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Using an Output Approach to Measure Household Production

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Introduction

In 2002 the Office for National Statistics (ONS) was the first National Statistical Institute to publish a Household Satellite Account (HSA), which measured and valued the unpaid goods and services produced by households, using an output based approach (ONS, 2000; Holloway, Short & Tamplin, 2002).

Following the publication of the Report by the Commission for the measurement of economic performance and social progress and the subsequent launch of the Measuring National Well-being programme, there has been fresh interest in valuing household production. As such, as part of the Measuring National Well-being programme ONS is currently updating the household satellite accounts which measure household production in the UK. Childcare is the first of the eight household satellite accounts modules to be updated. ONS plans to publish 2010 estimates of childcare at the end of September 2012.

The methodology remains under development and any estimates reported here, or in forthcoming publications, should be considered experimental and interpreted with caution. ONS welcome comments and feedback on all aspects of the methodology used and the assumptions made, and seek suggestions for further/alternative data sources.

This paper presents a brief overview of the methodology for compiling the household satellite accounts using an output approach and then looks in detail at the application of this methodology to the childcare account. Finally, the paper provides an overview of the results obtained from previous estimates of household production of childcare by ONS using this methodology.

Household satellite accounts

Conventional National Accounts measurements, such as GDP do not fully take into account non-market production for own final consumption. The National Accounts production boundary includes, in theory, all production of goods for own use, although in practice different countries make adjustments for different parts of this category. Many of the goods for own final consumption will be included implicitly or explicitly in the HSA. This provides a means by which the influence of changing patterns of unpaid work on the economy can be measured. The information will also be of use to policy makers who need to take significant amounts of unpaid work into account.

This work falls outside the scope of the UK National Accounts. This is because the inclusion of all activity which is productive in the economic sense but which does not have a monetary value, would swamp the monetary flows, obscure what is happening in the markets, and reduce the usefulness of National Accounts data for analysis. HSA is therefore separate from, but conceptually consistent with the UK National Accounts.

The HSA extends the National Accounts boundary to include all activity that could be delegated to another person. This activity is divided into six principal functions providing housing, transport, nutrition, clothing and laundry services, care (of adults and children), and voluntary work. The approach being taken by the ONS is to focus on the outputs of these principal functions.

There are two possibilities for measuring household production, to measure inputs or outputs. Measuring inputs focuses on the time spent on productive activities and relies principally on time-use data. This usually takes the form of a diary, which the survey respondent is asked to complete, giving information about their principal activities throughout a 24-hour period.

The alternative is to attempt to measure outputs, this is the approach being taken by ONS. The output method values what the household produces, for example the number of children cared for or the number of meals prepared. This is important because it is often easier to value outputs than inputs, particularly when there is a market equivalent to the service being produced. Output measurement is also more consistent with the way

the rest of the National Accounts are constructed and reflects household productivity. It may be possible to construct a historical series using this approach, even in the absence of time-use data. Outputs can be estimated through surveys that specifically request this type of information.

An estimate of gross unpaid production is obtainable by multiplying the volume of output by an appropriate market value or price. This in itself is problematic due to the difficulties in applying a market price or wage rate to outputs without any information on the variation in quality between households. The methodology is essentially the same for all of the principal functions except voluntary work.

The development of the UK Household Satellite Account was the first attempt to estimate the volume of outputs for each of the principle functions and to produce a value for total household production based on this approach.

Definitions and scope of informal childcare

The remainder of this paper will now look at the estimation of household production of childcare (one element of the household satellite accounts) using the output approach. As most of the childcare carried out by the household members or their networks (family members or neighbours) could be delegated to another person, it is deemed to be part of the productive role of households. ONS have not tried to distinguish between physical acts of supervision or help and the building of parent-child relationships, which obviously cannot be delegated.

The HNSA definition of informal childcare is all care which does not involve a monetary transaction. It is the total amount of childcare required (total number of children in the population multiplied by twenty four hours a day) less any formal childcare, defined as all paid childcare, whether it is registered or unregistered. However the estimates do not include some paid care which takes place, but for which ONS has been unable to find any data. This includes care by babysitters and au-pairs, as well as out-of-school clubs and holiday play schemes for children over eight years old.

