small positive effects,³⁴ but there are well-publicised exceptions.³⁵

Some of the most robust evidence from England shows that out-of-work lone parents receiving benefits and whose youngest child becomes eligible for full-time school at the age of 4 – which is a form of free childcare, albeit highly restrictive and with its own demands – are more likely to leave benefits and enter work than those with similar-aged children not yet in full-time school, but that the impact is extremely small. Similar estimates for lone parents whose youngest child becomes eligible for part-time nursery (at age 3) are negligible.³⁶ Ongoing IFS work is investigating the impact of the same policy on the labour supply of parents in couple families as well.

No work has been done to estimate the impact of support for childcare provided via employers or the tax credit system, although an IFS study undertaken before the tax credit changes were enacted predicted that there would be a small positive effect on the labour supply of lone mothers and no employment effect on mothers in couples.³⁷

³⁰ For example, 53% of non-working mothers surveyed as part of the Childcare and Early Years Survey of Parents in 2011 agreed with the statement that 'if I could arrange good quality childcare which was convenient, reliable and affordable, I would prefer to go out to work'.

³¹ For example, they might compare parents' labour supply before and after a reform that changes the subsidy they receive for ECEC, or across areas with differing availability of ECEC, or across parents with children of slightly different ages who are entitled to different amounts of free ECEC.

³² D. Blau and J. Currie, 'Pre-school, day care, and after-school care: who's minding the kids?', in E. Hanushek and F. Welch (eds), *Handbook of the Economics of Education*, Volume 2, Elsevier, 2006.

³³ G. Paull, J. Taylor and A. Duncan, *Mothers' Employment and Childcare Use in Britain*, IFS Report R64, 2002, <http://www.ifs.org.uk/publications/9>.

³⁴ See T. Havnes and M. Mogstad, 'Money for nothing? Universal child care and maternal employment', *Journal of Public Economics*, 2011, 95, 1455–65, and the discussion therein.

³⁵ See, for example, M. Baker, J. Gruber and K. Milligan, 'Universal child care, maternal labor supply, and family well-being', *Journal of Political Economy*, 2008, 116, 709–45.

³⁶ M. Brewer and C. Crawford, 'Starting school and leaving welfare: the impact of public education on lone parents' welfare receipt', IFS Working Paper W10/19, 2010, <http://www.ifs.org.uk/publications/5275>.

³⁷ Paull, Taylor and Duncan, 2002, op. cit.

It is difficult to reconcile the notion of childcare costs as a significant barrier to work with the typically small estimates of the responsiveness of parental labour supply to often quite substantial childcare subsidies. There may be a number of reasons for this:

- Subsidies usually apply only to formal childcare, and as such can lead to a change in the type of childcare used (for example, from informal to formal) rather than an increase in the total number of hours used;³⁸ this can help to explain why such policies may lead to an improvement in children's outcomes but not a rise in parental labour supply.
- The policy variation used in these studies to assess the impact of changes in the availability or cost of childcare on parental labour supply can be fairly inflexible; for example, when free nursery places were first introduced for 3- and 4-year-olds in England, parents could only use a maximum of 2½ hours of free childcare per day. Such an arrangement would make it difficult to cover even part-time work without having to pay for additional hours of care (and this might be even more difficult if the entitlement were being taken in a nursery class in a maintained school), thus limiting the ability of such policies to increase labour supply.
- Studies from the US tended to find a bigger effect of ECEC on parental labour supply 30 years ago than similar studies looking at similar interventions more recently. It has been suggested that this is because, as maternal employment rates rise (as they are doing in most developed countries over time), those women who remain out of work when they have young children are increasingly those who are further from the labour market and/or have stronger preferences not to work. For example, over three-quarters of mothers with high educational qualifications whose youngest child is of pre-school age are in work; this compares with around 50–60% of mothers of pre-school-age children with low educational qualifications and around 80% of mothers of any education level whose youngest child is aged 10.³⁹ This suggests that there may be relatively little scope to further increase the labour market participation rates of highly educated mothers using childcare subsidies (although hours of work could still rise), meaning that childcare subsidies are likely to become less and less effective at increasing maternal labour supply over time.
- There may also be issues over the timing of subsidy payments. For example, under the current tax credits and proposed UC system in the UK, parents have to pay out the full cost of their childcare to providers and then wait to be reimbursed by the government. If parents are credit constrained, this may mean that they are unable to benefit fully from the scheme, thus undermining its potential effectiveness.

