

**Early and Late Entry to Motherhood in Wales:  
Evidence of Socio-economic Inequalities in the First Survey of the  
UK Millennium Cohort**

**REPORT TO THE WELSH ASSEMBLY GOVERNMENT**

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## **EXECUTIVE SUMMARY**

The Millennium Cohort Study is the fourth national birth cohort study, in which a large sample of births at a particular time is followed through time as the children grow up – eventually into adulthood. In Wales, the Study doubled its initial sample size to facilitate analysis within Wales. It did so in such a way as to focus on the circumstances of families having children in the new century in disadvantaged areas. Well over half the sample of 2732 families were drawn from disadvantaged wards, most of them in South Wales.

After allowing for the over-sampling, (by reweighting sample numbers to provide an accurate all-Wales picture) 46% of the families in Wales were living in areas of high child poverty compared to 35% in UK as a whole. On many of other indicators, there were also proportionately more families in disadvantaged circumstances in Wales than in the UK as a whole, although mothers of 9-month old babies were marginally more likely to be employed in Wales than elsewhere.

This report focuses on age at motherhood as a marker of a number of social and economic disadvantages. In 22% of Welsh families, the mother had been a teenager at the time of her first birth, significantly above the UK average of 18%. Taking mothers whose first child was born before age 25 accounts for 48% of mothers in Wales and 43% in the UK. Conversely, motherhood over 30 is relatively less frequent in Wales (21%), compared to the rest of the UK (27%), and indeed to the rest of the EU, where there has been a general trend towards later motherhood in which Wales appears to lag behind - though Wales is moving in the same direction.

This study finds some explanation for relatively early motherhood in the relatively high concentration of disadvantaged areas in Wales compared to the rest of the UK, but this still leaves most of the explanation of extra young mothers in Wales to unspecified factors.

Within Wales, the observed background correlates of young motherhood are much the same as they are in the UK; early school leaving, childhood family disruption, and living in a disadvantaged ward, (though minority ethnic group is less relevant in Wales). Use of the Welsh language was one of the few indicators examined, which was not strongly patterned by age at motherhood.

There are striking associations of age at motherhood and current circumstances: lone parenthood, employment, income and wellbeing, all in favour of later motherhood. Regression analysis is used in an attempt to unpack these relationships. In Wales (as for the larger UK sample) observed antecedent factors help to explain both the age at motherhood and the differences in outcomes by age at motherhood. Similarly a number of other features of current circumstances (which may also reflect `unobserved antecedent factors) help to explain both the age at motherhood and the differences in outcomes by age at motherhood. These current circumstances may themselves also be consequences of early motherhood. The depression and low life satisfaction of the early mothers is largely accounted for by their current economic circumstances.

The pattern of poor circumstances compounding the initial disadvantages of women who become teenage mothers is repeated in Welsh and UK data pointing to policy needs to help prevent the causes and ameliorate the consequences of early motherhood.

We speculate about the reasons for the smaller numbers of women deferring motherhood in Wales, the obverse of the reasons for proportionately more young ones.

- Selective out migration of the career minded graduates. Whilst Wales has net immigration of total population across all ages apart from 16-24 at the moment and is a net gainer for older people, many of whom bring their families as Wales also has net immigration of children age 0-16, this migration may be selective - those who are more family orientated moving into and staying in Wales and those who are less moving out. This remains to be investigated and may not be restricted to Wales but also to other regions within the UK such as the North East or the North West.
- Poor labour market prospects in Wales for low skilled young men, who are the actual or potential partners of mothers. This may have applied more strongly for the earlier first births in the 1980s and 1990s when the Welsh labour market was relatively more unfavourable. However, Wales does have relatively high proportions of people with low skills, particularly in disadvantaged areas where early motherhood is most prevalent, for whom labour market prospects have deteriorated across all parts of the UK in recent decades.

- Better possibilities in Wales for combining family life and employment, given the higher level of involvement of the cohort child's grandparents, and some other indicators in the Millennium Cohort Survey of social capital in Wales than elsewhere.

This report gives evidence for some concern about those who enter motherhood under 20, given the compounding of disadvantage for mother and child. However it suggests that if fewer women in Wales than elsewhere delay motherhood beyond 30, this could be a sign of a better work-life balance rather than a problem.

The follow-up surveys of the cohort will bring fresh evidence on how the families studied in this report are faring, and start to indicate how far the children are resilient or disadvantaged by inauspicious beginnings. Data on age 3 will become available early in 2006 which will have direct assessments of the children's cognitive and physical development as well as monitoring the socio-economic trajectories of their families, and filling in more information about grandparents' class backgrounds.



## 1. INTRODUCTION

- **Early motherhood is relatively common in Wales compared to the UK. In addition, less delay into motherhood is observed in Wales than in the UK and the EU**
- **The data used is the Millennium Cohort Study, focusing on the Welsh subsample. The Millennium Cohort Study over-samples disadvantaged areas of Wales and the UK.**
- **Teenage motherhood in Wales and the UK is associated with childhood disadvantage and exclusion from employment and education.**
- **Teenage motherhood in Wales and the UK maybe a signal of a disadvantaged background or it may compound pre-existing disadvantages.**
- **Teenage motherhood in Wales and the UK is associated with disadvantaged consequences for the children of young mothers.**
- **This report considers whether the disadvantages of early starter found previously for Scotland and the UK are manifest in Wales where early starters are relatively abundant.**
- **After presenting tabular evidence of the association of socio-economic disadvantages with early motherhood, regression analyses look at the explanation of age at motherhood in terms of prior disadvantages, and an analysis of the contribution of early motherhood and other variables to the explanation of current disadvantage.**

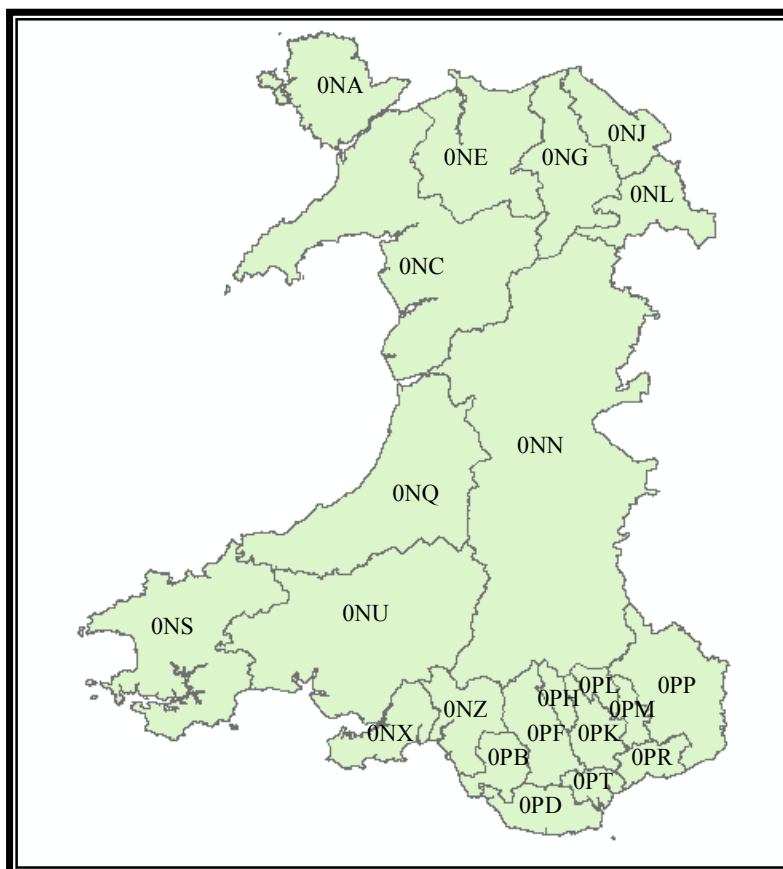
The age at which women have their first child is of interest, as it affects the rate of population replacement. Delaying motherhood towards age thirty is a common feature of the decline in fertility rates in developed countries at the end of the twentieth century, though this is less marked in Wales than the rest of the UK. Women with the least socio-economic advantages tend to have children young while the most advantaged tend to defer childbearing. Early motherhood is relatively common in Wales. This report investigates whether earlier motherhood in Wales as compared with the rest of the UK can be accounted for by more antecedent disadvantages in the Principality. It also asks what are the current socio-economic circumstances of families initiated by young mothers, and whether the relationship to age at motherhood in Wales is the same as in the rest of the UK.

This report focuses on the Welsh sub-sample of Millennium Cohort Study (MCS), the fourth National Birth Cohort Study, which was boosted to permit within-Wales analysis. In Wales MCS

surveyed 2,761 families (with 2,799 children allowing for multiple births). In the UK as whole the survey gathered information from 18,553 families and 18,819 children, born over a year, in selected electoral wards. The wards were disproportionately sampled to over-represent areas of high child poverty, to boost cases in Scotland, Wales and Northern Ireland, and to over-represent areas of ethnic minority concentration in England (Plewis et al 2004). The first survey took place when the children were 9 months old during 2001-2 (Shepherd et al 2003, Smith and Joshi 2002). The first follow-up at age 3 finished in the field in April 2005. Surveys of the children at age five and seven are being actively planned, follow up into adulthood is intended, in the path of the previous national birth cohort studies.

In Wales 73 wards were sampled in all but two of the Welsh Local Authorities. The Local Authorities in which they are located are shown in Figure 1, along with the number of families interviewed in each LA. Only 17% of the families interviewed from the sample of disadvantaged wards lived in the northern part of the principality (Powys and points North), whereas 46% of the families surveyed in non-disadvantaged wards were in the North, where they form the majority of the sample, even before re-weighting to allow for their lower chance of being selected. The bulk of the unweighted sample were living in disadvantaged areas in South Wales. In the analysis we prefer to use the social indicator of location, which takes account of sample design than the pure geographical one, but note that they are highly related. Note also, that not every family living in a disadvantaged ward themselves would satisfy the criterion of being poor, and that there are also some poor families living in lower geographical concentration in the less disadvantaged wards.

**Figure 1: MCS Cases in Wales by Local Authority and type of ward sampled within them**



<b>Local Authority</b>	<b>Local Authority Name</b>	<b>Families in Advantaged Wards</b>	<b>Families in Disadvantaged Wards</b>
0NA	Isle of Anglesey	19	16
0NC	Gwynedd	28	26
0NE	Conwy	0	122
0NG	Denbighshire	21	39
0NJ	Flintshire	114	65
0NL	Wrexham	177	42
0NN	Powys	26	20
0NQ	Ceredigion	0	42
0NS	Pembrokeshire	0	98
0NU	Carmarthenshire	21	20
0NX	Swansea	0	135
0NZ	Neath Port Talbot	0	149
0PB	Bridgend	40	57
0PD	The Vale of Glamorgan	0	44
0PF	Rhondda, Cynon, Taff	62	219
0PH	Merthyr Tydfil	0	0
0PK	Caerphilly	0	215
0PL	Blaenau Gwent	0	0
0PM	Torfaen	13	92
0PP	Monmouthshire	28	34
0PR	Newport	139	139
0PT	Cardiff	146	353
<b>Total</b>	<b>NUMBER OF FAMILIES</b>	<b>834</b>	<b>1927</b>

### *1.1 Socio-Economic Disadvantage and Early Motherhood: Cause or Effect?*

Teenage motherhood is associated with prior childhood disadvantage and, perhaps simultaneously, exclusion from both employment and education thereafter. Early entry to motherhood maybe little more than a signal of a disadvantaged family background which is then the real driver in the subsequently observed poorer adult outcomes for the mother, and consequently her children. On the other hand, early motherhood, in the early twenties as well as the teens, may compound pre-existing disadvantages, setting these families apart from those where childbearing has been delayed until the late twenties or beyond. Allowing for existing background factors, Ermisch and Pevalin (2003), using the British birth cohort of 1970, find that a teen birth had little independent effect on a woman's qualifications, employment or earnings when she is 30 years old. Goodman et al. (2004) also using the British birth cohort of 1970 and, also using data on miscarriages, find that a teen birth had little independent effect on a equivalised family income, wages and benefit variables when she is 30 years old. Work on sisters for the US (Geronimus and Korenman 1992) and twins for the UK (Hawkes 2003) also suggest that early motherhood is strongly associated with poor family background; the effects of entering motherhood early on household income and educational attainment are much smaller once family background is controlled for. However Ermisch and Pevalin (2003) do find that the lower employment and educational attainment of any partner present when a teen mother is 30 can be attributed to an adverse outcome in the 'marriage' market, and a companion paper finds another independent, detrimental effect of early motherhood on a woman's mental health (Futing Liao 2003).

The timing of motherhood, early or late, may be the outcome of a deliberate strategy, or it may be unintended - early because of unplanned pregnancy, or late because of unanticipated infertility (or partnership problems). Whether early motherhood constitutes a rational choice in the face of limited alternatives in education or employment, or a lack of planning and poor information, any differential outcomes for families started early and late are certainly not chosen by the child. Whatever its cause, young age at motherhood could be viewed as a signal of disadvantage *for the children* on a number of fronts, including consequences (Pevalin 2003).

We use evidence from the Millennium Cohort Study to see how far early motherhood in Wales and the UK is associated with low initial resources and the woman's human capital. How far can differential early motherhood in Wales be accounted for by different levels of prior disadvantage?

We also ask how far the current disadvantage of early mothers (on several counts) can be accounted for by low initial resources and by a set of intervening circumstances. We compare results with an equivalent analysis of the UK (specifically tailored to match the age band used for Wales) to see if either circumstances or relationships are different in Wales.

As a survey of children, MCS cannot account for women who have not (yet) had children, nor can it yet trace outcomes for the children themselves, as data is only, at present, available from its first round, but its large sample size and rich content does provide an excellent source in which to consider the great diversity among those who have become mothers according to the age at which they did so, from the child's perspective. Some family background influences on early (or late) entry to motherhood can be distinguished and associated with the diverse current circumstances of families with young children, although as a survey of children the information on their mothers' origins is limited.

Earlier work on the cohort in Scotland, Joshi and Wright (2005), and for the UK (Hawkes et al 2004), showed a consistent association of age at motherhood with large range of variables recording education, partnership, employment, occupation, income, neighbourhood, housing, the planned-ness of the cohort pregnancy, infant feeding and mother's mental health and subjective well-being. This report explores whether such disadvantages of the earlier starters are manifest in Wales, where they are relatively abundant. The larger sample size in Wales permits us to break down age at motherhood in Wales into 4 age-bands in contrast to the 3 used on the somewhat smaller Scottish sample.

**Plan of the report:** Chapter 2 presents cross tabulations in which a number of variables are ranged by age at motherhood. Chapter 3 reports an analysis of the age at which the mothers had their first child. Chapter 4 considers age of motherhood as a predictor of the current circumstances of the mother and her child(ren) when the cohort member was nine months old. The outcomes studied are: whether the mother currently has a partner, if she does, whether he is earning, whether she is earning herself, the family's receipt of means tested benefits and equivalised household income, the mother's life satisfaction and depression. We control first for the identifiable set of characteristics used in chapter 3 which are treated as pre-dating the entry to motherhood, and then include a number of correlates describing current or intervening circumstances, whose causal connection with the age at motherhood and the outcome is less easy to disentangle. These correlates include educational qualifications and current location, and as the models build up, some of previously analysed outcomes. Thus presence of a partner and his

qualifications help to explain family income, and family income helps to explain life satisfaction. These are still no more than descriptive accounts, but we do discuss how far the additional variables in the fuller model may be consequences of the timing of motherhood, and how far they may reflect other unmeasured factors which encourage early or delayed motherhood, drawing on the results of other studies.

