

Widening the gap?

The impact of the 30-hour entitlement on early years education and childcare



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About

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Foreword

Across the world, many Governments have been increasing their financial support for early years education and childcare. There is a growing understanding of the positive role which high quality early years education can play in raising attainment and closing the gap between outcomes for children from disadvantaged backgrounds and other children. In England, around two-fifths of the performance gap arises before children even enter school, which shows how important early years development may be.

Governments also provide subsidised support for young children in order to pursue other objectives – notably, increasing employment participation by reducing childcare costs, and reducing pressures on household budgets. Unfortunately, government policies to promote these differing objectives do not always seem consistent and aligned.

This Report – the first in a series on early years education – looks at the most recent Government initiative in England, which aims to deliver 30 hours of provision for the children of ‘working families’. As this Report highlights, there is a risk that this policy may widen the attainment gap on entry to school, and cut across initiatives such as the Pupil Premium, which aim to narrow this gap. The Report also considers how recent changes in Government support for all forms of early years provision appear to be moving towards a less progressive allocation of financial resources. A Government committed to pursuing a ‘life chances’ agenda needs to consider if these policy directions are consistent, and whether they will deliver its overall objectives.

David Laws
Executive Chairman, Education Policy Institute

Executive summary

In September 2017 the government will implement its 2015 election manifesto pledge to provide 30 hours per week of free childcare for working parents of children aged 3 and 4 years in England. For those who are eligible, this constitutes a doubling of the current, universal free entitlement of 15 hours per week of early education and childcare. From its inception, this extension to the free entitlement has been conceptualised as a policy designed to support and promote parental (particularly maternal) employment.¹ Only children from families in which all parents are earning the equivalent of 16 hours per week worked at the national living wage (but under £100,000 per year each) will be entitled to the additional 15 hours.² Using new analysis of entitlement and take-up of government subsidies, this report examines the implications of the policy for children from the lowest income households and considers its potential impact on the gap in educational outcomes between children from higher and lower socio-economic backgrounds.

Government subsidy for early years provision

Our analysis looks at both maximum entitlements to government childcare subsidy and estimated take-up of these benefits. It compares the system in March 2016 to that which will be in place from September 2017 and finds that:

- : The extension to the free entitlement, combined with the roll-out of universal credit and tax-free childcare, will result in a substantial increase in maximum entitlement to government subsidy for many families, with the exception of those on very high incomes and those who are unemployed.
- : However, the majority of parents do not currently access their maximum entitlement, particularly the childcare element of working tax credit. This is likely to be due in part to the dependence of this benefit on parental contributions, which many low income families may struggle to afford. Lack of awareness of available support, as well as parental preferences, are likely also to play a part.
- : Assuming no great change in uptake patterns, our modelling predicts that, although all working families except the wealthiest can be expected to receive an increase in government subsidy, this increase is expected to be lower for families on the lowest incomes, which do not qualify for the 30-hour entitlement and tax-free childcare. A cliff edge will be created between families above and below this threshold and those on lower incomes can be expected to receive substantially less in government subsidy.
- : In our example, a single parent family on the national living wage earning £5,000 per year could be expected to receive an average increase of nearly £1,000 in government subsidy under the 2017 system, taking their average annual total government subsidy to just over £3,000 for a child aged 3 or 4 years. A single parent family earning £95,000, on the other hand, could be expected to receive an average increase of over £2,000, taking their average total government subsidy to over £3,400 per year for a child aged 3 or 4 years.
- : This means that in 2016, this single parent on the national living wage earning £5,000 per year can be expected to receive 48 per cent more subsidy than a single parent with an annual income of £95,000. In 2017, however, the single parent earning £5,000 per year might be expected to receive 12 per cent less subsidy than a single parent earning £95,000.
- : A two parent family on the national living wage earning £19,000 per year can be expected to receive on average around £600 more per year in government subsidy under the 2017 system, with an average total government subsidy of over £2,700 for a child aged 3 or 4 years. However, a two parent family earning £100,000 can be expected to receive an average increase of around

1 See, for example: Conservative Party, 'The Conservative Party Manifesto 2015', April 2015, p.27; Hansard, HC Deb., 25 November 2015, cc.1413, 1421-1422, 1453; Department for Education, 'Childcare Bill: policy statement', December 2015, p.4; Hansard, HC Deb., 25 January 2016, c.58; Department for Education, 'Thousands of parents benefit from 30 hours' free childcare early', 2 February 2016; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.16.

2 HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

£1,400 per year, taking their average annual total government subsidy to over £3,400 for a child aged 3 or 4 years.

- : As a consequence, in 2016, a two parent family on the national living wage with annual earnings of £19,000 can be expected to receive 6 per cent more subsidy than a two parent family earning £100,000 per year. In 2017, the two parent family earning £19,000 might be expected to receive 20 per cent less subsidy than the two parent family with annual earnings of £100,000.

These changes are summarised in the table below.³

	Gross Annual Earnings		2016			2017		
			Entitlement	Mean Uptake Estimate	Mean % Entitlement Used	Entitlement	Mean Uptake Estimate	Mean % Entitlement Used
Single Parents	not employed	£0	£2,900	£2,100	72%	£2,900	£2,100	72%
	< threshold	£5,000	£2,900	£2,100	72%	£10,400	£3,000	29%
	> threshold	£6,000	£8,900	£2,600	29%	£10,800	£4,700	44%
	median	£28,000	£4,200	£2,200	52%	£6,500	£3,800	58%
	high	£95,000	£3,200	£1,400	44%	£6,500	£3,400	52%
Two Parents	not employed	£0	£2,900	£2,100	72%	£2,900	£2,100	72%
	< threshold	£19,000	£2,900	£2,100	72%	£10,200	£2,700	26%
	> threshold	£20,000	£7,400	£2,100	28%	£10,800	£4,600	43%
	median	£36,000	£3,200	£2,200	69%	£6,500	£3,700	57%
	high	£100,000	£3,900	£2,000	51%	£6,500	£3,400	52%

These spending patterns reflect the government’s decision to prioritise spending that is intended primarily to promote parental employment.

Maternal employment

However, the available evidence indicates that the policy is unlikely to have a major impact on maternal employment rates. An existing study of the universal entitlement to 12.5 hours per week of free childcare in the early 2000s concluded that the policy was an expensive means of moving relatively few women into work.⁴ International reports on the impact of childcare subsidies on maternal employment are contradictory, reaching varying conclusions depending on the precise policies and the contexts in which they were implemented. Overall, the evidence broadly indicates that large effects should only be expected if there are existing low rates of maternal employment and low levels of informal childcare usage, and among mothers whose youngest child is eligible for the policy.⁵ In England, whilst there are variations across different groups, maternal employment rates are not particularly low and are broadly in line with OECD averages, and there are substantial levels of informal childcare use.⁶ Extending the free entitlement is likely to carry a considerable level of deadweight as existing childcare arrangements (either informal arrangements or formal childcare currently funded by parents) are replaced by government-funded provision without necessarily prompting a rise in maternal employment rates or working hours. The policy should therefore not be expected to transform maternal employment outcomes.

³ All figures are rounded to the nearest £100.

⁴ M. Brewer, S. Cattan, C. Crawford and B. Rabe, ‘The impact of free, universal pre-school education on maternal labour supply’, Institute for Fiscal Studies, October 2014.

⁵ S. Bauernschuster and M. Schlotter, ‘Public Child Care and Mothers’ Labor Supply – Evidence from Two Quasi-Experiments’, Center for Economic Studies and Ifo Institute, April 2013, pp.5-9.

⁶ OECD, ‘LMF1.2: Maternal employment rates’, OECD Family database, 2013, accessed 20 April 2016; OECD, ‘PF3.3: Informal childcare arrangements’, OECD Family database 2013, accessed 21 April 2016.

Child development and the attainment gap

The socio-economic gap in educational attainment appears very early in a child's life and already stands at 4.3 months at age 5.⁷ Early education has short and long-term effects on child development, but the impact is significantly greater when the provision is of high quality.⁸ The benefits derived from high quality provision are larger for disadvantaged children and therefore high quality early education has the potential to narrow the attainment gap.⁹ However, a disparity remains in the quality of provision located in the most and least deprived areas, at least in the private, voluntary and independent sector.¹⁰ The existing free entitlement does not necessarily offer the level of quality that would be required for the attainment gap to be reduced substantially. Analysis of the initial roll-out of the universal entitlement in the early 2000s found that the policy did not have a long-term impact on child outcomes or narrow the attainment gap; this is likely to be due to the fact that the expansion took place in lower quality settings.¹¹ Extending the entitlement to 30 hours per week for working families is likely to place further strain on quality and access for the most disadvantaged children. This is due to the eligibility criteria for the policy, the capacity of the sector, and the quality of provision which can be offered under the funding rates provided.

Eligibility

Children in families in which the per parent weekly income is below the equivalent of 16 hours worked at the national living wage will not be eligible for the extension to 30 hours of free early years provision. Although the Effective Pre-school, Primary and Secondary Education study concluded that full-time attendance at pre-school brought no additional gains compared to part-time attendance,¹² the wider evidence is not conclusive. A number of American studies have found gains from full-time attendance at kindergarten, and the Education Endowment Foundation has suggested that the benefits may be equivalent to around 3 months of additional progress.¹³ Clearer evidence is needed regarding the impact of various attendance levels and patterns on outcomes for different groups of children in England.

Capacity

There is already a shortage of early years places in some parts of England.¹⁴ The extension to the free entitlement will prompt an increase in demand for childcare places; the Department for Education has estimated that an additional 45,000 places will be required, but this does not allow for any change in working patterns prompted by the policy.¹⁵ It has been argued that the £50 million of capital funding pledged by the government to support growth in the sector is unlikely to be sufficient to allow for the expansion in capacity required.¹⁶ Moreover, several early implementer local authorities which are piloting the scheme from September 2016 have announced that they will be allocating higher funding rates for the additional 15

7 N. Perera and M. Treadaway with P. Sellen, J. Hutchinson, R. Johnes and L. Mao, 'Education in England: Annual Report 2016', EPI, April 2016, p.42.

8 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, pp.26, 28-29, 31, 32-33, 40-41; K. Sylva, E. Melhuish, P. Sammons, I. Siraj and B. Taggart, 'Students' educational and developmental outcomes at age 16: Effective Pre-school, Primary and Secondary Education (EPPSE 3-16) Project – Research Brief', Department for Education, September 2014, pp.5, 12-13, 14, 16.

9 E. Lloyd and S. Potter, 'Early childhood education and care and poverty', Joseph Rowntree Foundation, September 2014.

10 Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2012/13: Early years', April 2014, pp.22-24; S. Mathers and R. Smees, 'Quality and Inequality: Do three- and four-year-olds in deprived areas experience lower quality early years provision?', Nuffield Foundation, May 2014; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, p.44; 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, March 2013, pp.19, 33-34, 52-53.

11 J. Blanden, E. Del Bono, S. McNally and B. Rabe, 'Universal pre-school education: the case of public funding with private provision', *The Economic Journal*, 126:592, May 2016, pp.682-723.

12 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, p.26.

13 Education Endowment Foundation, 'Extra hours', Early Years Toolkit: <https://educationendowmentfoundation.org.uk/evidence/early-years-toolkit/extra-hours/>, accessed 22 April 2016.

14 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, p.38; J. Rutter, 'Childcare Costs Survey 2015', Family and Childcare Trust, February 2015, p.19.

15 National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.37.

16 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.35-36; Family and Childcare Trust, 'Childcare Bill: Written Evidence', House of Commons, December 2015, pp.9-10.

hours than for the core 15 hours.¹⁷ If this pattern is replicated during the national roll-out of the scheme then, alongside the context of increased competition for limited places, there is a danger that some providers will prioritise accommodating children who qualify for the full 30-hour entitlement at the expense of children eligible for only 15 hours of free early education. This risk extends to younger children eligible for the free entitlement for disadvantaged 2-year-olds and is particularly concerning due to evidence that duration of attendance at pre-school in months has a significant impact on subsequent outcomes.¹⁸

Quality

In November 2015 the government published a review into the costs of childcare delivery; this was used as the basis for announcing an increase in the national average funding rates paid by government to providers to deliver the free entitlement, from £4.56 to £4.88 per hour, including the early years pupil premium.¹⁹ In spite of this, claims have been made from the sector that the rates are unlikely to be sufficient to cover costs for many providers, particularly given the recent introduction of the national living wage in April 2016. Analysis commissioned by the Pre-school Learning Alliance estimates that the rates pledged by the government will result in private, voluntary and independent non-domestic settings experiencing an annual shortfall of over £200 per child for 3 and 4-year-olds claiming the 15-hour universal entitlement and almost £500 per child for those receiving 30 hours.²⁰ The extent to which the entitlement may or may not be under-funded continues to be contested, but what is clear is that the sums being made available will not allow providers to invest in quality through measures such as upskilling or expanding their workforce or developing their premises. This will place a strain on quality not only for the additional 15 hours of the new, extended entitlement, but also for the core, universal entitlement of 15 hours per week.

Early years national funding formula

By 2019-20, the government will be spending over £1 billion more per year on early years provision, with a total annual cost of more than £6 billion.²¹ At a time when the government is investing so much in the sector, this report finds that this investment is being made in a way in which children from the poorest families, who have the potential to benefit disproportionately from high quality early education, are likely to receive a smaller share of these additional resources. Indeed, it seems probable that they will lose out in terms of quality and access to the early education which is needed to tackle the attainment gap at its roots.

In light of the findings of this report, it will be critical to assess how far the forthcoming proposals for the early years national funding formula will mitigate or exacerbate the balance identified in favour of children from wealthier families; these families are likely to receive a greater quantity of childcare provided by the state. Funding sufficient high quality places for the existing universal 15-hour offer for poorer children must be prioritised above the expansion of provision for wealthier families. There is otherwise a risk of undermining the aims of the pupil premium before children even start school, and of offsetting the higher overall levels of funding that children attending schools in disadvantaged areas have experienced to an increasing degree over recent years.²² The principles of a national funding formula for schools should lead to an explicit and consistent level of funding for deprived pupils.²³ The forthcoming national funding formula for early years should seek to achieve this same goal through an explicit and clear weighting for disadvantaged children.

17 C. Gaunt, 'Local authorities reveal details of 30-hour rates', Nursery World, 16 May 2016.

18 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, p.26; K. Sylva, E. Melhuish, P. Sammons, I. Siraj and B. Taggart, 'Students' educational and developmental outcomes at age 16: Effective Pre-school, Primary and Secondary Education (EPPSE 3-16) Project', Department for Education, September 2014, p.18.

19 Department for Education, 'Review of childcare costs: the analytical report', November 2015; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44; Department for Education, 'Childcare Bill: policy statement', December 2015, p.6.

20 Pre-school Learning Alliance, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.18.

21 Department for Education, 'Review of childcare costs: the analytical report', November 2015; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.6.

22 C. Belfield and L. Sibbieta, 'Long-Run Trends in School Spending in England', Institute for Fiscal Studies, April 2016, pp.31-37.

23 Department for Education, 'Schools and high needs funding reform: The case for change and consultation summary', March 2016, p.14.

Introduction

The past two decades have witnessed a proliferation in government intervention in early years provision in England.²⁴ With its potential both to promote child development and to support parents (particularly mothers) to enter or increase paid employment, the case for government intervention in this area has been largely accepted by all UK political parties. Indeed, pledges to extend the free entitlement to early education above its current 15 hours per week formed major proposals in each of the Conservative, Labour and Liberal Democrat general election manifestos in 2015.²⁵ Alongside the free entitlement, the past 20 years has seen the introduction and development of two other government subsidies which support parents with the costs of early years provision: the childcare element of working tax credit (currently being replaced by universal credit), and tax relief on employer childcare vouchers (to be replaced by tax-free childcare from 2017). The early years pupil premium was also established in 2015 specifically to support provision for disadvantaged children.

There have been many calls for greater clarity about the purpose of government policy in early years provision, which can be used to fulfil several different purposes:

- : To promote parental (particularly maternal) employment, and thereby to further gender equality.
- : To support child development, and in doing so to narrow the attainment gap between children from disadvantaged and non-disadvantaged backgrounds.

These objectives are not necessarily compatible, and can pull policy in different directions depending on the value placed on each; policy making without clear priorities can lead to contradiction and incoherence.²⁶ Ensuring that priorities are clear must not, however, result in the neglect of other potential objectives.

The government has explicitly stated that the extension of the free entitlement to 30 hours per week of childcare is a policy for working parents, designed to support and promote parental employment.²⁷ The evidence to support the decision to take this particular route has, however, been much less clearly explained. Despite tensions between offering flexible childcare (to enable parents to work) and high quality early education (to promote child development),²⁸ early years settings can and often do fulfil both functions to a greater or lesser extent; this is similar to the way in which schools offer education to children aged between 5 and 18 and in so doing release parents from childcare responsibilities and enable them to work for a certain number of hours each day. The Department for Education's most recent early years survey of parents indicates that whilst the balance between economic and child-related reasons for using centre-based provision varies according to the type of setting, both purposes feature very prominently across usage of all provider types.²⁹ Certainly, there is a great deal of evidence to show that young children learn effectively through play-based activities; these are found in both establishments which are considered primarily to offer childcare as well as those focusing specifically on early education.³⁰

In developing the 30-hour entitlement to childcare, policy makers have prioritised the goal of promoting parental employment above the other potential purposes of early years provision. This report highlights that this approach fails to account sufficiently for the extent to which this policy has the potential to

24 J. Grauberg (ed.), 'Early Years: valuable ends and effective means', EPI, July 2014, pp.8-16.

25 Conservative Party, 'The Conservative Party Manifesto 2015', April 2015, p.27; Labour Party, 'The Labour Party Manifesto 2015', April 2015, p.44; Liberal Democrats, 'Liberal Democrat Manifesto 2015', April 2015, pp.42-43.

26 J. Grauberg (ed.), 'Early Years: valuable ends and effective means', EPI, July 2014, pp.17-20; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, pp.6, 22-23.

27 See, for example: Conservative Party, 'The Conservative Party Manifesto 2015', April 2015, p.27; Hansard, HC Deb., 25 November 2015, cc.1413, 1421-1422, 1453; Department for Education, 'Childcare Bill: policy statement', December 2015, p.4; Hansard, HC Deb., 25 January 2016, c.58; Department for Education, 'Thousands of parents benefit from 30 hours' free childcare early', 2 February 2016; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.16.

28 J. Hillman and T. Williams, 'Early years education and childcare: Lessons from evidence and future priorities', Nuffield Foundation, March 2015, p.47.

29 T. Huskinson, S. Hobden, D. Oliver, J. Keyes, M. Littlewood, J. Pye and S. Tipping, 'Childcare and early years survey of parents 2014 to 2015', Department for Education, March 2016, pp.18, 310.

30 M. Evangelou, K. Sylva, M. Kyriacou, M. Wild and G. Glenny, 'Early Years Learning and Development: Literature Review', Department for Children, Schools and Families, November 2009, pp.5, 31-32, 60-61, 71-73, 78; Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2015: Early years', July 2015, p.7.

impact negatively on the attainment gap between disadvantaged and non-disadvantaged children, and outlines key considerations which need to be tackled in order to guard against this.

Beginning with a brief overview of the background to the free entitlement and other government subsidies for early years provision, the paper moves on to explore the evidence available about the impact of early years provision and policies on maternal employment and child outcomes, before outlining concerns regarding the potential effects of the 30-hour entitlement on the attainment gap. The report goes on to analyse how the provision of government subsidy for early years provision relates to household income and uptake under the current and forthcoming systems, in order to illustrate priorities of funding implicit in the arrangements. Finally, it considers what may be needed going forwards in order to ensure that these policies do not result in a disproportionately negative impact on children from disadvantaged backgrounds.

Chapter 1: Background

Summary

- : Government subsidies for early years provision in England consist of both supply-side funding (free entitlement) and demand-side funding (childcare elements of working tax credit and universal credit; employer childcare vouchers and tax-free childcare).
- : The free entitlement to early education, originally introduced in 1998, was extended under the coalition government to 15 hours per week for 3 and 4-year-olds and to the 40 per cent most disadvantaged 2-year-olds. The main reason for these changes was in order to support child development.
- : The new extension of the free entitlement to 30 hours for working families, however, has been designed chiefly to support parental employment outcomes.