As children get older, some of them are left unsupervised for varying amounts of time. An allowance has been made for this, so that the amount of informal care is reduced for older children. There is limited hard data on the actual amount of unsupervised time. If, in fact, the assumptions ONS have made lead to informal childcare being underestimated (i.e. including too much unsupervised time), this will be offset to some extent by the unmeasured formal care which has not been included.

By using a residual approach to estimate informal childcare ONS is accounting for all the time a child needs supervision. This supervision can be active or passive. Passive care includes the time when an adult may not be directly interacting with the child, but is still responsible for them. The important point is that if no unpaid carer were available, a third person would have to be paid to take their place. Therefore passive care is part of the productive role of households and is included in the estimates. One simple way of distinguishing between passive and active childcare is to look at waking and sleeping time. If it is assumed that a child under five sleeps for twelve hours, then 50 per cent of their childcare is passive, and so on. Using a set of assumptions about the relative proportions of waking and sleeping time for children of different ages as proxies, ONS can value separately active and passive informal childcare.

Estimating formal childcare hours

Methodology

Information on different types of formal care has been collected for each UK country. This mainly takes the form of the numbers of childcare places available, and in all cases ONS have assumed 100 per cent take-up of

places. The requirement for and use of formal childcare varies for children of different ages, so the places have been allocated to the following categories:

- Age Group One: under 5 years old
- Age Group Two: 5-7 years old
- Age Group Three: 8-10 years old
- Age Group Four: 11-15 years old

As formal childcare availability varies by the time of the year, the year has been split into four types of day:

- Weekend = 104 days
- Week Day School Day = 180 days (36 weeks x 5 days)
- Week Day Working Holiday = 28 days (4 weeks x 5 days plus 8 bank holidays)
- Week Day School Holiday = 53 days (12 weeks holiday minus bank holidays)

The estimates for each age group, by time and type of day, have been aggregated to obtain a figure for the total number of hours spent by all children in the UK in formal care in any one year.

Assumptions

As for the original estimates produced in 2002, for each separate type of day and age group, assumptions were made about the length of time the various types of childcare provision were available. However, over time, as additional evidence has emerged, some of these assumptions have been revised. ONS continue to review the assumptions and would welcome any information on further sources to inform this process. Full details of the assumptions made about each type of formal care can be found in annex 1. For example, the assumption in 2002 was an average school day, including lunchtime supervision, was six and a half hours long; this assumption remains unchanged in 2012.

Assumptions about the average length of day spent with a childminder are based on the childcare module from the DWP Family Resources Survey and the DFE Childcare and Early Years Survey of Parents. This suggests that under fives use childminders, approximately 20 hours per week on average. This estimate is lower than the 25 hours per week assumed in 2002 based on data from the Family Resource Survey. For children aged over five, the original assumption of ten hours per week spent with childminders appears to be supported for more recent time periods as well.

Information from the DWP Family Resources Survey and the DFE Childcare and Early Years Survey of Parents suggests that playgroups are used for nine to ten hours a week. In 2002, it was assumed, based on data from the DFE Children's Day Care Facilities, that on average, playgroups offer five sessions per week and each session was three hours, giving 15 hours of childcare a week.

As with childminders, it appears that day nurseries are, on average, used for shorter periods of time. It was assumed that day nursery places were filled for five hours each day – both the DWP Family Resources Survey and the DFE Childcare and Early Years Survey of Parents suggest that the average is 20 hours per week in 2010. ONS assume that out-of-school clubs run for two hours on each weekday in term-time (based on data from the DFE Childcare and Early Years Survey of Parents), and that holiday clubs are open for six hours each weekday during the school holidays.