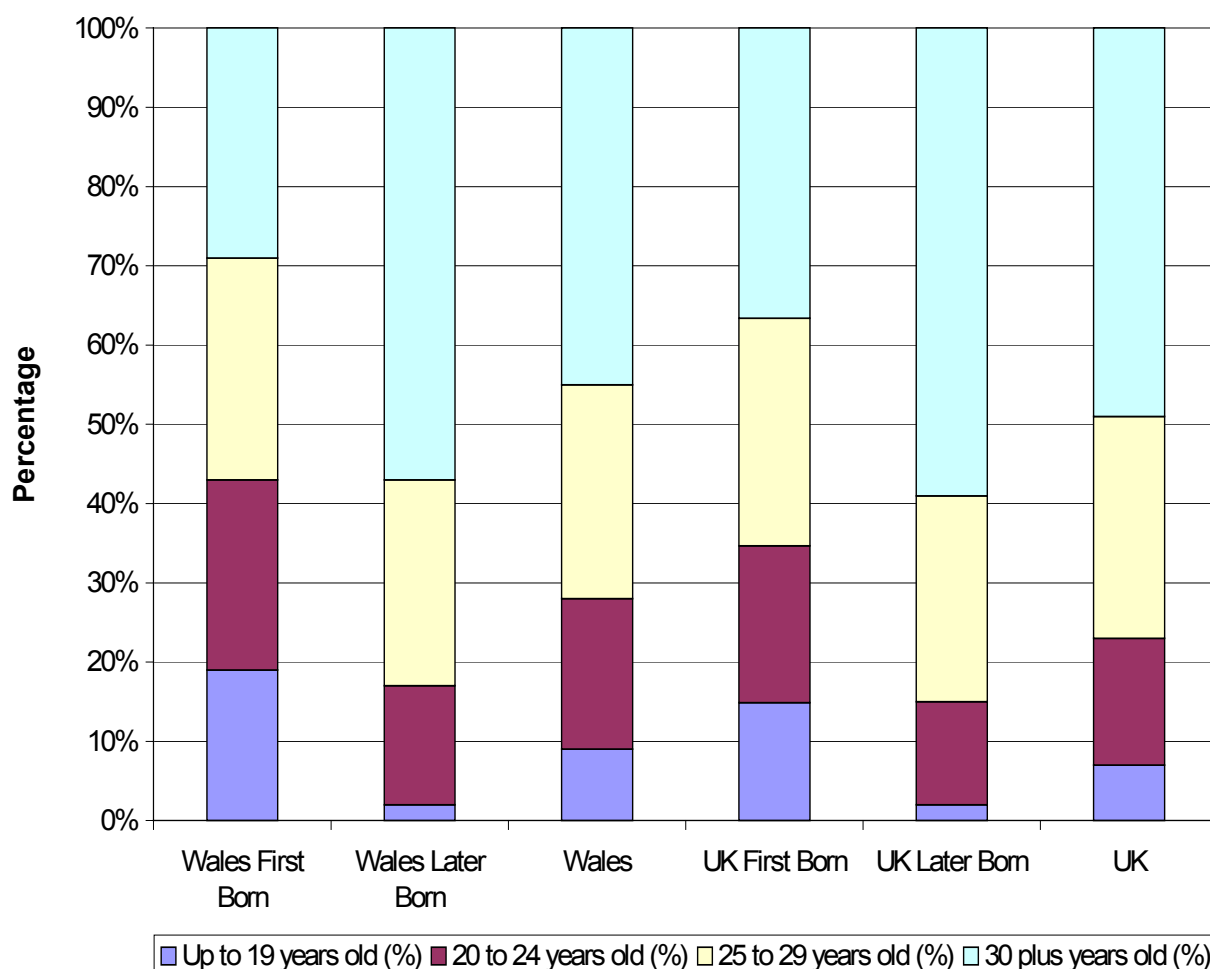
## **2. THE SOCIAL PROFILE OF AGE AT MOTHERHOOD: SOME DESCRIPTION**

- **Considering the age of the mother at the birth of the cohort child in 2000-1, 9% of all mothers in Wales were teenagers compared to 7% in UK. For first births only, 19% were to teenage mothers in Wales compared to 15% in UK.**
- **Considering the age of the mother at the birth of her first child, 22% in Wales were teenaged mothers compared to 18% in the UK. 21% of Welsh mothers entered motherhood over 30 compared to 27% in the UK.**
- **Wales has the highest proportion of teenage mothers in the UK and also the lowest proportion of older mothers (30+), but in all countries the majority of women had their first child in their twenties**
- **Early motherhood in Wales (as the rest of the UK) is concentrated in disadvantaged areas and is associated with: lone motherhood, low educational attainment, low household income, less employment and living in council accommodation.**
- **In Wales, mothers are more likely to be employed and have better garden access than their UK counterparts.**
- **50% of first-time mothers in Wales report being surprised by their pregnancy. 89% of those under 20 were surprised compared to 26% of those over 30.**
- **Despite reporting having plenty of time with their baby, young mothers in Wales and the UK were more likely to report symptoms of depression.**

## 2.1 Mother's Age at Cohort Child's Birth

Our analysis draws on all the natural mothers in the survey for whom it is possible to determine age at entry to motherhood and the order of the cohort child's birth (2732 in Wales and 18261 in the UK). Although we are mostly concerned in this report with age at the first birth whenever that occurred we look first at the age of the cohort mothers when they gave birth to the child in the survey, in 2000-1, whether or not this was their first child. Table 1 and figure 2 shows that at the time the cohort child was born, 9% of the mothers in Wales were teenagers compared with 7% for

**Figure 2: Mother's Age Distribution by Age at Cohort Child's Birth**



the UK as a whole. Wales also had proportionally more mothers in their early twenties than the whole UK sample, and fewer older mothers, especially at ages 30 and over (45% versus 49%). This younger profile is partly due to the slightly higher proportion of first births in the Welsh sample (42% versus 41%), but the Welsh mothers are still younger within birth order group,



particularly among those having their first child in the survey. 19% of the Welsh first-time mothers were under 20 (43% under 25), compared with 15% (and 35%) for the UK.

Table 2 analyses the Welsh births by current age of mother and type of ward. The majority of the unweighted sample were from disadvantaged wards (high Child Poverty Index), as the Welsh Assembly Government boost enabled the number of wards in this stratum to be doubled to 50. 70% of the unweighted achieved sample were in these wards. This represents, after re-weighting, 46% of the population, cf. 39% in the rest of the UK, reflecting the high rates of child poverty in Wales at the time of the survey. As shown in figure 1 most of the ‘disadvantaged’ sample were in South Wales. The disadvantaged wards have more younger mothers than the other areas: over one quarter (28%) of the first-time mothers in disadvantaged wards were teenagers (only just over one fifth (21%) were over 30). In other Welsh wards, these figures were 11% and 36% respectively. Nevertheless, teenaged mothers were more numerous in Wales within each type of ward than in the UK as a whole, suggesting that the greater frequency of child poverty areas do not on their own account for the greater percentage of teenage mothers in Wales.

## *2.2 Mother’s Age Distribution by First Birth*

Table 3 and figure 3 turns to the age of the mother at her first birth, which is the same age as that shown in Tables 1 and 2 for those having their first child in the Survey, but younger for those with previous births. Entry to motherhood is defined as the age at which the mother reported her first live birth of a child who had ever lived with her. This excludes stillbirths and any births reported as having been given away in adoption. The group of teenaged mothers, were mostly aged 18 or 19 at the time of their first birth. Of the 742 sampled teenaged entrants to motherhood in Wales, 117 were 16 or under (28 were 15 and under). The oldest age group shown in Table 3, those aged 30 or over were mostly in their early thirties at the time of birth. Of the 486 older mothers in Wales, 383 were 30 – 34. 22% of the Welsh mothers had entered motherhood as teenagers, and almost as many, 21% at 30 or over. Corresponding figures for all UK are 18% teenaged, 27% 30 plus. In both samples, the first births taking place in previous years were somewhat younger (reflecting a trend towards later childbearing and the older age of those who stop at one child, but the contrast between Wales and the UK is somewhat greater for the current first births, suggesting that the trend to deferred motherhood is less marked in Wales than elsewhere.

**Figure 3: Mother's Age Distribution by First Ever Birth**

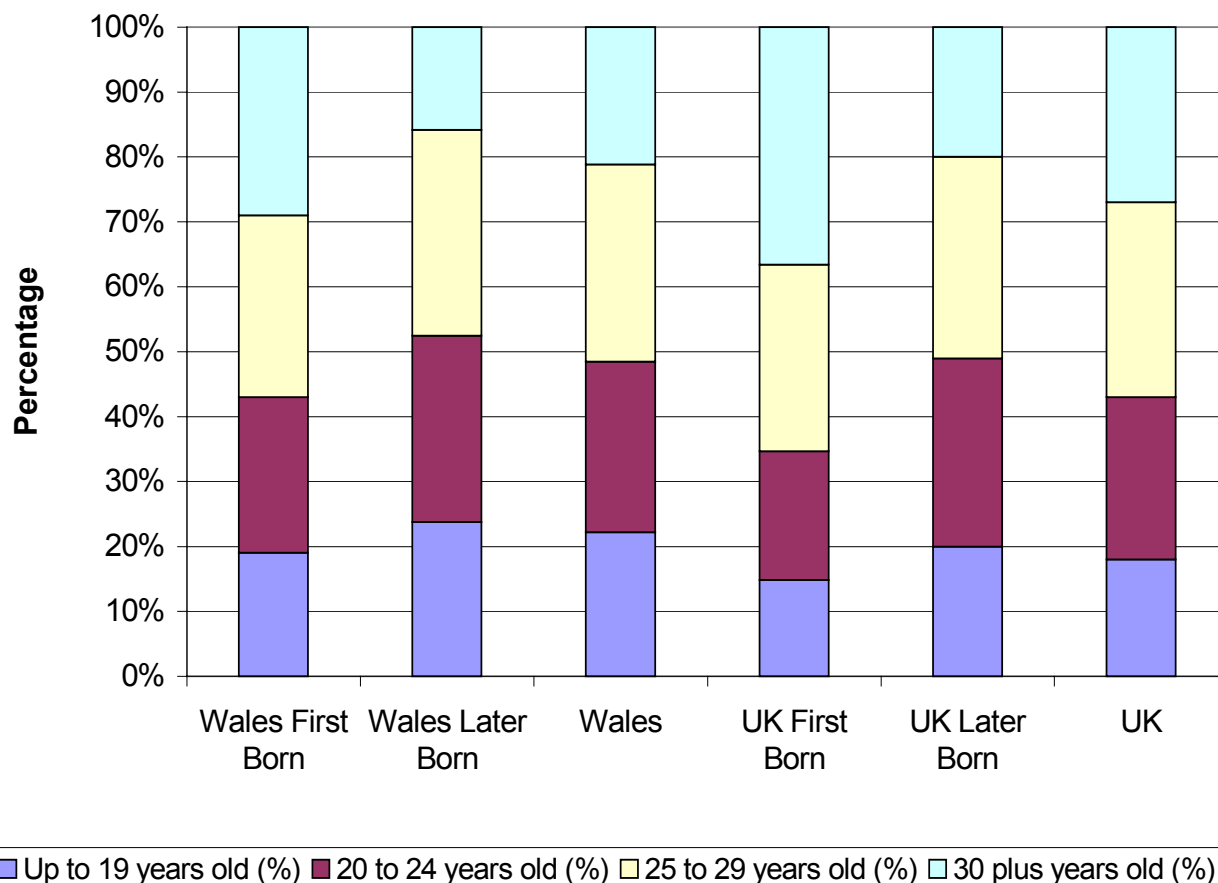


Table 4 shows comparisons of the distribution of age at motherhood of Wales with some other subsets of the UK. Wales has the highest proportion of mothers who were teenagers (22%), London and the South East and also Northern Ireland have the lowest rate (16%), but the rest of GB is still below Wales on this count. Northern Ireland is notable for having the highest proportion entering motherhood at ages 20-24, where London and the South East are still the lowest. Taking all ages under 25, Wales, at 48% still has the highest proportion of young mothers. At the older end of the scale, the rate of 21% becoming mothers at over 30 in Wales, is well below all other regions. Northern Ireland is “runner up” for the bottom of the league table (24%) and London and the South East at its lead (34%).

Table 5 (which differs from Table 2 only in respect of mothers whose cohort child was not the first) confirms that early motherhood is particularly concentrated in disadvantaged areas, where it was even more common (71% under 25 compared with 67% for all UK) for those first births occurring before the Millennium. Again, the excess of early motherhood in Wales is accounted for partly by the higher number of disadvantaged areas, but even within them the proportions in Wales are somewhat higher.

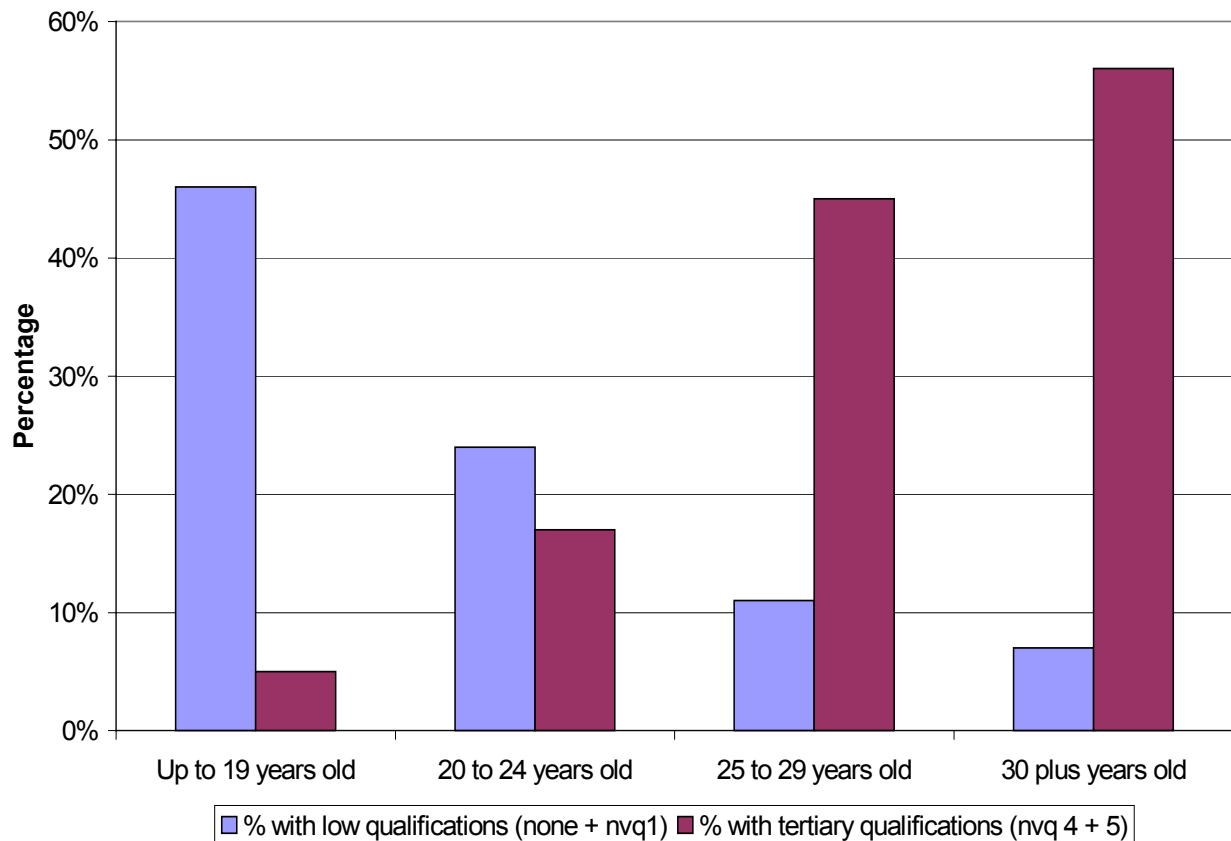
### *2.3 Characteristics of Cohort Families by Mother's Age at First Birth*

Tables 6 to 11 show the results for the full sample (all birth orders), not just those mothers whose cohort child was their first, since the relationships we detected between age at motherhood and other covariates were very similar regardless of whether the cohort child was the first born. Table 6 looks at the use of the Welsh language. This is one of the few variables we have examined which is not strongly patterned by the age at motherhood, but with only 222 families in the survey speaking any Welsh at home, one must be cautious about this finding.

#### *2.3.1 Demographic Characteristics*

Table 7 gives a few indicators of the demographic characteristics of the cohort families by mother's age at first birth. It shows that the younger mothers had, by the time of the survey, on average more children. At the time of the survey, not necessarily the situation at the first birth, 18% of the mothers in Wales were living without a partner (vs 14% in the UK). There is a ten-fold difference in the proportion of youngest and oldest entrants to motherhood who were 'lone mothers' at the time of the survey – 41% where the first child had been born before the mother was 20 compared to 4% where she had been 30 or more. This is partly because early childbearing is more likely to be unpartnered, and partly because of the greater fragility of early partnerships. Note the greater variation in current age of the lone mothers compared with all. Nearly one quarter of the lone mothers who had entered motherhood below 30 were living with the child's grandparents. Where there is a two-parent family, the chances of the couple being married rises with age at motherhood, as do the (high) chances of the mother's partner being the natural father of the cohort child. Table 7 and figure four summarises the low educational attainments of the early mothers. 46% of the teen mothers had, by the time of the survey, qualifications no higher than NVQ1 and only 5% had degrees or equivalent. These proportions are almost reversed for the thirty plus entrants to motherhood. 7% low and 56% high qualifications.

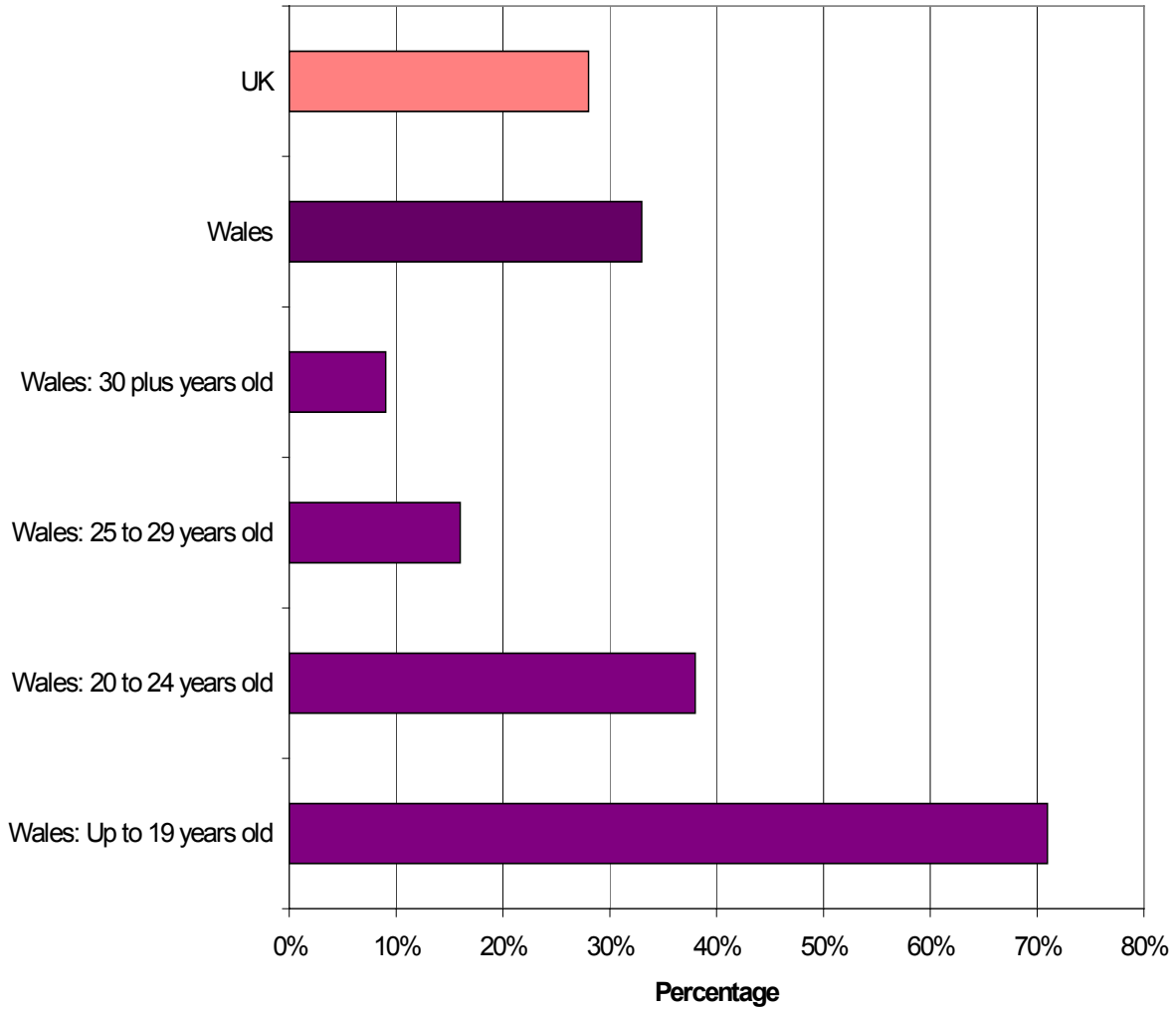
**Figure 4: Qualification by Age at First Birth of Welsh Mothers**



### 2.3.2 Economic Characteristics

The indications, of more lone mothers among the early mothers helps account for their over-representation in disadvantaged circumstances summarised in Table 8 showing indicators of current economic position by age at motherhood. Figure 5 shows that 71% of the current or erstwhile teenaged mothers in Wales are estimated to have incomes below 60% of the equivalised median compared with 9% of those entering motherhood at or over 30, and 28% for UK as a whole. Another indicator of the family's financial circumstances is claiming at least one of the four means-tested benefits that approximately correspond to the criterion used to stratify local areas in the sampling. This puts 35% rather than 28% of the UK sample into a low income category, but there is still a corresponding reverse gradient in the chances of claiming benefit as age of motherhood rises. 79% of the teenagers failing to 16% of those over 30. The mothers' subjective account of their financial situation follows a similar pattern. Overall one tenth of the mothers say they have financial difficulties, a proportion which falls as age of motherhood increases, but the age gradient is not as steep as for claiming means-tested benefits. The teen mothers are less likely to say they experience financial difficulties (16%) than to claim means

Figure 5: Percentage of Families living on less than 60% of median income



tested benefits (79%). The 30+ mothers while less likely to report current difficulties than the early mothers are less likely to claim subjective distress (8%) than means tested benefits (16%).