This evidence suggests that if one of the government's main aims in subsidising ECEC is to increase parental labour supply, then it may be extremely challenging to achieve this aim.

The economic case for encouraging greater use of ECEC

Even if we knew that ECEC did improve children's outcomes or increase parents' labour supply, this would not automatically lead us to conclude that the government should intervene to subsidise ECEC. It is worth working through exactly what it is that might lead

³⁸ See, for example, Baker, Gruber and Milligan (2008, op. cit.).

³⁹ Authors' calculations using Labour Force Survey, April–June 2012 for mothers aged 16–64 living in the UK. High education is defined as having achieved at least NVQ level 3 (equivalent to two or more A-level passes) and low education as not having achieved any GCSEs with a grade higher than C or NVQ level 2.

us to think that government intervention is important, because that can then help in deciding what the appropriate intervention is likely to be.

One could imagine a world in which the market for childcare functioned perfectly, with a range of high-quality, flexible and affordable childcare on offer, from which parents could choose to purchase the number of hours that maximised their family's well-being (which in turn is likely to depend on things such as their labour supply choices and their children's development). In that world, all parents would know and understand the benefits of childcare for their children and would choose to purchase the appropriate amount of care. We are, of course, not in such a world and there may be reasons of equity or efficiency for government to intervene.

Efficiency arguments for intervention to make ECEC cheaper or more available rest on there being a market failure such that, left to their own devices, private markets would not deliver an individually or socially optimal amount or use of ECEC.

On the demand side, there are two main reasons why this may be the case. First, parents may underestimate the benefits (or overestimate the costs) of ECEC – perhaps because they do not have the information necessary to make a judgement, or because some of the gains are uncertain, or because they do not value highly enough the long-term benefits that childcare may generate for their children; they may also incorrectly assess the costs and benefits of taking time out of the labour market to look after their children.

Second, even if parents correctly recognise the benefits from ECEC (either to themselves or to their children), some might be unable to finance the up-front cost; this may be a particular issue because many parents have children relatively near the start of their careers, when earnings are low relative to average earnings over the life cycle, and borrowing may be difficult.

On the supply side, providers may not know what constitutes high-quality care, may not be able to secure the resources to offer high-quality care (for example, if there is a shortage of highly qualified staff) or may simply overestimate the costs of offering high-quality care (or underestimate parents' willingness or ability to pay for such care).

Even if providers were able to secure the resources necessary to supply high-quality care and parents recognised the benefits of ECEC for themselves or their children and could pay the up-front costs, it is still possible that a free market could deliver a less-than-socially-optimal use of ECEC, because some of the benefits may accrue to society.

It seems likely that one or more of these factors is affecting the operation of the childcare market in the UK, which would mean that parents are using less-than-individually- or socially-optimal levels of ECEC. In this situation, the government may choose to intervene by subsidising, giving an entitlement to or directly providing childcare (or by improving its quality). It might also want to consider providing more information to parents on the long-run benefits from using childcare.

Equity arguments used to justify intervention usually rest on the premise that access to, use of or quality of ECEC should not depend on parental income or other family background characteristics. This may be driven by a desire to reduce the link between parental background and children's outcomes, or to ensure that parents have equal access to the labour market (regardless of their ability to afford formal childcare or to

rely on informal childcare). Evidence suggests that access, use and quality of ECEC for low-income parents are of concern in England.⁴⁰

Gender is another dimension in which equity considerations have been used to justify government intervention in the childcare market. Evidence suggests that women are more likely than men to stay at home to look after children; even if they do return to paid work, they often work part-time rather than full-time. We know that long periods out of the labour market and part-time work tend to carry a wage penalty; there is also evidence of a so-called ‘motherhood penalty’, especially for low-skilled women.⁴¹ This suggests that, in the absence of government intervention, parenthood may worsen gender inequalities in the labour market.

