

CHILDREN IN WORKLESS HOUSEHOLDS: LFS/FRS DIFFERENCES

Report of a Working Group: Summary

1. DWP and ONS have jointly investigated the reasons for the Family Resources Survey (FRS) consistently giving higher estimates, than does the Labour Force Survey (LFS), of the proportion of children in workless households. This proportion is the subject of a DWP PSA target and is also a key driver in relation to the DWP/HMT joint PSA target to reduce child poverty by 25% between 1998 and 2004. LFS is used to monitor the former, FRS the latter.
2. The main reasons for the divergence are:
 - (a) FRS unweighted data identifying a higher proportion of children in lone parent families – who have a much higher worklessness rate - than does LFS;
 - (b) FRS unweighted data showing a higher worklessness rate, in both lone parent and couple-with-children families, than LFS;
 - (c) LFS employing a grossing regime which substantially reduces the proportion of children in lone parent households, and thereby in workless households; whereas the FRS grossing regime has less of an effect in reducing these proportions;
 - (d) The LFS grossing regime also reduces the worklessness rate in lone parent families; whereas the FRS grossing regime has less clear-cut effects.
3. The judgement of the DWP/ONS working group conducting the investigation is that:
 - FRS results probably overstate the proportion of children in workless households, in any one year, by overstating worklessness among lone parents and, to a lesser extent, among couples with children;
 - LFS results, while achieving greater precision, are likely to understate the proportion of children in workless households, in any one year, by understating the proportion in lone parent families.
 - Neither survey is clearly superior to the other in measuring year-on-year changes in this variable; though LFS, and probably FRS, perform better over longer periods.
4. The working group make seven recommendations for further work to quantify and correct for biases in each survey. Key recommendations are:
 - Production of comparisons of FRS and LFS data with Census data, to allow response biases to be quantified as a necessary step towards correcting them, should be regarded as urgent and important, and should be made available as soon as possible in 2003.
 - DWP and ONS should in future routinely compare FRS and LFS estimates of changes in numbers of children in workless households and families with estimates, derived from DWP and IR administrative systems, of changes in the number of workless families in receipt of benefits and in receipt of tax credits. The implications, for such comparisons, of the introduction of Child Tax Credit should be considered and a report made by December 2002.

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Report of a Working Group

Introduction

1. This investigation is aimed at explaining why the Family Resources Survey (FRS) and Labour Force Survey (LFS) have given differing estimates of:

- the proportion of children in workless households in any one year – the FRS estimate being 2-3 percentage points higher in most years; and
- year-on-year changes in this proportion.

LFS figures are published by ONS. FRS figures are not published as a separate series but are released within the Households Below Average Income (HBAI) series published by DWP, which is drawn from FRS data. The differences in results are shown in the table:

Table 1: Percentage of children in workless working-age households

FRS	1996/7		1997/8		1998/9		1999/2000		2000/1		
	22.8		20.0		19.5		19.3		18.6		
LFS	Spr	Aut	Spr	Aut	Spr	Aut	Spr	Aut	Spr	Aut	Spr
	1996	1996	1997	1997	1998	1998	1999	1999	2000	2000	2001
	19.3	19.0	17.9	17.9	17.9	17.1	17.3	16.5	15.6	15.3	15.2

Note: FRS covers financial years, from April to March; results published in HBAI are rounded to nearest integer; see paragraph 5. ‘Spr’ indicates Spring, March to May. ‘Aut’ indicates Autumn, September to November.

These are statistically significant differences. Both surveys are large (LFS figures are drawn from nearly 50,000 households, FRS from about 24,000) and the differences are highly unlikely to be due to sampling error. LFS estimates have narrower confidence limits, these being 70% of those around the corresponding FRS estimate.

2. The two surveys both show that **a key factor is the proportion of children in lone parent families:**

- lone parent families constitute around a quarter of all families with children; and a slightly lower proportion of children;
- but worklessness is much higher for lone parents: over 50%, compared to under 10% for couples with children;
- so lone parent families account for over 60% of children in workless households.