Only 21% of the Welsh teenaged mothers were in employment (5% full-time) in contrast to 45% employed (16% full-time) among the older entrants to motherhood. Overall, the Welsh mothers were more likely to be employed than mothers in the rest of the UK, but note that the employment rates in England are pulled down by the low economic activity rates of some of the minority ethnic groups. The older mothers, in Wales as the rest of the UK, were not only more likely to be employed, but they were most likely to have a high status occupation. (58% managerial/professional vs. 6% in this group among teens)

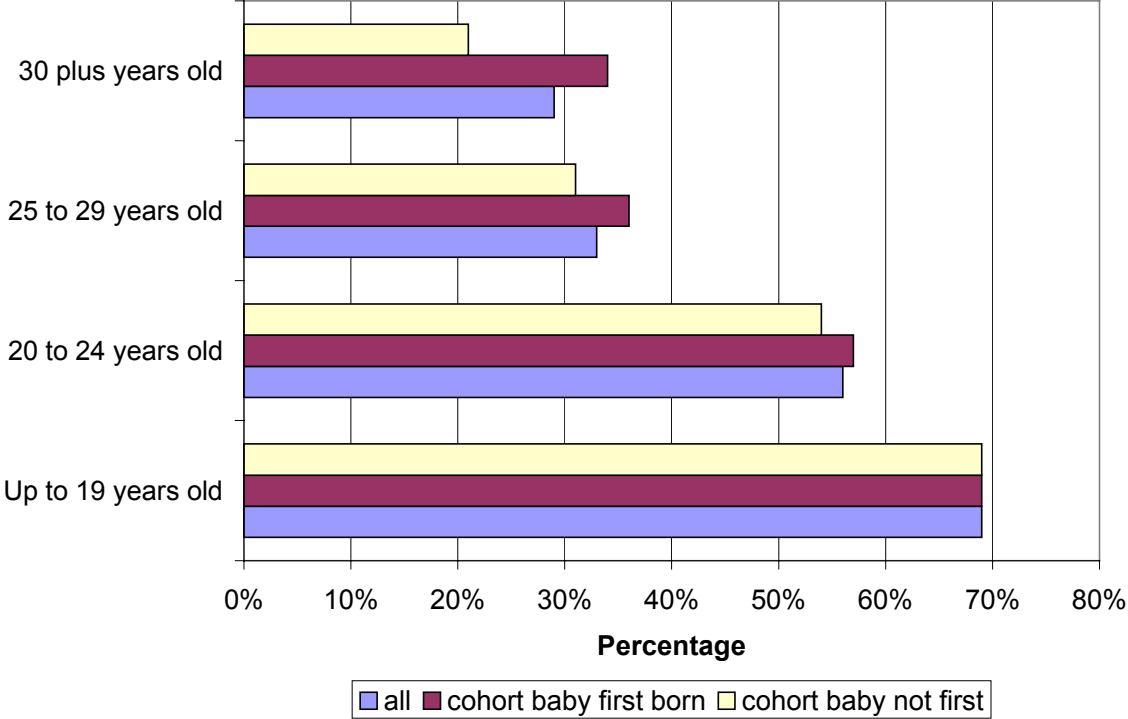
A major reason for the age pattern in financial circumstances is the age at motherhood pattern in the chances of the woman or her partner being employed. Thus the early mothers, if in a couple,

are most likely to be in a ‘workless couple’, and least likely to have full-time employment 9 months after the cohort child was born. 25% of the teenaged Welsh mothers in a couple were currently dual earners compared with nearly three quarters (72%) of the couples where the first child had arrived after the woman’s 30<sup>th</sup> birthday.

2.3.3 Living Environment

Table 9 shows a selection of indicators of the living environment at the time of the survey. The early mothers are most likely to live in council accommodation, in a flat rather than a house, and are least likely to have access to a garden. They are also most likely to complain about the quality of the neighbourhood. Despite, as we have seen in Tables 2 and 5, the Welsh families being most likely than the rest of the UK, to live in disadvantaged neighbourhoods, they are not uniformly more disadvantaged than the rest of the UK on all of these indicators, see figure 6. Garden access, for example, is relatively good in Wales.

**Figure 6: Percentage of Welsh Mothers Living in Disadvantaged Wards by age at first birth and order of birth in 2000-1**



Some of these profiles will be analysed in the next chapter. The others illustrate some of the many ways in which material conditions happen to vary systematically with age at first birth. The similarity, not shown, of the relationships where the first birth had taken place only nine months

before the survey and those where it occurred some years previously suggests that the disadvantages associated with early motherhood persist into later stages of family formation.

#### *2.4 Planned-ness of Pregnancy*

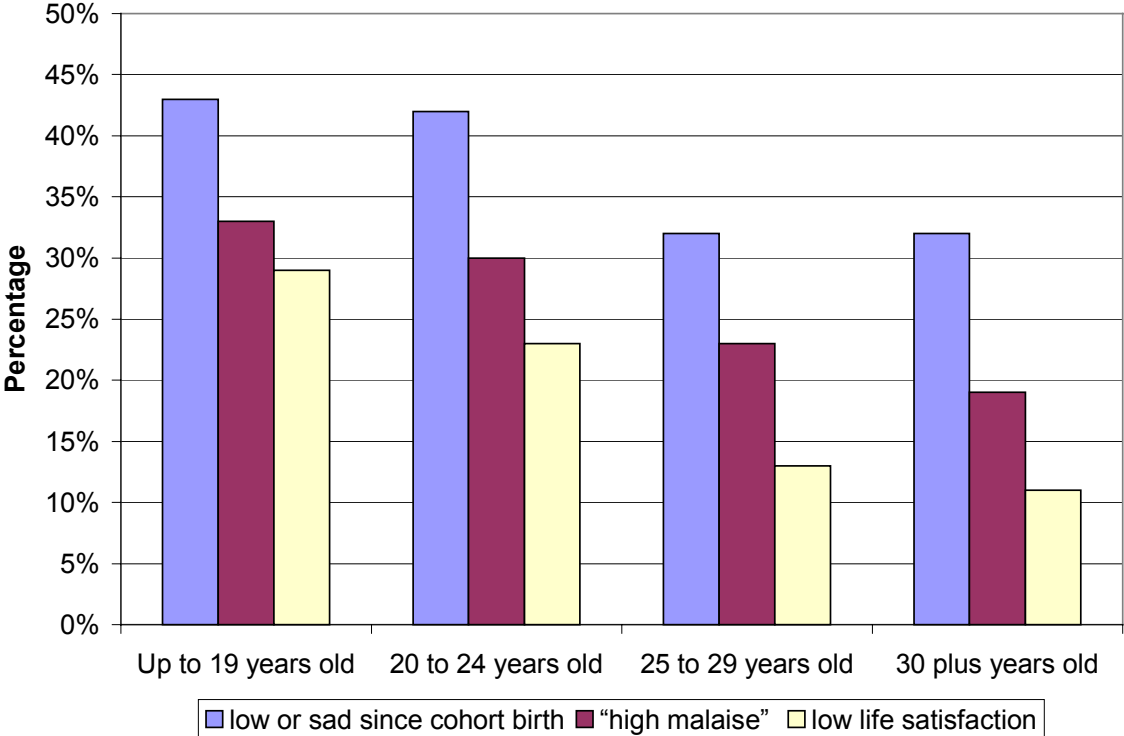
Table 10 presents some glimpses of further information about the pregnancy and its outcome which is also not explicitly included in the modelling which follows. We suggest that the extent to which the mother planned the timing of her birth is relevant to the interpretation of the associations shown in the previous tables, and can be inferred from answers to questions about whether or not the cohort birth was a surprise. 50% of mothers having a first child in the Welsh survey said their pregnancy was a surprise. This proportion is greatest for the youngest, 89% (under 20), though there were still 26% of the oldest group who were surprised. The corresponding figures for the UK are 42% for all mothers, 70% for those under 20 and 24% for those 30 plus. The impression that women having births early are less likely to be planners is supported by looking at the whole sample and relating the surprise status of the cohort baby to age at first birth.

#### *2.5 Health*

Table 10 also show that early mothers were less likely to breastfeed (fewer than half those having their first child at or under 20 did so, compared to 84% of the Welsh mothers aged 30 or more – with a gradual increase over intermediate ages). There is not much difference in the patterns by birth order but differences are found between those living in disadvantaged wards and those in other wards. We also report a positive gradient in the birthweight of first babies as the age of mother increases, at least up to the late twenties. The 120-gram gap between the weight of first children born to the women who entered motherhood under 20 and those who were 25-29 represents 2 standard deviations of this birthweight variable. This maybe linked to smoking during pregnancy. 41% of Welsh mothers report smoking at some point during their pregnancy compared to 35% of UK mothers. The proportion is greatest for teenage Welsh mothers at 69% and least for the oldest Welsh mothers at 21%. This is a similar pattern to those for UK mothers where the figures are 63% and 20% respectively. This report does not attempt to investigate this and other child outcomes. There will be better evidence to do this once the results of the second survey have been gathered in.

Table 11 and figure 7 reports several indicators of the mothers’ well being at the time of the survey. Reports of having felt ‘low or sad’ since the cohort birth, or currently experiencing 3 or more symptoms of malaise each suggest that the younger mothers are more likely to be depressed. This is despite the fact that they were more likely to say they had enough time to spend with the baby (presumably related to low employment rates). This extra time with the baby was not enough on average to compensate for other disadvantages, for the chances of expressing low satisfaction remained highest for the earliest mothers. The last panel of the table distinguishes cases where the cohort child was the first, and those where it is feelings at the time of a subsequent child that are being related to age at motherhood. The high malaise of teenaged mothers is particularly marked if they are observed at a later stage of family building.

**Figure 7: Happiness of Welsh Mothers by Age at First Birth**



These tables have illustrated the interconnection between social disadvantage and early motherhood, the next chapter attempts to unpack the relationships.



### 3. PREDICTORS OF AGE AT MOTHERHOOD

- **Mothers in Wales are significantly younger than UK mothers, before and after controlling for disadvantages in childhood and current area of residence.**
- **Family breakdowns, experiencing care and leaving at the minimum school leaving age are associated with young motherhood in Wales and the UK.**
- **The association of ethnic minority with young motherhood is well defined in England but less so in Wales, given the small numbers.**
- **Living in Wales and Northern Ireland are associated with earlier motherhood, especially allowing for births in the early 20's.**
- **The country effects are moderated when disadvantaged area characteristics are included. Whilst living in a disadvantaged area and date of first birth accounts for younger motherhood in Northern Ireland effect it only partly explains the Welsh phenomenon**

#### *3.1 Model*

The modelling is undertaken in two parts. This chapter considers some of the possible predictors of age at motherhood from the early life experience of the mothers of the cohort members and the country of the UK in which the mother lived when the cohort member was nine months old. Models are presented for the whole UK, including a dummy for living in Wales, and secondly for Wales alone. The former allows for a one-parameter shift for Wales in a general model, the latter allows for all parameters in Wales to be different from the UK as a whole. As the MCS dataset focuses on the cohort child, its current family life and wider environment there is relatively little information on the early life experience of the cohort child's mother. The antecedent variables we can observe consist of the mother's ethnic group, whether her parents separated or divorced before the birth of her own first child, and whether she had experienced any time "in care" as a child. We also treat leaving school at the compulsory school leaving age (16 – or 15 for the few born before 1958) as antecedent, even though in a few cases motherhood may have precipitated school leaving. As we can only draw information from the first sweep of a prospective study, we do not have as full a set of predictors of the timing of motherhood as the birth cohort studies where the potential teenage mother has been followed from birth, as in BCS70. We cannot for example look at early cognitive or behavioural scores, nor family income in childhood. The next

sweep of MCS will fill out the background a little more with retrospective questions on the mothers' parents' occupation, but nevertheless we cannot claim that our set of antecedent variables would be comprehensive even then. We treat the dependent variable as an ordered set of grouped ages, using an ordered probit as the method of estimation. For this report ages are grouped into the 4 brackets used in tables 1 – 11: under 20, 20-24, 25-29 and 30 plus. All of the regressions allow for the weighting and clustering of the sample design.

## *3.2 Results*

### *3.2.1 UK*

Table 12 analyses the chance of age at motherhood being in one of these 4 ordered categories: in terms of country of residence within the UK and antecedent circumstances. Table 13 contains the descriptive statistics for these models. Columns (4) to (8) of Table 12 show the results for the UK as a whole. Column (4) considers only country of residence as a source of difference. Only Wales of the three Celtic countries is significantly different from England, showing significantly younger mothers in Wales, as we would expect from Chapter 2. Column (5) considers the pure antecedent associations. Age at first motherhood is associated negatively with family breakdown in the previous generation, with having been in care, with leaving school at/before the compulsory school leaving age and in the whole UK with all ethnic groups other than White and 'Other'. Column (6) combines the country of residence and antecedent associations. For the UK model, residence in Wales (and even more so Northern Ireland) is associated with early motherhood once other things have been allowed for. Whilst the antecedent effects largely maintain their relative sizes and signs their inclusion increases in the estimated magnitude of the Welsh tendency to earlier motherhood and vastly increases the magnitude and significance of the Northern Irish to enter motherhood earlier. This is largely because controlling for ethnic group changes the reference category to white women in England, who have a higher age of motherhood than the multicultural group who form the reference category in Column (4). Column (7) includes the relative of area disadvantage. This has some effect on the antecedent variables and also moderate the tendency of Welsh and Northern Irish women to enter motherhood earlier, but hardly eliminates the simple "Wales" differential in Column (4). We interpret the moderating impact of area terms on the antecedent 'effects' as reflecting the influence of poor labour market prospects in precipitating early motherhood. The inclusion of an indicator for whether the first birth was in the survey or previously in column (8), picks up the time trend towards later first births. It helps

account for the tendency of Northern Irish women to enter motherhood earlier but has little impact on the Welsh coefficient. Therefore whilst the area disadvantage and the antecedent variables we are able to identify have helped to explain age at motherhood there is still a clear difference between Welsh mothers and their counterparts in the rest of the UK.

### *3.2.2 Wales*

Columns (1) to (3) consider in sample in Wales only. Column (1) is a Welsh only version of column (4). On the whole the relationships within the Welsh sample are similar to those estimated for the UK. Age at first motherhood is associated negatively with family breakdown in the previous generation, with having been in care and with leaving school at/before the compulsory school leaving age. In Wales, where the numbers in ethnic minorities are very small the ethnic differentials are less well determined (and for one small group – Black Caribbean – of opposite signs). Otherwise coefficients for Wales and the UK are comparable. Column (2) includes the measure for area disadvantage. This clearly shows a strong association between earlier motherhood and area disadvantage within Wales. Indeed the inclusion of the first birth in 2000-1 dummy in column (3) slightly strengthens the association between earlier motherhood and area disadvantage within Wales, and confirms that the time trend towards later first births also applies within Wales.

In the next chapter we carry forward these findings on circumstances preceding a first birth to the investigation of how different ages of entry to motherhood are associated with different conditions in the cohort child's first year of life.