Some of the market failures outlined above on the demand side (such as a lack of information about the costs or benefits of ECEC or credit constraints) may be more common amongst disadvantaged families, while some on the supply side (for example, the ability to recruit high-quality staff) may be more common in disadvantaged areas. This means that interventions targeted at poorer families or areas may not only be seen as an effective way of improving the long-term outcomes of the least advantaged children (and potentially increasing social mobility), but may be justified on efficiency as well as equity grounds. To address such equity concerns, the government could intervene on the demand side – to subsidise the price (to a greater extent) for disadvantaged families – or on the supply side – to provide greater incentives to providers to open or improve the quality of their services in disadvantaged areas.

These arguments do, of course, make it more difficult to justify universal policies on the basis of the economic rationales presented here. To justify intervention to support better-off families, one would need to appeal to arguments based on equity between the sexes, or to efficiency arguments based on the idea that higher-earning parents incorrectly assess the costs of time out of the labour market or the benefits of childcare, or perhaps to the idea that there are wider social and economic benefits to having these relatively skilled individuals in work. The long-run social and economic consequences of supporting better-off women to stay in the labour market may be profound, but they are certainly difficult to quantify.

8.5 Discussion

Government spending on early childhood education and care has increased markedly over the last 20 years – and, if anything, seems likely to rise over the coming years, regardless of whoever forms the government after the next general election. We

⁴⁰ See: figure 7 from National Audit Office, *Delivering the Free Entitlement to Education for Three- and Four-Year-Olds*, Report by the Comptroller and Auditor General, HC 1789, Session 2010–2012, 2012, <https://www.nao.org.uk/report/delivering-the-free-entitlement-to-education-for-three-and-four-year-olds/>, on differences in provider quality by area-level deprivation measures; E. Lloyd, S. Speight and R. Smith with C. Coshall, *Towards Universal Early Years Provision: Analysis of Take-Up by Disadvantaged Families from Recent Annual Childcare Surveys*, Department for Education Research Report 66, 2010, <https://www.gov.uk/government/publications/towards-universal-early-years-provision-analysis-of-take-up-by-disadvantaged-families-from-recent-annual-childcare-surveys>, for analysis of how take-up of the free entitlement to nursery education varies by family background; and S. Dickens, I. Wollny and E. Ireland, *Childcare Sufficiency and Sustainability in Disadvantaged Areas*, Department for Education Research Report 246, 2012, <https://www.gov.uk/government/publications/childcare-sufficiency-and-sustainability-in-disadvantaged-areas>, showing that providers are less financially secure in disadvantaged areas.

⁴¹ See, for example, D. Anderson, M. Binder and K. Krause, ‘The motherhood wage penalty: which mothers pay it and why?’, *American Economic Review*, 2002, 92, 354–8.

discussed above some of the specific issues surrounding the proposals that have been made – but there are also some general issues common to the debate around childcare spending that are worth raising.

The objectives of the policies that have been developed in this area can be multiple and are not always explicit: there is no evidence of an overarching strategy. While the aim of many of the existing proposals seems to be to increase parental labour supply,⁴² other components arguably have different aims. For example, the main goal of the free entitlement for 3- and 4-year-olds was, at least initially, to ensure that all children were ready for school.⁴³ Extending free nursery education to disadvantaged 2-year-olds regardless of whether their parents are in paid work, meanwhile, is presumably aimed at reducing socio-economic inequalities in child outcomes.

Having multiple instruments to achieve multiple objectives is often sensible, but it can be inefficient in the area of ECEC because of the nature of the mixed market. Parents of 3- or 4-year-old children using nurseries or day-care centres operated by private, voluntary and independent providers may find it relatively easy to combine their entitlement to 15 hours of free ECEC with subsidised spending on additional hours (whether through tax credits or tax relief). But a substantial fraction of 3- and (especially) 4-year-olds are receiving their free entitlement to ECEC in the maintained sector, usually via nursery or reception classes that are part of infant or primary schools. Although receiving ECEC in the maintained sector may well be good for children – as quality tends to be higher here than in the PVI sector⁴⁴ – it may not be especially helpful in facilitating parents to work unless the school also offers additional hours of care during and outside of the school day, as well as integrated holiday care.