3. We have considered the following possible sources of differences between FRS and LFS:

- Differences in definitions: of children, worklessness, households and working-age households
- Differences in population coverage

- Differences in the treatment of cases with missing data
- Differences in timing of data collection
- Differences in survey response biases
- Differences in grossing regimes¹
- Other considerations

Differences in definitions

4. We have investigated these in detail. If present, they might explain why FRS estimates exceed LFS. **We conclude that they do not contribute to explaining the higher FRS estimates.**

5. Some original DWP estimates employed a different interpretation of *worklessness*, which inflated the estimates slightly. But an FRS excess of 2-3 percentage points remains when definitions are aligned. HBAI estimates employ a broader definition of *children* than does LFS, by including 16-18 year-olds in non-advanced full-time education. But HBAI's use of the broader definition – rather than the LFS definition - *decreases* HBAI estimates of the percentage of children in workless households, so it does not explain why they are higher than LFS.

Table 2: Percentage of children in workless working-age households: FRS/HBAI dataset

	1996/7	1997/8	1998/9	1999/2000	2000/1
All HBAI 'children'	22.8	20.0	19.5	19.3	18.6
Children under 16	23.4	20.5	20.1	20.1	19.3

Differences in population coverage

6. Unlike FRS, LFS collects information on students living in halls of residence. Where these are working (presumably part-time) they could convert their parents' household from 'workless' to 'working.' This effect has been investigated and found to be **negligible**. Otherwise the two surveys have the same reference population.

Differences in the treatment of cases with missing data

7. FRS has very few instances where the data needed to assign economic status was not collected. LFS has about 5% of cases; for these, economic status is imputed according to the type of household. The process of allocating missing household economic activity status reduces LFS estimates of the proportion of children in workless households. This appears to be the result of a relatively high number of missing cases among married couples with dependent children, who have a greater than average tendency to live in households with at least one person working. Also, over 20% of data on individuals' economic status is collected

¹ See Technical Note

by proxy; but ONS have tested the reliability of proxy information on economic status and found it to be high. Overall we conclude that **the imputation of missing values in LFS might be a contributory factor in explaining LFS/FRS differences, but the effect is unlikely to be large.**

Differences in timing of data collection

8. FRS and LFS both collect data throughout the year, and LFS estimates of employment are available for the whole year. But LFS estimates of workless *households* are produced only for the Spring and Autumn quarters, covering March to May and September to November respectively. All FRS results relate to the whole financial year – effectively taking an average over the year.

9. Lone parent employment rates are known to fluctuate over the course of the year, typically picking up after the end of the school summer holiday season. Omission of school summer holiday months is likely to bias LFS Spring/Autumn estimates downwards, as a guide to year-average worklessness. The size of this bias is likely to vary between years – eg if the worklessness rate is falling, August may not be the peak month for worklessness. However the size of the overall effect appears to be small. Seasonal patterns in numbers of lone parents on Income Support suggest that the effect on the worklessness rate among lone parents does not exceed 0.5 percentage points. The effect on the overall child worklessness rate appears to be under 0.1 percentage point.

10. **This factor can, therefore, explain only a minority of the lower employment rate, for lone parents, found in FRS compared to LFS** – see tables below. The difference in employment rates is less marked for couples with children.

Table 3a: Percentage of children under 16 in workless working-age households: lone parent families

FRS	1997/8		1998/9		1999/2000		2000/1		
	59.3		57.1		58.3		55.0		
LFS	Spr 1997	Aut 1997	Spr 1998	Aut 1998	Spr 1999	Aut 1999	Spr 2000	Aut 2000	Spr 2001
	56.1	55.8	55.1	54.8	54.1	53.8	51.2	50.2	50.1

Note: These results use harmonised definitions as far as possible. LFS results exclude a small number of children not living with a natural parent, eg foster children. FRS results use the standard FRS grossing regime; LFS results use the standard LFS ‘household level’ grossing regime. The table above shows, for children in lone parent families in working-age households, the percentage who were in households with no adult in work; the table below gives the corresponding percentage for couples’ children.