#### 4: AGE OF MOTHERHOOD AS A PREDICTOR OF OUTCOMES

- **Younger mothers are less likely to have a partner. If they do have a partner he is less likely to be employed.**
- **Mothers who were young at first birth are less likely to be employed. However Welsh and Scottish mothers have higher employment rates than English mothers.**
- **Mothers who were young at first birth are more likely to be poor as they are more likely to have low equivalised incomes, more likely to be claiming means tested benefits and are more likely to be living below 60% of median income, than those whose first child came later.**
- **Younger mothers in Wales and the UK are poorer mostly because they have less advantaged backgrounds, are less educated, have more children, have fewer employed partners, fewer jobs themselves and are more likely to live in disadvantaged wards.**
- **They are more likely to report low life satisfaction and more likely to report symptoms on the Malaise Inventory (depression)**
- **These patterns of disadvantage are common to young mothers in both Wales and the UK**

##### *4.1 Model*

This chapter presents a second set of modelling which considers age at motherhood as a predictor of outcomes at the time the cohort child was nine months old. It is worth noting that the cohort child may not be the first child in the family and therefore some of these mothers have entered motherhood at some years prior to the interview. The model attempts to unpack some of the possible consequences of entering motherhood at various points in the life course. Country of residence within the UK, antecedent variables and contemporary variables are included as the models are developed. As in Chapter 3, separate models are presented for the UK, and for Wales alone. The UK models include, a dummy for living in Wales, which allows for a single across-the-board shift in the model in Wales compared with the rest of the UK, the separate model for Wales allows for the possibility of all relationships being different in Wales. The antecedent variables are the features of previous history which we are able to observe, as described in Chapter 3. The contemporary variables include qualifications, which may have been gained after compulsory school leaving, location of residence, and longstanding illness. In some cases a fourth model includes details of a partner's qualifications and health, or the level of equivalised net family

income. We do not claim to be able to disentangle how far these terms are themselves further influences on birth timing, reflect otherwise unmeasured influences on birth timing, or reflect other consequences of birth timing, so the estimated coefficients should be interpreted as measure of association rather than estimates of a causal pathway. Though labelled ‘effects’ they are reporting the strength of patterns in the data about whose causal dynamics we remain agnostic.

The estimation method is a probit where the outcome is binary (yes/no), or an ordered probit (as in Chapter 3), where the outcome is a set of ordered categories, as in our analysis of grouped income. Age at first motherhood is unlikely to have a linear impact on many of these outcomes, with a constant ‘response’ per year motherhood is delayed, and so is entered as the four age groups, studied in Chapters 2 and 3. The omitted category is those who entered motherhood up to the age of 19, the ‘teenaged mothers’.

## *4.2 Results*

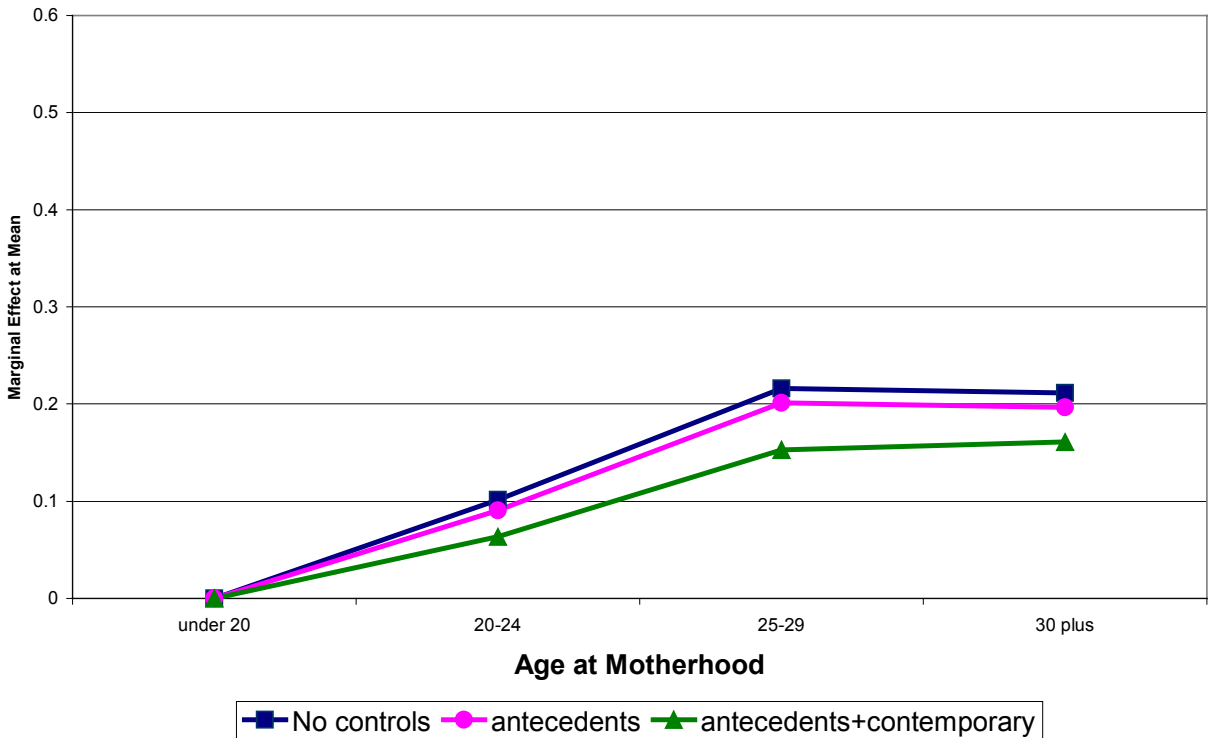
### *4.2.1 Partner Present*

Table 14 and figure 8 consider the presence of a partner at interview, the obverse of lone motherhood. The partner is almost invariably the cohort child’s natural father, though as we have seen he is not necessarily a ‘husband’. Lone motherhood mostly reflects partnerships having broken up, although un-partnered motherhood, where it occurs, is also more likely amongst younger women as shown in the data on lone mothers who had never lived with the cohort child’s father in Table 7 above. The first models of table 14 (columns 1 and 4) considers just the pattern by age at first motherhood also evident in the first row of Table 7. Relative to those who entered motherhood as teenagers, the other groups are increasingly likely to have a partner at the time of the MCS survey, the older they were at first birth.

In model 2 we include the antecedent variables. The inclusion of these antecedent variables reduces the age at motherhood terms in all cases; but the pattern remains, with those who entered motherhood over 30 still most likely to have a partner. There is a stronger association in Wales between disruptions in the women’s family of origin and the current presence of a partner than in the UK model, but a weaker link with not staying on at school. The terms for ethnic group are

insignificant or erratic for Wales while for the UK they significantly reflect the contrasting family structures of minority communities mostly living in England. In model 3 variables describing educational attainments and the current situation are included. The age at first motherhood terms are reduced further in size but the relative pattern of the coefficients on the 3 year age bands and their statistical significance remain. This model shows that partnership is more common among women with recent employment experience and higher qualifications, (especially NVQ 4 and 5, graduate and postgraduate level qualifications), and those living in more advantaged areas. It is also marginally less common, other things being equal, in Wales and Scotland, though Northern Ireland has the highest chance of lone motherhood, all else equal. Within Wales the model is very similar to that fitted to UK though the result is more sensitive in Wales to the level of qualification attained and the number of children already born. The association between lone motherhood and disadvantaged wards is identical.

**Figure 8: Effect of Age at Motherhood on Probability of having a Partner, with controls for other factors**



*4.2.2 Parental Employment*

Table 15 and figure 9 look only at those with partners (and information from them), and considers whether he is employed. A poor labour market outcome in the partner was one of the adverse consequences of early motherhood, working through the ‘marriage market’, suggested by Ermisch

and Pevalin (2003). The model once again sets out the pattern if age at first motherhood is considered alone. There is a strong positive association with delaying motherhood up to age 25 – 29, falling somewhat back for the oldest entrants particularly in Wales. Model 2 includes the antecedent variables; this again reduces all of the coefficients but maintains the overall pattern. Women with less advantaged family backgrounds or who left school at the minimum age are more likely to have partners who are out of work. Again the former terms are slightly more important in Wales. All significant ethnic terms are negative, reflecting the higher rates of unemployment among fathers in the minority ethnic group families. Model 3 introduces the contemporary variables entered in Table 14, and model 4 also includes information on the partner's qualifications and longstanding illness. These also reduce all of the coefficients on the age at first motherhood, but only marginally, maintaining the pattern, significance and similarity between Wales and UK. Delaying motherhood still appears to increase the probability of a resident father being employed, up to the 25 – 29 age band which may indeed be a result of increasing bargaining power on the marriage market. But it is also associated with the set of variables introduced in these models. Recently employed and educated women are more likely to have employed partners, though the association with their own qualifications is weakened when the partner's qualifications are included (Model 4). Model 4 also shows, not surprisingly, that partners with a longstanding illness are less likely to be employed. Table 22, which contains the descriptive statistics for the Chapter 4, shows that for this sample of fathers of young children, there are no more suffering with longstanding illness in Wales than in the UK. When Models 3 and 4 are fitted to couples in Wales only the significance of childhood background terms disappears, but the relatively strong association with the women's qualifications remains. There is a significant negative effect on fathers' employment of living in a disadvantaged ward for the UK analysis, but it is not significant in Wales.

**Figure 9: Effect of Age at Motherhood on Probability of a Partner (if any) being Employed , with controls for other factors**

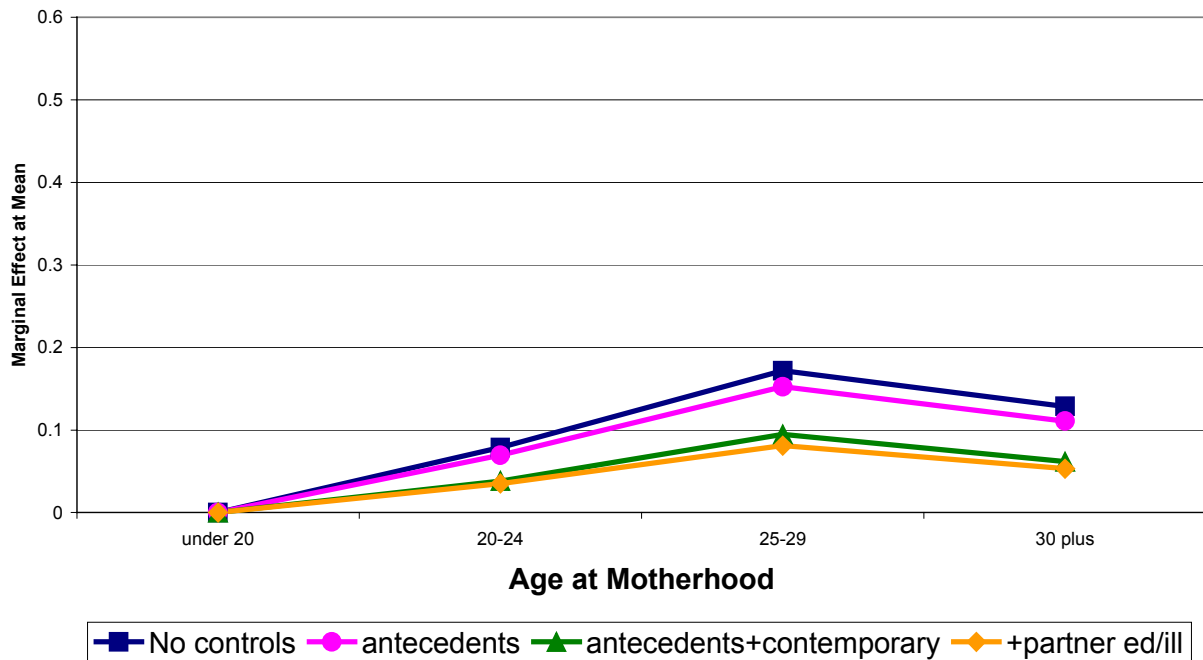
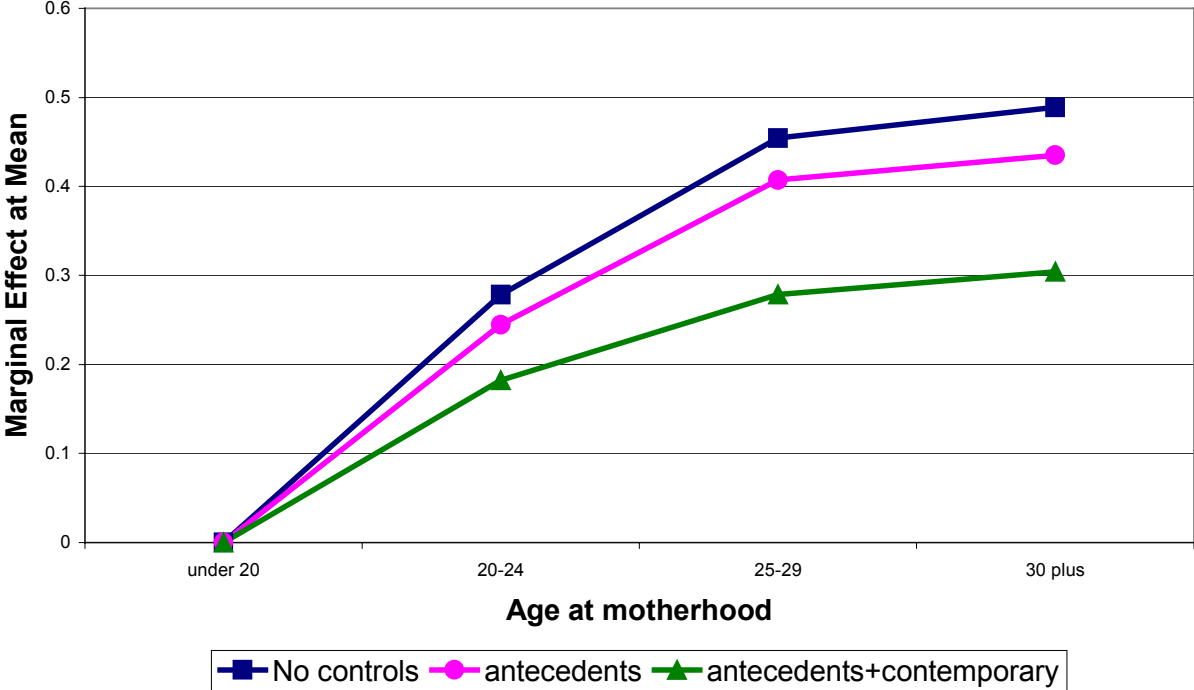


Table 16 and figure 10 consider the employment of the mother at interview. Remember these are all women with a child under one year old. Model 1 shows that the later mothers are more likely to be in the labour market than the younger mothers particularly in Wales. As in the UK data, this increases monotonically with age. Model 2 includes the antecedent variables which reduces all the age terms slightly but maintains the pattern in both Wales and the UK. Women with disrupted families in childhood, or who left school early are less likely to be employed. Apart from ethnic factors these terms are marginally stronger in Wales. In model 3, the direction of the age pattern remains, but with much smaller coefficients, mediated by the battery of current circumstances and highest qualifications. Women with high qualifications and no longstanding illness areas are more likely to be employed. The term registering the number of other children in the family has the expected negative sign, but the presence of a partner has a positive coefficient. Since lone motherhood is age-at-motherhood related, the inclusion of this term helps to moderate the otherwise unexplained age pattern. Allowing for all these factors Wales (and Scotland) have higher mothers' employment rates than England, but not as high as Northern Ireland. The coefficients in the Welsh Model 3 are similar to the UK model with the exception that the those for age at motherhood and employment are stronger, so are the estimated effects of family background, but most of the qualification terms are similar and in either sample living in disadvantaged areas add significantly to the explanation, given the other information included.



Model 3 in table 16 reflects, without completely explaining, the low employment rates of lone

**Figure 10: Effect of Age at Motherhood on Probability of being in employment, with controls for other factors**



mothers even after government policy sought to encourage it through measures such as the National Childcare Strategy, Working Families Tax Credit and New Deal for Lone Parents.

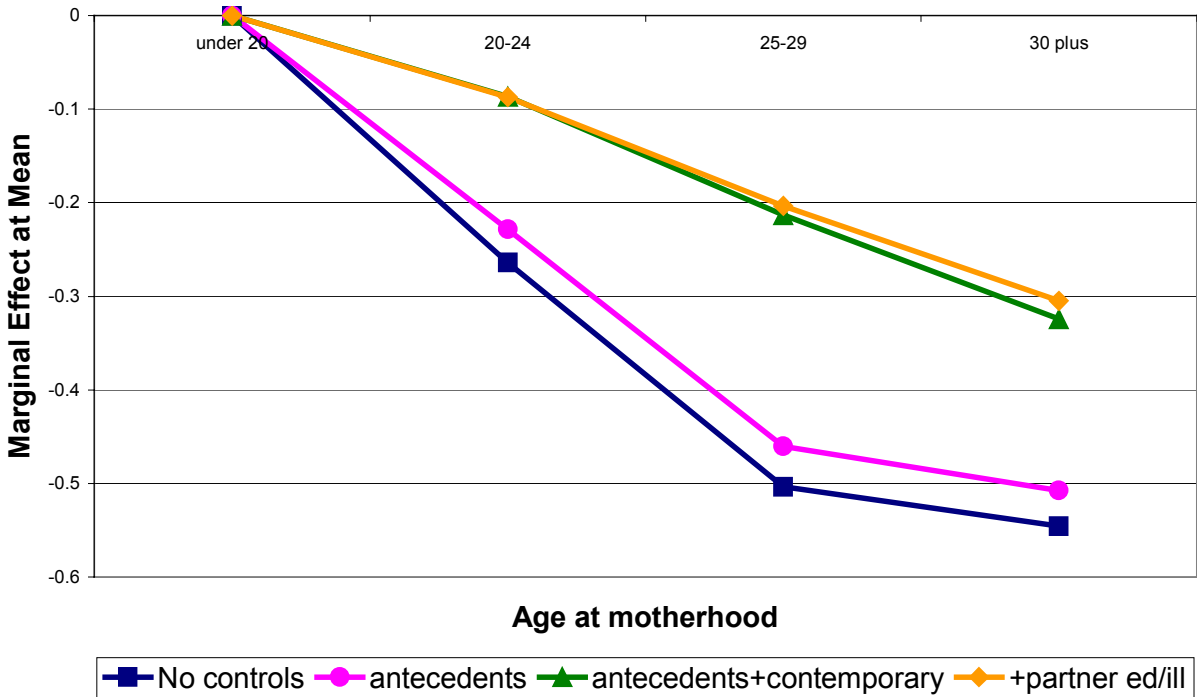
*4.2.3 Household Income*

Table 17 looks at the probability of a family being in one of four net income groups (£0-£150, £150-£300, £300-450 and £450+) equivalised per week. Model 1 shows how this rises with age at motherhood in both the Welsh and UK samples and how the profile is moderated in more or less the same fashion in both samples by the introduction of variables included in models 2, 3 and 4. Family disruption in childhood is among the significant antecedent factors of model 2, again somewhat more strongly related, this time to adult income, in Wales than the whole UK, but these terms lose their significance in Wales in models 3 and 4, as does not having stayed on at school. The terms which are important in these models are the mother’s employment (particularly in Wales), mother’s qualifications, the presence and employment of a partner.