We also know next to nothing about the effectiveness of the policies that are already in place. There is very little evidence on the impact of entitlement to free nursery education for 3- and 4-year-olds on parental labour supply⁴⁵ and none on its effects on child outcomes (although we will be adding to the evidence base in both of these areas over the coming months). We also know nothing about the effectiveness of the demand-side subsidies for working parents that have been on offer for several years (the childcare element of the working tax credit and employer-supported childcare vouchers). This makes it very difficult to assess which policies are (more) effective and hence which, if any, should be expanded. International evidence provides no clear guidance on these

⁴² The government's reforms to tax credits and the new tax-free childcare scheme reduce the cost of childcare for working parents only, as would the Labour Party's proposals to extend the number of hours of nursery education provided free to 3- and 4-year-olds.

⁴³ Although this could arguably have been achieved more efficiently by targeting the offer on children from the most disadvantaged backgrounds, who are typically the least school-ready – see, for example, L. Dearden, L. Sibieta and K. Sylva, 'The socio-economic gradient in early child outcomes: evidence from the Millennium Cohort Study', IFS Working Paper 11/03, 2011, <http://www.ifs.org.uk/publications/5519>, which shows that children in the top fifth of the socio-economic distribution score around 30 percentile points higher on the Bracken school readiness test at age 3 than children in the bottom fifth of the socio-economic distribution – and whose parents are the most likely to be credit constrained.

⁴⁴ See, for example, L. Gambaro, K. Stewart and J. Waldfogel, 'A question of quality: do children from disadvantaged backgrounds receive lower quality early years education and care in England?', Centre for Analysis of Social Exclusion Discussion Paper 171, 2013, <http://sticerd.lse.ac.uk/dps/case/cp/CASEpaper171.pdf>.

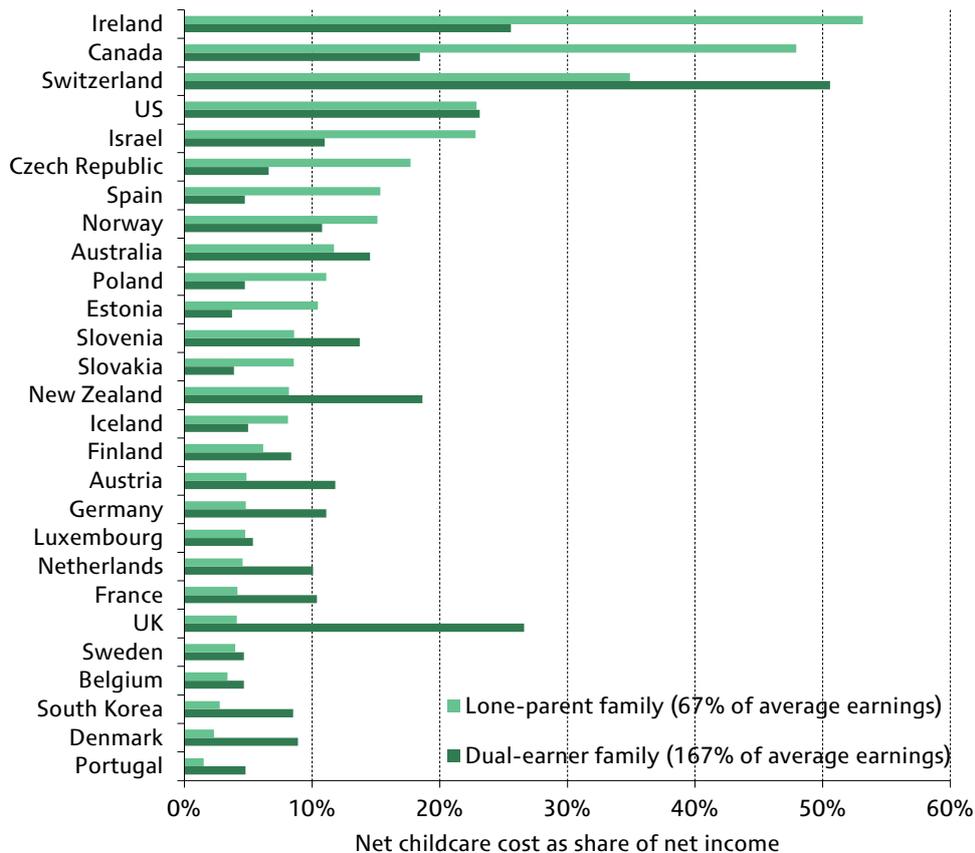
⁴⁵ The exception is our own previous work; see M. Brewer and C. Crawford, 'Starting school and leaving welfare: the impact of public education on lone parents' welfare receipt', IFS Working Paper W10/19, 2010, <http://www.ifs.org.uk/publications/5275>.

issues either: to our knowledge, there are no studies that have compared and contrasted the effectiveness of different types of childcare subsidies.