ONS assume those children in foster places and children's homes are cared for 24 hours a day all year round, with the exception of attending school for six and a half hours a day. Similarly, full time boarders are assumed to be in formal care 24 hours a day on school days and at weekends. Weekly boarders are assumed to be in formal care 24 hours a day on weekdays in term time. This means that for some individual children ONS may be double counting the total number of hours spent in formal care; for example, a foster child, a child living in a children's home or a boarder may attend other formal care activities (such as holiday play schemes or out of

school clubs). Due to this double counting, the total number of formal hours may be slightly over estimated; this will result in an underestimate of informal hours.

Assumptions have also been made in order to divide the geographic data between the three different age groups. If the data is already broken down into different age groups from the ones outlined above, then the data is prorated using the UK country and year specific population age structure. If only the total number of children in a care category is available, then the proportion in each age group from the England data has been applied to the total numbers. Finally, if data is split down into the age groups for only some years, then the average split between the age groups has been applied to the years when only the total is available. Missing data points have been estimated by predicting the trend between existing data points.

The total number of children in the population in Great Britain (as estimated by the Population Estimates Unit, ONS) is higher than the total number of pupils on the school rolls (aggregating estimates from DfE, the Scottish Executive and the Welsh Government). ONS have assumed that the number of children who are not accounted for in the school rolls are those children who are taught at home, children who are under special arrangements for the education of travellers' children, or refugees and asylum seekers. As the population figures are estimates only and the school rolls and population figures are often taken at different times of the year, this will also account for some of the differences. For Northern Ireland, however, there is the additional problem that the number of pupils attending school from across the land-border cannot be separated from those resident in Northern Ireland. The number of school places in Northern Ireland is much higher than the relevant population figures. Therefore ONS have assumed that all 5-15 year olds resident in Northern Ireland attend school there, and the population figures have been used in place of the number of school places.

Population estimates were taken before any adjustments for the 2011 Census had taken place, and therefore at this stage the population estimates are not consistent with the 2011 Census.

Valuation of formal childcare

The total number of formal hours can be split down into types of care e.g. childminders, schools etc. These annual hours are the number of places available multiplied by the number of hours and days in which they are used.

The value of actual childminding provision in the UK was crudely calculated using the average hourly wage that National Childminding Association (NCMA) members receive, multiplied by the number of hours estimated above.

When compiling the original HHSA, ONS compared the average weekly hours and costs in term-time and school holidays for households in Great Britain using childminders, playgroups/ day nurseries and crèches, using the Family Resources Survey (FRS) childcare module. While the HHSA hours for these types of provision look in line with FRS estimates, costs are higher. The FRS shows average hourly costs falling as children get older, but if we try to break this down by type of provision, the sample sizes become very small for older children. In the HHSA ONS have used the average childminder rate as outlined above, which is the same for children of all ages, plus information on prices for day nurseries, out-of-school clubs and holiday clubs. ONS estimate that these types of formal childcare provision in the UK were worth in the region of £2.2bn in 1999.

Estimating informal childcare hours

Methodology

ONS estimate the volume of informal care by subtracting the hours spent in formal care, plus an allowance for the hours a child aged 12-15 may be left unsupervised, from the child population multiplied by the total

number of hours in a year. As with formal care, the total hours of informal care can be broken down by age group and time, and type of day.

Assumptions

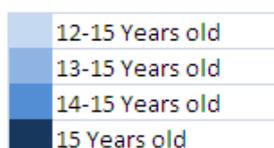
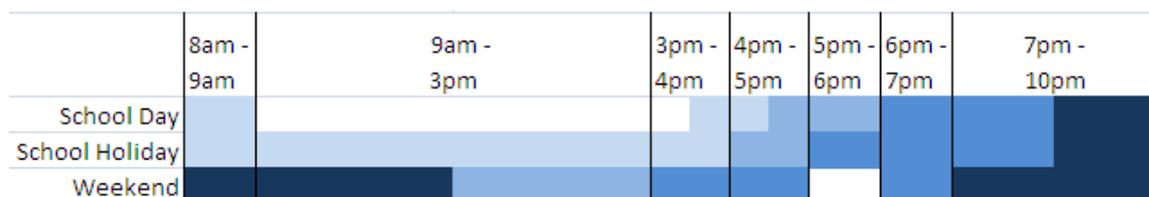
The assumption about the time children aged between 11 and 15 spend unsupervised is critical in calculating informal hours, and is perhaps the most difficult to support with hard evidence. To estimate the number of hours spent in informal care, the number of hours a child is left unsupervised, plus the hours spent in formal childcare activities, needs to be subtracted from the total population hours. This time unsupervised by adults could be when a child is spending time with their friends, being looked after by an older sibling, or when they are on their own.