Table 3b: Percentage of children under 16 in workless working-age households: couple families

FRS	1997/8		1998/9		1999/2000		2000/1		
	8.8		8.7		7.8		7.8		
LFS	Spr 1997	Aut 1997	Spr 1998	Aut 1998	Spr 1999	Aut 1999	Spr 2000	Aut 2000	Spr 2001
	8.6	8.2	8.2	7.0	7.5	6.9	6.7	6.7	6.4

Differences in survey response biases and grossing regimes

11. All surveys are vulnerable to response biases, whereby some groups are more likely than others to agree to be interviewed. In 2000/1 the FRS response rate was 66% of eligible households; and during this period the LFS response rate averaged 75%. (Of the 34% of FRS non-responders, 29% were refusals and 5% non-contacts; for the 25% of LFS non-responders there were 17% refusals and 8% non-contacts.) A fuller picture of these biases, and hence of any differences between FRS and LFS, will be available when DWP and ONS receive the results of comparisons of survey data with Census results for the relevant households; but these will not be available until next year. Some information is available from the FRS 'non-response' module. In 1999/2000 and 2000/1, just over half of FRS non-respondents agreed to answer at least some questions on a 'non-response' form, designed to secure basic information about households who did not agree to take part in the main FRS interview.

12. **FRS reports a higher ratio of lone parents to couples with children than does LFS. This is one of the main reasons for FRS reporting a higher proportion of children in workless households.** If, for example, FRS has the proportion of children in lone parent households 2 percentage points higher than LFS, this will increase the percentage of children in workless households by close to 1 percentage point. In unweighted FRS data for 1999/2000, lone parent families accounted for 25½% of all children under 16; this compares to around 23½% in unweighted LFS data. The divergence appears to have increased in recent years:

Table 4a: Percentage of children in lone parent families (for working age households): unweighted data

FRS	1997/8		1998/9		1999/2000		2000/1		
	23.9		24.7		25.5		25.9		
LFS	Spr 1997	Aut 1997	Spr 1998	Aut 1998	Spr 1999	Aut 1999	Spr 2000	Aut 2000	Spr 2001
	22.0	22.7	23.0	23.7	23.7	23.4	23.1	22.8	23.6

Note: The Note to the tables in paragraph 10 applies to these tables also.

The grossed estimates show an even greater divergence, between FRS and LFS, in the proportion of children in lone parent families (more on the effects of grossing below):

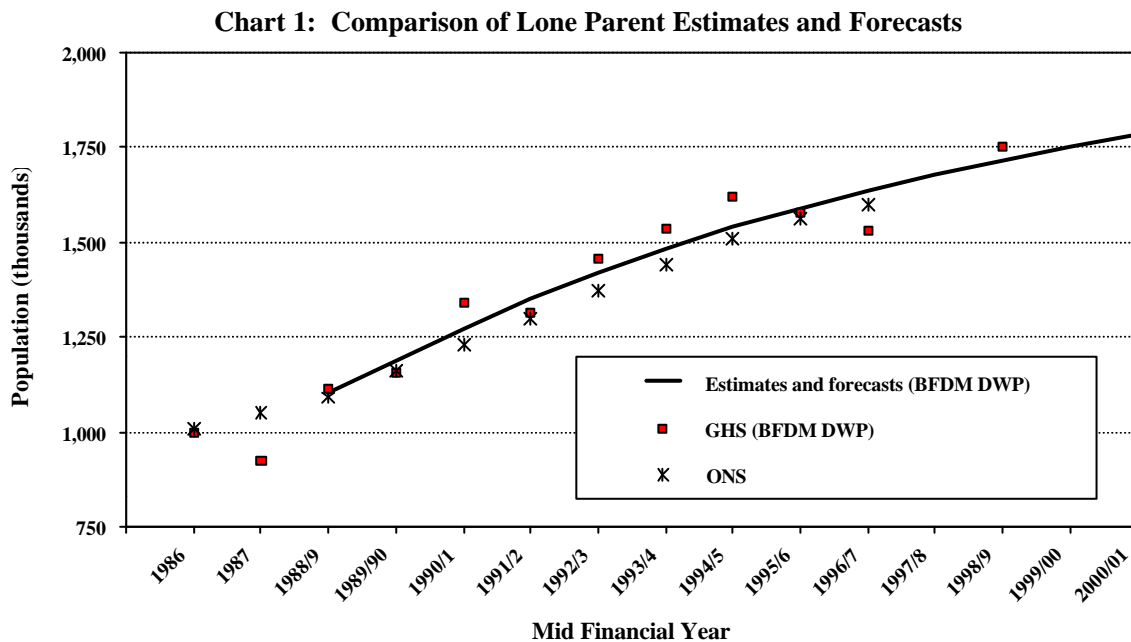
Table 4b: Percentage of children in lone parent families (for working age households): grossed results

