Costing and funding free universal childcare of high quality

Updated briefing from the ***UK Women's Budget Group*** *on the costing, employment effects and financing of universal provision of childcare in the UK*

Key findings

- *Public investment in a system of free universal early education and childcare of high quality provided to* ***all children in the UK between the age of 6 months and primary school*** *by qualified staff has long-term benefits for children and their parents, as well as for the economy*
- *Our modelling (using 2014 as reference) shows that if childcare workers are paid a* ***salary*** *equivalent to* ***primary school teachers*** *and all 3.2m children are offered up to* ***40 hours a week for 48 weeks a year****, the* ***annual gross cost would be £55bn*** *(****3% of GDP****); if pay rates are based on current wage levels by qualification, the investment is £33bn (1.8% of GDP).*
- ***Employment creation*** *in childcare services and elsewhere in the economy through multiplier effects would add* ***up to 1.7m full-time equivalent jobs*** *under such a scenario, raising the overall employment rate by up to 4.3 percentage points and the female employment rate by 6.4 percentage points.*
- *Increased* ***tax revenue*** *from additional earnings (including indirect taxation from increased consumption) and reduced spending on social security benefits, has the potential to recoup* ***between 95% and 89% of this annual investment*** *, leaving* ***£1.7bn and £6.1bn net funding need*** *(at current and higher pay rates respectively).*
- *The net funding need compares with a* ***cumulative annual net give away of £5.4bn*** *through* ***raising income tax thresholds*** *above inflation through the 2015-20 parliament (71% of which will go to men).*

- This briefing considers the case for providing universal and free childcare services in the UK to promote better child outcomes, foster gender equality and stimulate high-quality employment. It simulates different childcare staff pay and coverage scenarios and analyses their employment and fiscal effects.[1]

- The briefing is part of the Women's Budget Group proposed *Plan F for a Caring Economy.* Investing in care services, guaranteeing decent working conditions in paid care and supporting more equitable sharing of unpaid care between men and women is at the heart of a caring economy.[2] It fosters gender equality, improves equal opportunities and provides enhanced outcomes and genuine social mobility for all children.

[1] This briefing is an updated summary of De Henau, J. (2016) 'Costing a Feminist Plan for a Caring Economy: The Case of Free Universal Childcare in the UK' in Bargawi, H, Cozzi, G and Himmelweit, S. (eds) *Lives after Austerity: gendered impacts and sustainable alternatives for Europe*, London: Routledge.

[2] See several other WBG briefings on Plan F and the caring economy, including the case for investing in adequate social care services (http://bit.ly/1Q40goa).

Context: childcare services are insufficient and underfunded

Childcare services in the UK are still lacking in quality, accessibility and affordability.

- The cost to parents is very high in the UK compared to its European neighbours, and cost increases have outstripped general inflation over the last 10–15 years. [3]
- Market-based solutions have failed to deliver adequate supply. There remains a significant lack of places for young children due to a lack of public funding.
- The UK also has highly unequal take-up of childcare by socioeconomic levels, and more so than in other OECD countries. This is concerning as high-quality childcare has been shown to have significant benefits for children from disadvantaged backgrounds.
- Current level of state support for three and four year olds and disadvantaged 2-year olds remains below running costs for most providers; even increased to 30 hours per week in 2017, it remains insufficient for many parents, covering only 38 weeks a year. [4]
- Cash support to families via tax credits creates perverse incentives for the second earners in low income families, discouraging them from full-time work or even form seeking employment at all.
- The level of subsidy in the (delayed) planned 'tax-free' childcare scheme remains too low, may simply fuel price rises and is unlikely to solve the problem of lack of supply and rising cost.

Yet, high quality childcare is essential

- Evidence from many studies demonstrates that access to high-quality formal childcare for a significant number of hours during the week is crucial to improving children's outcomes and life chances, even for very young toddlers and infants, and especially so for children from disadvantaged backgrounds.[5]
- Research has also consistently shown that lack of affordable and accessible childcare provision is associated with lasting negative effects on gender inequalities over the life course, as families adopt a one-and-a-half breadwinner model that reinforces intra-household inequalities.[6]

High-quality, universal childcare requires significant public investment

- In place of the current patchwork of measures and subsidies, the UK needs a system of free universal child care available to all children from the age of 6 months, or when maternity and paternity leave ends, until compulsory schooling begins.
- This simulation exercise calculates the annual amount required to pay for the childcare workforce and other running costs (including non care time and non-wage costs, such as training) for centre-based provision.

The simulation uses the following parameters:

- Centres offer free places for 40 hours a week, 48 weeks a year.
- Staff/child ratios are in line with average ratios in existing group-based facilities (more generous than statutory guidelines), based on the

[3] See yearly Childcare Cost Survey reports from the Family and Childcare Trust (eg Rutter, 2015 http://bit.ly/1CIFdRC)

[4] As the WBG response to the 2015 Autumn financial Statement and Spending Review highlighted, the increase in childcare funding from 15 hours to 30 hours for working parents from 2017 (and the delayed introduction of Tax Free childcare) would only keep the proportion of GDP publicly spent on childcare by 2020 at its 2014 level (0.3% of GDP) (see http://bit.ly/1QbC6Ir).