Early years provision in England

Early years provision in England is a complex patchwork of different types of providers, financed by a variety of funding streams. This mixed market of provision includes private, voluntary or independent (PVI) settings, maintained nurseries, primary schools, children's centres and childminders. The cost of early years provision is borne partly by parents and partly by government, through a combination of demand-side and supply-side subsidies: the childcare element of working tax credit (currently being replaced by universal credit) and employer-supported childcare vouchers (to be replaced by tax-free childcare from 2017) constitute demand-side subsidies by channelling funding directly to parents in order to support the costs of childcare; the entitlement to free early education and childcare is a supply-side subsidy, consisting of the provision of subsidised services, with government funding transferred directly to settings by local authorities.

The past quarter century has witnessed a dramatic expansion in early years provision. In 1990, there were 59,000 nursery places in England and Wales, compared to 1.7 million in 2015; the vast majority of this increase has taken place in the PVI sector.³¹ This growth has been underpinned in part by large rises in government investment in early years provision, which has increased since 1998 from under £1 billion each year to over £5 billion per year.³²

Free entitlement to early education and childcare

A substantial proportion of the expansion in government spending on early years provision can be attributed to the introduction of, and extension to, an entitlement to free childcare, which in 2014-15 carried an annual cost of £2.9 billion.³³ In 1998, the government announced that all 3 and 4-year-olds in England would be entitled to free part-time early education; this had been implemented for 4-year-olds by 2000 and for 3-year-olds by 2005.³⁴ This entitlement was initially for 12.5 hours per week for 33 weeks a year; this increased to 38 weeks a year in 2006. From September 2010, the universal entitlement was extended to 15 hours per week for 38 weeks per year.³⁵ In addition, this free entitlement was expanded to the 20 per cent most disadvantaged 2-year-olds from September 2013 and the 40 per-cent most disadvantaged 2-year-olds from September 2014. The rationale for the extensions to the free entitlement under the coalition government was predominantly an educational one, focusing

31 J. Rutter, 'Childcare Costs Survey 2015', Family and Childcare Trust, February 2015, p.5; J. Hillman and T. Williams, 'Early years education and childcare: Lessons from evidence and future priorities', Nuffield Foundation, March 2015, p.6.

32 A. Butler and J. Rutter, 'Creating an anti-poverty childcare system', Joseph Rowntree Foundation, January 2016, p.15. It has been estimated that total public expenditure on early years, childcare and maternity payments increased from 0.2 per cent of Great Britain's GDP in 1997-98 to 0.7 per cent in 2010-11. See: K. Stewart, 'Labour's Record on the Under Fives: Policy, Spending and Outcomes 1997-2010', Centre for Analysis of Social Exclusion and The London School of Economics and Political Science, July 2013, p.11.

33 L. Sibieta, 'Schools Spending: IFS Briefing Note BN168', Institute for Fiscal Studies, March 2015, pp.4-5.

34 Institute for Fiscal Studies, 'The impact of free early education for 3 year olds in England', 22 October 2014, p.1.

35 T. Jarrett, 'Childcare Bill 2015-16: Analysis for Commons Report Stage (Bill 107)', House of Commons Library, 20 January 2016, p.7.

on the scope for this policy to support child development and improve outcomes, particularly for disadvantaged children.³⁶

Concurrent with the development of the universal free entitlement, however, was a dramatic rise in costs of childcare. During the last parliament, childcare costs rose rapidly: the average weekly cost of a part-time nursery place in England for a child aged 2 and over, for example, increased by over 36 per cent, from £82 per week in 2010 to £111.64 in 2015.³⁷ Without a comparable rise in wages, the strain which this has placed on family budgets has become increasingly prominent in public debates, with the cost of childcare often cited as a significant barrier to employment.³⁸ Within this context, political rhetoric has shifted in prime emphasis from the need for the free entitlement to support child development, to the potential for it to support parental employment.³⁹

Prior to the 2015 general election, Conservative, Labour and Liberal Democrat general election manifestos all guaranteed to extend the free entitlement in different ways.⁴⁰ Following the Conservative Party's election victory, their pledge to double the entitlement to free childcare for working parents from 15 to 30 hours per week was confirmed at the time of the Queen's Speech and further details published in a policy statement.⁴¹ The Chancellor's autumn statement in 2015 re-stated the government's commitment to double the entitlement to 30 hours of free childcare per week, but revised the eligibility criteria. The policy statement published in July 2015 had guaranteed the offer to parents working the equivalent of 8 hours per week at the national minimum wage,⁴² but in November, this bar was raised to a weekly per parent income equivalent to working 16 hours per week at the national living wage. An upper income limit of £100,000 per parent per year was also introduced.⁴³ The Childcare Act, which received royal assent in March 2016, guarantees 30 hours per week of free childcare for 38 weeks each year for eligible children of working parents. Throughout its evolution, government ministers have emphasised that the intention of the policy is to increase parental employment: 'extending the 15 hours to 30 hours is primarily a work incentive'.⁴⁴

Demand-side subsidies for early years provision

In addition to the free entitlement, there are two demand-side subsidies available to support parents with the costs of childcare: the childcare element of working tax credit (gradually being replaced by universal credit); and employer childcare vouchers (to be replaced by tax-free childcare from 2017).

36 Department for Education and Department of Health, 'Supporting Families in the Foundation Years', July 2011, pp.21-22; Department for Education, '92,000 2-year-olds already receiving free childcare', 11 November 2013; E. Lloyd, 'Early childhood education and care policy in England under the Coalition Government', *London Review of Education*, 13:2, September 2015, pp.147-148.

37 J. Rutter, 'Childcare Costs Survey 2015', Family and Childcare Trust, February 2015, pp.4, 15; Daycare Trust, 'Childcare costs survey 2010', February 2010, p.2. In both years, figures are based on 25 hours per week of childcare. The most recent survey of childcare costs found that childcare prices rose only in line with inflation from 2015 to 2016; this is the first time this has happened since 2008. However, childcare remains a major expense for families. See: J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016. There are a variety of reasons for the sharp increase in childcare fees in recent years. Efforts to improve qualification levels within the early years workforce have placed greater pressure on staffing costs (although pay levels in the sector remain below the national average). In addition, under-funding of the free entitlement by government has caused many providers to pitch prices charged to parents for additional hours at a level which allows for cross-subsidisation. For more detailed analysis of the costs of providing childcare and potential causes of increases in fees, see: R. Brind, O. Norden and D. Oseman, 'Childcare Provider Finances Survey', Department for Education, May 2012; J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.22-29.

38 M. Brewer, S. Cattam and C. Crawford, 'IFS Green Budget 2014: State support for early childhood education and care in England', Institute for Fiscal Studies, February 2014, p.173; J. Rutter, 'Childcare Costs Survey 2015', Family and Childcare Trust, February 2015, p.3; HM Government, 'More affordable childcare', July 2013, pp.13-16.

39 E. Lloyd, 'Early childhood education and care policy in England under the Coalition Government', *London Review of Education*, 13:2, September 2015, pp.146-152.

40 The Conservative Party promised to double the entitlement to free childcare for 3 and 4-year-olds from 15 to 30 hours per week for working families; Labour committed to an increase to 25 hours per week for the same group; and the Liberal Democrats offered 20 hours per week of free early years provision to both working and non-working parents of all children aged 2 to 4 years and for all working parents of children from the age of 9 months to 2 years. See: Conservative Party, 'The Conservative Party Manifesto 2015', April 2015, p.27; Labour Party, 'The Labour Party Manifesto 2015', April 2015, p.44; Liberal Democrats, 'Liberal Democrat Manifesto 2015', April 2015, pp.42-43.

41 Prime Minister's Office, 'The Queen's Speech', 27 May 2015, p.25; Department for Education, 'Childcare Bill: policy statement', July 2015.

42 Department for Education, 'Childcare Bill: policy statement', July 2015, pp.5-6.

43 HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

44 Hansard, HC Deb., 25 January 2016, c.58. See also, for example: Hansard, HC Deb., 25 November 2015, cc.1413, 1421-1422, 1453; Department for Education, 'Childcare Bill: policy statement', December 2015, p.4; Department for Education, 'Thousands of parents benefit from 30 hours' free childcare early', 2 February 2016.

The childcare element of working tax credit offers eligible families reimbursement for up to 70 per cent of eligible childcare costs.⁴⁵ Universal credit is currently being rolled out and is gradually replacing working tax credit; its childcare component covers up to 85 per cent of eligible childcare costs.⁴⁶ The childcare element of working tax credit carries a weekly working requirement of 16 hours per week per parent; this does not apply to the childcare component of universal credit, although all parents must usually be employed. Under both systems, families cease to be eligible once household earnings reach around £31,000 per year.

A working parent can currently claim tax relief on some childcare costs through a salary sacrifice scheme, if operated by their employer. This scheme is due to be replaced by a system of tax-free childcare, which will be rolled out from 2017. Under tax-free childcare, the government will contribute 20 per cent of eligible childcare costs. The scheme was initially to be available to families in which all parents were in work and each earning under £150,000 per year. However, the eligibility requirements were subsequently revised so that they are now the same as those for the entitlement to 30 hours per week of free childcare.⁴⁷ This means that all parents in a household must be earning at least the equivalent of 16 hours per week worked at the national living wage but have an annual income of less than £100,000.⁴⁸

Early years pupil premium

The early years pupil premium was introduced in 2015, following the roll-out of pupil premium to schools in 2011. This is paid to providers in order to fund interventions and practices intended specifically to improve outcomes for disadvantaged 3 and 4-year-olds.⁴⁹ The early years pupil premium differs from the other benefits and entitlements outlined above in that it is intended specifically to be used to improve quality of provision for those eligible, whereas the other benefits relate to the quantity of childcare available to parents.

45 HM Revenue and Customs, 'Working Tax Credit – Help with the costs of childcare', April 2015, p.10.

46 Universal Credit, 'Universal Credit and your family', January 2016, p.2; 'Proposed benefit and pension rates 2016 to 2017', p.13: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480317/proposed_benefit_and_pension_rates_2016_to_2017.pdf, accessed 5 May 2016.

47 A. Seely, 'Tax relief for childcare', House of Commons Library, 11 June 2014, p.2; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

48 T. Jarrett, 'Childcare Bill 2015-16: Analysis for Commons Report Stage (Bill 107)', House of Commons Library, 20 January 2016, pp.8, 50-53; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

49 Department for Education, 'Early years pupil premium: guide for local authorities', November 2014, updated March 2015: <https://www.gov.uk/guidance/early-years-pupil-premium-guide-for-local-authorities>, accessed 5 May 2016.

Chapter 2: The impact of early years provision on labour supply and educational outcomes

Summary

- : Childcare subsidies can be implemented with the intention of increasing the labour supply of parents or of supporting child development, or both. This chapter examines evidence of the impact of such policies on both types of outcome, focusing principally on supply-side subsidies such as the free entitlement to early years provision.
- : The 30-hour entitlement to free childcare is unlikely to transform maternal employment rates. Existing analysis of the universal entitlement to 12.5 hours per week of free provision in the early 2000s concluded that the policy was a high-cost way of moving relatively few women into work.
- : International evidence is contradictory, with different policies leading to different results depending on the precise policies and the contexts in which they were implemented. Overall, the evidence broadly indicates that large effects should be expected only if there are existing low rates of maternal employment and low levels of informal childcare, and among mothers whose youngest child is eligible for the policy.
- : In England, whilst there are variations across different groups, maternal employment rates are not particularly low and are broadly in line with OECD averages, and there are substantial levels of informal childcare. Extending the free entitlement is likely to carry a considerable level of deadweight as existing private childcare arrangements are replaced by government-funded provision without necessarily prompting a rise in maternal employment rates or working hours.
- : The socio-economic gap in attainment appears very early in a child's life and is already entrenched by the time a child begins school.
- : Early education has short and long-term effects on child development, but high quality provision has a significantly greater impact. The benefits derived from high quality provision are larger for disadvantaged children, but there is a divergence in the quality of provision located in the most and least deprived areas, at least in the PVI sector.
- : However, the free entitlement does not automatically guarantee the level of quality that would be required for the attainment gap to be reduced substantially. Analysis of the initial roll-out of the universal entitlement in the early 2000s found that the policy did not raise child outcomes or narrow the attainment gap; this is likely to be due to the fact that the expansion took place in low quality settings.

Maternal employment

According to current and former government ministers, the extension of the free entitlement to childcare has been explicitly designed chiefly to promote parental access to the labour market.⁵⁰ There is evidence that many mothers regard high childcare costs as a barrier to entering or extending hours of employment.⁵¹ However, it is important to remember that an individual's decision to enter the labour market or not is based on a combination of factors in addition to cost of childcare, including accessibility and flexibility of early years provision, as well family attitudes, flexibility of employment, work incentives in the welfare system, and opportunities for education and training.⁵²

Crucially, there is not a strong body of evidence to indicate that free entitlement to childcare has a strong impact on employment outcomes for a large number of parents. Limited research has been

50 See, for example: Conservative Party, 'The Conservative Party Manifesto 2015', April 2015, p.27; Hansard, HC Deb., 25 November 2015, cc.1413, 1421-1422, 1453; Department for Education, 'Childcare Bill: policy statement', December 2015, p.4; Hansard, HC Deb., 25 January 2016, c.58; Department for Education, 'Thousands of parents benefit from 30 hours' free childcare early', 2 February 2016; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.16.

51 G. Cory and V. Alakeson, 'Careers and carers: Childcare and maternal labour supply', Resolution Foundation, January 2014, pp.17-18.

52 A. Butler and J. Rutter, 'Creating an anti-poverty childcare system', Joseph Rowntree Foundation, January 2016, p.11; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, pp.68-76.

undertaken to date to evaluate the impact of the free entitlement on parental employment, or indeed of government investment in childcare more generally in England.⁵³ The main research into this has been carried out by the Institute for Fiscal Studies and the Institute for Social and Economic Research (University of Essex), which found that the introduction of the universal free entitlement to part-time early education for 3 and 4-year-olds between 2000 and 2008 increased the proportion of children in England who had access to free part-time early education by 50 percentage points and resulted in an increase in the employment rate of mothers whose youngest child was 3 years old of about 3 percentage points; this was equivalent to about 12,000 additional women in employment. Therefore, although the free entitlement to childcare did support some mothers into work, its impact on maternal employment rates was relatively limited, partly because some local education authorities were already providing free early education and partly because many parents were already paying for such provision. The authors concluded that the policy ‘constituted a very expensive way of moving a small number of additional women into work’ and cautioned against assumptions that extending the free entitlement would necessarily result in a major impact on parental employment.⁵⁴

An earlier study focused solely on the impact on lone parents (mainly mothers) in receipt of benefits whose youngest child moves into free part-time early education or full-time primary education, as the group most likely to be responsive to this change. This report similarly identified a small but significant effect on the proportion of lone parents in employment and not on welfare, which increased by around 2 percentage points 8 to 9 months after their child became eligible for primary education. The impact of eligibility for part-time nursery education on the proportion of lone parents in employment and not on welfare was found to be smaller and weaker.⁵⁵

The provision of 30 hours per week of free childcare may therefore have a different impact on maternal employment rates than did the introduction of 12.5 hours per week, by increasing the size of the entitlement and placing it on a par with the number of free hours of primary education. A review of international evidence on childcare and maternal employment rates suggests that countries in which maternal employment rates are high offer at least 30 hours per week of subsidised childcare.⁵⁶ However, the conclusions from evaluations of the impact of national policies of subsidised childcare on maternal employment rates is mixed, as would be expected from a variety of policies in very different contexts.⁵⁷

There are some examples of childcare subsidies having a considerable positive effect on maternal employment. In Germany, for instance, the introduction in 1996 of a legal entitlement to a kindergarten place, comprising of highly subsidised half-day provision for children from the age of 3 years, had a large positive effect on maternal labour supply: eligibility for the scheme increased maternal labour supply by roughly 6 percentage points and if a mother’s youngest child attended the provision then the probability of the mother being employed rose by over 35 percentage points.⁵⁸

On the other hand, a number of studies have found policies offering access to free or subsidised childcare to have only a small impact on maternal employment. A study of the introduction of subsidised, universally accessible childcare in Norway in the late 1970s, for example, identified barely any impact on the labour supply of married mothers with children aged 3 to 6 years, and suggested that the policy instead overwhelmingly simply crowded out existing informal childcare arrangements.⁵⁹

53 Select Committee on Affordable Childcare, ‘Affordable Childcare’, House of Lords, 24 February 2015, HL 117 2014-15, pp.64-68.

54 M. Brewer, S. Cattam, C. Crawford and B. Rabe, ‘The impact of free, universal pre-school education on maternal labour supply’, Institute for Fiscal Studies, October 2014.

55 M. Brewer and C. Crawford, ‘Starting School and Leaving Welfare: The Impact of Public Education on Lone Parents’ Welfare Receipt’, Institute for Fiscal Studies, September 2010.

56 S. Thompson and D. Ben-Galim, ‘Childmind the Gap: Reforming childcare to support mothers into work’, Institute for Public Policy Research, February 2014, p.28.

57 M. Brewer, S. Cattam, C. Crawford and B. Rabe, ‘The impact of free, universal pre-school education on maternal labour supply’, Institute for Fiscal Studies, October 2014, pp.3-5; S. Thompson and D. Ben-Galim, ‘Childmind the Gap: Reforming childcare to support mothers into work’, Institute for Public Policy Research, February 2014, pp.10-12.

58 S. Bauernschuster and M. Schlotter, ‘Public Child Care and Mothers’ Labor Supply – Evidence from Two Quasi-Experiments’, CESifo Working Paper No. 4191, April 2013.

59 T. Havnes and M. Mogstad, ‘Money for Nothing? Universal Child Care and Maternal Employment’, IZA Discussion Paper No. 4504, October 2009.

Similarly, research into the impact of universal pre-kindergarten programmes in Georgia and Oklahoma in 2000 concluded that these policies increased pre-school enrolment of 4-year-olds considerably but had no significant impact on the labour supply of most mothers.⁶⁰

Other studies have identified substantial differences in the impact between different groups of mothers. The large expansion of publicly-funded kindergartens in a number of American states in the 1960s and 1970s has been found to have had a relatively high impact on employment rates for single mothers whose youngest child was aged 5 years, but no significant effects on the labour supply of married mothers or of mothers with younger children (whether married or single); the policy was associated with a high level of substitution from existing private arrangements to the new public kindergarten places.⁶¹ The major expansion of free, publicly available childcare for all 3-year-olds in Spain in the early 1990s appears to have led to an increase of around 2 percentage points in the overall employment rate of mothers whose youngest child was aged 3 years and also prompted a rise in average number of hours worked. This trend was driven by mothers who were not college graduates: no effects were found for mothers with a college degree, who were likely already to be able to afford private childcare and who already had a high level of participation in the labour market. In addition, the effects of the policy persisted much more strongly for mothers with high school degrees, whereas the impact faded away for lower skilled mothers.⁶²

Certain factors in particular have been identified as limiting the impact of such policies on maternal employment rates: existing high rates of maternal employment and childcare attendance; high levels of deadweight (i.e. if new state-funded childcare simply replaces private childcare arrangements); and women whose youngest child is not eligible for the policy.⁶³ These variables, along with others, such as the structure of the labour market and cultural attitudes towards childcare, vary between countries and shape the impact of particular policies.

In the UK, maternal employment rates are broadly in line with the OECD average: in 2013, 66.6 per cent of mothers with at least one child aged 0 to 14 years were employed in the UK, compared with 66.8 per cent across the 28 OECD countries for which comparable data was available.⁶⁴ The employment rate does, however, vary amongst different groups of mothers. It is below the OECD average for mothers whose youngest child is aged between 3 and 5 years: 62.7 per cent of mothers in this category were employed in the UK in 2013, compared with 66.8 per cent across the OECD.⁶⁵ Yet the employment rate is substantially below this for some groups. It is particularly low, and below the OECD average, for mothers with three or more children aged between 0 and 14 years, at 46.7 per cent in 2013.⁶⁶ It is also very low (albeit above OECD average) for mothers with low levels of education, at 45.0 per cent.⁶⁷ This compares with a high rate of employment amongst highly educated mothers, which, at 79.7 per cent, is above the OECD average.⁶⁸

60 M. Fitzpatrick, 'Preschoolers Enrolled and Mothers at Work? The Effects of Universal Prekindergarten', *Journal of Labor Economics*, 28:1, January 2010, pp.51-85.

61 E. Cascio, 'Maternal Labor Supply and the Introduction of Kindergartens into American Public Schools', *The Journal of Human Resources*, 44:1, Winter 2009, pp.140-170.

62 N. Nollenberger and N. Rodriguez-Planas, 'Child Care, Maternal Employment and Persistence: A Natural Experiment from Spain', IZA Discussion Paper No. 5888, July 2011.