FRS	1997/8		1998/9		1999/2000		2000/1		
	23.1		23.5		24.4		24.4		
LFS	Spr 1997	Aut 1997	Spr 1998	Aut 1998	Spr 1999	Aut 1999	Spr 2000	Aut 2000	Spr 2001
	19.7	20.3	20.7	21.1	21.0	20.4	20.2	19.9	20.3

13. The FRS non-response module indicates that households that refused to give FRS interviews were less likely to contain a lone parent family than those that gave interviews. Results for 1999/2000 and 2000/1 suggest that *unweighted* FRS data overstated the proportion of families with children who were lone parent families by between 1 and 2 percentage points.

14. The same module provides information on family type and household worklessness for slightly under half of FRS non-responding households. This indicates that ‘working’ households with a lone parent were far less likely to give a full FRS interview than were the corresponding ‘workless’ households. This suggests that raw FRS data overstated the proportion of lone parent families that were in workless households – by between 1½ and 5 percentage points, though the limited sample size for non-respondents completing the non-response module means results should be treated with caution. The proportion of ‘couple with children’ families that were in workless households may have been overstated by between ½ and 1 percentage point, in the unweighted FRS data.

15. The FRS grossing regime ensures that the grossed number of lone parent families matches a control total, provided by DWP’s Benefit Forecasting and Model Development Division. This uses a model based on General Household Survey data and validated against estimates from other surveys, giving figures only a little higher than ONS estimates published in Population Trends – see Chart 1 below. The total number of families with children is grossed to match Child Benefit counts (this is not free from problems and is under investigation in the separate review of the FRS grossing regime, currently underway). These aspects of the FRS grossing regime do not guarantee the accuracy of FRS estimates of the proportion of children in lone parent families – that depends on the accuracy of the lone parent control total. But they may reduce spurious volatility – that is, spurious fluctuations from one year to another, due to sampling error and/or fluctuations in response biases.



16. In practice the FRS grossing regime and control totals have, when compared with unweighted FRS data, reduced the FRS’s count of lone parent families and, therefore the proportion of children in lone parent families - by between 1 and 1½ percentage points. This is close to the extent of bias implied by the FRS non-response module; and should, thereby, correct that bias. The effect of the grossing regime on worklessness estimates by family type is:

- for children of lone parents, the grossing regime has no consistent effect on the proportion in workless households - over a run of 5 years the effect varies, with a

maximum increase of 0.6 percentage points and a maximum reduction of 0.7 percentage points;

- for children of couples, again the effect varies in direction but is under 0.2 percentage points.

Overall, applying the FRS grossing regime to unweighted FRS data reduces the FRS estimate of the proportion of children in workless households by between ½ and 1 percentage point; and to this extent the FRS grossing regime brings the FRS-based estimate of the proportion of children in workless households closer to LFS-based estimates.

17. The FRS grossing regime also controls for population structure by age and gender, tenure and Council Tax Band. The LFS grossing regime for household-level results (there is a separate regime for individual-level results) controls only for population structure by age, gender and region. We have examined the effect of applying, to FRS data, the LFS grossing regime rather than the FRS grossing regime. The effect, of moving from FRS results grossed by the standard FRS grossing regime to FRS results grossed by the LFS grossing regime, would (as indicated by results for 1999/2000 and 2000/1) be to:

- reduce the proportion of children in lone parent families, by 2½ percentage points;
- and reduce the worklessness rate in lone parent households by 2½ percentage points; and that in couple-with-children households by ¼ percentage point;
- overall, to reduce the proportion of children in workless households by over 2 percentage points.

Analysis of 2000/1 data suggests that the reduction in lone parent numbers, from replacing the FRS grossing regime by the LFS, is concentrated among lone mothers aged under 35.

18. A similar exercise, applying the FRS grossing regime – or strictly, as close an approximation as is possible – to the LFS, confirms that the FRS grossing regime would give higher estimates of worklessness, from the LFS, than does the LFS grossing regime.