Table 18 and figure 11 consider one binary measure of low income: being on means tested benefits. The four benefits involved are roughly equivalent to those used to rank areas for the stratification of the sample, but include in-work benefits available somewhat higher up than

Family Income Supplement used in the selection of the sample and means that the upper incomes included are also further up the income scale than the 60% line (considered next). It covers to whole sample for which the data are available, 15,819 cases in the UK and 2,459 in Wales, including both lone mothers and those in partnerships. The chances of receiving means-tested benefits fall with rising age at motherhood in Wales as in the UK. Allowing for the antecedent variables reduces the slope while maintaining the order in model 2. Including the variables in models 3 and 4 also roughly halves the original age at motherhood estimates but maintains their significance and order. The high propensity of earlier mothers to be on benefit is partly explained by observed childhood circumstances. In model 3 their lack of qualifications, employment and partners, poor health and poor location are also strongly associated with being on benefit, as is the

**Figure 11: Effect of Age at Motherhood on Probability of claiming means tested benefits, with controls for other factors**

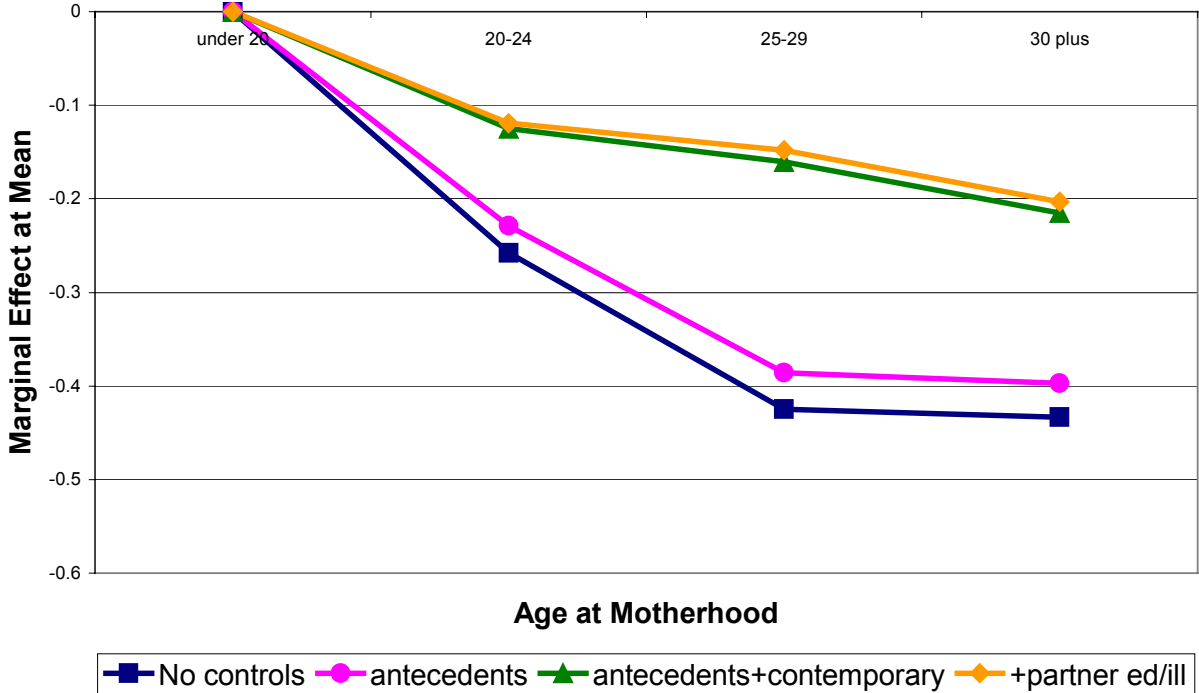


lack of qualifications and poor health of their partner. In the UK model, Wales is significantly worse off even after allowing for these terms. This is also reflected in the higher intercept of the Welsh models. As the latter models also allow the relationship with individual terms to vary we see that the women’s qualification terms are somewhat stronger in Wales than the UK while some of the partner’s qualification terms are weaker.

Table 19 and figure 12 analyse another binary indicator of low income, approximately being below 60% of median income mimicking the threshold used in the official ‘child poverty statistic’

(we compute the weighted sample medium of equivalised income). The sample of 14,723 (UK), 2,357 (Wales) of those with non-missing data is a bit smaller than Table 18. The age profile of being below the 60% threshold follows the similar negative slope from those entering motherhood in their teens to thirties. Again the antecedent variables are also predictive of being below the poverty line they make only a modest contribution to explaining the age-at-motherhood profile in 'poverty'. The more recent variables in Models 3 and 4 reduce the age of motherhood terms by more than half in both UK and Wales samples. The otherwise unexplained association of age at motherhood with this poverty indicator is still significant. Wales is not significantly different (5% level) from other countries of the UK in the pooled model for being below the poverty line (rather

**Figure 12: Effect of Age at Motherhood on Probability of living on 60% median income, with controls for other factors**



than receiving means tested benefits), and residence in a disadvantaged ward makes no significant contribution to the explanation of this variable, all else equal, in contrast to benefits indicator (note that the disadvantage areas were identified on the basis of awards of means-tested benefits to mainly other families 3 years earlier). The 60% indicator is also more sensitive to the mother's and partner's employment status.

The message from these three attempts to measure and explain levels of cash resources is that we can say that early mothers are more likely to be 'poor' than those who deferred to their mid twenties or thirties partly because they have less education, more older children, fewer employed partners, less employment themselves and live in less advantaged areas.

#### *4.2.4 Mother's Well Being*

Table 20 and figure 13 consider one measure of the mother's well being – that of her life satisfaction. The self completion part of the survey asked her to record 'satisfaction with your life so far' on a scale from 1 to 10 where 1 was completely unsatisfied and 10 completely satisfied. For this analysis we have taken as an indicator those who are satisfied with their life as those recording at least 7 on this scale. Delayed motherhood to the age of 30 or more goes along with higher life satisfaction in Wales as in UK.<sup>1</sup>

The age contrasts are however of a smaller order of magnitude than in income, employment or partnership gradient. The "contemporary" terms in Model 3 are sufficient to remove significant age at motherhood terms in Wales, and the introduction of income in Model 4 flattens both profiles further. In addition in general those who experienced family breakdown or lived in care, are consistently less satisfaction with their life currently while those who were employed during pregnancy, those with higher education, those with smaller numbers of children, those without illness and those with a partner are consistently more satisfied with life. Most of these effects also survive, though moderated, when income is included. There is very little difference between models for Wales and the UK.

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<sup>1</sup> In the larger UK sample we have shown that satisfaction does not go on improving as age at motherhood increases into the later 30s and 40s (Hawkes et al 2004)

**Figure 13: Effect of Age at Motherhood on Probability of having high life satisfaction, with controls for other factors**

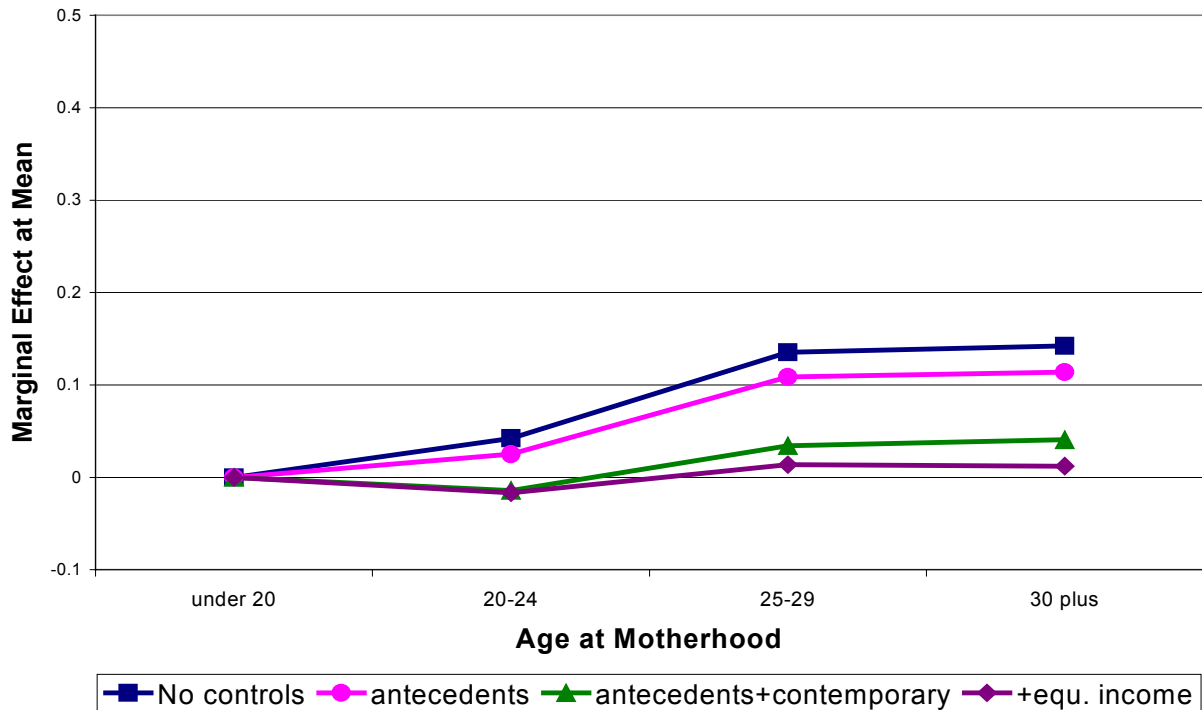
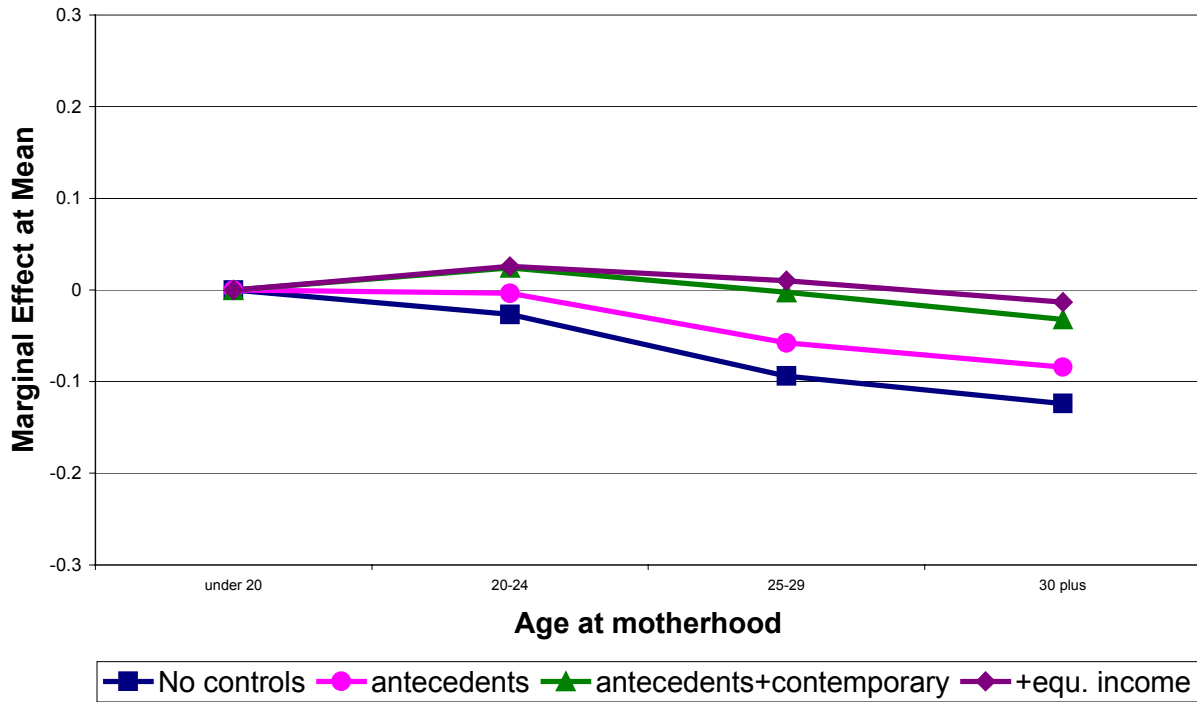


Table 21 and figure 14 consider another measure of the mother’s well being, or mental health, in terms of malaise. The survey used an abbreviated (9 item) version of Rutter’s Malaise Inventory (Shepherd et al 2003). We took as an indicator of depression scoring at least three adverse symptoms out of nine. Once again delaying motherhood appears to reduce malaise but differentials are smaller than the variables considered previously. Including antecedent disadvantages (mostly significantly associated with malaise) accounts for much of this gradient, though leaving malaise significantly less frequent for those entering motherhood aged over 25. Including the current factors without income reduces the age terms further. Their significance disappears in the Wales model and is only marginal in the UK version. In Model 4 malaise is well predicted by low income, low qualifications and in contrast to the life satisfaction model, living in a disadvantaged area. Outside Wales lacking a partner or being Indian or Pakistani are also significant in model 4. Otherwise there are few differences in the models for Malaise in Wales and the UK. Once all this is taken into account there is no significant differences (at the 95% level) by age at first motherhood, the age profile in this case is fully explained. This gives us insight into why this outcome varies across women who start motherhood from their teens to their early thirties, material resources play a clear role in subjective wellbeing. If one wishes to argue

early motherhood has non-pecuniary compensations it would be necessary to say that well-being in the counterfactual condition of delayed motherhood would have been even lower.

**Figure 14: Effect of Age at Motherhood on Probability of reporting Malaise, with controls for other factors**



## 5. DISCUSSION

- **There are more very young mothers in Wales compared to UK. In addition there are very few older mothers in Wales compared to the UK.**
- **Despite entering motherhood earlier Welsh mothers are more likely to be employed compared to UK mothers**
- **There may be fewer older mothers in Wales for four reasons: education, more deprived areas, better work-life balance and shorter travel to work times.**
- **Disadvantages of young motherhood within Wales are similar to those with the UK.**
- **Although there are more young mothers in Wales they are no worse off individually than their UK counterparts.**

This report finds that the “Land of Our Fathers” is also a land of young mothers. Not only are there more very young mothers in Wales compared to the rest of the UK but those who delay entry to motherhood in Wales are observed to be delaying less than those elsewhere in the UK. There are indeed very few older mothers (post 35) on the Millennium Cohort Study in Wales, suggesting that Wales has not yet caught up with the tendency across Europe to delay motherhood into the thirties. Why is motherhood postponed less often in Wales?

Part of the explanation could be connected with women’s education. Mothers in Wales appear to be marginally significantly less educated than those in the UK. Therefore this may also reduce the desire to delay child bearing as entry to employment and an adult life starts after the completion of education. However the differentials in attainment are not large and we have partly allowed for them in the model reported in Table 12 by the term for staying on at school. A related possibility, yet to be investigated is that the most educated Welsh women might not have stayed in Wales, and that there is net out-migration of the sort of career woman who is most likely to avoid or defer motherhood. Those who are more family-inclined may be attracted to stay in, or move into, Wales, where for reasons discussed below, it is easier to combine jobs and children whilst those who are more career motivated leave Wales and become later mothers or remain childless elsewhere in the UK. The data used here cannot confirm this hypothesis, though they do suggest that migration would be worth investigating with other evidence such as the ONS Longitudinal Study, as a possible explanation for the lower proportion of graduates among Millennium Cohort mothers as well as of older mothers in Wales, and perhaps other regions of the UK.

Secondly the results also highlight the link between living in more deprived areas and early motherhood. This pattern holds true across the UK as well as within Wales itself. Could the tendency towards earlier entry to motherhood in Wales just be a reflection of the relative disadvantage of Wales compared to the rest of the UK? Our regressions have included some indicators of material deprivation at local and individual level, which have not entirely mopped up the excess of early motherhood in Wales. It is possible that the omitted variables are other aspects of deprivation. One possibility is that the unexplained Wales differential might reflect poorer job prospects for men as well as women. These could reduce the incentive for young women to avoid early-unpartnered motherhood. If this is an explanation, it is more likely to apply in the 1980 and early 1990s when some of the older women became first-time mothers and when overall unemployment rates were relatively high in Wales. This may still apply now as concerns men with low skills, who are often found in disadvantaged areas. Alongside this are UK-wide (and beyond) shifts in the labour market mean that the economic potential of unskilled men has declined significantly. This has reduced their attractiveness as partners from an economic perspective. This change will have the greatest impact in areas where the proportion of unskilled men is highest i.e. in the disadvantaged areas where unpartnered motherhood is most prevalent. If the development of the Welsh economy, improves opportunities for the least skilled, this should help to discourage very early motherhood and would complement any policies aimed directly at birth control, sex and relationship education.