[5] See De Henau (2016) for a review

[6] Ibid.

Department for Education childcare cost review, December 2015.[7]

- The proportion of staff at graduate level (Level 6) is however much higher than in current provision, where only 14% are graduates.

Table 1: Distribution of pre-school children and staffing

	Popul. (2014)	Staff: child ratio	% qualified (L6) staff
Chi 6m-1y olds	1,188,872	1:2.5	33%
Chi 2y olds	828,035	1:3.2	50%
Chi 3&4y olds	1,219,129	1:6	50%
All children <5y	3,236,035	1:3.6	45%

Source: Author's calculations

- Two salary scenarios are simulated, calculated per level of qualification.
- In the first scenario, child care staff who are not fully qualified (Level 3) are paid at the same rate as staff of equivalent level in primary schools (circa £14.06 an hour mid-scale), and qualified and supervisory staff (level 6) at the same rate as qualified primary school teachers (circa £18.80 an hour mid scale). The rationale for this is that higher pay should result in better quality provision.[8]
- In the second scenario, staff is paid at current average rates for a given qualification: pay for those who are not fully qualified is at Living Wage level (£8.01 in 2014, as calculated by the Living Wage Foundation, incl. London rate), and graduate staff are paid at £10.70, so roughly the same 30% pay premium over less qualified staff as in the first scenario.
- Both scenarios require increased training of child care staff, given that qualified staff at level 6 would increase from 14% to 45% on average in the new system (regardless of pay). Training costs have been included in the total costing.
- Building costs were also included in the calculations (in the form of an annual mortgage repayment based on costings for building a standard primary school setting pro rata of the number of children)[9]
- Using these parameters, the total gross cost of offering free full-time childcare to 3.2m pres-school children in the UK is £55bn a year in the Teacher Wage scenario (3% GDP) and £33bn in the Current (Living) Wage scenario (1.8% GDP).

Table 2: Gross cost per annum of universal full-time childcare

	Teacher pay by qualif.		Current pay by qualif.	
	Unit cost (£)	Annual (£m)	Unit cost (£)	Annual (£m)
6m-1y	14.49	17,849	8.68	10,923
2y	11.63	12,432	7.09	7,608
3&4y	7.84	24,330	4.98	14,889
	10.87	54,611	6.67	33,419

Source: Author's calculations. Costings are based on 2014 data and prices. Unit cost is per contact hour with child.

Public investment in childcare yields positive effects on employment

- In the scenarios modelled above, direct employment in childcare services will amount to 1.3 million FTE jobs (1m new and 0.3m existing but at higher qualification and thus pay), with staff on 35 hour contracts (Table 2). 98% of these would go to women if current gender proportions

[7] See detailed method of calculations and assumptions about non-staff costs and current child/staff ratios in Dep. Educ. childcare cost review (2015)

[8] See for example a recent study from the Family and Childcare Trust that found outstanding nurseries pay their staff higher wages (http://bit.ly/1SImwuP).

[9] See example at http://ubm.io/2cIX8mp

were maintained – although it is likely that higher pay would attract more men into these roles.

- As childcare services require inputs from other industries, there would be an indirect increase in employment in these 'supplying' industries.
- With additional earnings from the new jobs, consumption would increase in households with newly employed members, thereby further raising employment levels in the wider economy to meet rising demand. These induced effects are larger in the higher paid scenario than in the living wage scenario.
- The net increase in employment from indirect and induced effects would be 740,000 FTEs in the teacher pay scenario and 454,000 in the current (living) wage scenario (Table 2).
- Taken together, the net total employment creation would reach between 1.5m and 1.8m new FTEs, a rise of up to 3.6 – 4.3 percentage points in the overall employment rate
- If current gender segregation is maintained, between 75% and 81% of the increased employment would go to women, raising their employment rate by up to 5.8 – 6.4 percentage points, and therefore narrowing the gender employment gap by almost half. Between 263,000 and 429,000 FTE jobs would still be created for men , mainly in non-childcare industries.
- Boosting the availability of high-quality childcare would free up time of current unpaid carers (mostly women), opening up a range of employment opportunities for them.
- Based on a 35-hour week model, the FTE employment rate of mothers of children aged zero to four years was 41% in 2014 and that of childless women was 82% (84% for corresponding fathers). If this gap was closed, up to 900,000 mothers of pre-school children could take-up employment or increase their working hours.

Table 2 Net employment effects (by pay scenario)

000s	All	Women	Men	% women
Childcare	1,025	1,004	20	98%
Other jobs (current)	454	191	263	42%
Other jobs (teacher)	740	311	429	42%
Total (current)	1,479	1,195	284	81%
Total (teacher)	1,764	1,315	450	75%
% pts empl. rate chge				Empl. gap change
current	3.6%	5.8%	1.4%	-4.4%
teacher	4.3%	6.4%	2.2%	-4.2%

Source: Author's calculations

- Low to mid-income households in which a mother or a father of a pre-school child increases their employment and earnings will see a reduction in tax credits. However, their net gain to employment after childcare costs is much higher with a system of free childcare than with the current or planned system (i.e. even when factoring in the planned increased childcare support under Universal Credit and 'tax-free' childcare). This would reduce further any barrier to employment.