63 S. Bauerschuster and M. Schlotter, 'Public Child Care and Mothers' Labor Supply – Evidence from Two Quasi-Experiments', Center for Economic Studies and Ifo Institute, April 2013, pp.5-9.

64 OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 20 April 2016.

65 OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 18 May 2016.

66 OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 20 April 2016. The OECD-26 average is 51.0 per cent of mothers with three or more children aged 0 to 14 years in employment.

67 OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 18 May 2016. The OECD-20 average is 42.9 per cent of women with low levels of education in employment.

68 OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 20 April 2016. The OECD-20 average is 78.1 per cent of highly educated mothers in employment.

Figure 2.1: Employment rates of women in OECD countries, 2013⁶⁹

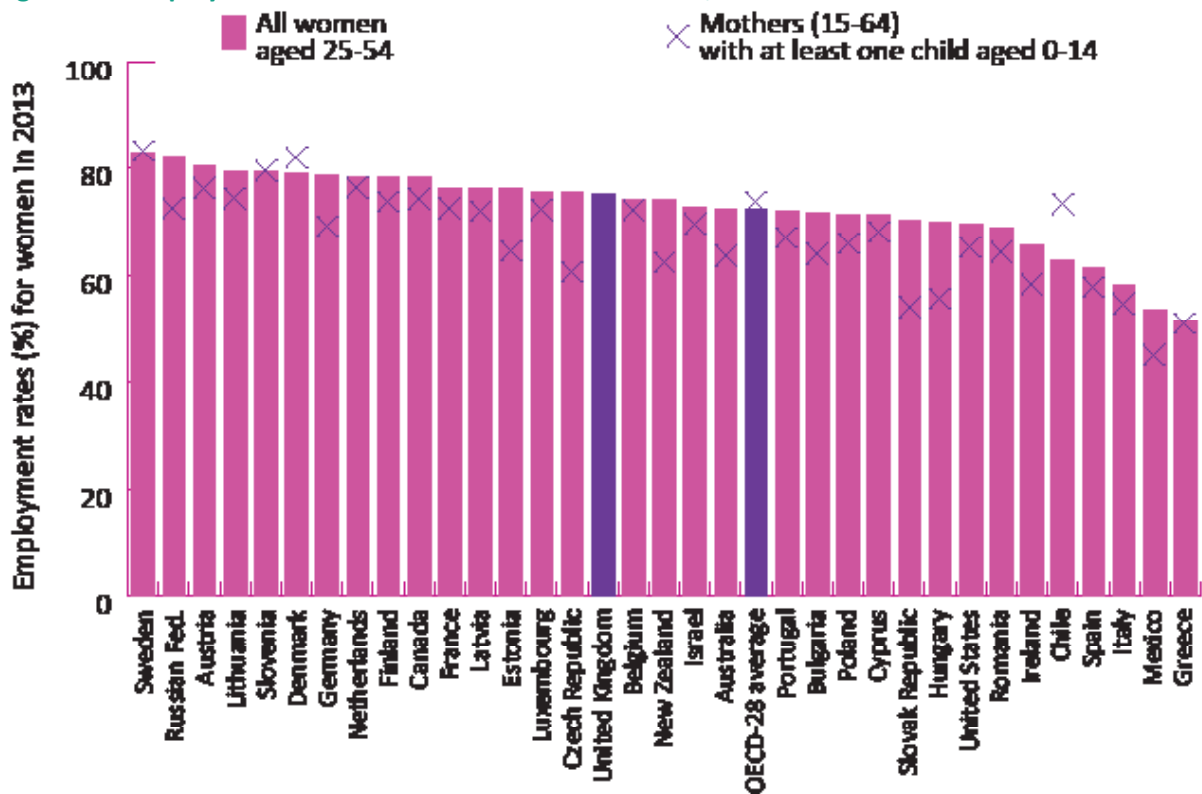
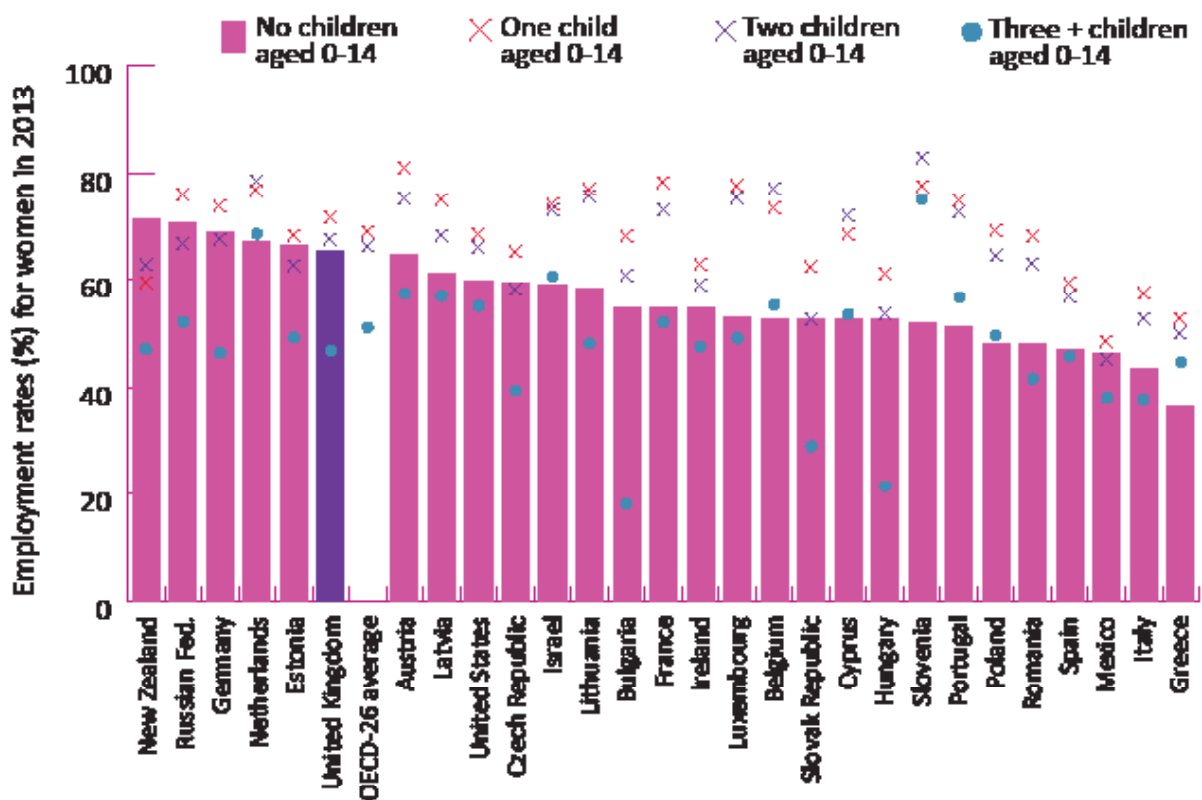


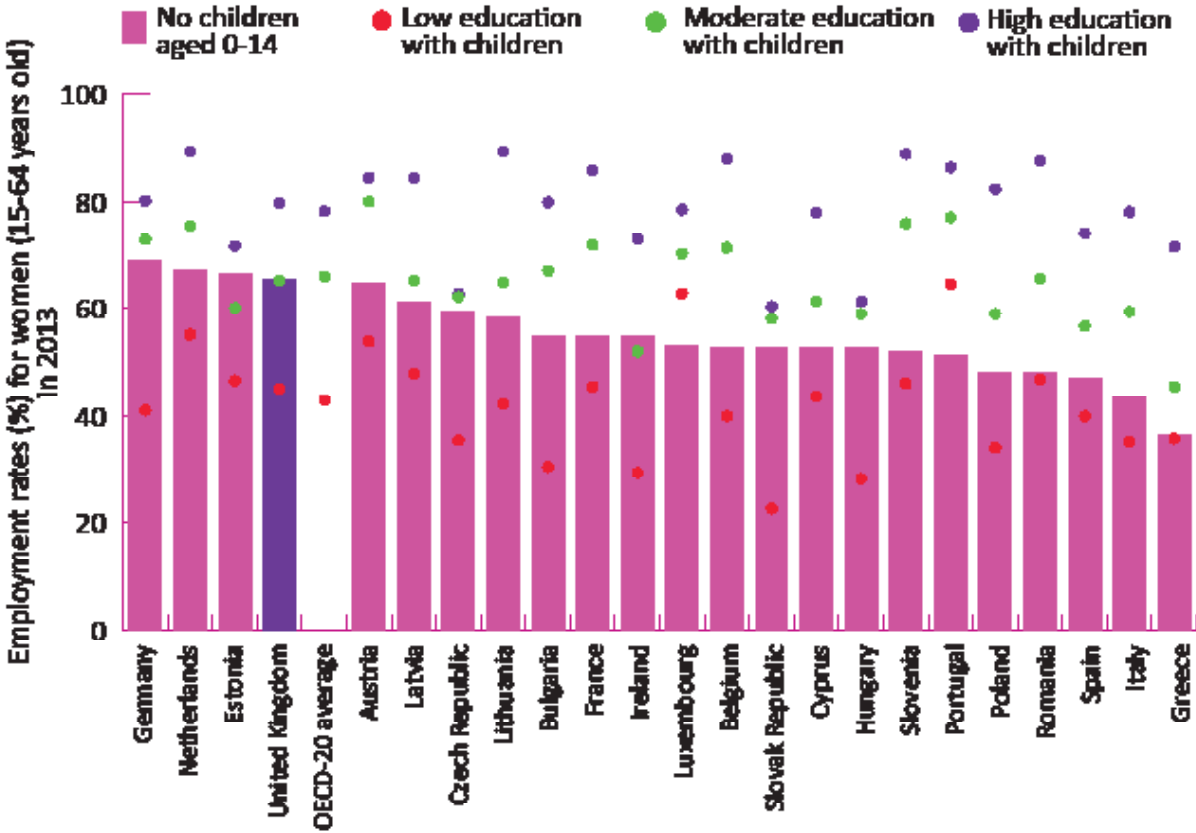
Figure 2.2: Employment rates of women in OECD countries, according to number of children, 2013⁷⁰



69 Data from: OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 18 May 2016.

70 Data from: OECD, 'LMF1.2: Maternal employment rates', OECD Family database, 2013, accessed 18 May 2016. OECD average for employment rate of women with no children aged between 0 and 14 years is not available.

Figure 2.3: Employment rates of women in OECD countries, according to level of education, 2013⁷¹



This raises the question of whether an extension to the universal entitlement to free childcare is the most efficient way of attempting to raise maternal employment rates, rather than more targeted interventions focused on groups for which employment rates are particularly low. In addition, increasing the childcare subsidy for an individual who is already working full-time provides a potential incentive to work fewer hours or accept a more convenient but lower paid job: the individual can reduce their earnings and maintain the same standard of living due to reduced spending on childcare. In this situation, the ‘income effect’ (increased earnings net of childcare costs leading to the same standard of living if earnings are reduced) may dominate the ‘substitution effect’ (net benefits of work are increased if the associated childcare is cheaper). This scenario is most likely to apply to more highly skilled parents, for whom the economic benefits of work would be greater.

There may be more scope for the 30-hour entitlement to prompt an increase in the number of hours worked by mothers, as the UK has particularly high levels of part-time working amongst employed mothers: in couples with at least one child aged 0 to 14 years, 50.0 per cent of employed women in the UK work between 1 to 29 hours per week, as opposed to an OECD average of 25.6 per cent.⁷² Amongst couples whose youngest child is aged between 3 and 5 years, 53.7 per cent of employed mothers in the UK work between 1 and 29 hours per week, compared with and OECD average of 27.7 per cent.⁷³ However, high levels of part-time working persist amongst employed mothers of school-age children,

71 Data from: OECD, ‘LMF1.2: Maternal employment rates’, OECD Family database, 2013, accessed 18 May 2016. OECD average for employment rate of women with no children aged between 0 and 14 years is not available.
 72 OECD, ‘LMF2.2: The distribution of working hours among couple families and adults in couple families individually, by broad hours groups, presence of children, and age of youngest child’, OECD Family database, 2013, accessed 20 April 2016. Of employed lone parents with at least one child aged 0 to 14 years, 53.5 per cent were working between 1 and 29 hours per week in the UK in 2013, as opposed to an OECD-20 average of 23.2 per cent. See: OECD, ‘LMF2.3: The distribution of working hours among adults in sole-parent households’, OECD Family database, 2013, accessed 20 April 2016.
 73 OECD, ‘LMF2.2: The distribution of working hours among couple families and adults in couple families individually, by broad hours groups, presence of children, and age of youngest child’, OECD Family database, 2013, accessed 19 May 2016.

with 49.0 per cent of working mothers in couples whose youngest child is aged between 6 and 14 working between 1 and 29 hours per week in the UK in 2013, as opposed to the OECD average of 26.7 per cent.⁷⁴ Even accounting for the long-term impact of working patterns previously established whilst raising younger children, the high level of part-time work amongst employed mothers of older children suggests that other barriers will need to be addressed if maternal employment is to increase significantly.

There is also a strong likelihood that a substantial proportion of the extended entitlement will be used as a substitute for existing private childcare arrangements. Of children in the UK who spend at least one hour per week in formal childcare, the average weekly number of hours spent in a formal childcare setting was 20.2 hours in 2014.⁷⁵ Although this is far below the EU average,⁷⁶ it is above the current free entitlement of 15 hours per week.⁷⁷ For parents now paying for additional childcare, extending the free entitlement will enable them to substitute paid hours with free hours without necessarily increasing their working time.⁷⁸ Analysis of the roll-out of the initial free entitlement for 3-year-olds found that between 2002 and 2007 the number of free places increased much more than the number of children attending pre-school: for every 10 government-funded places, only 2.7 were actually new places.⁷⁹ In addition, there is evidence that the UK has substantial levels of informal childcare consumption, with 39.6 per cent of children aged 3 to 5 years using informal care in a typical week in 2013, compared with an EU average of 29.1 per cent.⁸⁰ If the effect of the 30-hour entitlement is to convert a substantial proportion of these informal arrangements into formal childcare consumption, then the policy is likely to carry a considerable level of deadweight without necessarily prompting a rise in maternal employment rates or working hours.

Overall, extending the free entitlement to 30 hours will almost certainly support maternal employment; however, the evidence regarding the extent to which it is likely to do so, and for which parents, is far from conclusive. There is a paucity of research on the impact of the free entitlement on the rate, level and nature of maternal employment, but that which exists does not indicate that extending the free entitlement will have a transformative effect. Perhaps this is part of the reason why the Department for Education has not stated the amount by which the policy is expected to increase parental working hours.⁸¹

Child development

Attainment in the early years

There is a risk in prioritising the maternal employment objective to an extent that neglects other functions of early years provision, particularly child development and the potential for narrowing the attainment gap between disadvantaged children and their peers. Research points to the lasting effects

74 OECD, 'LMF2.2: The distribution of working hours among couple families and adults in couple families individually, by broad hours groups, presence of children, and age of youngest child', OECD Family database, 2013, accessed 20 April 2016.

75 Eurostat database, 'Average number of weekly hours of formal care by age group – Children with at least 1 hour of formal care', Eurostat website, last updated 18 February 2016, accessed 20 April 2016. Under the definitions used in this dataset, childcare by a professional childminder is not categorised as formal childcare.

76 The EU average (28 countries) for children attending at least one hour per week of formal childcare was 30.2 hours per week in 2014. See: Eurostat database, 'Average number of weekly hours of formal care by age group – Children with at least 1 hour of formal care', Eurostat website, last updated 18 February 2016, accessed 20 April 2016.

77 The Department for Education has stated that 'We know that the majority of working families with three- and four-year-olds already use more than 15 hours of childcare. This means that many children will already be in a place and will not require a new one'. See: Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.11. Whilst this assertion is designed to address concerns regarding capacity, it also implies acknowledgement that the policy will carry substantial deadweight.

78 Some parents may respond to the additional free hours by increasing their working time without having to spend more on childcare. Alternatively, some parents will have the option of reducing their working hours whilst maintaining their net income, due to their reduced expenditure on childcare for a given number of hours. Other parents may simply enjoy the rise in net income afforded by the increased subsidy, without changing their working patterns.

79 J. Blanden, E. Del Bono, S. McNally and B. Rabe, 'Universal pre-school education: the case of public funding with private provision', *The Economic Journal*, 126:592, May 2016, pp.682-723.

80 OECD, 'PF3.3: Informal childcare arrangements', OECD Family database 2013, accessed 21 April 2016. The UK's average number of weekly hours of informal childcare for children aged 3 to 5 years using at least one hour of informal care in a typical week in 2013 is, at 15.0 hours per week, below the EU-27 average of 15.9 hours.

81 National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.11.

of experiences which take place in the first years of a child's life and of the crucial impact which high quality early years provision can have on outcomes, both at the start of primary school and in the longer term.⁸² Analysis of the 1970 Birth Cohort Survey has shown that child development test scores at 22 months, and especially at 42 months, are a predictor of educational qualifications attained by the age of 26. Moreover, even according to test scores at 22 months, the difference between the average rank of children in the lowest and highest social class groups is 13 percentiles.⁸³ The attainment gap between disadvantaged children and their peers thus emerges very early and is certainly already evident at the start of primary school. A recent EPI report identified a gap of 4.3 months of development between disadvantaged and non-disadvantaged pupils at age 5, according to performance in the Early Years Foundation Stage Profile in 2015.⁸⁴ Looking specifically at either end of the income spectrum, The Sutton Trust has identified a gap of 19 months in performance on vocabulary tests between 4 and 5-year-olds in the lowest income quintile compared with those in the highest income quintile.⁸⁵

Impact of high quality early years provision on later outcomes

There is a growing and robust body of research which points to high quality early years education as one effective way of helping to redress this imbalance. For children aged 3 years and above, there is consistent evidence that attendance at pre-school (compared to none) boosts educational and social outcomes, and that the impact is greater with higher quality provision.⁸⁶ The Effective Provision of Pre-School Education Project in England identified a significant link between pre-school attendance and higher cognitive and social outcomes when starting primary school and at the end of Year 1; the quality of early years education was significantly linked to performance in both developmental areas.⁸⁷ More recently, the project found that attendance at pre-school also has a significant impact on GCSE attainment. Quality of early education remained important: the quality of pre-school attended, and its effectiveness in developing pre-reading skills and early number concepts, were significantly linked to higher attainment at GCSE. In terms of socio-behavioural development, attendance or not at pre-school was found not to be significant by age 16, but quality of pre-school continued to influence outcomes. Year 11 pupils who had attended high (as opposed to low) quality pre-schools scored better for self-regulation and pro-social behaviour and lower for hyperactivity.⁸⁸

These findings are broadly consistent with those of other projects elsewhere. Evaluation of the Sure Start programme in England, for example, found that higher quality early years settings as measured by the Early Childhood Environment Rating Scale were associated with better language development for children aged 3 to 5 years.⁸⁹ Similarly, the Effective Pre-school Provision Northern Ireland project found a significant link between attendance at a high quality pre-school and higher attainment in both English and maths at the end of Key Stage 2, as well as greater progress in maths during primary school. Compared with children who had not attended any pre-school, those who had attended high

82 For a summary of evidence demonstrating the rapid and critical development which takes place during the first few years of a child's life, see: J. Finnegan, 'Lighting up young brains: How parents, carers and nurseries support children's brain development in the first five years', Save the Children, March 2016.

83 L. Feinstein, 'Inequality in the Early Cognitive Development of British Children in the 1970 Cohort', *Economica*, 70:277, February 2003, pp.73-97; L. Feinstein, 'Very early evidence', CentrePiece, Summer 2003, pp.24-30.

84 N. Perera and M. Treadaway with P. Sellen, J. Hutchinson, R. Johns and L. Mao, 'Education in England: Annual Report 2016', EPI, April 2016, p.42.

85 The Sutton Trust, 'The Social Mobility Summit: Report of the Summit held at the Royal Society', September 2012, p.5. See also: Save the Children, 'Ready to Read: Closing the gap in early language skills so that every child in England can read well', June 2015; Fair Education Alliance, 'Will We Ever Have A Fair Education For All? The Fair Education Alliance Report Card 2014', December 2014, p.14; B. Becker, 'Social disparities in children's vocabulary in early childhood. Does pre-school education help to close the gap?', *The British Journal of Sociology*, 62:1, March 2011, pp.69-88.

86 E. Melhuish, 'A Literature Review of the Impact of Early Years Provision on Young Children, with Emphasis given to Children from Disadvantaged Backgrounds', National Audit Office, 2004, p.4.