Strong cross-party support for additional spending on childcare subsidies is perhaps understandable. But the evidence base for this growing consensus is surprisingly weak. The apparent mismatch between the stated aims and convincing evidence of effectiveness is strongest in the case of parental labour supply. The evidence that reducing the price of childcare increases parental labour supply is mixed: most studies find zero or very small positive effects. This suggests that the increase in parental labour supply that might be expected to result from the introduction or extension of some of these policies is likely to be small.

There is also a remarkable lack of clarity about the costs of provision (to providers and parents) of childcare in the UK. Policy discussion about ECEC in the UK is frequently punctuated by claims, usually based on OECD reports and statistics, that childcare in the UK is, by international standards, expensive for parents. However, these discussions often focus on gross costs (i.e. the costs before any public subsidies are taken into account). Because of the different ways in which different countries subsidise childcare, it is difficult to come up with a measure of gross costs that is truly comparable across countries. Other commentators have pointed out that international comparisons of the

Figure 8.7. Proportion of family income spent on net childcare costs for two example families, 2008



Source: OECD family database.

affordability of childcare should therefore be done on the basis of net costs, i.e. costs after accounting for direct subsidies to providers and tax-based subsidies to parents.⁴⁶

However, the net cost to parents of childcare in the UK varies considerably according to the age of the children and the income of the parents.⁴⁷ Based on an analysis of specimen families, the OECD calculates that low-earning lone parents with young children pay relatively little for childcare in the UK (4% of their net income) – lower than in all but five other OECD countries (see Figure 8.7).⁴⁸ However, couple families with two full-time earners whose combined earnings are 167% of average earnings (and hence would be ineligible for support via tax credits) would spend a much higher amount (27% of their net income) on childcare (also shown in Figure 8.7); such families have access to much cheaper childcare in countries that have broader-based programmes for supporting childcare (such as Sweden and Denmark).

8.6 Conclusion

Government spending on childcare currently enjoys a remarkable degree of cross-party support, particularly in the context of deep cuts across many areas of public spending. Recently enacted reforms (and proposals made by both Labour and the SNP) mean that spending is likely to be higher still in the next parliament.

There are a number of ways in which the government's proposed reforms could be improved. For example, the interaction between the new tax-free childcare scheme and the support that is already provided via tax credits / universal credit will effectively create three different regimes subsidising working families' spending on childcare from 2015. Each of these regimes will have different eligibility rules, different levels of support (with little rationale) and will create some perverse cliff edges. One obvious way to overcome these problems would be to scrap support for childcare through universal credit and operate a single scheme, open to all parents, where the government tops up payments made by parents (like the proposed tax-free childcare scheme), but where the size of the top-up depends on the income of the family, the age of the children and the work status of all the parents. This would be a welcome simplification.

More fundamentally, however, there is a lack of clarity over the objectives and evidence underlying the current public debate on childcare, which requires urgent attention.

First, there has to be much greater clarity over what policy is aiming to achieve and why state intervention is needed to achieve it. A policy aimed at improving the life chances of the most disadvantaged is likely to have little in common with one aimed at supporting the labour supply of large numbers of parents, for example.

Second, there needs to be more clarity and honesty about the evidence base for intervention. There is good evidence that early years provision can help improve child

⁴⁶ H. Penn and E. Lloyd, 'The costs of childcare', Childhood Wellbeing Research Centre Working Paper 18, 2013, <http://www.cwrc.ac.uk/projects/documents/CostsofchildcareJuly2013.pdf>.

⁴⁷ For example, the way ECEC is supported in the UK means that the net cost is higher for a 2-year-old than for a 3-year-old, and the nature of the means test in tax credits means that the net cost is lower for low-income families than for high-income families and lower for lone parents than for a couple with equal earnings.