Finally, the lower age at motherhood in Wales could at least partly be due to a more positive contrast between the principality and the rest of the UK. There may be a better work- life balance in Wales. The higher rate of employment of mothers in Wales suggests it is easier to combine motherhood and employment in that country, which might reduce the pressures to defer motherhood felt elsewhere. There are various possible features of the environment which might facilitate combining motherhood and employment. On some of them Wales did not appear particularly different to the rest of the UK in the Millennium Cohort data: the availability of flexible working arrangements to employed mothers, the use of maternity leave, the use of formal child care (used by around one in six employed mothers of the cohort children). Fathers' involvement in childcare was also not particularly high in Wales - lower than in England but higher than Scotland and Northern Ireland (Dex and Joshi 2004).

However MCS evidence on family relationships suggests some features of the Welsh scene which do make it particularly 'friendly' to working mothers. One is the role of grandparents. 53% of



Welsh mothers see their own mother at least 3 times a week compared to 41% of UK mothers. In addition 36% of Welsh mothers see their own fathers at least 3 times a week compared to 27% of UK mothers. This is in part for child care reasons with 39% of Welsh mothers using grandparents care as their main source of child care whilst they are at work compared to 34% for the UK. It is also possible that the availability of grandparents is a consequence of young parenthood – the older generation is younger and more likely to be alive and active- rather than or as well as being a reason for young parenthood, although older mothers within Wales have more contact with their own parents than corresponding mothers in the rest of the UK. The greater contact with the baby's grandparents in Wales is also echoed in higher rates of contact with friends.

Another factor, which may also be related to small and possibly closer-knot communities in Wales, is travel to work. For those who are employed, journeys to work are much shorter than in the UK as a whole. 45% of Welsh mothers travel less than 15 minutes to work, 77% less than 30 minutes. This includes the journey to the childcare provider. Corresponding figures for the UK are 36% and 63% respectively. So whilst Welsh mothers are equally likely to report having plenty of time with baby (68% compared to 70%) they do have more contact with their own parents and less time journeying to work. If the cost of establishing work-life balance is the reason for delayed motherhood, the lower rate of delay in Wales could be viewed as a positive success.

Whatever the reasons for the timing of motherhood in Wales, the disadvantages of young mothers in terms of partnership, employment, income and well being are clear for those who enter motherhood in or before their early twenties. However these effects are similar within Wales and the rest of the UK. This suggests that whilst there are more young mothers in Wales, their catalogue of poorer outcomes has much in common with other UK families, at an equivalent age of motherhood.

Although we present some evidence that many teenage births are unplanned and more likely than others to be unwanted, we have concentrated on the socio-economic context of teenage pregnancy and its outcomes rather than its 'proximate determinants' in terms of sexual behaviour and fertility control. We have not been able to identify all the factors which lead to early motherhood and its attendant disadvantages for children as well as women but we do find evidence consistent with Teenage Pregnancy Unit recognising need for better alternatives in the labour market or training for young people of both sexes (Social Exclusion Unit 1999). This evidence also suggests that early motherhood (at ages up to 25 not just teenagers) compounds original

disadvantages. Along with appropriate services to help young people avoid unwanted pregnancy, policy to help those who have already become young mothers, with childcare to enable further education or employment would help moderate disadvantage. It should also be sensitive to the informal networks, which form an important part of family life in Wales.

The data used in this report has been purely cross-sectional, based on one survey when the cohort was aged 9 months. Among various possibilities for developing the research are the follow-up surveys of the cohort will bring longitudinal evidence on how the families studied in this report fare over time. The first follow-up, at age 3, will, start to indicate how far the children, in particular, are resilient or disadvantaged by inauspicious beginnings. Data on the three years old survey will become available later in 2005. It will say much more than the first survey about outcomes for children: their cognitive development and growth, their physical health and behavioural adjustment. It will also continue to track the economic and social fortunes of their parents, and also include new information on the social class of mothers' and fathers' families of origin.

## 6. CONCLUSION AND SUMMARY

This report has presented evidence on the socio-economic inequalities within Wales and the UK by age at motherhood. The Millennium Cohort Study, especially the Welsh boost, to its sample has been used to consider age at motherhood as a marker of a number of social and economic disadvantages.

Early motherhood (under 20, and also under 25) is relatively more common in Wales than in the UK. There is also less delay of motherhood beyond 30 in Wales than in the UK and elsewhere in Europe. Whilst teenage motherhood is associated with various antecedent and consequent factors for the woman, it is most importantly associated with disadvantaged consequences for children.

. . Early motherhood in Wales and the UK is concentrated in disadvantaged wards and is associated with lone motherhood, low educational attainment, low family income, low parental employment and living in council accommodation. However compared to their UK counterparts, Welsh mothers are more likely to be employed and more likely to have access to a garden. Younger mothers were most surprised by their pregnancy. Whilst having plenty of time with their baby a larger proportion of young mothers report symptoms of depression.

Factors associated with young motherhood are similar in Wales and the UK. We find young motherhood to be associated with family breakdown, experiencing care and leaving school at the minimum school leaving age. In addition to these individual characteristics, area characteristics are important. Living in Wales and Northern Ireland is associated with young motherhood. These regional characteristics are moderated, but not eliminated for Wales, by including measures of ward disadvantage.

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Younger mothers also have different outcomes than their elder counterparts, these patterns are similar for Wales and the UK as a whole. Younger mothers are less likely to have a partner, if they do have a partner he is less likely to be employed and they are less likely to be employed (although Welsh and Scottish mothers are more likely to be employed than their English counterparts). As a consequence they are poorer. They are more likely to have low equivalised income, more likely to claim means tested benefits and more likely to be living on less than 60% of the median income. Not surprisingly young mothers in Wales and the UK report less life

satisfaction and more Malaise (depression). Overall although there is a greater proportion of young mothers in Wales than the UK, both groups experience similar disadvantages.

Finally we speculate as to the causes of the different age at first birth distributions of Wales and the UK. The larger proportion of young mothers in Wales relative to the UK has been shown here to be partly associated with the greater proportion of disadvantaged areas in Wales and less education of the mothers. Other factors we suggest but do not document are possibly poorer employment prospects of low skilled men, at least until recently, and possibly selective net outward migration of career minded female graduates. We also suggest a more positive interpretation for the lower proportion of older mothers in Wales relative to the UK. This may be due to a better work life balance in Wales, largely due to stronger social networks with more contact with grandparents and friends. These social networks are reinforced by shorter journeys to work, which may reduce the cost of establishing work-life balance.

**APPENDIX**

**Table 1**  
**Millennium Cohort Study Mothers by Current Age and Order of Cohort Birth**  
**Wales and UK**

	<b>Mothers Age at Cohort Baby's Birth</b>					<b>Weighted Base</b>	<b>Sample Size (N)</b>	
	<b>Up to 19 years old (%)</b>	<b>20 to 24 years old (%)</b>	<b>25 to 29 years old (%)</b>	<b>30 plus years old (%)</b>	<b>Total</b>			
<b>Wales</b>								
	First Born	19%	24%	28%	29%	100%	1144	1167
	Later Born	2%	15%	26%	57%	100%	1559	1565
	Total	9%	19%	27%	45%	100%	2703	2732
<b>UK</b>								
	First Born	15%	20%	29%	37%	100%	7785	7627
	Later Born	2%	13%	26%	59%	100%	10407	10634
	Total	7%	16%	28%	49%	100%	18192	18261

Note: For natural mothers only where the natural mother is the main respondent. For the original 18553 families, 50 families are lost as main respondent is not the natural mother of the cohort child. 9 cases lost as not have the age of mother at birth of cohort member, 233 cases lost as not know if the cohort child is the first born who lived with the mother or not

**Table 2**  
**Millennium Cohort Study Mothers**  
**By Current Age and Order of Cohort Birth and Type of Ward, Wales**

	Mothers Age at Cohort Baby's Birth					Total	Weighted Base	Sample Size (N)
	Up to 19 years old (%)	20 to 24 years old (%)	25 to 29 years old (%)	30 plus years old (%)				
<b>Wales</b>								
First Born	19%	24%	28%	29%	100%	1144	1167	
Later Born	2%	15%	26%	57%	100%	1559	1565	
<b>Disadvantaged (50 wards)</b>								
First Born	28%	29%	21%	21%	100%	535	823	
Later Born	4%	24%	31%	41%	100%	703	1081	
<b>Other Wards (23 wards)</b>								
First Born	11%	19%	33%	36%	100%	609	344	
Later Born	1%	8%	22%	69%	100%	857	484	
<b>All Wales</b>								
Total	9%	19%	27%	45%	100%	2703	2732	
<b>UK</b>								
<b>Disadvantaged</b>								
First Born	24%	28%	25%	23%	100%	2839	4510	
Later Born	3%	20%	30%	47%	100%	3889	6482	
<b>Other Wards</b>								
First Born	10%	16%	31%	43%	100%	4250	3117	
Later Born	1%	9%	23%	67%	100%	5681	4152	

Note: For the UK analysis disadvantaged wards include the ethnic wards of England

**Table 3**  
**Millennium Cohort Study Mothers by Age at Motherhood and Order of Cohort Birth**  
**Wales and UK**

	Mothers Age at First Baby's Birth					Total	Weighted Base	Sample Size (N)
	Up to 19 years old (%)	20 to 24 years old (%)	25 to 29 years old (%)	30 plus years old (%)				
<b>Wales</b>								
First Born	19%	24%	28%	29%	100%	1144	1167	
Later Born	24%	29%	32%	16%	100%	1560	1566	
Total	22%	26%	30%	21%	100%	2704	2733	
<b>UK</b>								
First Born	15%	20%	29%	37%	100%	7785	7627	
Later Born	20%	29%	31%	20%	100%	10407	10634	
Total	18%	25%	30%	27%	100%	18192	18261	

**Table 4**  
**Millennium Cohort Study Mothers by Age at Motherhood: Wales and Other UK Regions Compared**

	Mothers Age at First Baby's Birth				
	Up to 19 years old (%)	20 to 24 years old (%)	25 to 29 years old (%)	30 plus years old (%)	Total
Wales	22%	26%	30%	21%	100%
England	17%	25%	30%	28%	100%
England excluding London and SE	18%	27%	30%	25%	100%
London and SE	16%	22%	28%	34%	100%
Scotland	18%	24%	28%	29%	100%
Northern Ireland	16%	29%	31%	24%	100%
GB	18%	25%	30%	33%	100%
GB excluding London and the South East	16%	22%	28%	27%	100%
GB excluding London, South East and Wales	19%	26%	29%	25%	100%
UK	18%	25%	30%	27%	100%
UK excluding London and the South East	19%	26%	30%	25%	100%
UK excluding Wales	17%	25%	30%	28%	100%
UK excluding Scotland	18%	25%	30%	27%	100%
UK excluding London, South East and Wales	18%	26%	30%	26%	100%



**Table 5**  
**Millennium Cohort Study Mothers**  
**By Type of Ward, Age at Motherhood and Order of Cohort Birth**

	Mothers Age at First Baby's Birth					Total	Weighted Base	Sample Size (N)
	Up to 19 years old (%)	20 to 24 years old (%)	25 to 29 years old (%)	30 plus years old (%)				
<b>Wales</b>								
First Born	19%	24%	28%	29%	100%	1144	1167	
Later Born	24%	29%	32%	16%	100%	1560	1566	
<b>Disadvantaged (50 wards)</b>								
First Born	28%	29%	21%	21%	100%	535	823	
Later Born	37%	34%	22%	7%	100%	703	1082	
<b>Other Wards (23 wards)</b>								
First Born	11%	19%	33%	36%	100%	609	344	
Later Born	14%	24%	40%	22%	100%	857	484	
<b>All Wales</b>								
Total	22%	26%	30%	21%	100%	2704	2733	
<b>UK</b>								
<b>Disadvantaged</b>								
First Born	22%	28%	26%	24%	100%	3003	4510	
Later Born	30%	37%	23%	10%	100%	4101	6481	
<b>Other Wards</b>								
First Born	10%	14%	31%	45%	100%	4782	3117	
Later Born	13%	24%	36%	27%	100%	6307	4153	

Note For the UK analysis disadvantaged wards include the ethnic wards of England.

**Table 6**  
**Millennium Cohort Study Mothers**  
**Use of Welsh Language by Age at Motherhood, Wales**

<b>Mothers Age at First Ever Live Birth</b>					
	<b>Wales</b>				
	<b>Early</b>	<b>Middle</b>		<b>Late</b>	<b>All</b>
	<b>Up to 19 years old</b>	<b>20 to 24 years old</b>	<b>25 to 29 years old</b>	<b>30 plus years old</b>	
% speak only Welsh at home	2%	1%	3%	3%	2%
% speak Welsh and English at home	5%	6%	7%	5%	6%
<b>If speaks Welsh at home at all</b>					
% read Welsh	5%	3%	17%	8%	9%
% write and read Welsh	85%	84%	76%	83%	81%
Sample size for speaking Welsh at home	45	62	71	44	222
Maximum unweighted sample size	742	797	729	486	2,754

Note: For natural mothers only where the natural mother is the main respondent and the family is located in Wales. The maximum unweighted sample size is the sample size before casewise deletion for each variable due to missing data. The differences in speaking Welsh at home by age of mother at first birth are statistically significantly at 10%.

**Table 7**  
**Selected Demographic and Educational Characteristics of Millennium Cohort Study by Age at Motherhood in**  
**Wales, and the United Kingdom**

	<b>Mothers Age at First Ever Live Birth</b>					<b>UK All</b>
	<b>Wales</b>					
	<b>Early Up to 19 years old</b>	<b>Middle 20 to 24 years old</b>	<b>Middle 25 to 29 years old</b>	<b>Late 30 plus years old</b>	<b>All</b>	
% of mothers starting in age group	22%	26%	30%	21%	100%	
Average age of mother at interview	23.2	27.1	30.7	34.7	28.9	29.7
% where cohort baby is first born	37%	38%	39%	58%	42%	43%
Average number of children in household	2.1	2.1	1.8	1.5	1.9	1.9
% of lone mothers	41%	22%	7%	4%	18%	14%
% of couples, legally married*	40%	59%	83%	81%	70%	72%
Average age of fathers at interview (years)*	28.8	31.2	33.3	36.0	32.7	33.1
Current age difference between mothers and fathers (yrs.mnths)*	4.3	3.7	2.6	1.4	2.8	2.7
Average current age of lone mothers (years)**	21.3	25.4	30.0	35.2	24.9	
% of lone mothers who never lived with cohort baby's father**	62%	65%	48%	52%	61%	56%
% lone mothers living with parents (cohort child's grandparents)**	25%	24%	24%	11%	24%	21%
% with low qualifications (none + nvq1)	46%	24%	11%	7%	21%	20%
% with tertiary qualifications (nvq 4 and 5)	5%	17%	45%	56%	31%	34%
Maximum unweighted sample size	742	797	729	486	2,754	18494

Note: \* as a percentage of those who report a partner of any type living in the household full or part time, \*\* as a percentage of all lone parents

**Table 8**  
**Earning and Finances of Millennium Cohort Study Mothers by Age at First Birth**  
**Wales and the United Kingdom**

	<b>Mothers Age at First Ever Live Birth</b>					
	<b>Wales</b>					<b>UK All</b>
	<b>Early Up to 19 years old</b>	<b>Middle 20 to 24 years old</b>	<b>Middle 25 to 29 years old</b>	<b>Late 30 plus years old</b>	<b>All</b>	
% in social class – management/professional*	6%	16%	40%	58%	31%	34%
% in social class – semi-routine/routine*	75%	55%	26%	16%	41%	36%
% employed, full time	5%	11%	20%	29%	16%	14%
% employed, part time	16%	36%	47%	45%	37%	37%
% of couples with two earners	25%	48%	68%	72%	57%	53%
% of couples, no earners	28%	11%	4%	3%	9%	7%
% of lone parents who are “workless”	90%	73%	58%	43%	79%	75%
% of all in workless families	54%	24%	7%	4%	21%	17%
% receiving means tested benefits (MTB)	79%	55%	25%	16%	43%	35%
% experiencing financial difficulties	16%	10%	5%	8%	9%	10%
% receiving less than 60% of median income	71%	38%	16%	9%	33%	28%
% on between £0-£150 equivalised incomes **	63%	32%	12%	7%	28%	23%
<b>Analysis by birth order</b>						
% in low/very low income band						
cohort baby first born	92%	72%	31%	22%	50%	41%
cohort baby not first	74%	55%	28%	21%	46%	41%
<b>Analysis by type of area</b>						
% in low/very low income band						
living in disadvantaged areas	83%	71%	40%	30%	63%	58%
living in other areas	76%	49%	24%	18%	35%	30%
Maximum unweighted sample size	742	797	729	486	2,754	18494

Note: \* based on mother’s current or latest occupation \*\* equivalised incomes grouped in four groups £0-£150, £150-£300, £300-£450 & £450+, income adjusted for family composition on McClements equivalence scale

**Table 9**  
**Living Environments of Millennium Cohort Study Mothers by Age at Motherhood in**  
**Wales and the United Kingdom**

	<b>Mothers Age at First Ever Live Birth</b>						<b>UK All</b>
	<b>Wales</b>					<b>All</b>	
	<b>Early Up to 19 years old</b>	<b>Middle 20 to 24 years old</b>	<b>Middle 25 to 29 years old</b>	<b>Late 30 plus years old</b>			
% living in disadvantaged areas	69%	56%	33%	29%	46%	35%	
% living in a flat	12%	7%	3%	2%	6%	13%	
% who are local authority tenants	41%	24%	6%	3%	18%	16%	
% who have damp/condensation in their homes	19%	14%	9%	11%	13%	13%	
% who have no garden	9%	5%	2%	3%	4%	10%	
% who are dissatisfied with the area that they live in	18%	10%	4%	3%	8%	10%	
% indicating that noisy neighbours are very common	11%	9%	3%	2%	6%	6%	
% indicating that rubbish or litter lying around is very common	19%	11%	5%	4%	9%	10%	
% who indicate that there are safe places for children to play	52%	64%	74%	75%	66%	65%	
% indicating that poor public transport is very common	11%	12%	13%	13%	12%	11%	
<b>Analysis by birth order</b>							
% living in disadvantaged areas							
cohort baby first born	69%	57%	36%	34%	47%	35% (39%)*	
cohort baby not first	69%	54%	31%	21%	45%	34% (39%)*	
Maximum unweighted sample size	742	797	729	486	2,754	18494	