87 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, pp.26, 28-29, 31, 32-33, 40-41.

88 K. Sylva, E. Melhuish, P. Sammons, I. Siraj and B. Taggart, 'Students' educational and developmental outcomes at age 16: Effective Pre-school, Primary and Secondary Education (EPPSE 3-16) Project – Research Brief', Department for Education, September 2014, pp.5, 12-13, 14, 16. See also: P. Sammons, K. Sylva, E. Melhuish, I. Siraj, B. Taggart, K. Toth and R. Smees, 'Influences on students' GCSE attainment and progress at age 16: Effective Pre-School, Primary and Secondary Education Project (EPPSE)', Department for Education, September 2014, pp.xxiii-xxiv, 40-41, 74-84; P. Sammons, K. Sylva, E. Melhuish, I. Siraj, B. Taggart, R. Smees and K. Toth, 'Influences on students' social-behavioural development at age 16: Effective Pre-School, Primary and Secondary Education Project (EPPSE)', Department for Education, September 2014, pp.xx, 48-55.

89 E. Melhuish, J. Belsky, K. MacPherson and A. Cullis, 'The quality of group childcare settings used by 3-4 year old children in Sure Start Local Programme areas and the relationship with child outcomes', Department for Education, November 2010, pp.v, 29-34.

quality pre-school provision were 2.4 times as likely to attain a Level 5 in English and 3.4 times as likely to achieve a Level 5 in maths at the end of Key Stage 2. The report did not find significant benefits derived from attending a medium or low quality pre-school compared to no pre-school, at the end of Key Stage 2.⁹⁰ Likewise, an American study using data from the National Institute of Child Health and Development (NICHD) Study of Early Child Care and Youth Development found higher quality childcare up to the age of 4.5 years to be associated with higher academic and cognitive attainment at age 15; it suggested that this enduring impact of childcare on academic outcomes was linked with provision of moderate quality or better and that the size of the quality effects were greater at higher levels of quality.⁹¹

Attainment gap

In addition, early education which is of high quality can help to tackle gaps in outcomes between children from disadvantaged backgrounds and their peers. There is evidence that high quality early education can be particularly beneficial for children from disadvantaged backgrounds, even in the context of non-targeted programmes. An extensive review of the impact of early childhood education and care on reducing and preventing poverty concluded that early years provision has the potential to promote social mobility by reducing under-achievement amongst disadvantaged children, but that it must be of high quality if it is to raise educational outcomes for these children.⁹² Analysis from the EPPSE project suggested that pre-school quality had a greater impact on GCSE attainment for children whose parents had lower level educational qualifications than it did for pupils whose parents were more highly qualified.⁹³ Building on this evidence, statistical modelling by the Institute for Fiscal Studies has suggested that the impact on gross lifetime earnings of attending a high quality (as opposed to low quality) pre-school is greater for those on relatively low earnings.⁹⁴

Analysis of more recent data from the UK Millennium Cohort Study has found that pre-school attendance was linked with improved language skills between the ages of 3 and 5 years for children of lower qualified parents; this effect was not identified for children of higher educated parents. Improvement in vocabulary between these ages was nevertheless greater for children of higher educated parents (regardless of pre-school attendance); pre-school participation did not result in a narrowing of the attainment gap, but children of lower educated parents who did not attend pre-school fell behind even further.⁹⁵

In America, research based on data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999, found that participation in a pre-school programme during the year before starting school was linked with higher performance in reading and maths assessments in both kindergarten and first grade; the effects were generally found to be greater for children from disadvantaged families (children living in poverty, children whose mothers had low levels of education, and children of single parents) than for the whole sample. For example, on average, experience of centre-based care resulted in a child of a low educated mother moving from the 30th to the 37th percentile for reading skills and from the 30th

90 E. Melhuish, L. Quinn, K. Sylva, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'Effective Pre-school Provision Northern Ireland (EPPNI): Pre-school experience and Key Stage 2 performance in English and Mathematics', Department of Education, 2010, pp.7, 21-22, 25. See also: S. Mathers, N. Eisenstadt, K. Sylva, E. Soukakou, K. Erekly-Stevens, 'Sound Foundations: A Review of the Research Evidence on Quality of Early Childhood Education and Care for Children Under Three', Sutton Trust, January 2014, p.14; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, pp.30-31.

91 D. Lowe Vandell, J. Belsky, M. Burchinal, N. Vandergrift and L. Steinberg, 'Do Effects of Early Child Care Extend to Age 15 Years? Results from the NICHD Study of Early Child Care and Youth Development', *Child Development*, 81:3, May-June 2010, pp.737-756. For a summary of various studies demonstrating the benefits derived from high quality early years education, see: E. Melhuish, 'Research on Early Childhood Education in the UK', in M. Stamm and D. Edelmann (eds.), 'Handbuch frühkindliche Bildungsforschung', 2013, pp.211-221.

92 E. Lloyd and S. Potter, 'Early childhood education and care and poverty', Joseph Rowntree Foundation, September 2014.

93 K. Sylva, E. Melhuish, P. Sammons, I. Siraj and B. Taggart, 'Students' educational and developmental outcomes at age 16: Effective Pre-school, Primary and Secondary Education (EPPSE 3-16) Project – Research Report', September 2014, pp.19, 25. See also: E. Melhuish, 'Research on Early Childhood Education in the UK', in M. Stamm and D. Edelmann (eds.), 'Handbuch frühkindliche Bildungsforschung', 2013, p.214.

94 S. Cattán, C. Crawford and L. Dearden, 'The economic effects of pre-school education and quality', Institute for Fiscal Studies, September 2014, p.28. See also: J. Heckman and D. Masterov, 'The Productivity Argument for Investing in Young Children', National Bureau of Economic Research, April 2007.

95 B. Becker, 'Social disparities in children's vocabulary in early childhood. Does pre-school education help to close the gap?', *The British Journal of Sociology*, 62:1, March 2011, pp.69-88. See also: A. George, L. Stokes and D. Wilkinson, 'Does Early Education Influence Key Stage 1 Attainment? Evidence for England from the Millennium Cohort Study', *National Institute Economic Review*, 222:1, October 2012, pp.R67-R80.

to the 35th percentile for maths skills, when assessed at kindergarten.⁹⁶ A study examining the impact of growth of childcare in France in the 1960s and 1970s likewise found that lasting positive effects of pre-school attendance (such as number of grade repetitions at school, high school graduation and wages) are predominantly identified with children from middle and lower socio-economic groups.⁹⁷

A number of American evaluations of high quality, targeted early years interventions for disadvantaged children have demonstrated substantial long-lasting effects of such programmes. The High/Scope Perry Pre-school study, for instance, involved comparison of outcomes of 123 low income African American children randomly assigned in the 1960s either to a high quality pre-school programme or to a non-programme control group which did not participate in any pre-school scheme. Participants' outcomes regarding school achievement, personal development, crime, and socio-economic status were tracked up to the age of 40. The programme group performed significantly better on measures for education, economics and crime, displaying a significantly higher proportion of high school graduation, higher employment rates at ages 27 and 40, significantly higher median annual wages at ages 27 and 40, and significantly fewer lifetime arrests.⁹⁸ The Abecedarian Project also identified positive effects on cognitive and academic performance throughout primary schooling and early adulthood, and subsequently higher educational and economic outcomes at age 30 for children of low income families who participated in an intensive early education programme in the 1970s and 1980s.⁹⁹

Quality of early education, therefore, is positively correlated with raising child outcomes, and research indicates that children from disadvantaged backgrounds are those who have the potential to benefit the most. Yet the evidence does not suggest that a policy of free entitlement is an assured way of automatically providing the quality required for a lasting positive impact on outcomes or on the attainment gap. Analysis specifically of the implementation of free part-time early years places for 3-year-olds in England in the early 2000s has found that the improvements in child outcomes linked with this policy were evident in the short term only, with significant fade-out by the age of 11 years; nor did the policy reduce the socio-economic gap in educational attainment. These findings are attributed to the fact that the growth in provision which the policy caused took place predominantly in the private, voluntary and independent sector, where average quality is lower and where there are far fewer qualified teachers, rather than extending the availability of high quality provision with graduate staff that is more effective in raising developmental outcomes.¹⁰⁰

The childcare minister has rejected the relevance of this research on the grounds that the quality of provision in the PVI sector has improved since the report's reference period.¹⁰¹ Whilst Ofsted data indicate that inspection judgements have been improving across early years settings generally in recent years,¹⁰² a gap remains in the proportion of providers rated good or outstanding between the most deprived and least deprived areas. According to Ofsted data from 2013, there was a 10 percentage point gap in the proportion of non-domestic providers rated good or outstanding when comparing

96 K. Magnuson, M. Meyers, C. Ruhm and J. Waldfogel, 'Inequality in Preschool Education and School Readiness', *American Educational Research Journal*, 41:1, Spring 2004, pp.115-157.

97 C. Dumas and A. Lefranc, 'Early schooling and later outcomes: Evidence from pre-school extension in France', Thema Working Paper No. 2010-07, Université de Cergy Pontoise, November 2010.

98 L. Schweinhart, J. Montie, Z. Xiang, W.S. Barnett, C.R. Belfield and M. Nores, 'The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions', HighScope Press, 2005.

99 F. Campbell, E. Pungello, K. Kainz, M. Burchinal, Y. Pan, B. Wasik, O. Barbarin, J. Sparling and C. Ramey, 'Adult Outcomes as a Function of an Early Childhood Educational Program: An Abecedarian Project Follow-Up', *Developmental Psychology*, July 2012, 48:4, pp.1033-1043. See also: E. Melhuish, 'A Literature Review of the Impact of Early Years Provision on Young Children, with Emphasis Given to Children from Disadvantaged Backgrounds', National Audit Office, 2004; I. Parker, 'Early Developments: Bridging the Gap between Evidence and Policy in Early-Years Education', Institute for Public Policy Research, August 2013, pp.14-15.

100 J. Blanden, E. Del Bono, S. McNally and B. Rabe, 'Universal pre-school education: the case of public funding with private provision', *The Economic Journal*, 126:592, May 2016, pp.682-723.

101 Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, p.41.

102 Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2015: Early years', July 2015, p.9.

settings in the 20 per cent most deprived areas with those in the 20 per cent least deprived areas.¹⁰³ Analysis based on quality of settings measured on the Early Childhood Environment Rating Scales has found that quality is lower specifically in PVI settings located in deprived areas and attended by children from disadvantaged backgrounds, although it is similar in school-based settings. In particular, a 9 per cent gap in quality of support for children's language and reasoning skills was identified between PVI settings in the least and most deprived areas.¹⁰⁴ Although children from the most disadvantaged areas are more likely to be enrolled in a maintained setting at age 3 or 4 years, data from 2011 indicates that over one-quarter of these children were at that time nevertheless receiving their free entitlement in the PVI sector.¹⁰⁵ There is a need for further improvements in quality of provision, particularly in disadvantaged areas, if the early years sector in England is to reach its potential in supporting child development and narrowing the attainment gap. However, as outlined in the next chapter, the further expansion to the free entitlement is likely to place strain on quality of provision.

103 Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2012/13: Early years', April 2014, pp.22-24. See also: Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, p.44; S. Mathers and R. Smees, 'Quality and Inequality: Do three- and four-year-olds in deprived areas experience lower quality early years provision?', Nuffield Foundation, May 2014, pp.3-4; 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, March 2013, pp.19, 33-34, 52-53; Professional Association for Childcare and Early Years, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1; 'Oral evidence: Free entitlement to early years education and childcare, HC 912', Public Accounts Committee, April 2016, pp.11, 23.

104 S. Mathers and R. Smees, 'Quality and Inequality: Do three- and four-year-olds in deprived areas experience lower quality early years provision?', Nuffield Foundation, May 2014.

105 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, March 2013, pp.16, 29, 50; S. Mathers and R. Smees, 'Quality and Inequality: Do three- and four-year-olds in deprived areas experience lower quality early years provision?', Nuffield Foundation, May 2014, p.5. Families who take the free entitlement in a maintained setting are also unlikely to have access to the flexibility of provision which is often needed to support employment and more commonly found in the PVI sector: there is therefore often a choice to be made between quality and flexibility. See: J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, p.40.

Chapter 3: The 30-hour entitlement and educational outcomes

Summary

- : The 30-hour entitlement poses risks to outcomes for disadvantaged children in a number of ways. These relate particularly to eligibility, capacity and quality.
- : Children from families on the very lowest incomes will not be eligible for the extended entitlement. Research regarding the impact of full-time compared to part-time attendance on child outcomes is contradictory. Clearer evidence is needed regarding the impact of various attendance levels and patterns on outcomes for different groups of children in England.
- : There is already a shortage of early years places in some parts of England. The extension to the free entitlement will prompt an increase in demand for childcare places; the Department for Education has estimated that an additional 45,000 places will be required, but this does not allow for any change in working patterns prompted by the policy. It has been argued that the £50 million of capital funding pledged by the government to support growth in the sector is unlikely to be sufficient to allow for the expansion in capacity required. In the context of increased competition for limited places, and with early implementer local authorities offering higher funding rates for the additional 15 hours than for the core 15 hours, there is a danger that some providers will prioritise accommodating children who qualify for the full 30-hour entitlement at the expense of children eligible for only 15 hours of free early education, including disadvantaged 2-year-olds.
- : It is not yet clear whether the funding rates for the free entitlement will be sufficient to cover the costs of delivery for all providers. What is clear, however, is that the sums being made available will not allow providers to invest in quality through measures such as upskilling or expanding their workforce or developing their premises. This will place a strain on quality not only for the additional 15 hours of the new, extended entitlement, but also for the core, universal entitlement of 15 hours per week. This neglect of quality is concerning given that it is high quality provision which is needed in order to narrow the attainment gap.

Eligibility

The government's initial proposal regarding the 30-hour free entitlement offered the allowance to families in which each parent works the equivalent of 8 hours per week at the national minimum wage.¹⁰⁶ This criteria was subsequently narrowed as part of the spending review in November 2015: qualifying families are now those in which each parent earns at least the equivalent of 16 hours per week at the national living wage but no more than £100,000 per year.¹⁰⁷ Following this announcement, the government's estimate of the number of eligible families was reduced from 600,000 to 390,000; this revised figure is equivalent to 42 per cent of children eligible for the current 15-hour entitlement for 3 and 4-year-olds.¹⁰⁸

These changes pose three main concerns. Firstly, children from families on the lowest incomes are not eligible for the entitlement: in order to fulfil the minimum income criteria, a two parent family in which both parents are aged 25 or over will have to be earning at least £230.40 per week (£115.20 each); a lone parent would need to be earning at least £115.20 per week. Children of non-working parents or whose family income falls below these thresholds will continue to be allowed the universal entitlement of 15 hours but will not be able to access the additional 15 hours. This is particularly troubling given that studies have shown that those who benefit most from high quality early years provision are children from disadvantaged families.¹⁰⁹ Indeed, this is the reason why the free entitlement to 15 hours per

¹⁰⁶ Department for Education, 'Childcare Bill: policy statement', July 2015, pp.5-6.

¹⁰⁷ HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

¹⁰⁸ T. Jarrett, 'Childcare Bill 2015-16: Analysis for Commons Report Stage (Bill 107)', House of Commons Library, 20 January 2016, p.22; National Audit Office, 'Entitlement to free early education and childcare', March 2016, pp.10, 37.

¹⁰⁹ See Chapter 2, above.

week of early education has been extended to the 40 per cent most disadvantaged children, and why the early years pupil premium was introduced in April 2015.¹¹⁰

There have been attempts to square this inconsistency through reference to the Effective Pre-school, Primary and Secondary Education Project, which identified no difference in outcomes for children who attended pre-school part-time as opposed to those who attended full-time.¹¹¹ However, this evidence is based on a national average and does not provide a breakdown of different groups: it is not clear, therefore, whether or not part-time or full-time attendance has an impact upon the outcomes specifically for disadvantaged children, who are less likely to have access at home to many of the opportunities available to their peers. Nor is it clear whether there is an optimum number of hours of attendance (between full-time and part-time) and whether this varies for different groups of children.

Indeed, some American studies have identified a moderate positive impact of full-day, as opposed to half-day, attendance at kindergarten, particularly for disadvantaged children.¹¹² The Education Endowment Foundation concludes that the average impact across all studies is roughly equal to 3 months of additional progress.¹¹³ Without more granular analysis of data from England, it is important not to assume that an additional 15 hours per week of early years provision would have no impact on the outcomes of disadvantaged children, or that the eligibility criteria for the 30-hour entitlement will not exclude such children from opportunities for further development.

Secondly, certain groups of families will be disproportionately excluded from the entitlement. In particular, parents who are carers are likely to face particular difficulties in meeting the eligibility requirements. Parents of disabled children are more likely to undertake fewer hours of paid employment. In addition, although families in which one parent is employed and the other is a carer are eligible for the 30-hour entitlement, current guidance implies that this allowance will not be extended to single parents who have substantial caring responsibilities.¹¹⁴ Similarly, students are not included in the offer, which would appear to run counter to the stated primary aim of the measure of supporting parental employment by excluding those undertaking training or study intended to enhance employment opportunities.¹¹⁵

Thirdly, eligibility is based on an income threshold, rather than on the number of hours worked. This means that a child of parents who work few hours for a high hourly rate could still be eligible for the entitlement, whereas a child of parents working a greater number of hours (though still under 16 hours) at the national living wage may not. In this situation, parents with better earnings prospects will receive more subsidy, at the same time as children who may have the most to gain from early education cannot access the extended entitlement.¹¹⁶

Capacity

Although children who do not qualify for the 30-hour entitlement will continue to be eligible for the universal entitlement to 15 hours of free early years provision, there is a risk that the new policy may hinder access to this basic offer. The Department for Education has estimated that 390,000 children will be eligible for the extended entitlement, although this does not account for parents who enter employment or increase their working hours in order to become eligible. It has also suggested that this

110 N. Clegg, 'Deputy PM's speech: Putting a premium on fairness', Cabinet Office, 15 October 2010; Department for Education, '92,000 2-year-olds already receiving free childcare', 11 November 2013; Department for Education, 'New funding will help most disadvantaged 3- and 4-year-olds', 23 October 2014.

111 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, p.26. However, this study also found that duration of early education in months had a significant impact on cognitive development. The researchers recommended that part-time attendance for an extended period was preferable to full-time attendance for a shortened period.

112 Education Endowment Foundation, 'Extra hours: Early Years Toolkit references', Early Years Toolkit, November 2015: https://educationendowmentfoundation.org.uk/public/files/Early_Years_Toolkit/EEF_EYToolkit_Reference_ExtraHours.pdf, accessed 26 April 2016.

113 Education Endowment Foundation, 'Extra hours', Early Years Toolkit: <https://educationendowmentfoundation.org.uk/evidence/early-years-toolkit/extra-hours/>, accessed 22 April 2016.

114 Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, pp.17, 26; Department for Education, 'Childcare Bill: policy statement', December 2015, pp.8-9; Mencap, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.35.

115 'Oral evidence: Free entitlement to early years education and childcare, HC 912', Public Accounts Committee, April 2016, p.16.

116 Parents who are not eligible for the extended entitlement should be eligible for support with childcare costs under universal credit. However, take-up of this benefit may be low. See Chapter 4, below, for further details.

will result in the need for 45,000 new 15-hour places. The National Audit Office has stated that further work is needed to determine whether or not the assumptions underpinning this estimate are valid and to identify which local authorities will be particularly affected by increased demand.¹¹⁷ However, these initial figures indicate that, whilst there will be substantial deadweight associated with the policy, there will also be additional strain placed on a sector which is, even now, grappling with capacity challenges.