The data available on when children are left unsupervised by their parents is very sensitive to reporting errors. This is due to social norms and beliefs about the amount of time children should spend alone. A survey carried out by Kids Club Network in 1997, sponsored by Nestlé, estimated that six per cent of children return home to an empty house. A similar survey (the Make Space Youth Review) conducted by 4Children in 2007 suggests that an estimated 34 per cent of all teenagers return home to an empty house. The sensitivity of the issues suggests that there is under-reporting by parents. Because of the lack of data about the length of time left unsupervised, ONS have started from the working assumption outlined below.

In the HHSA ONS have assumed that no child aged 11 or under is left unsupervised and that ten per cent of 12 year olds, 20 per cent of 13 year olds, 30 per cent of 14 year olds and 50 per cent of 15 year olds spend time without adult supervision. In every case, ONS have not included any allowance for time spent unsupervised during four weeks holiday plus Bank Holidays. These assumptions can be interpreted as a mix of two extremes. ONS could say that ten per cent of children aged 12 are left unsupervised all the time. ONS could also say that out of 337 days (365 days minus four weeks paid holiday of parent/carer minus eight days bank holiday) an individual 12-year-old would spend a total of ten per cent of their time unsupervised.

As the chart below shows, for a 12 year old, this unsupervised time could typically include an hour in the morning before school, plus an hour and a half after school (e.g. walking themselves to and from school), plus being left unsupervised by an adult between 8.00 a.m. and 4.00 p.m. in the school holidays while a parent is at work. This scenario assumes no time unsupervised in the evenings or at the weekends. For a 15-year-old, the assumption includes the same times of day as a 12 year old, plus additional hours after school on school days, in the evenings in the school holidays and at the weekend. Informal care in the HHSA is therefore care of children by adults, as care of children by other children is included in the assumption of time unsupervised.

Unsupervised Time



Valuation of informal childcare

As mentioned earlier the requirement for and use of informal childcare varies for children of different ages, as well as by different times of the day and different days of the year. It is possible to value all informal hours at a single market price or to take into consideration the time of the year, time of the day and the age of the child. Because ONS is valuing the output of childcare, i.e. the number of children cared for multiplied by the total time in a year when they receive this care; the market price must also be a rate per child.

The services provided by an employed live-in nanny are deemed to be the nearest market equivalent to the services provided by parents and other informal carers, so their rate per child hour has been used to value informal care. The wages of live-in nannies have been taken from the Professional Nanny/Nannytax Annual Survey, which gives average wages by geographical area for the UK.

However, the averages conceal considerable variation. For example, the Nannytax survey shows that for live out nannies in 2010, the net weekly wages was £490 in London, but just £360 outside of London and the Home Counties. ONS have used the average wage for other cities. i.e. excluding London.

A live-in nanny is paid not just in wages but also in accommodation and food, with some nannies receiving additional perks such as the use of a car. Because of this the live-in nanny wage rate is lower than the daily nanny rate. The Nannytax survey gives data for both live in nannies and live out nannies, with a difference of £110 per week in net wages in central London in 2010. Following the original methodology, ONS have made an adjustment for payment in kind, comparing the live-in and daily rate for nannies working the same number of hours per week. This results in an upward adjustment to the net wage rate of eight and a half per cent and the gross wage rate of ten per cent.

Nannies do not charge for their services by the hour or per child. ONS have assumed that the average live-in nanny works 48 hours a week looking after an average of two children. This information is used to adjust the gross and net weekly wages.