19. Some information on possible LFS response biases is available from a 1991 comparison of Census data, for LFS non-respondents as well as respondents, with LFS data. This found that couples with children had an above-average response rate; this suggests that LFS data before grossing might tend to overstate the proportion of children in couple families and thereby understate the proportion in workless households. Over the period 1996-2001, the effects of the LFS grossing regime, compared to using unweighted LFS data, are to:

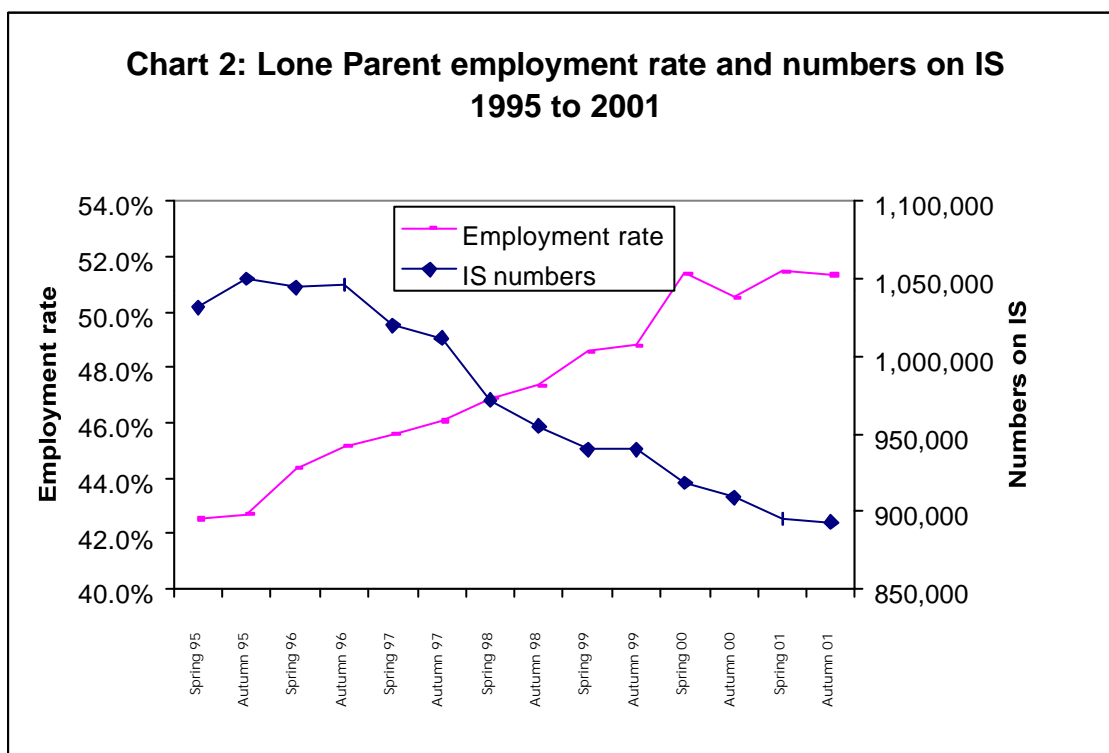
- reduce the percentage of children in lone parent families by 2 to 3 percentage points;
- reduce the lone parent household worklessness rate by up to 1 percentage point;
- slightly reduce the household worklessness rate for couples with children, though the effect is no more than 0.3 percentage points;
- reduce the overall percentage of children in workless working-age households by around 1.5 percentage points.

The LFS grossing regime has no discernible effect on the volatility of LFS results.

Other considerations

20. Differences in survey design are a further possible source of differences in results. While the FRS collects information from respondents only once, the LFS collects information from the same respondents in 5 successive quarters; each quarter's LFS data comprises approximately one fifth people receiving their first LFS interview, one fifth their second interview and so on. If people in employment are more – or less – likely than others to drop out before the fifth wave, this could bias LFS-based results. LFS documentation suggests that LFS estimates of employment rates tend to be 1-2 percentage points higher in waves 2-5 than in wave 1, with correspondingly lower unemployment and inactivity rates. This would suggest higher levels of worklessness at an individual level which one may expect to lead to a higher proportion of workless households and possibly a higher proportion of children in workless households. However, autumn 2000 LFS figures show, when waves 2-5 are compared to wave 1, an increase in the proportion of workless households but not in the proportion of children in such households. So there is no clear attrition bias for children.