Investment in universal childcare would reduce the gender pay gap

- In a scenario where childcare workers are paid at teacher wage equivalent, the employment effect would bring down the annual gender earnings gap (all employees) from 39% to 36% and cut the hourly pay gap (mean gross pay – all employees) by 3 percentage points (from 17.7% to 14.6%), based on the 2014 figures from the Annual Survey of Hours and Earnings (ASHE). This is quite apart from any knock-on effects on pay in other industries.

… and bring in tax revenue

- Increased employment would bring in more tax revenue and reduce spending on both out-of-work and in-work social security benefits. Current spending related to childcare support schemes would also be absorbed (about £5bn in 2014-15).
- Applying respective earnings to childcare workers of different qualifications, and taking average annual earnings in each of the non -childcare industries where other new jobs would be created, the net increase in income tax and NICs revenue for the Treasury could be up to £20bn in the teacher wage scenario and £9bn in the current (living) wage scenario.
- Applying average indirect tax incidence rates (for the 60% households around the middle of the income distribution) to the spending of additional net earnings in goods and services, expenditure taxes could add another £10bn to government revenue in the teacher wage scenario and £6bn in the current wage scenario.
- Reduction in spending on tax credits and out-of-work benefits for people increasing their earnings and hours of employment could amount to £13.5bn in the teacher wage scenario and £11.5bn in the current wage scenario.[10]
- Therefore, the teacher wage scenario leaves a net funding requirement of £6.1bn, that is 89% of the initial investment is recouped; in the current wage scenario, 95% of the initial investment is recouped (Table 3) leaving a net funding requirement of £1.7bn.

Filling the funding gap

- The remaining £6.1bn funding gap sounds large but it is much smaller than the annual tax give-aways introduced since 2010, of which the successive rises in personal tax allowance (£13bn a year by 2015) and cuts and freezes in fuel and alcohol duties (£7bn a year by 2015) are the most significant. As the WBG and others have repeatedly noted, these have been poorly targeted measures which benefit men disproportionately.[11] It would be reasonable to expect income tax-payers to make a contribution to this investment in the future well-being of society.

Table 3 Net funding requirement of childcare

Costing (£m)	Current pay	Teacher pay
Gross annual cost	-33,419	-54,611
Direct tax revenue	9,485	19,993
Indirect tax revenue	5,676	9,988
UC bill reduction	11,523	13,489
Current CC funding	5,000	5,000
Net funding gap	**-1,735**	**-6,142**
% recouped	95%	89%

Source: Author's calculations

- Further, contributions from private companies (which benefit from universal childcare by retaining new parents among their staff) could also be made. The 2010-15 successive cuts to the main rate of corporation tax – amounting to £8bn annual give-away – have been of questionable effectiveness in raising employment and earning levels.
- In any case, the gap remains well below the foregone revenue due to tax avoidance and evasion, even compared to the government's conservative estimates of £34bn per annum.[12]
- The universal character of this investment should be understood as progressive fiscal redistribution: that is, the in-kind benefit of free childcare is a

[10] Calculations made using the Landman Economics tax-benefit model

[11] See latest WBG responses to Budgets and Autumn Statements (http://bit.ly/21dwYvt)

[12] See discussion by Prem Sikka in the Conversation (2015) (http://bit.ly/1GCp8ns)

larger proportion of the income of lower income families than that of higher income families. Moreover, if income tax was used to fill the remaining funding gap (eg by reversing some of the PTA rises), the redistributive effect would be even more progressive.

- Also, these costings only look at immediate outcomes in terms of employment and fiscal revenue. In the long-run, such investment in universal childcare would certainly provide longer term improvements in productivity for both the children and their parents as well as reduced spending on education (on remediation, etc.).[13]

In sum, this is about providing for a sustainable, civilised and caring economy

- This simulation exercise has shown the investment required for providing free universal childcare in the UK and set out a number of approaches to funding it. Although the amounts are substantial, the investment is by no means unaffordable and stands to yield significant economic and social benefits.
- Complementary to the provision of high quality childcare should be an effective and more gender equal parental leave system, combined with reduced full-time working hours for all (as argued elsewhere).[14]
- Indeed, transforming labour markets, childcare provision and parental leave systems in this way could contribute to developing a high-quality triple-carer (shared between the state and both parents) and dual-earner model that fosters gender equality in both spheres of paid and unpaid work.
- Ultimately, building the social infrastructure and providing the care that people need is not just about creating employment, boosting economic growth and therefore investing in productive assets—children—for the return they can bring. Investing in free universal childcare of high quality is worthwhile on the grounds of improving well-being, quality of life and long-term social mobility and cohesion

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UK Women's Budget Group, February 2017.

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[13] See discussion in a WBG report for the ITUC by De Henau et al. (2016) at http://bit.ly/1RBSyCK

[14] See discussion in De Henau and Himmelweit (2013) at http://bit.ly/2dFE3Ry