Note: \* including ethnic areas in England in parenthesis

**Table 10**  
**Reproductive Health Indicators of Millennium Cohort Study Mothers by Age at Motherhood in**  
**Wales and the United Kingdom**

	<b>Mothers Age at First Ever Live Birth</b>						<b>UK All</b>
	<b>Wales</b>					<b>All</b>	
	<b>Early Up to 19 years old</b>	<b>Middle 20 to 24 years old</b>	<b>Middle 25 to 29 years old</b>	<b>Late 30 plus years old</b>			
As percentage of all births							
% who indicated that their pregnancy was a surprise	73%	57%	33%	24%	46%	42%	
% who felt unhappy about the prospect of having this baby	23%	15%	6%	5%	12%	10%	
% who smoked at sometime during pregnancy	69%	48%	27%	21%	41%	35%	
Average birthweight (kg excluding multiples)	3.33	3.38	3.44	3.35	3.38	3.38	
standard deviation in parenthesis	(0.48)	(0.59)	(0.76)	(0.61)	(0.61)	(0.80)	
% of those who ever tried to breastfeed cohort baby	41%	58%	71%	84%	64%	71%	
Analysis by type of area of breastfeed							
Disadvantaged wards	39%	54%	67%	75%	55%	62%	
Other wards	45%	63%	73%	88%	71%	77%	
As percentage of first live births							
% who indicated that their pregnancy was a surprise	89%	68%	34%	26%	50%	42%	
% who felt unhappy about the prospect of having this baby	28%	16%	3%	3%	11%	9%	
% who smoked at sometime during pregnancy	69%	56%	31%	28%	43%	37%	
Average birthweight (kg excluding multiples)	3.26	3.36	3.38	3.26	3.32	3.32	
standard deviation in parenthesis	(0.53)	(0.57)	(0.55)	(0.62)	(0.56)	(0.75)	
% of those who ever tried to breastfeed cohort baby	41%	62%	73%	85%	68%	76%	
Analysis by type of area of breastfeed							
Disadvantaged wards	39%	57%	70%	81%	60%	68%	
Other wards	46%	69%	74%	88%	75%	82%	
Maximum unweighted sample size	742	797	729	486	2,754	18494	

**Table 11**  
**Indicators of Well-Being of Millennium Cohort Study Mothers by Age at Motherhood in**  
**Wales and the United Kingdom**

	<b>Mothers Age at First Ever Live Birth</b>					<b>UK All</b>
	<b>Wales</b>				<b>All</b>	
	<b>Early Up to 19 years old</b>	<b>Middle 20 to 24 years old</b>	<b>Middle 25 to 29 years old</b>	<b>Late 30 plus years old</b>		
% of mothers reporting feeling low or sad since cohort birth	43%	42%	32%	32%	37%	33%
% in “high malaise” = 3 or more symptoms out of 9	33%	30%	23%	19%	26%	23%
% indicating that they do not spend enough time with baby	7%	13%	25%	28%	18%	16%
% indicating that they spend plenty of time with baby	85%	76%	58%	55%	68%	70%
% indicating low life satisfaction (6 or less out of a scale of 10)	29%	23%	13%	11%	19%	19%
<b>Analysis by birth order</b>						
% in “high malaise” = 3 or more symptoms out of 9						
cohort baby first born	29%	33%	24%	18%	25%	22%
cohort baby not first	37%	28%	22%	21%	27%	25%
Maximum unweighted sample size	742	797	729	486	2,754	18494

**Table 12**  
**Analysis of Age at Motherhood in terms of factors from childhood**

<b>Age at Motherhood</b>		<b>Ordered Probit All Mothers</b>					
in 4 groups of 5 year bands up to 30+		<b>Wales</b>			<b>UK</b>		
<b>Country Factors</b>							
<i>Region: reference category England</i>							
	Wales			-0.181 (3.48)***	-0.226 (5.07)***	-0.176 (4.16)***	-0.174 (4.13)***
	Scotland			0.003 (0.04)	-0.072 (1.34)	-0.048 (0.87)	-0.052 (0.92)
	Northern Ireland			-0.055 (0.95)	-0.239 (4.58)***	-0.167 (3.45)***	-0.152 (3.02)***
<b>Area Factors</b>							
<i>Area Type: reference Advantaged</i>							
	Disadvantaged ward	-0.566 (8.46)***	-0.581 (8.75)***			-0.472 (11.11)***	-0.489 (11.52)***
	Ethnic Ward					-0.472 (7.43)***	-0.478 (7.40)***
<b>Childhood Factors</b>							
Mother's parents ever separated or divorced	-0.312 (7.07)***	-0.288 (6.82)***	-0.318 (7.40)***	-0.388 (16.60)***	-0.394 (16.91)***	-0.374 (15.82)***	-0.388 (16.43)***
Mother ever in care during childhood	-0.608 (4.20)***	-0.573 (4.61)***	-0.523 (4.03)***	-0.767 (7.26)***	-0.775 (7.31)***	-0.725 (6.88)***	-0.699 (6.70)***
Mother left school at minimum age	-0.766 (14.45)***	-0.692 (14.18)***	-0.665 (13.72)***	-0.774 (25.89)***	-0.779 (26.03)***	-0.706 (23.92)***	-0.679 (23.56)***
	<i>Ethnic origin: reference category White</i>						
	Mixed	-0.510 (2.11)**	-0.196 (0.80)	-0.221 (0.88)	-0.303 (2.95)***	-0.325 (3.13)***	-0.224 (2.20)**
	Indian	-0.239 (1.04)	-0.160 (0.56)	-0.133 (0.50)	-0.286 (4.85)***	-0.315 (5.24)***	-0.174 (2.67)***
	Pakistani	0.148 (0.99)	0.211 (1.37)	0.278 (1.83)*	-0.607 (14.05)***	-0.636 (13.98)***	-0.399 (7.83)***
	Bangladeshi	-0.583 (2.44)**	-0.523 (2.12)**	-0.488 (1.98)*	-1.008 (15.94)***	-1.035 (15.96)***	-0.801 (9.07)***
	Black Caribbean	8.185 (52.01)***	7.609 (43.35)***	7.738 (44.25)***	-0.249 (2.34)**	-0.276 (2.56)**	-0.068 (0.68)
	Black African)	-0.253 (5.96)***	0.032 (0.65)	0.142 (3.11)***	-0.190 (2.46)**	-0.219 (2.78)***	0.014 (0.17)
	Other	0.414	0.488	0.466	-0.047	-0.068	0.068



Table 12 Continued

<b>Age at Motherhood</b>	<b>Ordered Probit All Mothers</b>							
in 4 groups of 5 year bands up to 30+	<b>Wales</b>				<b>UK</b>			
	(1.92)*	(2.35)**	(2.30)**	(0.57)	(0.83)	(0.75)	(0.76)	
<b>First Birth</b>								
Cohort member is the first born			0.290 (5.73)***				0.342 (16.70)***	
Observations	2730	2730	2730	18230	18230	18230	18230	18230
F	599.67	1182.73	971.56	4.37	158.59	122.47	130.51	148.72
Prob>F	0.000	0.000	0.000	0.0048	0.000	0.000	0.000	0.000
<b>Cut Points</b>								
Cut 1	-1.318 (25.37)***	-1.567 (24.14)***	-1.454 (23.35)***	-0.945 (34.21)***	-1.557 (51.65)***	-1.593 (45.56)***	-1.736 (43.60)***	-1.600 (40.27)***
Cut 2	-0.501 (9.54)***	-0.712 (12.72)***	-0.595 (10.80)***	-0.194 (6.31)***	-0.708 (23.46)***	-0.742 (21.32)***	-0.862 (22.75)***	-0.719 (19.08)***
Cut 3	0.407 (6.99)***	0.230 (3.57)**	0.359 (5.91)**	0.591 (16.83)***	0.158 (4.57)**	0.126 (3.25)**	0.028 (0.68)	0.188 (4.73)***

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 13**  
**Descriptive Statistics for Chapter 3**

		Wales		UK	
		Weighted Proportions	Unweighted Proportions	Weighted Proportions	Unweighted Proportions
<b><i>Country Factors</i></b>					
	England	-	-	0.83	0.62
	Wales	-	-	0.05	0.15
	Scotland	-	-	0.09	0.13
	Northern Ireland	-	-	0.03	0.10
<b><i>Area Factors</i></b>					
	Advantaged ward	0.54	0.30	0.61	0.40
	Disadvantaged ward	0.46	0.70	0.34	0.48
	Ethnic Ward	-	-	0.05	0.12
<b><i>Childhood Factors</i></b>					
	Mother's parents ever separated or divorced	0.31	0.33	0.28	0.27
	Mother ever in care during childhood	0.01	0.02	0.02	0.02
	Mother left school at minimum age	0.48	0.52	0.46	0.49
	Ethnicity				
	White	0.98	0.97	0.89	0.85
	Mixed	0.00	0.01	0.01	0.01
	Indian	0.00	0.00	0.02	0.02
	Pakistani	0.00	0.00	0.03	0.05
	Bangladeshi	0.01	0.01	0.01	0.02
	Black Caribbean	0.00	0.00	0.01	0.01
	Black African	0.00	0.00	0.01	0.02
	Other	0.01	0.01	0.02	0.02
<b><i>First Birth</i></b>					
	Cohort member is the first born	0.42	0.43	0.42	0.41
<b><i>Age at Motherhood</i></b>					
	up to 19	0.22	0.27	0.18	0.21
	20 to 24	0.27	0.29	0.26	0.29
	25 to 29	0.30	0.26	0.30	0.27
	30 plus	0.21	0.18	0.26	0.23
Observations (unweighted)		2730		18230	

**Table 14**  
**Analysis of the Presence of a Partner at Interview: all natural mothers with valid data**

Partner Currently Present	Probit			UK		
	Wales			Model (1)	Model (2)	Model (3)
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
<i>Reference category: up to 19 years</i>						
20 to 24	0.528 (7.80)***	0.470 (6.59)***	0.349 (4.91)***	0.617 (10.07)***	0.520 (8.37)***	0.404 (6.30)***
25 to 29	1.268 (15.92)***	1.179 (14.40)***	0.940 (9.87)***	1.353 (17.12)***	1.241 (15.69)***	0.974 (11.51)***
30 plus	1.519 (12.71)***	1.387 (11.47)***	1.185 (8.64)***	1.532 (23.51)***	1.433 (20.64)***	1.113 (13.44)***
<b>Childhood Factors</b>						
<i>Ethnic origin: reference category White</i>						
Mixed		-0.487 (1.15)	-0.253 (0.59)		-0.413 (2.33)**	-0.399 (2.24)**
Indian					0.537 (2.65)***	0.678 (2.83)***
Pakistani					0.564 (4.05)***	0.871 (5.56)***
Bangladeshi		0.730 (1.41)	0.789 (1.43)		0.833 (6.01)***	1.094 (7.15)***
Black Caribbean					-1.284 (7.09)***	-1.243 (6.31)***
Black African		-0.097 (1.55)	0.281 (3.10)***		-1.006 (5.85)***	-0.875 (4.55)***
Other		0.305 (0.60)	0.620 (1.22)		0.084 (0.49)	0.261 (1.26)
Mother left school at minimum age		-0.143 (1.95)*	0.091 (1.23)		-0.266 (5.30)***	-0.059 (1.07)
Mother's parents ever separated or divorced		-0.207 (3.75)***	-0.108 (1.77)*		-0.049 (0.94)	-0.032 (0.57)
Mother ever in care during childhood		-0.353	-0.257		-0.195	-0.048

Table 14 Continued

Partner Currently Present	Probit					
	Wales			UK		
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
		(1.77)*	(1.20)		(1.11)	(0.26)
<b>Contemporary Factors</b>						
Mother Employed when pregnant with cohort child			0.366			0.331
			(3.94)***			(5.77)***
<i>Highest Qualification: reference None</i>						
NVQ level 1 or equivalent			0.262			0.064
			(2.79)***			(0.68)
NVQ level 2 or equivalent			0.332			0.261
			(3.46)***			(3.24)***
NVQ level 3 or equivalent			0.551			0.283
			(3.73)***			(2.76)***
NVQ level 4 or equivalent			0.764			0.593
			(5.29)***			(5.90)***
NVQ level 5 or equivalent (nvq5)			1.239			0.757
			(3.15)***			(4.07)***
Overseas and other unclassified			0.110			0.199
			(0.48)			(1.11)
Total number of children in family			0.240			0.112
			(6.62)***			(0.72)
Long standing illness, mother			-0.067			-0.056
			(0.94)			(0.98)
<i>Country: reference category England</i>						
Wales						-0.199
						(3.72)***
Scotland						-0.173
						(2.59)***
Northern Ireland						-0.285
						(4.22)***
<i>Area Type: reference Advantaged</i>						

Table 14 Continued

Partner Currently Present	Wales			UK		
	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
Age at motherhood						
Disadvantaged ward			-0.200 (2.05)**			-0.197 (3.86)***
Ethnic Ward						-0.249 (2.58)**
Constant	0.242 (4.48)***	0.458 (6.18)***	-0.529 (3.67)***	0.056 (1.18)	0.302 (4.65)***	-0.171 (0.94)
Observations	2700	2700	2700	7557	7557	7557
F	109.83	33.47	36.40	196.80	60.36	35.56

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Partner includes partners reported as part time

Similar results are obtained if use those for whom the cohort member is their first birth

Some of the ethnic groups disappear as not in sample for Wales

Based on all natural mothers

**Table 15**  
**Analysis of Partner employed: mothers with partner present at interview**

Employment of Partner	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Reference category: up to 19 years</i>								
20 to 24)	0.560 (5.33)***	0.497 (4.88)***	0.295 (2.78)***	0.308 (2.91)***	0.495 (10.04)***	0.428 (8.19)***	0.315 (5.66)***	0.301 (5.23)***
25 to 29	1.234 (11.65)***	1.108 (9.10)***	0.754 (5.91)***	0.725 (5.24)***	1.070 (21.26)***	0.927 (17.04)***	0.658 (10.88)***	0.609 (9.69)***
30 plus	1.026 (7.31)***	0.874 (6.21)***	0.506 (3.35)***	0.491 (2.96)***	1.063 (21.31)***	0.880 (16.03)***	0.513 (7.95)***	0.455 (6.69)***
<b>Childhood Factors</b>								
<i>Ethnic origin: reference category White</i>								
Mixed		-1.939 (5.60)***	-1.539 (5.37)***	-1.588 (5.07)***		-0.293 (1.64)	-0.053 (0.31)	-0.005 (0.03)
Indian						-0.248 (2.35)**	0.031 (0.24)	0.001 (0.00)
Pakistani		0.112 (0.27)	0.695 (1.28)	0.518 (1.02)		-0.364 (3.45)***	0.265 (2.10)**	0.291 (2.18)**
Bangladeshi		0.417 (0.76)	0.880 (1.54)	0.978 (1.59)		-0.365 (2.39)**	0.237 (1.27)	0.288 (1.47)
Black Caribbean						-0.482 (2.94)***	-0.368 (2.02)**	-0.389 (2.36)**
Black African		-1.277 (17.20)***	-0.409 (3.15)***	-0.254 (1.89)*		-0.640 (3.66)***	-0.311 (2.25)**	-0.389 (2.76)***
Other						-0.243 (2.45)**	0.240 (2.25)**	0.249 (2.19)**
Mother's parents ever separated or divorced		-0.157 (2.07)**	-0.051 (0.63)	-0.028 (0.33)		-0.030 (0.76)	-0.019 (0.46)	-0.023 (0.53)
Mother ever in care during childhood (incare)		-0.386 (1.30)	-0.088 (0.26)	-0.145 (0.42)		-0.463 (3.63)***	-0.235 (1.75)*	-0.265 (1.90)*

Table 15 Continued

Employment of Partner	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
Mother left school at minimum age		-0.233	0.071	0.124		-0.304	-0.090	-0.054
		(2.64)**	(0.76)	(1.22)		(7.87)***	(1.82)*	(1.08)
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			0.680	0.610			0.578	0.544
			(7.82)***	(6.69)***			(12.83)***	(11.75)***
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			0.534	0.576			0.341	0.267
			(3.34)***	(3.35)***			(4.40)***	(3.32)***
NVQ level 2 or equivalent			0.646	0.583			0.492	0.388
			(5.02)***	(4.30)***			(8.84)***	(6.94)***
NVQ level 3 or equivalent			0.745	0.696			0.363	0.229
			(4.88)***	(4.32)***			(5.08)***	(3.21)***
NVQ level 4 or equivalent			0.769	0.606			0.550	0.393
			(5.84)***	(4.65)***			(7.31)***	(4.92)***
NVQ level 5 or equivalent			0.345	0.042			0.346	0.123
			(1.01)	(0.13)			(2.58)**	(0.81)
Overseas and other unclassified			-0.381	-0.396			0.100	0.009
			(1.02)	(1.14)			(0.91)	(0.08)
Total number of children in family			0.014	0.031			-0.006	0.006
			(0.38)	(0.80)			(0.29)	(0.28)
Long standing illness, mother			-0.136	-0.086			-0.195	-0.154
			(2.01)**	(1.29)			(4.77)***	(3.74)***