Results

ONS plans to publish 2010 estimates of childcare at the end of September 2012. Previous estimates of the household production of childcare for the UK using this methodology are recorded in Table 1. It shows that over just five years there was a shift away for informal childcare towards formal childcare (Holloway & Tamplin, 2001; Francis & Tiwana, 2004). Informal childcare was estimated to account for approximately 25 per cent of total household production.

Total formal childcare hours increased by 3.4 per cent between 1995 and 2000. Table 1 shows that this is predominately driven by the increase in formal childcare hours for children aged under ten – particularly those under five years old (despite a five and a half per cent fall in the total population aged under five).

Table 1: Formal Childcare Hours

United Kingdom

	1995	1996	1997	1998	1999	2000	% change 1995-2000
Estimated UK formal Childcare hours (millions)							
Aged under 5	2,043	2,072	2,083	2,123	2,078	2,109	3.2
Aged 5 to 10	5,671	5,762	5,826	5,903	5,948	5,936	4.7
Aged 11 to 15	4,872	4,851	4,836	4,844	4,890	4,973	2.1
Total	12,586	12,685	12,745	12,870	12,916	13,018	3.4

In line with the increase in formal childcare, the volume of unpaid childcare activity provided by households decreased slightly between 1995 and 2000, by 866 million hours or one per cent (see table 2). This was a result of a decrease in the child population and an increasing proportion of older children with more assumed unsupervised time. The remaining difference is largely accounted for by an increase in the use of nurseries.

Table 2: Number of hours of formal and informal care provided to children

United Kingdom

	1995	1996	1997	1998	1999	2000
Total hours of children under 16	106047	105981	106041	106110	106106	105789
Formal or paid care	12586	12685	12745	12870	12916	13018
Estimated unsupervised time	5100	5064	5047	5097	5164	5276
Informal or unpaid care	88361	88231	88250	88143	88027	87495
Change in informal care from 1995		-0.1	-0.1	-0.2	-0.4	-1.0

However, despite the fall in informal hours the value of informal childcare increased between 1995 and 2000, both in total and for each age group (see table 3). This is a result of the fall in hours being outweighed by an increase in the underlying nanny wage rates used to value the output. There were sharp increases in hourly rates between 1995 and 1996 and between 1998 and 1999. The latter increase is influenced by the introduction of the National Minimum Wage in April 1999 and due to a shortage of nannies.

Table 3: Informal Childcare

United Kingdom

	1995	1996	1997	1998	1999	2000	% change 1995-2000
Estimated UK informal Childcare hours (millions)							
<i>Aged under 5</i>	31,557	30,896	30,448	30,046	29,673	29,210	-7.4
<i>Aged 5 to 10</i>	34,723	35,083	35,342	35,303	35,099	34,766	0.1
<i>Aged 11 to 15</i>	22,082	22,252	22,460	22,794	23,254	23,519	6.5
Total	88,361	88,231	88,250	88,143	88,027	87,495	-1.0
Average weekly net wages - live-in nanny (£)							
<i>Net hourly rate per child</i>	1.28	1.48	1.54	1.57	1.91	2.02	57.8
<i>Gross hourly rate per child</i>	1.38	1.97	2.03	2.07	2.56	2.52	82.6
Estimated value of UK informal Childcare (based on gross hourly rate per child) £ million							
<i>Aged under 5</i>	34,548	60,865	61,809	62,195	75,963	73,609	69.0
<i>Aged 5 to 10</i>	47,917	69,114	71,744	73,078	89,854	87,610	82.8
<i>Aged 11 to 15</i>	30,473	43,836	45,594	47,184	59,531	59,269	94.5
Total	121,939	173,816	179,147	182,457	225,348	220,488	80.8
Estimated value of UK informal Childcare (based on net hourly rate per child) £ million							
<i>Aged under 5</i>	40,393	45,726	46,890	47,172	56,675	59,004	46.1
<i>Aged 5 to 10</i>	44,445	51,923	54,426	55,426	67,040	70,227	58.0
<i>Aged 11 to 15</i>	28,265	32,933	34,589	35,787	44,416	47,509	68.1
Total	113,102	130,582	135,905	138,385	168,131	176,740	56.3

Further areas for development

There are several ongoing methodological challenges which ONS will continue to develop while updating the accounts. Of primary concern is the use of the 'time-unsupervised' assumption; this assumption could be tested by examining whole household data in the 2000 Time Use survey and estimating time spent unsupervised by age. Additionally, the alternatives for pricing passive care will be investigated.