Many local authorities already lack sufficient childcare places, and this problem appears to be worsening: a shortfall in free early education places for 3 and 4-year-olds has been identified in 59 English local authorities in early 2016, compared to 23 local authorities in 2015.¹¹⁸ There were 41,300 3-year-olds who did not receive any free early education in 2015 and lack of places appears to be one of the factors behind this: in areas which claimed to have sufficient free early education places, uptake was 95.4 per cent, as opposed to 91.9 per cent in areas which did not. It is particularly concerning that many children who do not receive their entitlement to free early education are from disadvantaged families.¹¹⁹ Take-up of the entitlement among 3-year-olds stands at 98 per cent in the least deprived areas, compared with 90 per cent in more deprived areas, though it is not clear how much of this disparity derives from lack of available places and how much from lack of demand.¹²⁰

Although the government has pledged £50 million of capital funding nationally in order to support expansion, it has been argued that, at the equivalent of £3,400 per group setting, it is highly unlikely that this sum will prove to be of the level required to support the scale of growth which is needed.¹²¹ If the hourly funding rates for the free entitlement are also inadequate, providers may simply refuse to offer the extended entitlement: results from a survey of mainly private nurseries found that only 45 per cent of respondents were likely to increase the number of free hours which they offer; one-quarter were unlikely and one-third were unsure. The barriers cited to extending the free hours offered included insufficient funding and space.¹²² Another survey of providers concluded that 19 per cent are not planning to offer the extended entitlement and 51 per cent are unsure (whereas 98 per cent of respondents currently offer the universal entitlement of 15 hours per week). In addition, 49 per cent of settings were concerned that there was a risk that they may close as a consequence of the 30-hour entitlement and 58 per cent expect it to have a negative financial impact on their business.¹²³ In York, which is due to pilot the 30-hour entitlement from September 2016, over 30 childcare providers have refused to participate in the programme on the grounds that the funding rates which they have been offered are too low.¹²⁴

Within this context, children eligible for only 15 hours of early years provision may have to compete for limited places with those entitled to 30 hours. Aside from the greater efficiencies derived from accommodating a single child for a higher number of hours, rather than two or three children for a few hours each, the distribution of funding may offer a substantial incentive for providers to prioritise children eligible for the full 30-hour entitlement. Although the childcare minister previously stated that

117 National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.37. Analysis of the introduction of the free entitlement found that between 2002 and 2007, for every 10 places that were funded, only 2.7 new places were created, indicating that in large part, state funding simply replaced parental spending. See: J. Blanden, E. Del Bono, S. McNally and B. Rabe, 'Universal Pre-School Education: The Case of Public Funding With Private Provision', *The Economic Journal*, 126:592, May 2016, pp.682-723.

118 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, p.38; J. Rutter, 'Childcare Costs Survey 2015', Family and Childcare Trust, February 2015, p.19.

119 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.37-39.

120 National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.17.

121 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.35-36; Family and Childcare Trust, 'Childcare Bill: Written Evidence', House of Commons, December 2015, pp.9-10.

122 National Day Nurseries Association, 'Annual Nursery Survey 2016 – England', February 2016, p.11. There are also a number of barriers to the expansion of nursery classes linked to primary schools.

123 Pre-school Learning Alliance, 'Childcare providers fear closure over 30-hours offer, survey reveals', 20 April 2016. See also: J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.41-42; National Audit Office, 'Entitlement to free early education and childcare', March 2016, pp.30, 37; National Day Nurseries Association, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.2; Independent Association of Prep Schools, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1.

124 C. Gaunt, '30-hour childcare pilot in crisis', *Nursery World*, 4 May 2016; National Day Nurseries Association, 'York nurseries' withdrawal from 30 free hours scheme is early warning for Government, says NDNA', 4 May 2016.

that both the universal 15 hours and the additional 15 hours would be funded at the same rates,¹²⁵ several early implementer local authorities, which are piloting the scheme from September 2016, have recently revealed that providers participating in the pilot will receive higher funding rates for the additional 15 hours, compared with the core 15 hours. In Northumberland, for example, providers will be paid £3.15 per hour for the first 15 hours (with additional funding between £0.51 and £1.29 per hour available for deprivation weighting) and £4.01 per hour for the additional 15 hours.¹²⁶ This may be a consequence of providers' reluctance to deliver the extended entitlement. It raises significant questions about the impact of the policy on those who are not eligible for the additional hours, particularly if this pattern is replicated during the full roll-out. Some of these children may be completely unable to access the core 15-hour entitlement; others may be clustered in low-demand slots or at sessional settings which are unable to convert to more flexible, full-time provision.¹²⁷ Such a trend would be particularly concerning in light of evidence that the cognitive development of disadvantaged children tends to be greater in settings which are more socially mixed, rather than in those with high proportions of disadvantaged children.¹²⁸

This risk applies also to the 40 per cent most disadvantaged 2-year-olds, who are entitled to 15 hours per week of free early years provision. Accommodating these younger children is more expensive, due to the higher staff-to-child ratios required, and there is evidence of providers having to cross-subsidise to cover the costs of providing for these children, despite the higher rates allocated for this entitlement. Although the government has announced an increase in funding rates for the free entitlement both for 3 and 4-year-olds and for 2-year-olds, the latter rate did not account for retention of a certain proportion by local authorities, the introduction of the national living wage, or inflation. There is therefore a danger that settings will reduce or end their provision for disadvantaged 2-year-olds, favouring instead 3 and 4-year-olds eligible for the 30-hour entitlement.¹²⁹ This is particularly concerning given the evidence that number of months spent in early education has a significant impact on later outcomes.¹³⁰

Quality

Aside from concerns relating to accessibility of free early years provision, the 30-hour entitlement poses a substantial risk to the quality of early education and care which can be offered to all children if it is not accompanied with sufficient overall funding. The early years sector has been vocal in pointing to the strain caused in recent years by under-funding of the universal entitlement.¹³¹ Many providers have apparently resorted to using additional hours paid for by parents in order to subsidise the 15-hour entitlement funded by government.¹³² Similarly, schools have reported cross-subsidising their

¹²⁵ Hansard, HC Deb., 25 November 2015, c.1452.

¹²⁶ C. Gaunt, 'Local authorities reveal details of 30-hour rates', Nursery World, 16 May 2016.

¹²⁷ Admissions policies and practices vary widely between early years settings. Private providers can, for example, charge parents a premium for access to flexible childcare and some prioritise children whose parents pay for the highest number of hours of provision. It has been suggested that the childcare system could be rendered more widely accessible and flexible through the introduction of an early years admissions code, based on the existing school admissions code and cases of good practice currently evident in some early years settings. See: A. Butler and J. Rutter, 'Creating an anti-poverty childcare system', Joseph Rowntree Foundation, January 2016, pp.44-45.

¹²⁸ K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, pp.27-28. See also: 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', The Sutton Trust, January 2014, pp.7, 44.

¹²⁹ National Audit Office, 'Entitlement to free early education and childcare', March 2016, pp.29, 37. See also: Pre-school Learning Alliance, 'Childcare providers fear closure over 30-hours offer, survey shows', 20 April 2016; Pre-school Learning Alliance, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.8; Early Education, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1.

¹³⁰ K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, p.26; K. Sylva, E. Melhuish, P. Sammons, I. Siraj and B. Taggart, 'Students' educational and developmental outcomes at age 16: Effective Pre-school, Primary and Secondary Education (EPPSE 3-16) Project', Department for Education, September 2014, p.18.

¹³¹ See, for example: National Day Nurseries Association, 'Annual Nursery Survey 2016 – England', February 2016; National Day Nurseries Association, 'NDNA Annual Nursery Survey 2015 – England', January 2015.

¹³² Family and Childcare Trust, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.10; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, pp.48-49; National Day Nurseries Association, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, pp.2-3; Pre-school Learning Alliance, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, pp.1, 2; St Paul's Pre-school, Winchester, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1.

early years provision with funds from other elements of their budgets. A recent survey by the National Association of Head Teachers, comprising predominantly nursery settings in primary or infant schools and maintained nursery schools, found that 58.5 per cent of respondents did not receive sufficient funding to cover the cost of providing places for 3 and 4-year-olds and that 79.8 per cent were using sums from elsewhere in the school budget to cover the shortfall.¹³³

The government has acknowledged the strain felt by providers and announced additional funding for the sector in the 2015 spending review, in order to increase rates paid to providers delivering the free entitlement: an additional £300 million per year from 2017-18 will be used to augment the average hourly rate paid to childcare providers. For 3 and 4-year-olds, the national average will rise from £4.56 to £4.88 per hour, including early years pupil premium; the new rate was based on a review of the costs of delivery of childcare published by the Department for Education in November 2015.¹³⁴ Whilst such funding is certainly welcome, it is questionable how far it will stretch given rising costs for providers, particularly the introduction of the national living wage in April 2016, which will have a major impact on the early years sector and particularly on PVI providers.¹³⁵ Analysis commissioned by the Pre-school Learning Alliance estimates that the rates pledged by the government will result in PVI non-domestic settings experiencing an annual shortfall of £233.70 per child for 3 and 4-year-olds claiming the 15-hour universal entitlement and £467.40 per child for those receiving 30 hours.¹³⁶ The Pre-school Learning Alliance suggests that the government's proposed rates do not account sufficiently for the impact of the introduction of the national living wage and that a substantial part of the modelling included in its review was based on data collected several years earlier.¹³⁷ In addition, increasing demand for formal childcare would be likely to increase the costs of provision, as the required staff and premises become more scarce.

The scope for providers to cover any shortfalls through cross-subsidising by charging high fees to parents for additional hours or from other parts of school budgets is likely to be restricted by the extension of the free entitlement to 30 hours per week and the increasing pressures on school budgets in the coming years.¹³⁸ Settings which accommodate younger children under the age of 3 may opt to increase fees for this age group if losses are made in providing the 30-hour entitlement for 3 and 4-year-olds.¹³⁹ However, this is not an option which would be open to all providers and it is not clear that increases in fees for younger children would necessarily be sufficient to make up shortfalls in funding for the 30-hour entitlement.¹⁴⁰

The extent to which the new funding rates may or may not constitute under-funding of the free entitlement continues to be contested. The government maintains that the new funding rates, based on their review of childcare costs, will be sufficient.¹⁴¹ Full details regarding the distribution of funding for the free entitlement have not yet been revealed and are due to be announced in the form of the

133 National Association of Head Teachers, 'An early years place for all: NAHT survey on extending childcare provision in schools', September 2015, pp.5-6. See also: Independent Association of Prep Schools, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1.

134 Department for Education, 'Review of childcare costs: the analytical report', November 2015; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44; Department for Education, 'Childcare Bill: policy statement', December 2015, p.6.

135 Family and Childcare Trust, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.10; National Day Nurseries Association, 'Childcare Bill: Written Evidence', House of Commons, December 2015, pp.36-38; National Day Nurseries Association, 'Annual Nursery Survey 2016 – England', February 2016, pp.6, 14; National Day Nurseries Association, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, pp.1, 4-5.

136 Pre-school Learning Alliance, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.18.

137 Pre-school Learning Alliance, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.18.

138 It has been estimated that schools' per-pupil spending will fall by 7.5 per cent in real terms between 2015-16 and 2019-20, as consequence of rising numbers of pupils and increased costs, particularly employer contributions to teachers' pensions and national insurance. See: P. Sellen, 'The Education White Paper and Budget 2016: financial implications for schools', EPI, April 2016; Institute for Fiscal Studies, 'School funding reform', November 2015. See also: Independent Association of Prep Schools, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.1.

139 For interviews on this issue with representatives from the Pre-School Learning Alliance, Family and Childcare Trust, and National Day Nurseries Association, see: 'Victoria Derbyshire' (Television), BBC, 15 March 2016.

140 If providers do respond to potential under-funding of the 30-hour entitlement by raising fees for children under the age of 3 years then this would also oppose the stated aim of the policy by increasing barriers to employment for parents of younger children, at a point in a child's life when there is already a gap in support for childcare: from the end of maternity leave/shared parental leave (lasting up to 52 weeks, of which 39 weeks are paid) to the start of the free entitlement (at age 2 or 3 years), parents currently enjoy very little support beyond any childcare vouchers or tax credits which they receive.

141 Hansard, HC Deb., 25 January 2016, c.76.

early years national funding formula, following a consultation later this year. It is not yet known, for example, how far allocations will be weighted according to deprivation measures.¹⁴² However, what is clear from the national funding rates is that the sums being made available will not enable providers to invest in improving the quality of their settings through measures such as upskilling or expanding their workforce or developing their premises. This will have implications not only for the additional 15 hours but also for the universal 15 hours to which all 3 and 4-year-olds are entitled.

In particular, the government's review of childcare costs, on which the new rates are based, recommends that settings could become more efficient, such as by operating at the statutory limit of staff-to-child ratios and by employing staff on a more flexible basis in line with varying levels of demand at different times of the day or week.¹⁴³ However, the Department for Education has been criticised for not knowing the level of efficiency at which providers are currently operating.¹⁴⁴ Whilst there are likely to be some settings in which improved efficiencies are possible, a number of early years organisations have stated that in many cases such steps would either not be practical or would endanger the quality or flexibility of provision on offer.¹⁴⁵ Providers simply cannot in practice always operate in exact ratios: to do so would require children to be admitted in groups of fixed sizes in line with the ratios and to arrive and leave at the same times as each other, which is at odds with the government's desire to ensure that parents have access to flexible childcare arrangements, and would render providers vulnerable to breaching statutory ratios unintentionally.¹⁴⁶ Employing staff more flexibly may place at risk the quality of staff available, a particular concern in light of the considerable body of evidence which highlights staff quality as the lynchpin of overall quality in a setting.¹⁴⁷ Raising the quality of the early years workforce has proved challenging largely because of the poor status and low pay which the profession offers; moving towards more flexible employment arrangements would indicate a shift in the wrong direction.

In addition to these concerns, the funding rates do not indicate scope for providers to increase investment in staff through supporting those undertaking higher qualifications or through offering higher salaries to better qualified or more experienced staff.¹⁴⁸ Indeed, the introduction of the national living wage, applicable to those aged 25 and above, may incentivise providers to employ a higher number of younger workers in order to reduce staff costs.¹⁴⁹ It has yet to be seen whether action will be taken to counter these barriers to raising the quality of staff: the Department for Education has announced that it will be publishing an early years workforce strategy in order to develop a strong career structure within the sector.¹⁵⁰

Any neglect of quality has concerning implications for the attainment gap. Research showing that the introduction of the universal entitlement in the early 2000s did not result in a narrowing of the attainment gap due to the low quality provision in which expansion of places occurred suggests of the 30-hour entitlement that 'such a policy is unlikely to generate substantial positive impacts for affected

142 The Department for Education has been warned of the need to monitor the impact of funding arrangements on take-up of the free entitlement in disadvantaged areas. Maintained settings are disproportionately located in these areas, but also tend to have higher costs. See: National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.38. See also: 'Oral evidence: Free entitlement to early years education and childcare, HC 912', Public Accounts Committee, April 2016, p.4.

143 Department for Education, 'Review of childcare costs: the analytical report', November 2015, pp.9-10, 50-65, 72.

144 National Audit Office, 'Entitlement to free early education and childcare', March 2016, pp.9, 30.

145 Early Education, 'Childcare Bill: Written Evidence', House of Commons, December 2015, p.33; Pre-school Learning Alliance, 'Childcare Bill: Written Evidence', House of Commons, December 2015, pp.18-19; Pre-school Learning Alliance, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, pp.6-7.

146 Pre-school Learning Alliance, 'Childcare Bill: Written Evidence', House of Commons, December 2015, pp.18-19. For the government's intention to ensure that the free entitlement provides parents with flexibility, see, for example: Department for Education, 'Childcare Bill: policy statement', December 2015, pp.12-13; Hansard, HC Deb., 25 January 2016, c.77; 'Oral evidence: Free entitlement to early years education and childcare, HC 912', Public Accounts Committee, April 2016, pp.33-35.

147 S. Mathers, K. Sylva and H. Joshi, 'Quality of Childcare Settings in the Millennium Cohort Study', SureStart, March 2007, pp.8, 39-42; S. Mathers, H. Ranns, A. Karemaker, A. Moody, K. Sylva, J. Graham and I. Siraj-Blatchford, 'Evaluation of the Graduate Leader Fund: Final Report', Department for Education, July 2011; K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart, 'The Effective Provision of Pre-School Education (EPPE) Project: Final Report', Institute of Education, November 2004, p.28.

148 A. Butler and J. Rutter, 'Creating an anti-poverty childcare system', Joseph Rowntree Foundation, January 2016, pp.37-39, 43-44; National Day Nurseries Association, 'Annual Nursery Survey 2016 – England', February 2016, p.14; Save the Children, 'Written Evidence: Free entitlement to early years education and childcare', Public Accounts Committee, April 2016, p.3.

149 J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, p.28.

150 Department for Education, 'Sam Gyimah: we are in a golden age of childcare', November 2015.

children's outcomes. Indeed, unless high quality settings expand substantially, increasing provision to 30 hours for some children may reduce access to high quality provision for other groups. The likelihood of sufficient new high quality expansion will depend upon the precise details of the policy, in particular the extent to which funding mechanisms are linked to quality'.¹⁵¹

151 J. Blanden, E. Del Bono, S. McNally and B. Rabe, 'Universal pre-school education: the case of public funding with private provision', *The Economic Journal*, 126:592, May 2016, pp.682-723.

Chapter 4: Government subsidies for early years provision

Summary

- : This chapter examines how the offer and take-up of government subsidies for early years provision relate to household income. It compares the current system with the one which will be in place from September 2017, after a variety of changes have been made to the different benefits and entitlements. This is used to highlight funding priorities implicit in the system and how these are likely to change under the new arrangements.
- : The extension to the free entitlement, combined with the roll-out of universal credit and tax-free childcare, will result in a substantial increase in maximum entitlement to government subsidy for many families with the exception of those on very high incomes and those who are unemployed.
- : However, the majority of parents do not currently access their maximum entitlement, particularly to the childcare element of working tax credit. This is likely to be due in part to the dependence of this benefit on parental contributions, which many low income families may struggle to afford. Lack of awareness of available support, as well as parental preferences, are likely also to play a part.
- : Assuming no great change in uptake patterns, our modelling predicts that, although all working families except the wealthiest can be expected to receive an increase in government subsidy, this increase is expected to be lower for families on the lowest incomes, which do not qualify for the 30-hour entitlement and tax-free childcare. A cliff edge will be created between families above and below this threshold and those on lower incomes can be expected to receive substantially less in government subsidy.

Benefits and entitlements

Government spending on early years education and childcare is currently distributed via a range of benefits and entitlements, outlined below.¹⁵²

Free entitlement to childcare

As discussed in previous chapters, all 3 and 4-year-olds currently qualify for 15 hours of free childcare for 38 weeks of the year (it is possible to spread the same number of total hours annually across more weeks). From September 2017, some families will be eligible for an additional 15 hours of free childcare. In order to qualify, both parents (or a single parent) must each earn at least £115.20 per week (equivalent to 16 hours worked at the national living wage) but less than £100,000 per year; this definition is used to denote 'working families'. Some exceptions will apply for families in which an adult has caring responsibilities or a disability.¹⁵³

Childcare element of working tax credit (to be replaced by universal credit by 2017)

The childcare element of working tax credit covers up to 70 per cent of eligible childcare costs up to the limits of £175 per week for one child, or £300 per week for two or more children (a maximum of £122.50 / £210 per week in government spending).¹⁵⁴ For a two parent family to be eligible, both parents must usually work at least 16 hours per week each, and single parents must usually work 16 hours per week.¹⁵⁵ The benefit is withdrawn at a rate of £0.41 for every £1 of gross annual household income above £6,420.¹⁵⁶

152 For a summary of sources of support for families with the cost of childcare, see: J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.8-9.

153 Department for Education, 'Childcare Bill: policy statement', December 2015. If a parent is not legally entitled to be paid the national living wage then they must earn at least the weekly equivalent to 16 hours worked at the national minimum wage in order to qualify for the extended entitlement to free childcare.