21. Both FRS and LFS are subject to sampling error – that is, random fluctuations in results due to each sample not being perfectly representative of the population as a whole. Inspection of the LFS estimates of lone parents' employment rate suggests there was a 'blip' in Spring 2000, with an employment rate that looks too high in relation to the trend. (See chart 2.) This exceeded the normal margins of estimating error and ONS regarded it at the



time as a genuine change; but later results and comparisons with benefit data suggest that the Spring 2000 result is anomalous. So use of Spring 2000 LFS data may tend to overstate the reduction in the proportion of children in workless households from 1998/9 to 2000/1. (The working group's activities were prompted, in large measure, by concern as to a divergence –

for the period 1998/9 to 2000/1 – between the change implicit in the FRS-based ‘poverty count’ data and that reported in LFS.)

Comparisons with benefit data

22. Comparisons with benefit data can shed some light on the relative plausibility of LFS-based and FRS-based estimates. However the picture is not straightforward. For lone parents, the huge majority of workless parents will be on Income Support (IS) – lone parents’ take-up of IS is between 95% and 100%, and few workless lone parents have other income making them ineligible for IS. So if a survey’s estimates of numbers on IS are accurate, its estimates of numbers of workless lone parents will have a high degree of accuracy. LFS data on benefit receipt is not sufficiently good to allow a comparison, but FRS data does allow them. Comparisons of grossed FRS counts of lone parents on IS with DWP administrative data show a shortfall of around 10% in the former. Comparisons of grossed FRS counts of Family Credit recipients typically show a larger shortfall. This suggests that:

- the FRS, with its higher count of lone parent families than LFS, may be more accurate in this count; but
- FRS overstates the worklessness rate among lone parent families. This is consistent with the evidence from the FRS non-response report.

Table 5: Grossed FRS counts as percentage of administrative counts

Year	Lone parents on Income Support	Couples with children on IS/JSA(IB)	Lone parents on Family Credit	Couples with children on Family Credit
1994/5	87	100	79	78
1995/6	91	116	93	81
1996/7	94	133	76	83
1997/8	89	115	79	86
1998/9	90	114	82	100
1999/2000	90	122	-	-
2000/1	89	119	-	-

Note: the administrative counts used here exclude awards made only at a later date; this gives more appropriate comparisons.

23. For couples with children, comparisons of benefit counts are less valuable as a guide to worklessness, as receipt of income-related benefits is lower. However, they suggest that grossed FRS counts of those on out-of-work benefits are too high, and counts of those on FC/WFTC too low. This evidence suggests – in relation to the estimate, from the FRS non-response module, that unweighted FRS data overstates worklessness among couples with children by the order of 1 percentage point – that grossed data may still overstate worklessness to a similar degree.

24. From this it appears that FRS-based estimates will tend to overstate the proportion of children in workless households, by overstating worklessness in both lone parent and couple-with children households. If the FRS understates the proportion of children in lone parent families – comparisons with benefit counts suggest there may be such an understatement, while results from the non-response module suggest little if any understatement in the grossed FRS data – this might be an offsetting factor to some extent.

25. A comparison of LFS estimates for the number of children in lone parent families in workless households with administrative data for the number of children in lone parent families on Income Support or Jobseekers Allowance (and reporting no earnings) indicates that the former falls well short of the latter:

Table 6a: Comparison of LFS and benefit counts of lone parents' children

Year	1996	1997	1998	1999	2000	2001
LFS estimate of children in lone parent families in workless households (millions)	1.38	1.34	1.38	1.34	1.21	1.23
Number of children in lone parent families on Income Support/JSA, reporting no earnings (millions)	1.79	1.75	1.68	1.66	1.62	1.59

Note: LFS figures take average of Spring and Autumn estimates; benefit counts take average of February, May, August and November counts.