ONS acknowledge the advantages of using time-use data to complement the output approach. The main advantage of using time-use data is that socio-demographic information can be applied to the data to answer

question's such as 'who is providing informal childcare?'. The data sources used in the UK accounts, at present, do not allow linkages to be made between the outputs of household production and types of individual. This question can be addressed by looking at time-use data, such as the UK Time Use Survey from 2000, allowing the comparison of relative contributions of different socio-demographic groups.

Conclusion

This article summarises the work done, and development work planned, by the ONS to value household production of childcare. This work is based on an output approach, which has several key advantages; it is consistent with the way the rest of the National Accounts are constructed, it is often easier to value outputs than inputs, and it allows the productivity of households to be estimated. Additionally, it may be possible to estimate a back series using this approach as outputs can be estimated through surveys that specifically request this type of information.

The value of informal childcare is estimated by residual by subtracting formal care from the amount of total childcare required in any year – adjustments are made for time spent unsupervised by adults. This volume measure of informal care is then multiplied by a market rate; in this case the wages of a live-in nanny adjusted for hours worked, number of children looked after, and payment in kind.

Previous estimates show that childcare is a significant element of household production, accounting for almost 25 per cent of the total. The changes between 1995 and 2000 show that there is a movement away from informal care towards formal care – further understanding of how this trend has developed over the last decade will provide a fuller picture of well-being than can be obtained by looking at the National Accounts alone. ONS plans to publish 2010 estimates of childcare at the end of September 2012.

This methodology remains under development and any estimates are considered experimental and should therefore be interpreted with caution. ONS welcome comments and feedback on all aspects of the methodology used and the assumptions made, and seek suggestions for further/alternative data sources.

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Annex 1: Childcare Assumptions

		Assumptions (2002)	Updated assumptions (2012)	Other data issues
Carers	Childminders	<p>Under 5's: Five hours per day - school day & school holiday.</p> <p>5-7s and 7-11s: Two hours per day - school day. Five hours per day - school holiday.</p> <p>Data on places for under eights only</p> <p>All: Assume 100% take up of places. This may be an over estimate in the number of childminders but could offset unregistered paid childminders.</p>	<p>Under 5's: Four hours per day - school day & school holiday.</p>	<p>Using an estimate to calculate the split between under 5's and 5-7 from the total childminders figure affects the total number of informal hours spent in childcare.</p> <p>If the valuation of childcare for under 5s is at a higher rate than the 5-7s, then the total hours spent in care with a childminder is more crucial.</p>
	Nannies	<p>Eight hours per day - school day, school holiday and weekend.</p> <p>Assume under eight only.</p>		<p>Estimate may include other jobs such as dinner supervisor.</p>
Under 5s	Day Nursery	<p>Five hours per day - school day and school holiday.</p> <p>Assume 100% take up of places.</p>	<p>Four hours per day - school day and school holiday.</p>	

	Nursery School	<p>Full-time: Six hours a day - school day.</p> <p>Part-time: Three hours a day - school day.</p> <p>Assume under 5s only.</p>		
	Play Groups	<p>Three hours per day - school day.</p> <p>Assume under 5s only.</p> <p>Assume 100% take up.</p>	Two hours per day - school day	
Schools	Nursery Classes	<p>Full-time: Six hours per day - school day.</p> <p>Part-time: Three hours per day - school day.</p> <p>Assume under 5s only.</p>		
	Maintained Schools	<p>Under 5s Full-time: Six hours per day - school day.</p> <p>Part-time: Three hours per day school day.</p> <p>Over 5s Full-time: Six and a half hours per day - school day</p>		<p>Assume that the children not included in the school education rolls but counted in the population estimates are being cared for informally.</p> <p>The population is estimated and takes place mid April whilst the school statistics count children at the start of September.</p>