154 HM Revenue and Customs, 'Working Tax Credit – Help with the costs of childcare', April 2015, p.10.

155 HM Revenue and Customs, 'Working Tax Credit – Help with the costs of childcare', April 2015, p.1.

156 HM Treasury, 'Tax and tax credit rates and thresholds for 2015-16', December 2014.

Universal credit is currently being rolled out, gradually replacing working tax credit. Although few families with children have as yet transferred to universal credit, the implementation schedule expects all claimants to have transferred by late 2017. Since April 2016, the childcare element of universal credit has covered up to 85 per cent of eligible childcare costs, up to the same limit of £760 per month for one child, or £1,304 for two or more children (a maximum of £646.35 / £1108.04 per month in government spending).¹⁵⁷

In contrast to working tax credit, there are no minimum working hours eligibility criteria for the universal credit childcare component; this means that working households will be entitled to childcare support even if their working hours and income are low.¹⁵⁸ The benefit is reduced at a rate of £0.65 for every £1 of net monthly household income above £397, equating to £4,764 annually for families with stable income from month to month.¹⁵⁹

Employer childcare vouchers (to be replaced by tax-free childcare from 2017)

A working parent can currently claim tax relief on some childcare costs through a salary sacrifice scheme, if operated by their employer. Since 2011, the maximum amount of vouchers which can be claimed have been £55 per week for a basic rate taxpayer (equivalent to a maximum weekly tax and national insurance saving of approximately £18) and £28 per week for a higher rate taxpayer (equivalent to a maximum weekly tax and national insurance saving of around £12).¹⁶⁰ The benefit can be claimed on a per parent basis, regardless of number of children in a family. Childcare purchased through employer vouchers is not eligible for support from the childcare element of working tax credit and therefore it is only financially logical to claim childcare vouchers in situations in which the benefit derived from them is greater than the amount of potential support on offer from the childcare element of working tax credit, or in which entitlement to the childcare element of working tax credit has been exhausted completely.¹⁶¹

From 2017, employer childcare vouchers will be replaced by a system of tax-free childcare. Under this scheme, the government will contribute 20 per cent of childcare costs, up to an annual maximum of £10,000 per child (a total of £2,000 in government spending on childcare). The eligibility requirements have been revised so that they are now the same as those for the entitlement to 30 hours per week of free childcare. This means that all parents in a household must be earning at least the equivalent of 16 hours per week worked at the national living wage.¹⁶² Tax-free childcare cannot be claimed alongside any element of universal credit.¹⁶³

Early years pupil premium

The early years pupil premium is additional funding paid to providers in order to finance particular support for disadvantaged 3 and 4-year-olds. It is worth £0.53 per hour for each eligible child (equivalent to an annual sum of £302.10 for each child who claims 570 hours of free early education per year).¹⁶⁴ There are a number of different criteria which children can meet in order to be eligible for this funding. In most cases, children who attract early years pupil premium funding are not those who are eligible for 30 hours of free childcare.

157 Universal Credit, 'Universal Credit and your family', January 2016, p.2; 'Proposed benefit and pension rates 2016 to 2017', p.13: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480317/proposed_benefit_and_pension_rates_2016_to_2017.pdf, accessed 5 May 2016.

158 Universal Credit, 'Universal Credit: Increasing the Childcare Offer', December 2014, p.3.

159 'Proposed benefit and pension rates 2016 to 2017', p.13: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480317/proposed_benefit_and_pension_rates_2016_to_2017.pdf, accessed 5 May 2016; Universal Credit, 'Earnings Taper for Universal Credit': https://about.universalcredit.service.gov.uk/kms/Pages/Earnings_taper_for_Universal_Credit.htm, accessed 5 May 2016.

160 HM Revenue and Customs, 'Employment Income Manual', EM16053, updated March 2016: <https://www.gov.uk/hmrc-internal-manuals/employment-income-manual/eim16053>, accessed 5 May 2016.

161 'Tax credits: working out your childcare costs', last updated 3 May 2016: <https://www.gov.uk/childcare-costs-for-tax-credits>, accessed 5 May 2016.

162 T. Jarrett, 'Childcare Bill 2015-16: Analysis for Commons Report Stage (Bill 107)', House of Commons Library, 20 January 2016, pp.8, 50-53; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44.

163 HM Treasury, 'Millions of parents to get help with childcare costs', March 2014: <https://www.gov.uk/government/news/millions-of-parents-to-get-help-with-childcare-costs>, accessed 5 May 2016.

164 Department for Education, 'Early years pupil premium: guide for local authorities', November 2014, updated March 2015: <https://www.gov.uk/guidance/early-years-pupil-premium-guide-for-local-authorities>, accessed 5 May 2016.

Early years pupil premium differs from the other subsidies listed above in that it is intended specifically to be used to improve quality of provision for disadvantaged children; the other benefits relate to the quantity of childcare available to parents. The extent to which it does or does not improve quality is not yet clear. Depending on the interventions which the funding is used to cover, it is also possible that benefits in quality of provision would be felt by all children attending the same provider, regardless of family income. However, early years pupil premium is included in the models below, and linked specifically with the family earnings against which it is distributed, in order to provide contextual information which allows for comparison of the relative size of the different sources of subsidy.

Maximum entitlements to government subsidy for early years provision

The following graphs outline the changes in overall maximum entitlements to government support for early years provision for single and two parent families with one pre-school child aged 3 or 4 years, comparing 2016 with 2017.¹⁶⁵ The level of subsidy provided via the free entitlement is modelled at the national average of cost of childcare and is assumed to remain stable across family earnings. In reality, funding for the free entitlement is allocated by local authorities according to various weightings which include a deprivation element.¹⁶⁶ Several of the early implementers involved in the pilot of the 30-hour entitlement have also revealed that they will be funding the additional 15 hours at a higher rate than the core, universal 15 hours.¹⁶⁷ However, arrangements vary locally and are currently under review as part of the early years national funding formula. A full explanation of the method and assumptions used to create these models are available in the Annexe.

In order to demonstrate the maximum entitlement to subsidy available, this first set of models takes as its basis 50 hours per week of early years provision; although this level of childcare use is unrealistically high, it allows for the full level of government subsidy available to be modelled.¹⁶⁸

165 The number of other children in the family is independent of the models presented in this chapter; the figures show solely the subsidy for the pre-school child aged 3 or 4 years.

166 T. Jarrett, 'Children: Introduction of 30 hours of free childcare (England)', House of Commons Library, 5 May 2016, p.13; Department for Education, 'Early education and childcare: Statutory guidance for local authorities', September 2014, p.12.

167 C. Gaunt, 'Local authorities reveal details of 30-hour rates', Nursery World, 16 May 2016. See also: Chapter 3, above.

168 Under the current system, an individual must work at least 16 hours per week in order to be eligible for childcare support via working tax credit. Therefore the cliff edge in the models outlining current entitlements to government subsidy has been positioned according to the annual income an individual would earn by working a minimum of 16 hours per week at the national minimum wage. This means that someone working fewer hours for a high wage could earn the same annual income but would not be eligible for childcare support via working tax credit.

Figure 4.1: Maximum entitlements to government subsidy for early years provision for pre-school children aged 3 and 4 years, single parent family – March 2016

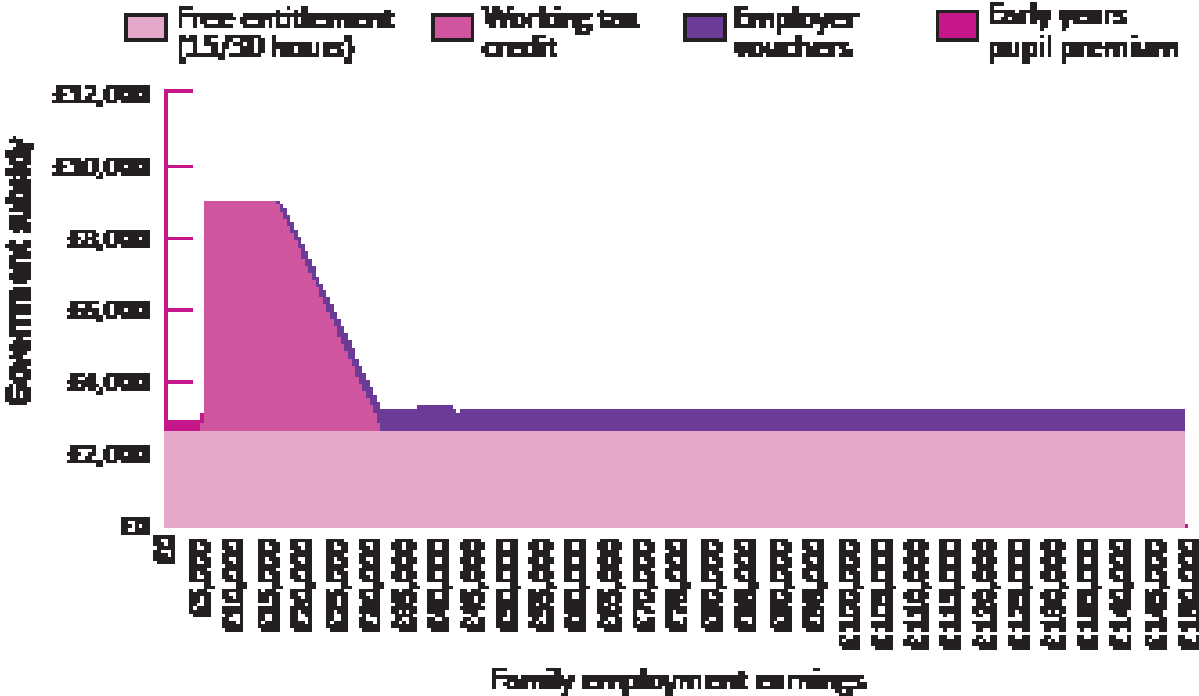


Figure 4.2: Maximum entitlements to government subsidy for early years provision for pre-school children aged 3 and 4 years, two parent family – March 2016

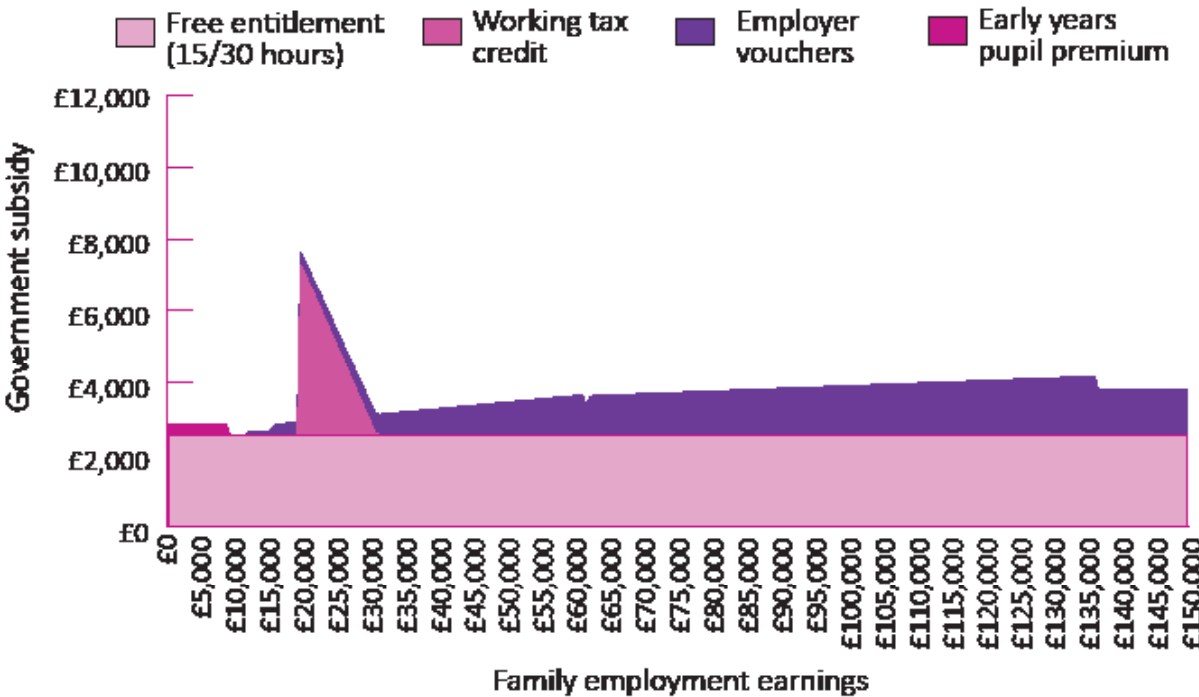


Figure 4.3: Maximum entitlements to government subsidy for early years provision for pre-school children aged 3 and 4 years, single parent family – September 2017¹⁶⁹

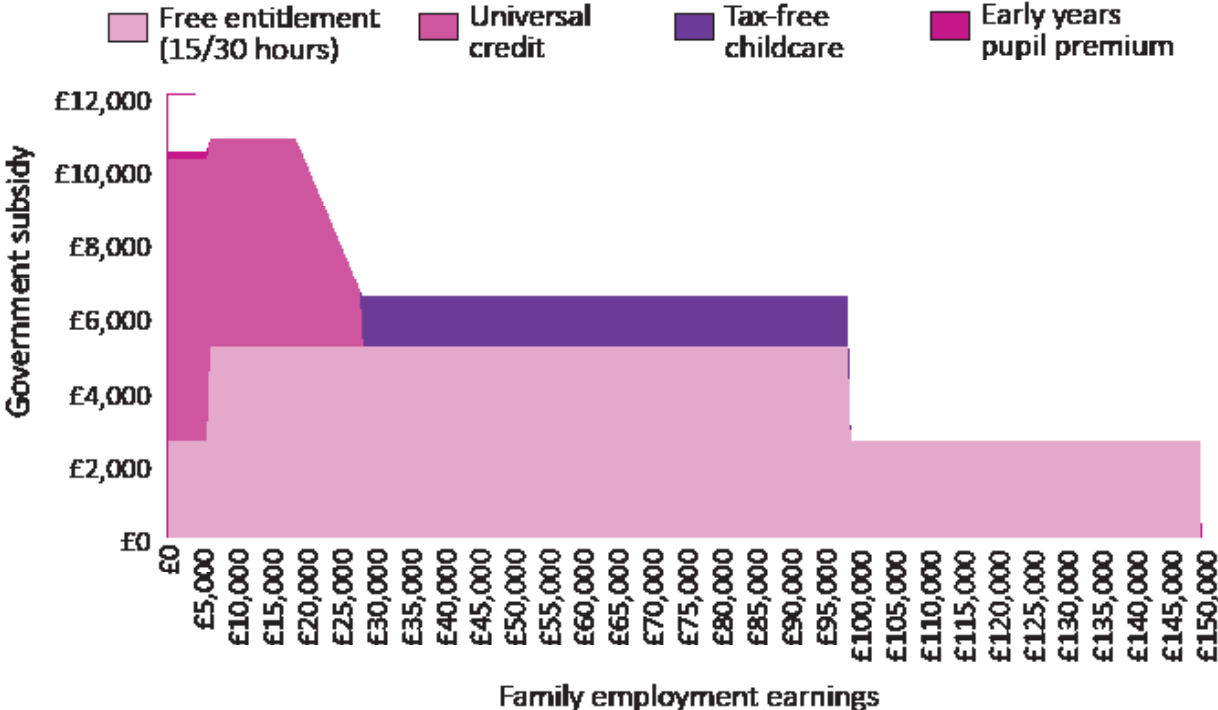
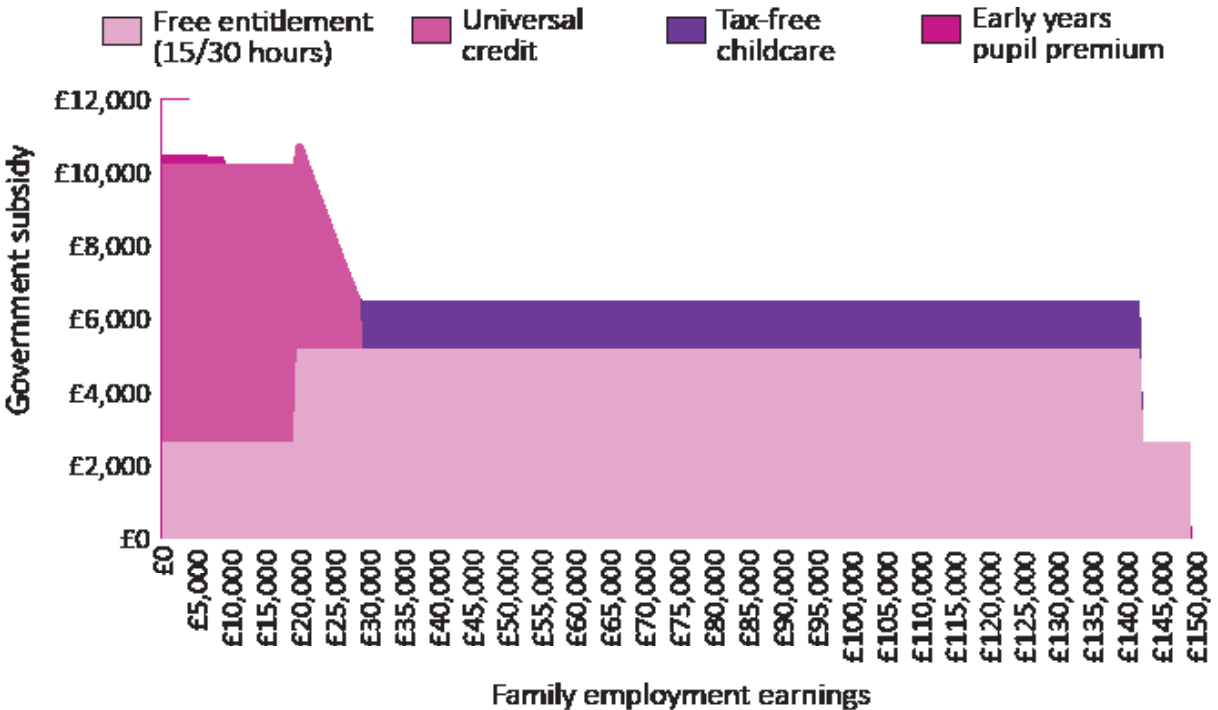


Figure 4.4: Maximum entitlements to government subsidy for early years provision for pre-school children aged 3 and 4 years, two parent family – September 2017



169 Figures 4.3 and 4.4 assume that the childcare component of universal credit will be available to all families which are employed, regardless of working hours and income. However, this policy appears still to be under development and therefore the level of entitlement available to those on the lowest incomes may be over-estimated. See below for further details.

Under the current system, entitlements to government support are lowest for those with the very lowest employment earnings, before increasing dramatically once a family becomes eligible for the childcare element of working tax credit, which requires parents to work at least 16 hours per week. Once entitlement to the childcare element of working tax credit has fallen away entirely, the distribution remains largely flat.

The forthcoming changes appear to offer substantially more support to families at the bottom of the income scale than is the case under the current system. This is because the childcare element of universal credit does not carry the requirement that each parent must work a minimum of 16 hours per week, unlike the childcare component of working tax credit. It appears that this change will disproportionately benefit two parent families, who currently must be at a much higher family income than single parent families in order to meet the per parent working requirement to receive the childcare element of working tax credit. However, the details regarding eligibility for the childcare element of universal credit are not yet available: current guidance simply states that all parents in a family must be employed and must ‘pay for childcare because of this work’.¹⁷⁰ It is not clear whether, in time, this stipulation will be implemented via a minimum working hours requirement or through an alternative means, which may reduce the number of eligible families on lower incomes.

Further up the income scale, once families move from universal credit to tax-free childcare, the level of entitlements remains largely static and at a much a higher rate than under the old system until eligibility for the 30-hour free entitlement is withdrawn. This means that, for example, a two parent family with one child aged 3 years with family employment earnings of £100,000 per year will be eligible for around £3,900 per year in government support under the current system; this will increase to nearly £6,500 per year under the new system. A single parent family with earnings of £95,000 will see their entitlement increase from nearly £3,200 under the March 2016 system to almost £6,500 under the September 2017 system. This greater level of support for those on higher incomes is due very largely to the introduction of the 30-hour entitlement. The main reason why the increase is greater for a single parent family on this part of the income scale is that the move from employer childcare vouchers (entitlement to which is allocated on a per-parent basis) to tax-free childcare (subsidy for which is given on a per child basis) disproportionately benefits single parent families in employment.

Take-up of government subsidy for early years provision

Maximum entitlements to government support do not, however, necessarily reflect the amount of subsidy that is actually claimed. This section estimates the potential level of subsidy being claimed by different families by using data from the Department for Education’s ‘Childcare and early years survey of parents 2014 to 2015’.¹⁷¹ This survey records the number of hours of childcare used in a typical week according to family income level and allows for a breakdown to be calculated of hours from the free entitlement and additional hours purchased, displayed in Figure 4.5 below.

Figure 4.5: Weekly childcare usage by family income¹⁷²

Total yearly gross income	Mean free hours claimed	Mean purchased hours
Up to £9,999	11	5
£10,000-£19,999	11	4
£20,000-£29,999	10	6
£30,000-£44,999	10	7
£45,000 or more	8	13

170 Universal Credit, ‘Qualifying for the Childcare Costs Element’: http://about.universalcredit.service.gov.uk/kms/Pages/Qualifying_for_Childcare_Costs_element.htm, accessed 4 May 2016.
 171 T. Huskinson, S. Hobden, D. Oliver, J. Keyes, M. Littlewood, J. Pye and S. Tipping, ‘Childcare and early years survey of parents 2014 to 2015’, Department for Education, March 2016.
 172 Data taken from: T. Huskinson, S. Hobden, D. Oliver, J. Keyes, M. Littlewood, J. Pye and S. Tipping, ‘Childcare and early years survey of parents 2014 to 2015’, Department for Education, March 2016.