One would not expect the two series to match: this LFS count will exclude children whose (non-working) parent shares a household with someone in work, whereas the benefit count will include them; while the benefit count will exclude lone parents who are not taking up their Income Support entitlement (up to 5% of those entitled) and those whose other income or savings excludes them from entitlement. But the extent of the shortfall in the LFS count does point to the strong possibility that it understates the number of workless lone parents and thereby understates the proportion of children in workless households.

26. A survey may over- or under-state worklessness without over- or under-stating proportionate *changes* in worklessness. However, from the table immediately above and FRS estimates analogous to the LFS estimates:

Table 6b: Comparison of FRS and benefit counts of lone parents' children

Year	1996/7	1997/8	1998/9	1999/2000	2000/1
FRS estimate of children in lone parent families in workless households (millions)	1.75	1.57	1.55	1.64	1.54
Number of children in lone parent families on Income Support or JSA, reporting no earnings (millions)	1.78	1.73	1.67	1.65	1.62

Note: figures are for financial years; benefit counts take average of May, August, November and February counts.

it appears that neither survey gives a picture of year-on-year changes that ties in well with the picture from administrative benefit data. Over a longer period the match tends to be better. But even for longer periods, the match can be poor, depending on the start and end years – eg FRS 1997/8-2000/1 and LFS 1996-1999.

27. For couples with children, one would expect less of a match between surveys' worklessness estimates and counts of IS/JSA recipients, because of couples' lower take-up and because non-working couples are more likely than lone parents to be on Incapacity Benefit. Both LFS and FRS counts of children of couples in workless households exceed the counts of children whose parents are on IS/JSA. LFS year-on-year percentage changes are less volatile than FRS, and are more in step with the picture from benefit counts. For

percentage changes over periods of 3 years or more, both LFS and FRS come reasonably close to benefit data for some periods but less close for others.

28. A comparison of changes in the total number of children (covering couples as well as lone parents) in families on Income Support or income-based Jobseekers Allowance with changes in LFS and FRS worklessness counts indicates:

- For year-on-year changes, LFS comes within 2 percentage points of the benefit count change on 3 out of 5 occasions, and never differs by more than 4 percentage points – a better ‘performance’ than for lone parent children alone; FRS comes within 2 percentage points of the benefit count change on 2 out of 4 occasions.

Table 7: Year-on-year percentage fall in counts (%)

Financial years (FY)		96/7-97/8	97/8-98/9	98/9-99/00	99/00-00/1	
FRS estimate of children in workless households		14*	2	0	4	
Number of children in families on Income Support/JSA, reporting no earnings	F	7	5	2	4	
	Y					
	C	7	6	2	4	3
	Y					
LFS estimate of children in workless households		7	2	4	8	1
Calendar years (CY)		96-97	97-98	98-99	99-00	00-01

Notes: FRS results in 1st row of figures should be compared with benefit results in 2nd row; LFS results in 4th row should be compared with benefit results in 3^d row. Figure marked * are affected by a discontinuity in the Child Benefit data to which FRS was grossed.

- For percentage changes over periods of 3 years or more, LFS comes within 1 percentage point of the benefit count change in 4 out of 6 comparisons, the maximum difference being 4 percentage points. Given that one would not expect an exact match, these results are consistent with LFS giving a reasonably accurate picture of changes for most, though not all, periods of 3 or more years. Evidence available for the FRS is sparser, with FRS coming within 2 percentage points of the benefit count change in 2 out of 3 comparisons, but 5 percentage points adrift in the third.

Table 8: Percentage fall in counts over various periods of 3+ years (%)

Period (FY)		96/7-99/00	96/7-00/1	97/8-00/1			
FRS estimate as above		16	19	6			
Benefit count as above	FY	14	17	11			
	CY	15	18	12	20	15	9
LFS estimate		12	19	13	20	14	13
Period (CY)		96-99	96-00	97-00	96-01	97-01	98-01

29. To the extent that conclusions can be drawn from these comparisons with administrative data for families on the safety-net benefits, it appears that for neither FRS nor LFS can one be confident of the accuracy of year-on-year changes in the proportion of children in workless households. For longer periods the LFS – and probably FRS – perform better on the whole, but with exceptions for some periods.