⁴⁸ This, and all other figures in this sort of analysis, will reflect the OECD's assumption about take-up of subsidies and free places, as well as how many hours of ECEC need to be purchased to facilitate parental employment.

development. But – despite the obvious prima-facie case – the evidence that subsidised childcare is important in increasing parental labour supply is surprisingly thin.

Third, we know very little about the cost of providing childcare in the UK or about the impact of current policies. There is a particular dearth of evidence on the relative (cost-) effectiveness of demand- and supply-side subsidies.

Given all these uncertainties, the case for extending universal provision of nursery education for pre-school children is in fact not easy to make. There is a danger that the current policy bidding war – welcome as it will be to many parents looking for additional support – will result in ill-targeted and inefficient use of scarce public resource. We have already stumbled a long way in the dark in this policy area. It is time to stop stumbling, shine a light on the policy landscape, and plot an effective route forward.

Annex 8.1. Central government support for ECEC in England since 1990

Year	Free provision (in England)	Employer-supported childcare (throughout the UK)	Support for childcare via tax credits and in-work benefits (throughout the UK)
1990–94		1990: employees are not taxed on the benefits they receive from using a nursery or playscheme provided by their employer.	1994: the childcare disregard in family credit is introduced, helping at most 40,000 low-income working families.
1995–99	1996: the nursery education voucher system is introduced. All parents of 4-year-olds receive a voucher worth £1,100 (per child per year) to pay providers. Private, voluntary and independent providers can charge top-up fees, and maintained providers receive the top-up from their local authority (LA). 1997: the voucher programme is replaced by a statutory requirement for LAs to provide a free place, at a maintained or PVI provider, for 12½ hours a week to all 4-year-olds for 33 weeks a year from September 1998.		1999: working families' tax credit is introduced and covers up to 70% of eligible childcare costs up to a maximum of £100 per week for one child or £150 for two or more children. The credit partially refunds spending on childcare at registered providers. It is available only to families where both adults work 16 or more hours a week, or where one works 16 or more hours and the other is unable to work through ill health.

Year	Free provision (in England)	Employer-supported childcare (throughout the UK)	Support for childcare via tax credits and in-work benefits (throughout the UK)
2000–04	<p>2001: PVI providers are allowed to access government funding for 3-year-olds, which before 1996 had previously been widely available only to the maintained nursery sector.</p> <p>2004: entitlement to free nursery education is extended to all 3-year-olds.</p>		<p>2001: the maximum amounts per week claimable increase to £135 for one child and £200 for two or more children.</p> <p>2003: these provisions are replaced by the childcare element of working tax credit (WTC), but otherwise remain unchanged.</p>
2005–09	<p>2008: duration of the entitlement is extended to 38 weeks.</p> <p>2009: a pilot scheme extends the entitlement to some 2-year-olds.</p>	<p>2005: employers are able to provide childcare vouchers of up to £50 per week free from income tax and NICs for employees to use at any registered provider.</p> <p>2006: employers can pay up to £55 p.w.</p>	<p>2006: the childcare element of WTC is increased to cover 80% of costs up to a maximum of £175 p.w. for one child and £300 p.w. for two or more children.</p>
2010–13	<p>2010: the number of hours available to 3- and 4-year-olds is extended from 12½ to 15 a week.</p> <p>2012: parents are allowed to use these 15 hours over two days. Providers can no longer require parents to purchase additional hours of care in order to qualify for their free hours.</p> <p>2013: entitlement to 15 hours of free nursery education per week, 38 weeks per year, is extended to 2-year-olds who qualify for free school meals.</p>	<p>2010: for new beneficiaries, the amount that employers can pay tax-free is cut to £28 p.w. for higher-rate taxpayers and £22 for additional-rate taxpayers (to ensure that the benefit is no higher for higher- and additional-rate taxpayers than for basic-rate taxpayers).</p>	<p>2010: the proportion of childcare costs claimable is reduced to 70%.</p>

Source: H. Waldegrave, *Quality Childcare: Improving Early Years Childcare*, Policy Exchange, London, 2013, <http://www.policyexchange.org.uk/images/publications/quality%20childcare.pdf>; HM Treasury and HMRC, *Tax-Free Childcare: Consultation on Design and Operation*, 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226460/tax-free_childcare_consultation_on_design_and_operation.pdf.