Although take-up of the free entitlement is high, the relatively low number of purchased hours amongst families earning below £45,000 indicates that take-up of other benefits which rely on some parental contribution towards the cost of childcare (working tax credit and employer childcare vouchers) must be very low. There may be several reasons for this. Although the childcare element of working tax credit covers up to 70 per cent of childcare costs, it is nevertheless dependent on parents covering the remaining expense. This cost is still too great for many families to purchase many or even any hours of childcare above the universal entitlement to 15 hours per week, particularly if the childcare which is available is not sufficiently flexible to accommodate parental working patterns.¹⁷³

There is also evidence that a substantial number of parents are not aware of the support for which they are eligible. A recent report from the Social Mobility and Child Poverty Commission found that only 53 per cent of parents had a very clear (14 per cent) or reasonable (39 per cent) understanding of government support for childcare costs available to them. Nearly half of parents were either confused (29 per cent) or had no idea at all (18 per cent). Notably, middle-class parents were more likely to have a clear or reasonable understanding of available support than were working-class parents.¹⁷⁴ The complexity of the system of entitlements, comprising various different sources of support, with different eligibility requirements and claiming processes, exacerbates the problem.¹⁷⁵

In addition, many parents prefer not to use long hours of formal childcare, particularly for younger children.¹⁷⁶ This may also contribute to decisions not to take up the full free entitlement even to 15 hours of free childcare, not to purchase the maximum number of childcare vouchers allowed, or not to use working tax credit to buy many (or any) additional hours of childcare above the free entitlement.

Figures 4.6 and 4.7 combine data on entitlements to government support with take-up of childcare in order to provide an indication of the amount of support which the government actually provides to different types of families under the current system. This was estimated by, firstly, drawing a line of best fit through the mean uptake of both free and purchased hours by category of family income shown in Figure 4.5, in order to create a more granular breakdown of estimated uptake.¹⁷⁷ Mean number of purchased hours was used as a cap to estimate the maximum level of potential funding by government (via working tax credit or employer childcare vouchers) once childcare usage has been taken into account.¹⁷⁸ Mean uptake of free and purchased hours has been used in preference to the median; this results in a model which does not represent any particular individual family but it does ensure that the uptake of all families is represented proportionally. A full explanation of the method and assumptions used to create these models is available in the Annex.

173 A report by HM Revenue and Customs, based on data from 2008-09, estimated both the take-up of the childcare element of working tax credit (the proportion of families who were eligible for the benefit and were claiming it) and also the childcare element ratio (the proportion tax credit claimants who were entitled to more than the family element and were claiming the childcare component). The childcare element take-up was found to be 81 per cent but the childcare element ratio was estimated to be 18 per cent. The difference in these figures was attributed largely to the inclusion in the denominator of the childcare element ratio of nearly 2 million families who were not eligible for the childcare element, although they were receiving tax credits and entitled to more than the family element. The three main reasons for ineligibility among these families were because they were single-earner couples (33 per cent); because they did not use any childcare (29 per cent); or because they only used childcare which did not count towards the childcare element, such as family and friends (29 per cent). See: HM Revenue and Customs, 'Working Tax Credit: Take-up of Childcare Element 2008-09', 2011. More recent data indicates that of 2.6 million in-work families with children claiming either working tax credit or child tax credit in 2013-14, and potentially eligible for the childcare component, only 392,000 (15 per cent) were receiving the childcare element of working tax credit. See: HM Revenue and Customs, 'Child and Working Tax Credits Statistics: Finalised annual awards in 2013-14, United Kingdom', May 2015, p.14.

174 B. Gulc and K. Silversides, 'Parents' experiences of services and information in the early years', Social Mobility and Child Poverty Commission, March 2016, pp.10, 40-42. See also: T. Huskinson, S. Hobden, D. Oliver, J. Keyes, M. Littlewood, J. Pye and S. Tipping, 'Childcare and early years survey of parents 2014 to 2015', Department for Education, March 2016, p.71.

175 Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, pp.57-59.

176 T. Huskinson, S. Hobden, D. Oliver, J. Keyes, M. Littlewood, J. Pye and S. Tipping, 'Childcare and early years survey of parents 2014 to 2015', Department for Education, March 2016, pp.167-169.

177 This means that the estimated uptake becomes less reliable above £45,000, as all families with earnings higher than this are placed in the same, very broad category in the survey.

178 Uptake in the 'Childcare and early years survey of parents 2014 to 2015' is reported according to gross family income, whereas the models contained within this chapter are based on total family employment earnings, as this is the criterion upon which eligibility to various benefits and entitlements is calculated. Total gross income consists of earned income plus working tax credit. However, uptake of both the free entitlement and additional purchased hours does not vary greatly across the two income bands up to £20,000 that would have substantial tax credit claims and therefore the difference in income types does not impact on the models in this chapter.

Figure 4.6: Estimated take-up of government subsidy for early years provision for pre-school children aged 3 and 4 years, single parent family – March 2016

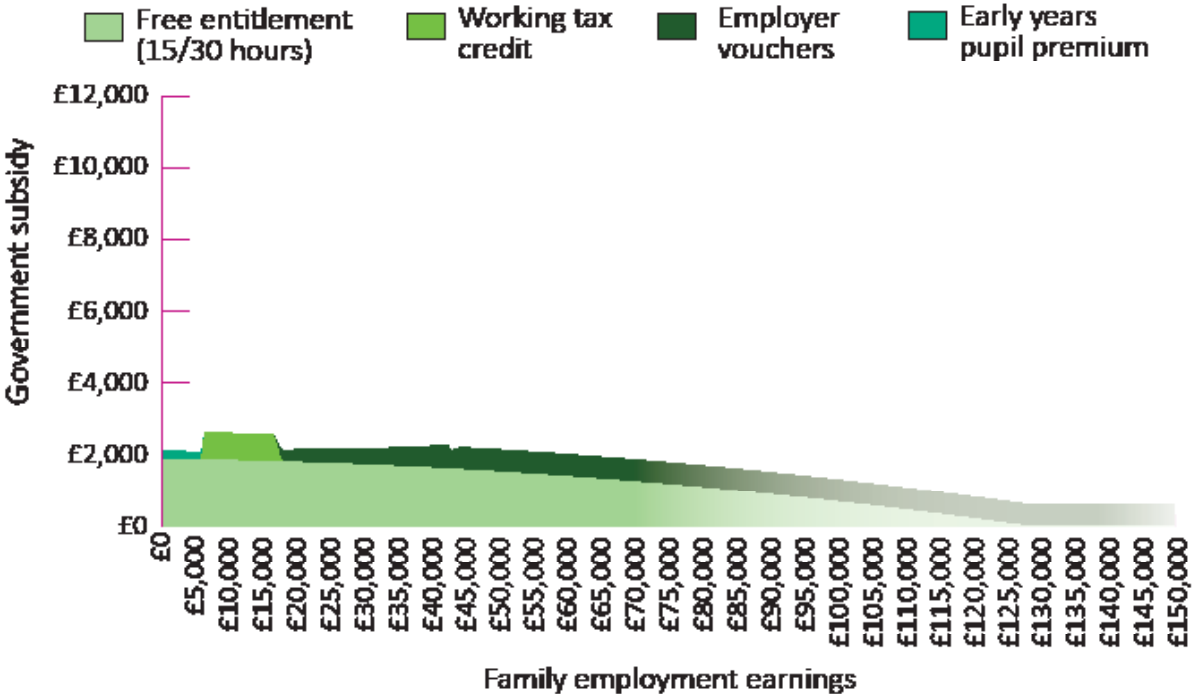
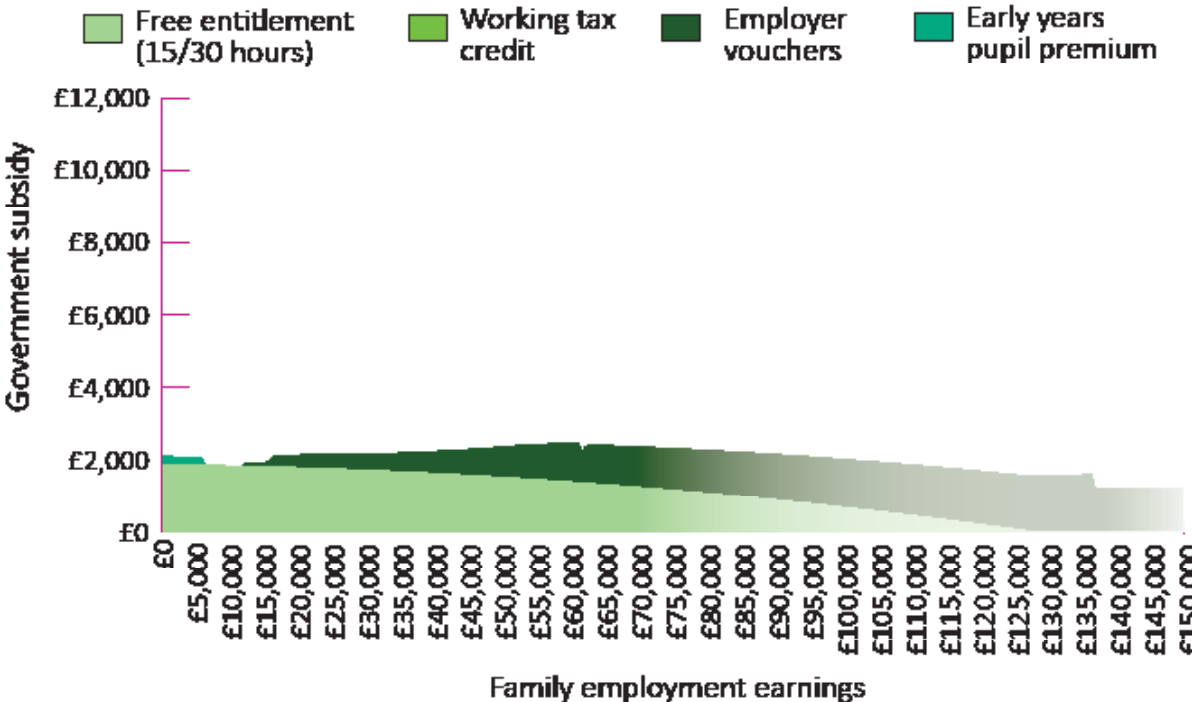


Figure 4.7: Estimated take-up of government subsidy for early years provision for pre-school children aged 3 and 4 years, two parent family – March 2016



Comparing estimates of take-up of government subsidy (Figures 4.6 and 4.7) with entitlements to government support (Figures 4.1 and 4.2) under the current system demonstrates that the actual distribution of government subsidy is much more similar across different family earnings than are the maximum entitlements on offer; this is because the majority of parents do not use their full entitlements and the childcare component of working tax credit in particular has very low uptake.

The graphs below suggest potential patterns in government spending on support for early years provision under the various changes which will be in place by September 2017. These were created using the same method outlined above for Figures 4.6 and 4.7 and are based on the following key assumptions:

- : **Free entitlement:** It is assumed that those eligible for the core 15-hour universal free entitlement only will continue to take up this entitlement at the same rate as recorded in 2014-15. For those eligible for the extended entitlement of 30 hours per week, it is assumed that families will take up the equivalent proportion of this as they did when eligible only for 15 hours in 2014-15. It is of course possible that there will be behaviour change associated with the policy, particularly as the Department for Education is working to explore and address barriers to take-up of the free entitlement; this will form part of the pilot from September 2016, with 32 local authorities to be provided with funding to develop and share best practice in this area.¹⁷⁹ More generally, the Childcare Act places a requirement on local authorities to publish information which will assist parents in making informed decisions about childcare.¹⁸⁰ If this results in improved parental awareness of available support for the costs of childcare then this may lead to an increase in take-up of the free entitlement and of other benefits. Neither the success of such initiatives, nor any associated increase in take-up, can be predicted at this stage and so are not included in the models below.
- : **Universal credit:** It is assumed that the take-up of purchased childcare will remain the same as under the current system and therefore that families will use the childcare element of universal credit to cover the same number of purchased hours. The childcare element of universal credit should be available to more families on lower incomes (due to the removal of the 16-hour weekly working requirement) and covers a greater proportion of the cost of childcare than does working tax credit (85 per cent as opposed to 70 per cent). Therefore it is possible that this will lead to some behaviour change. However, the estimates presented in this report, based on survey data from the Department for Education, indicate that current take-up of the childcare element of working tax credit is so low as to suggest that there is unlikely to be a major increase in uptake under universal credit. This is discussed in further detail below.
- : **Tax-free childcare:** Again, it is assumed that levels of purchased childcare will not change under the new system and that these will act as a cap on the amount of support claimed under tax-free childcare in the same way as under employer childcare vouchers in the current system modelled in Figures 4.6 and 4.7. Tax-free childcare does, however, differ from employer childcare vouchers in that the latter is available only to those whose employer chooses to administer the scheme, whereas tax-free childcare is available independent of the employer. This means that take-up of tax-free childcare may increase compared with uptake of employer childcare vouchers. Under the current system, take-up of employer childcare vouchers appears to increase with income, but whether this is due to a greater incidence of employers offering the scheme at higher incomes, or whether it is due to increased ability to pay for childcare is unclear. If the former is the case then the replacement of the voucher scheme with tax-free childcare is more likely to lead to behaviour change and increased uptake of subsidies via this scheme. In addition, parents will be able to apply for both tax-free childcare and the 30-hour entitlement via a joint online application system; streamlining these processes may also contribute to an increase in take-up under tax-free childcare.

¹⁷⁹ Department for Education, 'Expression of Interest: Evaluation of Early Implementation of 30 hours free childcare', May 2016, p.1.

¹⁸⁰ Childcare Act 2016, Chapter 5: <http://www.legislation.gov.uk/ukpga/2016/5/enacted>, accessed 18 May 2016; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.14.

Figure 4.8: Estimated take-up of government subsidy for early years provision for pre-school children aged 3 and 4 years, single parent family – September 2017

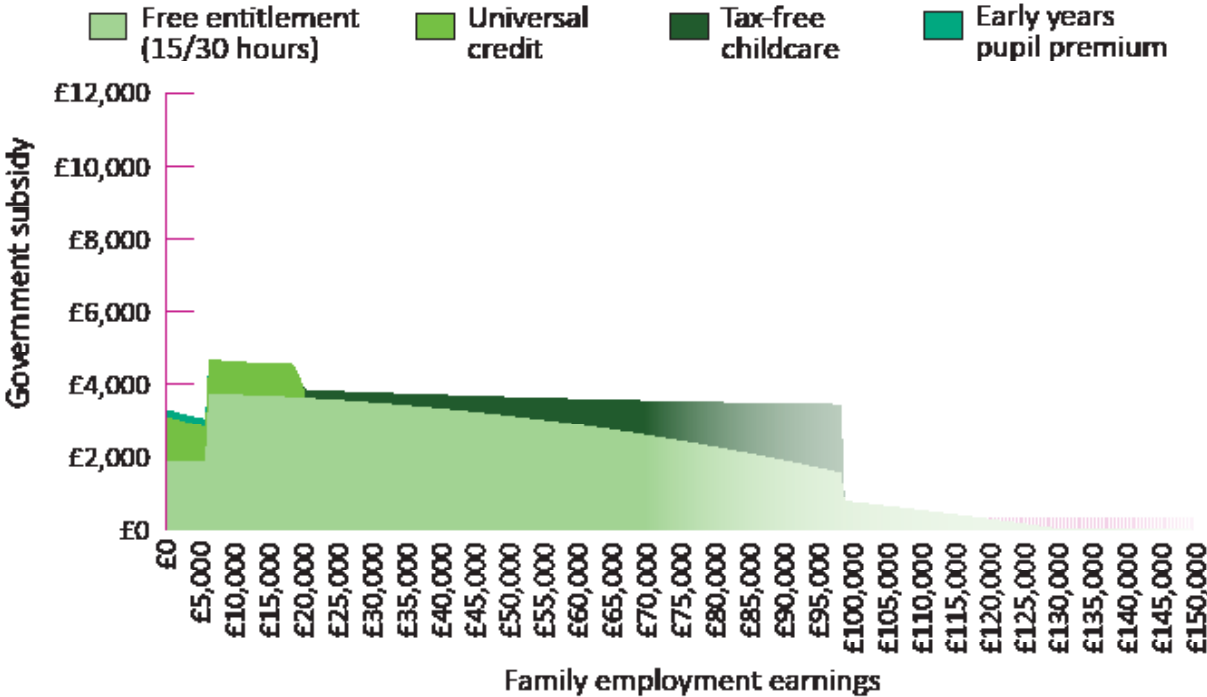
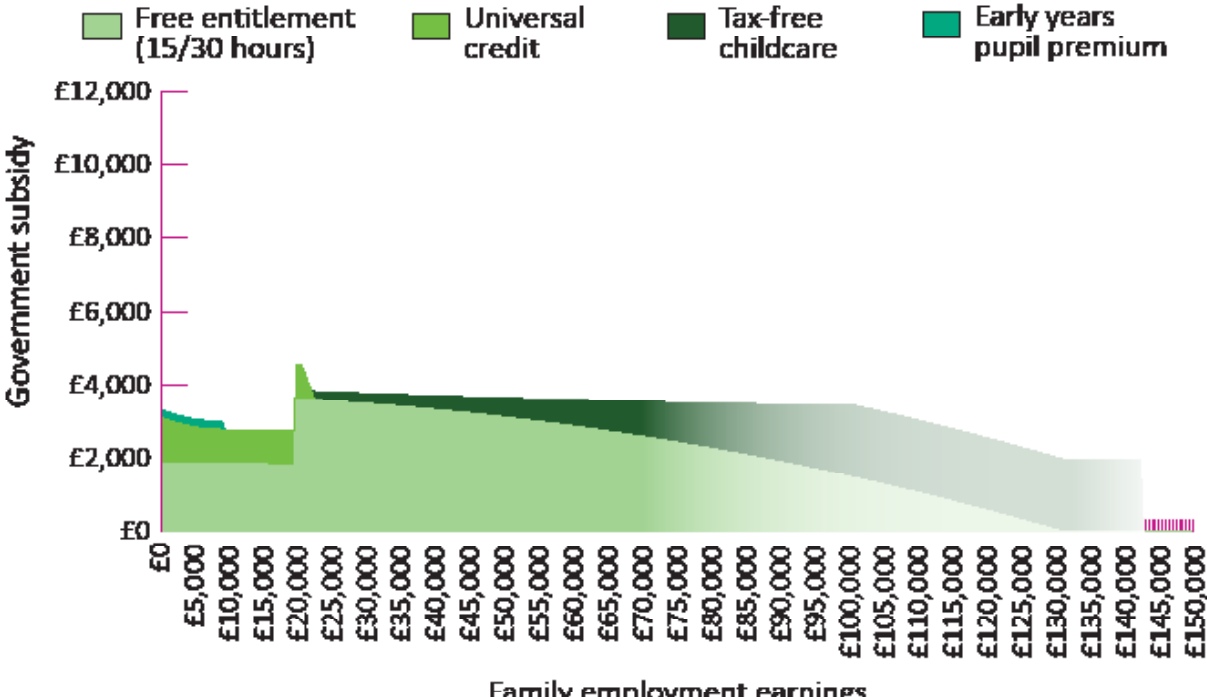


Figure 4.9: Estimated take-up of government subsidy for early years provision for pre-school children aged 3 and 4 years, two parent family – September 2017



These spending patterns suggest quite a different system than is indicated under both take-up of current entitlements (Figures 4.6 and 4.7) and under maximum entitlements in 2017 (Figures 4.3 and 4.4). For both family types, below family employment earnings of £100,000, the lowest levels of government childcare subsidies can be expected to be for children from families with the lowest employment earnings, before a substantial increase as families become eligible for the 30-hour entitlement. With the exception of a drop in spending as take-up and eligibility for the childcare component of universal credit fall away, spending otherwise plateaus until eligibility for the 30-hour entitlement and for tax-free childcare ceases at £100,000 for single parent families, or until lower take-up of entitlements among two parent families earning around £100,000 and above leads to a decline in spending.¹⁸¹

As explained above for the low take-up of the childcare element of working tax credit, the childcare component of universal credit is dependent on parental contributions to the cost of childcare. Although the proportion which parents will be required to cover will be halved from 30 per cent to 15 per cent under universal credit, parents may still opt for alternative arrangements such as informal care with relatives, in order to avoid the expense completely. This would be particularly likely if childcare prices rise further, which is one probable consequence of any shortfall in government funding of the free entitlement.¹⁸² The level of uptake of the childcare element of universal credit is uncertain, but low take-up by families who are not eligible for the 30-hour entitlement will result in a large cliff edge, with spending on support for early years provision roughly doubling for each family type as children become eligible for the 30-hour free entitlement. Moreover, as discussed above, the uptake of the new tax-free childcare may be greater than that of the current employer childcare vouchers. If increased uptake of tax-free childcare exceeds any increase in childcare support claimed under universal credit, there is a risk that the distribution of government spending could become more regressive than that indicated in the figures presented above.