Conclusions and Recommendations

30. The factors explaining why FRS gives higher estimates than LFS of the proportion of children in workless households *in any one year* are:

- (a) FRS unweighted data identifies a higher proportion of children in lone parent families than does LFS;
- (b) FRS unweighted data shows a higher worklessness rate, in both lone parent and couple-with-children families, than LFS;
- (c) LFS employs a grossing regime which substantially reduces the proportion of children in lone parent households, and thereby in workless households; whereas the FRS grossing regime has less of an effect in reducing these proportions;
- (d) The LFS grossing regime also reduces the worklessness rate in lone parent families; whereas the FRS grossing regime has less clear-cut effects.

There is an additional effect from LFS estimates omitting the summer school holiday period; but this effect is small for lone parents' children and negligible overall. There may be a small additional effect from the imputation of missing economic-status data in LFS.

31. The evidence suggests that:

- FRS results probably overstate the proportion of children in workless households, in any one year, by overstating worklessness among lone parents and, to a lesser extent, among couples with children;
- LFS results are likely to understate the proportion of children in workless households, in any one year, by understating the proportion in lone parent families.

32. For estimates of *changes* in the proportion of children in workless households, the 'blip' in the Spring 2000 employment rate for lone parents means that it may be a poor guide to changes from eg 1996 or 1998 to 2000. Neither FRS nor LFS give a picture, of year-on-year changes, that matches well with benefit data on children in families on out-of-work benefits; and neither survey appears to be superior to the other in this respect. Over longer periods of time there is a better match with benefit data, and the evidence suggests that LFS performs well for most periods of 3 years or more; but – depending on the precise base year and the precise end year – substantial differences can still appear, between either survey and what one would expect given the benefit data. Comparisons may become more difficult when income-related benefit support for children is replaced by the new tax credits, from 2003.

33. The DWP/ONS group who have investigated this issue recommend as follows:

- (A) DWP should ensure that plans to speed up analysis of the FRS non-response module are implemented and that FRS users are given clear and timely advice on likely biases in response patterns, where they are not corrected in the grossing regime.

- (B) Production of comparisons of FRS and LFS data with Census data, to allow response biases to be quantified, should be regarded as urgent and important, and should be made available as soon as possible in 2003.
- (C) DWP should, in time for the next substantial revision of the FRS grossing regime, consider the introduction of initial weights for households which contain a lone parent and are not workless – drawing on the Census comparison, non-response module and/or comparisons with the relevant (tax) credit counts from administrative data – to reduce the under-representation of working lone parents.
- (D) ONS, in consultation with LFS users, should consider the introduction of a control total for lone parent families in the LFS ‘household’ grossing regime, in the context of the follow-up to the recent LFS review.
- (E) DWP and ONS should co-ordinate work on the development of the FRS and LFS grossing regimes, with continuing liaison between those working on FRS grossing and the LFS review follow-up team.
- (F) When the final Census-linked revisions to FRS grossing are devised, if full-year LFS estimates of workless households are by then available and LFS grossing reduces volatility in lone parent counts to an acceptable level, DWP should consider drawing on LFS worklessness data in the control totals for the FRS grossing regime.
- (G) DWP and ONS should in future routinely compare FRS and LFS estimates of changes in numbers of children in workless households and families with estimates, derived from DWP and IR administrative systems, of changes in the number of workless families in receipt of benefits and in receipt of tax credits. The implications, for such comparisons, of the introduction of Child Tax Credit should be considered and a report made by December 2002.

Technical Note

When comparing FRS and LFS data either *unweighted* estimates or *grossed* estimates have been used.

Unweighted estimates are derived from the raw data, with no adjustments having been made for response biases etc.

Both surveys publish in *grossed* estimates - but differing grossing regimes are used (each designed with the main purpose of the survey in mind), which may affect the relative size of the published estimates from each of the two surveys.

The grossing regimes applied to both the FRS and the LFS have a dual purpose of weighting the data - to take account of known response biases (e.g. households comprising of a single young male are particularly hard to elicit responses from and are therefore under-represented in *unweighted* data) and grossing the data to total GB/UK population totals.

It is not possible to separate the two functions of the grossing regimes for either the FRS or the LFS.

Therefore, when looking at the underlying raw data and its structure, *unweighted* estimates have been used, but when comparing the published results and obviously when considering the effects of the differing grossing regimes, *grossed* estimates have been used.