Special Needs	<p>Under 5s: Full-time: Six hours per day - school day.</p> <p>Part-time: Three hours per day - school day.</p> <p>Over 5s Full-time: Six and a half hours per day - school day.</p>		
Boarding School	<p>Full-time: 24 hours per day - weekend and schoolday.</p> <p>Weekly: 24 hours per day - school day.</p>		<p>Data sensitive to the reliability of the ISIS split between weekly and full time boarders.</p> <p>Northern Ireland and Scotland - the number of total boarders is underestimated as the ISIS census covers only 80% of all independent schools. This means that the number of day pupils (see independent schools) is over estimated, which results in an underestimation of total hours spent in formal care. This is partly offset by day pupils attending other formal care categories such as out of school clubs.</p>
Independent School	<p>Full-time: Seven hours per day - school day.</p> <p>Part-time: Three hours per day - school day</p>		<p>The number of independent day pupils for Wales, Northern Ireland and Scotland has been calculated as the residual of all pupils in independent schools minus the boarders.</p> <p>As the number of boarders is calculated on only 80% of all independent schools, then the total hours spent in boarding schools and therefore formal care is underestimated.</p> <p>This is partly offset by the fact that day pupils may attend other care categories, and so still are formally cared for.</p> <p>This assumption will have a marginal affect on the valuation of childcare, as the number of children under five who are boarders is small.</p>

24 Hour	Children's Homes	<p>All: 24 hours per day - school holiday, working holiday and weekend.</p> <p>Assume no other formal care.</p> <p>Under 5s: 24 hours per day - school day.</p> <p>5-15s: 17.5 hours per day - school day.</p>		<p>Assume that no other care category is used if a child is resident in a children's home, means that the total hours spent in formal care is overestimated.</p> <p>This results in an under estimation of the total number of informal hours resulting in a lower valuation of informal childcare across all age groups.</p>
	Foster Places	<p>All: 24 hours per day - school holiday, working holiday and weekend.</p> <p>Assume no other formal care.</p> <p>Under 5s: 24 hours per day - school day.</p> <p>5-15s: 17.5 hours per day - school day.</p>		<p>Assumption that no other care category is used if a child is fostered means that the total hours spent in formal care is over-estimated.</p> <p>This results in an under estimation of the total number of informal hours and results in a lower valuation of informal childcare across all age groups.</p>
	Long Stay Hospital	24 hours per day - all year.		
	Short Stay Hospital	24 hours per day - all year.		

Clubs	Holiday Clubs	<p>Six hours per day (09:00-15:00) - school holiday.</p> <p>Assume 100% take up of places.</p>		<p>Assume five to sevens only due to data availability.</p>
	Out of School Clubs	<p>Two hours per day - school day.</p>		<p>Assume five to sevens only due to data availability.</p> <p>Kids Club Network suggests that the 40% of all clubs have a maximum age limit of 11 years, implying an underestimation in the number of children in formal care.</p>
	Time Alone	<p>No child aged 11 or under is left unsupervised.</p> <p>10 per cent of 12 year olds, 20 per cent of 13 year olds, 30 per cent of 14 year olds and 50 per cent of 15 year olds spend time without adult supervision.</p>		<p>The data available on when children are left unsupervised by their parents is very sensitive to reporting errors, due to social norms and beliefs about the amount of time children should spend alone.</p> <p>A survey carried out by Kids Club Network in 1997, sponsored by Nestlé, estimated that six per cent of children return home to an empty house. A similar survey (the Make Space Youth Review) conducted by 4Children in 2007 suggests that an estimated 34 per cent of all teenagers return home to an empty house. The sensitivity of the issues suggests that there is under-reporting by parents.</p>