Comparing the new system with the current one, the models contained in this chapter suggest that after the changes, working families on the lowest incomes can be expected to receive on average more government support than was previously the case, but that those on higher incomes can be expected to receive a substantially greater increase. The table below summarises the key changes experienced by single and two parent families on different incomes.

181 Entitlement to both the extended free entitlement and to tax-free childcare falls away if either parent is earning £100,000 or above. For two parent households, this report assumes that the earnings ratio between the lower and higher earning parent is 1:2.2. This ratio was taken from: H. Immervoll, H. Jacobsen Kleven, C. Thustrup Kreiner and N. Verdellin, 'An Evaluation of the Tax-Transfer Treatment of Married Couples in European Countries', EUROMOD, September 2008, p.37.

182 See Chapter 3, above. A further barrier to the purchase of additional hours arises from the fact that payments to support the cost of childcare will be made in arrears under universal credit. This means that parents will have to pay the full cost of additional hours of childcare up front and then wait for reimbursement for up to 85 per cent of the cost. This is likely to cause particular problems at the point of moving into work or if childcare costs increase due to higher fees during holidays. See: Citizens Advice Bureau, 'Delivery of support for childcare costs under Universal Credit'; J. Rutter, '2016 Childcare Survey', Family and Childcare Trust, February 2016, pp.10, 19; Gingerbread, 'Upfront: a childcare deposit guarantee', March 2016.

Figure 4.10: Summary of changes in maximum entitlements and mean uptake estimates, comparing March 2016 with September 2017¹⁸³

	Gross Annual Earnings		2016			2017		
			Entitlement	Mean Uptake Estimate	Mean % Entitlement Used	Entitlement	Mean Uptake Estimate	Mean % Entitlement Used
Single Parents	not employed	£0	£2,900	£2,100	72%	£2,900	£2,100	72%
	< threshold	£5,000	£2,900	£2,100	72%	£10,400	£3,000	29%
	> threshold	£6,000	£8,900	£2,600	29%	£10,800	£4,700	44%
	median	£28,000	£4,200	£2,200	52%	£6,500	£3,800	58%
	high	£95,000	£3,200	£1,400	44%	£6,500	£3,400	52%
Two parents	not employed	£0	£2,900	£2,100	72%	£2,900	£2,100	72%
	< threshold	£19,000	£2,900	£2,100	72%	£10,200	£2,700	26%
	> threshold	£20,000	£7,400	£2,100	28%	£10,800	£4,600	43%
	median	£36,000	£3,200	£2,200	69%	£6,500	£3,700	57%
	high	£100,000	£3,900	£2,000	51%	£6,500	£3,400	52%

In our example, a single parent family on the national living wage earning £5,000 per year could be expected to receive an average increase of nearly £1,000 in government subsidy under the 2017 system, taking their average annual total to just over £3,000 for a child aged 3 or 4 years. A single parent family earning £95,000, on the other hand, could be expected to receive an average increase of over £2,000, taking their average total government subsidy to over £3,400 per year for a child aged 3 or 4 years.

This means that in 2016, this single parent on the national living wage earning £5,000 per year could be expected to receive 48 per cent more subsidy than a single parent with an annual income of £95,000. In 2017, however, the single parent earning £5,000 per year might be expected to receive 12 per cent less subsidy than the single parent earning £95,000.

Likewise, a two parent family on the national living wage earning £19,000 per year could be expected to receive on average around £600 more per year in government subsidy under the 2017 system, with an average total government subsidy of over £2,700 for a child aged 3 or 4 years. However, a two parent family earning £100,000 could be expected to receive an average increase of around £1,400 per year, taking their average annual total government subsidy to over £3,400 for a child aged 3 or 4 years.

As a consequence, in 2016, a two parent family on the national living wage with annual earnings of £19,000 can be expected to receive 6 per cent more subsidy than a two parent family earning £100,000 per year. In 2017, the two parent family earning £19,000 might be expected to receive 20 per cent less subsidy than the two parent family with annual earnings of £100,000.

In looking at patterns in spending on support for early years provision, the balance between spending on childcare to support parental employment and spending on early education to support child development raises a number of complications. Increasing childcare subsidies for families on low incomes risks reducing the incentives to enter employment or increase working hours. Yet at the same time, there is a danger that the most disadvantaged children, who are most in need of high quality early education, will lose out in terms of investment, quality and access. The changes will dramatically increase childcare subsidies not only for relatively poor families who just meet the eligibility criteria, but also for families on much higher incomes. At the same time, spending on children from the poorest working families is likely to increase by a much smaller amount and will not change for children of unemployed parents. The new system is in danger of creating a substantial divide in the levels of

¹⁸³ All figures are rounded to the nearest £100.

support received by different families depending on qualification for the extended free entitlement.

Parents who face difficulties in working 16 hours per week at the national living wage may do so due to their skills or the economy. There is a risk that these challenges will leave their children on the lower level of subsidy and that this will impact these children's access to high quality early education, which has the potential to reduce the persistence of disadvantage across generations. As outlined in Chapter 3, the level of funding for the free entitlement is likely to place a strain on quality, whilst increased demand for provision will result in greater competition for available places. By 2019-20, the government will be spending over £1 billion more per year on early years provision, with a total annual cost of more than £6 billion.¹⁸⁴ At a time when such significant investment is being made in the early years, it is concerning that quality and access for the most disadvantaged children are being deprioritised in favour of subsidies for families earning £100,000 per year or even higher. It is notable also that, although universal credit was intended to remove the cliff edges in support which have previously existed with various work patterns, the extended entitlement may perpetuate a similar cliff edge in childcare subsidy.

In light of the findings of this report, it will be critical to assess how far the forthcoming proposals for the early years national funding formula will mitigate or exacerbate the balance in favour of children from wealthier families; these families are likely to receive a greater quantity of childcare provided by the state. Funding sufficient high quality places for the existing universal 15-hour offer for poorer children must be prioritised above the expansion of provision for wealthier families. There is otherwise a risk in undermining the aims of the pupil premium before children even start school, and of offsetting the higher overall levels of funding that children attending schools in disadvantaged areas have experienced to an increasing degree over recent years.¹⁸⁵

In schools, there is £2.5 billion of pupil premium funding, plus £2.5 billion allocated explicitly by local authorities to deprivation weightings.¹⁸⁶ The factors which are used to define deprivation are consistent between authorities (eligibility for free school meals and bands of IDACI scores). There is, however, considerable variation between local authorities regarding the proportion of funding that is allocated through deprivation factors; this ranges from 1 per cent to 21 per cent.¹⁸⁷ In the early years sector, £50 million is provided via the early years pupil premium and local authorities must include a deprivation factor in their local formula.¹⁸⁸ The approaches used by local authorities vary widely and factors include pupil-level free school meals eligibility, IDACI, IMD, and other area-based measures.¹⁸⁹ The principles of a national funding formula for schools should lead to an explicit and consistent level of funding for deprived pupils.¹⁹⁰ The forthcoming national funding formula for early years should seek to achieve this same goal through an explicit and clear weighting for disadvantaged children.

184 Department for Education, 'Review of childcare costs: the analytical report', November 2015; HM Treasury, 'Spending Review and Autumn Statement 2015', November 2015, p.44; Department for Education, 'Childcare free entitlement: delivery model', Government consultation, launch date 3 April 2016, p.6.

185 C. Belfield and L. Sibieta, 'Long-Run Trends in School Spending in England', Institute for Fiscal Studies, April 2016, pp.31-37.

186 Department for Education, 'Pupil Premium Awards 2016 launched', 5 February 2016; Education Funding Agency, 'Schools block funding formulae 2015 to 2016', March 2015.

187 Education Funding Agency, 'Schools block funding formulae 2015-16: Analysis of local authorities' schools block funding formulae', March 2015, p.7.

188 Department for Education, 'Extra funding to prepare for the early years pupil premium' 13 February 2015; Department for Education, 'Early education and childcare: Statutory guidance for local authorities', September 2014, p.12.

189 Department for Education, 'Early years funding pro forma', March 2014, last updated November 2015: <https://www.gov.uk/government/publications/early-years-benchmarking-tool>, accessed 19 May 2016.

190 Department for Education, 'Schools and high needs funding reform: The case for change and consultation summary', March 2016, p.14.

Conclusion

In light of the concerns detailed in this report and elsewhere, it is important that the implementation of the 30-hour entitlement is rigorously monitored and reviewed with respect to its impact not only on maternal employment but also on child outcomes and particularly the attainment gap between disadvantaged children and their peers.¹⁹¹ There is a danger that the government's emphasis on the employment objective of the policy could widen the attainment gap. A major question needs to be answered about how the impact on children's outcomes will be measured. The Early Years Foundation Stage Profile will no longer be compulsory from September 2016.¹⁹² The reception baseline test, introduced in September 2015, was intended to provide a progress measure for primary schools, rather than a national dataset which could be used to track national trends over time.¹⁹³ It has recently been announced that it will not be used as a progress measure due to the lack of comparability between different providers of the assessment.¹⁹⁴ There is now even greater uncertainty as to how child development will be measured in the early years: the Department for Education has said it will consider various options over the coming months before announcing a decision.¹⁹⁵

In addition to robust monitoring of the impact of the 30-hour entitlement on children's outcomes and the attainment gap, what is needed also is a serious commitment to raising the quality of early years education and care in England. Details of the Department for Education's forthcoming early years workforce strategy and early years national funding formula have yet to be revealed. If they are to bring meaningful improvement for all children then they will need to offer coherent, evidence-based strategies for raising the overall quality, status and pay of the early years workforce and for rendering subsidies more accessible and better designed to incentivise behaviours which will raise the quality of provision, alongside explicit and clear deprivation weightings for funding that ensure an equitable distribution of resources.

191 The Department for Education has been criticised for lack of detail in its stated measure of success for the policy, even with regards to promoting parental employment. See: National Audit Office, 'Entitlement to free early education and childcare', March 2016, pp.11, 35-36.

192 The EYFSP is also not a strong measure of development specifically during the pre-school years, as it is conducted by schools at the end of the Reception year, once children have been in primary school for one year. Data produced by the EYFSP is not directly linked with early years provider. See: Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2012/13: Early years', April 2014, pp.13-14; Ofsted, 'The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2015: Early years', July 2015, p.25; Select Committee on Affordable Childcare, 'Affordable Childcare', House of Lords, 24 February 2015, HL 117 2014-15, p.38.

193 Social Mobility and Child Poverty Commission, 'State of the Nation 2015: Social Mobility and Child Poverty in Great Britain', December 2015, p.16; Read On, Get On, 'Ready to Read: Closing the gap in early language skills so that every child in England can read well', Save the Children, June 2015, pp.40-41; National Audit Office, 'Entitlement to free early education and childcare', March 2016, p.23.

194 Standards and Testing Agency, 'Reception baseline comparability study: Results of the 2015 study', March 2016. For further concerns about the reliability of the reception baseline assessment, see: A. Bradbury and G. Robert-Holmes, "'They are children... not robots, not machines': The Introduction of Reception Baseline Assessment', National Union of Teachers and Association of Teachers and Lecturers, February 2016.

195 Department for Education, 'Press release: Reception baseline comparability study published', 7 April 2016. The Study of Early Education and Development project, commissioned by the Department for Education and currently underway, will evaluate the impact of early years provision on children born between 2010 and 2012, until the end of Key Stage 1, using a combination of interviews with the child's parent or guardian and cognitive assessments of the child, as well as studies of early years settings and of childminders. This is a very welcome and much-needed piece of research, but the absence of a national dataset is nevertheless deeply concerning: the lack of such information will render it difficult to track changes over time beyond the cohorts examined by SEED. In addition, the resources required to undertake an evaluation by any independent organisation will be considerably greater, due to the necessity of administering assessments to a sample population in order to gather data first-hand. This gap needs to be addressed to ensure that future policy making and evaluation can be based on robust evidence.

Annexe: Modelling assumptions

1. Entitlement rates, caps and thresholds

	1 parent, 1 child		2 parents, 1 child	
Free Entitlement				
Maximum hours	2016	2017	2016	2017
working <16 hrs @ NLW	15	15	15	15
working >16 hrs @NLW &< £100Kpa	15	30	15	30
Credits				
Maximum Payable	WTC	UC	WTC	UC
basic component*	£3,970	£7,140	£3,970	£9,312
childcare component	£6,370	£7,752	£6,370	£7,752
total (basic + childcare)	£10,340	£14,892	£10,340	£17,064
proportion of costs paid	0.70	0.85	0.70	0.85
conditions	>16h	-	>16h	-
Withdrawal (tapering)				
Basic threshold	£6,420	£4,764	£6,420	£4,764
Childcare threshold	£16,103	£4,764	£16,103	£4,764
Withdrawal rate	0.41 gross	0.65 net	0.41 gross	0.65 net
Tax-free				
Maximum saving	Vouchers	Account	Vouchers	Account
earning < £5,990	£0.00	£0.00	£0.00	£0.00
earning £5,990 - £8,059	£0.00	£2,000.00	£0.00	£2,000.00
earning £8,060 - £10,599	£174.72	£2,000.00	£174.72	£2,000.00
earning £10,600 - £42,384	£915.20	£2,000.00	£915.20	£2,000.00
earning £42,385 - £99,999	£611.52	£2,000.00	£611.52	£2,000.00
earning £100,000 - £149,999	£611.52	£0.00	£611.52	£0.00
earning £150,000+	£611.00	£0.00	£611.00	£0.00
other restrictions	can't double-count WTC hours	no UC; other parent earns < £100K	can't double-count WTC hours	no UC; other parent earns < £100K

* includes child components for UC but not for WTC, to reflect credit tapering rules;
should not be used to compare non-childcare entitlements

These figures are sourced from the following official documents:

<https://www.gov.uk/government/publications/tax-and-tax-credit-rates-and-thresholds-for-2015-16/tax-and-tax-credit-rates-and-thresholds-for-2015-16>

<https://www.gov.uk/help-with-childcare-costs/free-childcare-and-education-for-2-to-4-year-olds>

<https://www.gov.uk/hmrc-internal-manuals/employment-income-manual/eim16053>

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/480317/proposed_benefit_and_pension_rates_2016_to_2017.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/482517/Childcare_Bill_Policy_Statement_12.03.2015.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384090/uc-increasing-the-childcare-offer.pdf

<https://www.gov.uk/government/news/tax-free-childcare-10-things-parents-should-know>

2. Definition of entitlement

- i. Entitlements to childcare subsidy under working tax credits and universal credit are defined as that part of the total credits (under all components, not just childcare components) for which eligibility is contingent on the consumption of childcare. This is implicit in the operation of working tax credits, where childcare costs are tapered *after* basic elements, but not in the operation of universal credit. See: <https://www.gov.uk/hmrc-internal-manuals/tax-credits-technical-manual/tctm07045>.
- ii. In the case of universal credit, the same assumption has been applied, although the tapering rules neither encourage nor prevent parents from choosing to allocate their tax credits in this way. In some cases, given the impact of tapering, the household would not be receiving any credits if it was not for their childcare costs. Here, all the credits are counted as childcare subsidy.

3. Demand for childcare hours

- i. To calculate maximum entitlements to government subsidy, parents are assumed to continue to demand childcare hours until they have accumulated 50 hours per child per week, or have exhausted their entitlements, irrespective of whether they need all these hours to cover their working arrangements.
- ii. In accordance with (i) above, it is assumed that parents will seek to replace free childcare with other entitlements during the 14 weeks of the year not included in the 15 / 30 hour entitlements; i.e. they will seek 50 hours per week per child for all 52 weeks of the year.

4. Choices between schemes

- i. In 2016, in addition to their free entitlement, parents are assumed to take up a mixture of working tax credit childcare components and childcare vouchers subject to the relevant limits. In doing so, they are assumed to maximise (to the nearest hour of cost) the financial support obtained while consuming their hypothetical 50 hours per week of childcare. In some cases, this implies small quantities of working tax credit and voucher being used in combinations which, in practice, may not represent realistic scenarios due to the administrative effort required to apply. This approach is intended to produce an estimate of the theoretical level of support available but the results also highlight the complexity of the system.
- ii. In 2017, parents must opt for either universal credit childcare credits or a tax-free childcare account, because it is not permissible to combine UC with a tax-free account, as was possible with WTC and vouchers. It is assumed that parents will switch from UC to tax-free childcare at the income point where tax-free childcare entitlement exceeds the total entitlement to UC, and that this is correctly assessed by parents.

5. Costs, prices and earnings

- i. The average cost of childcare, applied to estimates of the subsidy available to or taken up by families, is assumed to be £4.52 per child per hour, based on the Family and Childcare Trust's 2016 Childcare Survey estimate for children aged 2 and over, attending Nursery: <http://www.familyandchildcaretrust.org/sites/default/files/Childcare%20cost%20survey%202016%20FINAL%20VERSION.pdf>, see table 1.
- ii. The value to the household of the free entitlement is assumed to be equal to the number of hours used multiplied by this cost.
- iii. The subsidy provided by childcare vouchers is calculated to be equal to the tax foregone when they are taken on a salary sacrifice basis. Given variable tax rates, this means that the marginal benefit to the household of increasing voucher use depends upon earnings. We assume that the balance of vouchers used between two earners in a family is optimised to maximise these benefits; in practice this means that the higher-earning partner uses vouch-

ers first as they ‘fill up’ their entitlement.

- iv. Prices for 2017 are inflated using HMT’s GDP deflator for 2016-17 of 1.5%, and all 2017 benefits and earnings are deflated by the same rate to compare households and their subsidies on a like-for-like basis: <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-march-2016-quarterly-national-accounts>
- v. For families on low incomes, the combination of numbers of hours worked and wage rate determines benefit entitlements for a given level of annual earnings. From annual earnings of zero up until families become eligible to working tax credit via their hours worked and/or free entitlements and vouchers via their earnings, we assume that families are paid at the 2016/17 Living Wage for over 25s and earnings are increased by raising hours worked. For 2016 the equivalent of the living wage in 2015/16 prices is assumed, using the GDP deflator.
- vi. In two parent households the earnings ratio between the higher and lower earning parent is assumed to be 2.2:1. For couples with more evenly divided earnings, the impact on entitlements under the old system will be mixed: the entitlement to childcare vouchers will begin at a higher level of family earnings than indicated but the entitlement to free hours will begin at a lower level of family earnings than indicated. Under the new system, entitlements will be a little more regressive for couples with more evenly divided earnings: higher income families will become ineligible for the additional 15 free hours, and for tax-free accounts, at a higher level of family earnings than indicated, due to having reached maximum earnings thresholds.

6. Survey estimates of childcare entitlements uptake

- i. Survey estimates of childcare consumption by family income were calculated from the DfE’s ‘Childcare and Early Years Survey of Parents 2014 to 2015’. The survey data were weighted to child level, then filtered to select 3 and 4-year-olds, excluding those four-year-olds attending school reception classes.
- ii. The mean number of free childcare hours taken was extracted for each of the five income categories provided in the survey.
- iii. An estimate of purchased hours of formal childcare for each respondent was derived by subtracting the free hours consumed from the total formal hours consumed, and the mean of this purchased hours estimate was extracted for each of the five income categories in the survey.
- iv. Estimates of mean free hours and mean formal purchased hours for the full income distribution were constructed using the equations of lines of best fit plotted through the five income categories reported in the survey data. These estimates become increasingly uncertain as income increases beyond £45,000 because the top category groups all households with income above this level.
- v. These estimates were applied to the childcare entitlements models as caps on the level of subsidy accessed at each earnings point, via tax credits, childcare voucher savings and tax-free account savings.
- vi. The household income categories reported in the survey are based on total income including transfers such as tax credits. This means that the earnings income used to model childcare entitlements diverges from the total income reported in the survey, particularly for families with low incomes. This could make the level at which purchased subsidised care starts to increase appear to be higher up the gross income distribution than it is in reality, but would also make the scaling down of the use of free entitlement appear delayed. These two effects should be broadly balanced in the total level of childcare support subsidy because overall uptake is flat across this part of the income distribution.