Table 15 Continued

Employment of Partner	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Country: reference category England</i>								
Wales							-0.120 (2.06)**	-0.128 (2.11)**
Scotland							-0.128 (2.05)**	-0.136 (2.14)**
Northern Ireland							-0.136 (2.01)**	-0.122 (1.76)*
<i>Area Type: reference Advantaged</i>								
Disadvantaged ward			-0.171 (1.63)	-0.101 (0.92)			-0.409 (8.73)***	-0.377 (7.69)***
Ethnic Ward							-0.533 (5.64)***	-0.464 (4.84)***
<i>Partner's Highest Qualification: reference None</i>								
NVQ level 1 or equivalent				0.332 (2.28)**				0.452 (5.67)***
NVQ level 2 or equivalent				0.503 (4.54)***				0.558 (10.02)***
NVQ level 3 or equivalent				0.620 (4.02)***				0.573 (8.60)***
NVQ level 4 or equivalent				0.714 (4.32)***				0.649 (9.69)***
NVQ level 5 or equivalent				1.140 (5.16)***				0.644 (4.52)***
Overseas and other unclassified				0.529 (2.79)***				0.203 (2.12)**



Table 15 Continued

Employment of Partner	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
Long standing illness, partner				-0.737				-0.470
				(8.69)***				(10.91)***
Constant	0.484	0.751	-0.096	-0.380	0.646	0.957	0.518	0.265
	(5.85)***	(7.65)***	(0.46)	(1.65)	(17.48)***	(19.14)***	(5.02)***	(2.41)**
<b>Observations</b>	1875	1875	1875	1875	12784	12784	12784	12784
<b>F</b>	46.77	114.85	67.12	58.83	237.87	58.89	35.92	33.40

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Based on those natural mothers living with partners

**Table 16**  
**Analysis of the probability of the mother being employed at interview: all mothers**

Employment of Mother	Probit					
	Wales			UK		
	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
<b>Age at motherhood</b>						
<i>Reference category: up to 19 years</i>						
20 to 24	0.734 (8.22)***	0.638 (7.20)***	0.467 (4.49)***	0.462 (12.03)***	0.414 (10.68)***	0.258 (6.34)***
25 to 29	1.272 (12.58)***	1.115 (10.60)***	0.727 (6.43)***	0.922 (23.15)***	0.782 (18.06)***	0.437 (10.01)***
30 plus	1.480 (16.46)***	1.260 (14.40)***	0.814 (7.59)***	1.084 (28.87)***	0.901 (21.83)***	0.473 (10.82)***
<b>Childhood Factors</b>						
Mother's parents ever separated or divorced		-0.250 (2.72)***	-0.221 (2.39)**		-0.140 (5.21)***	-0.132 (4.81)***
Mother ever in care during childhood		-0.630 (2.65)***	-0.258 (1.01)		-0.295 (3.02)***	-0.142 (1.45)
<i>Ethnic origin: reference category White</i>						
Mixed		-0.715 (2.79)***	-0.629 (2.25)**		-0.381 (3.10)***	-0.250 (2.00)**
Indian		-0.681 (1.12)	-0.808 (1.38)		-0.249 (2.89)***	-0.115 (1.18)
Pakistani		-1.281 (3.57)***	-1.229 (3.46)***		-1.062 (13.69)***	-0.812 (8.87)***
Bangladeshi		-1.008 (2.00)**	-1.150 (2.07)**		-1.012 (7.91)***	-0.741 (5.31)***
Black Caribbean					0.139 (1.46)	0.422 (4.25)***
Black African					-0.243 (1.73)*	0.147 (1.11)
Other		-0.465 (1.47)	-0.448 (1.45)		-0.519 (5.53)***	-0.342 (3.29)***
Mother left school at minimum age		-0.339 (6.10)***	-0.021 (0.33)		-0.255 (10.45)***	0.047 (1.59)

Table 16 Continued

Employment of Mother	Probit					
	Wales			UK		
	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
<b>Age at motherhood</b>						
<b>Contemporary Factors</b>						
<i>Highest Qualification: reference</i>						
<i>None</i>						
NVQ level 1 or equivalent			0.282 (2.33)**			0.398 (6.87)***
NVQ level 2 or equivalent			0.600 (7.40)***			0.603 (13.33)***
NVQ level 3 or equivalent			0.809 (7.84)***			0.755 (14.53)***
NVQ level 4 or equivalent			0.914 (9.59)***			0.940 (18.54)***
NVQ level 5 or equivalent			0.983 (3.91)***			1.012 (13.30)***
Overseas and other unclassified			0.182 (0.80)			0.184 (2.11)**
Total number of children in family			-0.151 (4.78)***			-0.162 (11.95)***
Long standing illness, mother			-0.362 (5.40)***			-0.170 (5.32)***
Partner present			0.649 (9.01)***			0.550 (15.30)***
<i>Country: reference category</i>						
<i>England</i>						
Wales						0.097 (2.53)**
Scotland						0.071 (1.95)*
Northern Ireland						0.215 (5.82)***
<i>Area Type: reference Advantaged</i>						
Disadvantaged ward			-0.062 (0.95)			-0.036 (1.04)
Ethnic Ward						-0.260 (3.81)***
Constant	-0.824	-0.445	-1.133	-0.649	-0.337	-1.034

Table 16 Continued

Employment of Mother	Probit					
	Wales			UK		
	Model (1)	Model (2)	Model (3)	Model (1)	Model (2)	Model (3)
Age at motherhood	(11.11)***	(5.29)***	(6.69)***	(19.81)***	(8.25)***	(14.26)***
Observations	2709	2709	2709	17816	17816	17816
F	123.54	32.53	27.92	294.50	110.12	91.04

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1% Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Including partner's nvq and long-standing illness does not affect the results significantly for the mother's employment decisions

Based on all natural mothers

**Table 17**  
**Probability of higher Net Family Income Group: all mothers with valid data**

Family Adjusted Income	Ordered Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Reference category: up to 19 years</i>								
20 to 24	0.788 (11.08)***	0.674 (9.45)***	0.303 (4.09)***	0.317 (4.29)***	0.656 (17.80)***	0.547 (14.91)***	0.205 (5.30)***	0.215 (5.59)***
25 to 29	1.673 (17.82)***	1.491 (15.65)***	0.728 (8.29)***	0.709 (8.21)***	1.490 (40.06)***	1.280 (32.20)***	0.641 (15.85)***	0.602 (14.76)***
30 plus	2.043 (26.26)***	1.813 (22.63)***	1.032 (12.60)***	0.957 (10.87)***	1.991 (44.31)***	1.739 (42.08)***	1.027 (23.39)***	0.955 (22.15)***
<b>Childhood Factors</b>								
Mother's parents ever separated or divorced		-0.161 (2.92)***	-0.075 (1.30)	-0.070 (1.16)		-0.098 (4.14)***	-0.067 (2.62)***	-0.060 (2.36)**
Mother ever in care during childhood		-0.560 (3.02)***	-0.104 (0.49)	-0.134 (0.62)		-0.253 (2.56)**	-0.030 (0.31)	-0.044 (0.44)
<i>Ethnic origin: reference category White</i>								
Mixed		-1.511 (4.58)***	-0.581 (1.62)	-0.688 (2.00)**		-0.177 (1.10)	0.099 (0.67)	0.064 (0.43)
Indian		0.996 (1.56)	0.935 (1.89)*	0.556 (1.10)		-0.211 (2.02)**	-0.185 (1.58)	-0.257 (2.31)**
Pakistani		-0.452 (1.02)	-0.740 (1.06)	-0.787 (1.07)		-0.770 (7.06)***	-0.525 (4.77)***	-0.557 (5.07)***
Bangladeshi		-1.252 (4.70)***	-1.590 (4.74)***	-1.322 (3.81)***		-0.759 (4.29)***	-0.558 (3.04)***	-0.562 (3.23)***
Black Caribbean		7.671 (46.80)***	7.476 (45.34)***	7.962 (46.17)***		-0.536 (3.92)***	0.074 (0.61)	0.091 (0.74)
Black African		-1.309 (27.29)***	-0.682 (8.97)***	-0.556 (6.47)***		-0.876 (4.53)***	-0.317 (2.29)**	-0.416 (3.26)***
Other		-0.532 (2.55)**	-0.757 (4.16)***	-1.007 (5.18)***		-0.428 (4.35)***	-0.266 (2.09)**	-0.312 (2.41)**
Mother left school at		-0.426	-0.024	0.013		-0.526	-0.187	-0.137

Table 17 Continued

Family Adjusted Income	Ordered Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
minimum age								
		(10.71)***	(0.40)	(0.22)		(18.37)***	(5.79)***	(4.37)***
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			0.546	0.567			0.280	0.294
			(8.65)***	(9.07)***			(7.95)***	(8.26)***
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			-0.199	-0.178			0.035	0.026
			(2.21)**	(1.97)*			(0.60)	(0.46)
NVQ level 2 or equivalent			0.150	0.123			0.278	0.251
			(1.77)*	(1.45)			(5.53)***	(5.23)***
NVQ level 3 or equivalent			0.231	0.194			0.388	0.331
			(2.22)**	(1.97)*			(7.37)***	(6.63)***
NVQ level 4 or equivalent			0.828	0.660			0.709	0.567
			(6.88)***	(5.91)***			(14.23)***	(11.73)***
NVQ level 5 or equivalent			0.596	0.169			1.182	0.869
			(3.56)***	(0.93)			(14.89)***	(10.48)***
Overseas and other unclassified			0.380	0.434			0.025	-0.018
			(2.68)***	(2.85)***			(0.28)	(0.21)
Total number of children in family			-0.092	-0.108			-0.103	-0.112
			(3.10)***	(3.76)***			(7.99)***	(8.53)***
Long standing illness, mother			-0.163	-0.152			-0.096	-0.084
			(3.07)***	(2.67)***			(3.50)***	(3.09)***
Partner present (partner)			0.352	0.303			0.359	0.214
			(2.83)***	(2.23)**			(6.03)***	(3.24)***
Partner employed			1.478	1.407			1.288	1.228
			(11.82)***	(11.11)***			(26.47)***	(25.17)***
<i>Country: reference category England</i>								
Wales							-0.132	-0.150
							(3.43)***	(4.06)***
Scotland							-0.095	-0.112

Table 17 Continued

Family Adjusted Income	Ordered Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
							(1.79)*	(2.21)**
Northern Ireland							-0.235	-0.215
							(4.67)***	(4.69)***
<i>Area Type: reference</i>								
<i>Advantaged</i>								
Disadvantaged ward			-0.119	-0.069			-0.276	-0.241
			(2.24)**	(1.37)			(7.84)***	(7.20)***
Ethnic Ward							-0.295	-0.241
							(2.57)**	(2.15)**
<i>Partner's Highest</i>								
<i>Qualification: reference</i>								
<i>None</i>								
NVQ level 1 or equivalent				-0.208				-0.001
				(1.83)*				(0.01)
NVQ level 2 or equivalent				0.029				0.155
				(0.33)				(3.47)***
NVQ level 3 or equivalent				0.226				0.259
				(2.28)**				(5.86)***
NVQ level 4 or equivalent				0.503				0.567
				(4.85)***				(11.61)***
NVQ level 5 or equivalent				0.916				0.921
				(5.15)***				(12.86)***
Overseas and other unclassified				-0.039				0.188
				(0.24)				(2.28)**
Long standing illness, partner				-0.059				-0.104
				(0.98)				(3.43)***
<b>Observations</b>	2363	2363	2363	2363	14723	14723	14723	14723
<b>F</b>	235.11	624.45	405.42	258.87	823.79	206.36	148.95	132.71

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Equalised Incomes grouped in four groups £0-£150, £150-£300, £300-£450 & £450+; Income adjusted for family composition on McClements equivalence scale

Based on all natural mothers

**Table 18**  
**Families Claiming Means tested benefits<sup>+</sup> at Interview (PROBIT): all mothers with valid data**

Claming benefits	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Reference category: up to 19 years</i>								
20 to 24	-0.715 (8.70)***	-0.611 (7.62)***	-0.221 (2.08)**	-0.222 (2.16)**	-0.628 (15.55)***	-0.506 (12.28)***	-0.175 (3.96)***	-0.180 (4.10)***
25 to 29	-1.518 (12.25)***	-1.351 (10.57)***	-0.555 (4.03)***	-0.530 (3.80)***	-1.502 (33.59)***	-1.280 (27.21)***	-0.675 (12.82)***	-0.637 (11.96)***
30 plus	-1.896 (14.70)***	-1.680 (13.96)***	-0.896 (6.60)***	-0.839 (6.39)***	-1.851 (35.27)***	-1.588 (30.21)***	-0.907 (15.36)***	-0.839 (13.96)***
		0.182	0.097	0.093		0.156	0.127	0.125
<b>Childhood Factors</b>								
Mother's parents ever separated or divorced		(2.68)***	(1.23)	(1.21)		(5.29)***	(4.12)***	(3.96)***
		0.646	0.317	0.337		0.645	0.534	0.543
Mother ever in care during childhood (incare)		(2.65)***	(0.86)	(0.86)		(5.37)***	(3.93)***	(3.96)***
<i>Ethnic origin: reference category White</i>								
Mixed		1.806 (5.57)***	0.997 (4.43)***	1.132 (6.76)***		0.222 (1.68)*	-0.110 (0.84)	-0.094 (0.70)
Indian						-0.060 (0.53)	-0.160 (1.28)	-0.100 (0.79)
Pakistani		-1.343 (3.16)***	-1.468 (4.48)***	-1.433 (3.93)***		0.543 (5.20)***	0.272 (2.49)**	0.321 (2.97)***
Bangladeshi		1.602 (2.66)***	1.826 (3.09)***	1.649 (3.08)***		0.296 (2.19)**	0.087 (0.75)	0.121 (0.98)
Black Caribbean						0.551 (4.07)***	-0.091 (0.75)	-0.094 (0.78)
Black African		0.871 (12.89)***	-0.003 (0.03)	-0.056 (0.49)		0.758 (4.56)***	0.076 (0.47)	0.158 (0.95)
Other)		-0.991 (1.79)*	-1.378 (3.75)***	-1.234 (3.56)***		0.039 (0.38)	-0.282 (2.64)***	-0.240 (2.25)**
Mother left school at		0.347	-0.016	-0.035		0.471	0.199	0.161



Table 18 Continued

Claming benefits	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
minimum age		(4.58)***	(0.22)	(0.48)		(15.92)***	(5.85)***	(4.60)***
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			-0.282	-0.286			-0.288	-0.292
			(2.67)***	(2.63)**			(8.57)***	(8.50)***
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			0.123	0.112			0.082	0.081
			(0.71)	(0.65)			(1.29)	(1.27)
NVQ level 2 or equivalent			-0.168	-0.157			-0.192	-0.171
			(1.48)	(1.35)			(3.45)***	(3.06)***
NVQ level 3 or equivalent			-0.378	-0.360			-0.219	-0.167
			(3.09)***	(2.99)***			(3.66)***	(2.71)***
NVQ level 4 or equivalent			-0.681	-0.566			-0.431	-0.319
			(4.60)***	(3.93)***			(7.14)***	(5.11)***
NVQ level 5 or equivalent			-0.528	-0.214			-0.799	-0.537
			(2.05)**	(0.74)			(7.34)***	(4.57)***
Overseas and other unclassified )			-0.194	-0.216			-0.100	-0.073
			(0.68)	(0.78)			(0.99)	(0.72)
Total number of children in family			0.069	0.082			0.025	0.029
			(1.77)*	(1.96)*			(1.69)*	(1.96)*
Long standing illness, mother			0.107	0.095			0.110	0.093
			(1.24)	(1.06)			(2.61)***	(2.17)**
Partner present			-0.421	-0.482			-0.362	-0.271
			(3.11)***	(3.13)***			(5.77)***	(3.79)***
Partner employed			-1.302	-1.269			-1.224	-1.172
			(9.62)***	(9.10)***			(24.59)***	(22.67)***
<i>Country: reference category England</i>								
Wales							0.171	0.187
							(3.40)***	(3.64)***
Scotland							0.061	0.077

Table 18 Continued

Claming benefits	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
							(1.14)	(1.43)
Northern Ireland							0.190	0.180
							(3.47)***	(3.42)***
<i>Area Type: reference</i> <i>Advantaged</i>								
Disadvantaged ward			0.230	0.200			0.304	0.278
			(3.00)***	(2.53)**			(6.26)***	(5.84)***
Ethnic Ward							0.323	0.285
							(3.57)***	(3.17)***
<i>Partner's Highest</i> <i>Qualification: reference</i> <i>None</i>								
NVQ level 1 or equivalent				0.266				0.134
				(1.74)*				(1.97)**
NVQ level 2 or equivalent				0.125				-0.120
				(1.15)				(2.27)**
NVQ level 3 or equivalent				0.057				-0.192
				(0.39)				(3.52)***
NVQ level 4 or equivalent				-0.266				-0.438
				(2.11)**				(7.41)***
NVQ level 5 or equivalent				-0.498				-0.810
				(2.16)**				(7.95)***
Overseas and other unclassified				0.108				-0.175
				(0.54)				(1.88)*
Long standing illness, partner				0.035				0.169
				(0.31)				(4.32)***
Constant	0.881	0.522	1.783	1.763	0.673	0.188	1.391	1.363
	(11.12)***	(6.43)***	(9.33)***	(9.16)***	(18.80)***	(4.33)***	(14.53)***	(14.31)***
<b>Observations</b>	2459	2459	2459	2459	15819	15819	15819	15819
<b>F</b>	94.88	96.03	52.98	40.53	588.41	156.84	130.99	117.54

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

+Jobseekers Allowance, Income Support, Working Families Tax Credit or Disabled Persons Tax Credit

Based on all natural mothers

**Table 19**  
**Families living on less than 60% of median income ( PROBIT): all mothers with valid data**

Less than 60% of median income	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<i>Reference category: up to 19 years</i>								
20 to 24	-0.871 (10.69)***	-0.766 (9.57)***	-0.425 (4.52)***	-0.414 (4.49)***	-0.665 (16.69)***	-0.577 (14.72)***	-0.240 (5.34)***	-0.242 (5.42)***
25 to 29	-1.599 (14.50)***	-1.422 (11.91)***	-0.551 (4.39)***	-0.517 (3.86)***	-1.475 (30.37)***	-1.286 (25.16)***	-0.567 (9.54)***	-0.535 (9.13)***
30 plus	-1.968 (18.72)***	-1.727 (15.85)***	-0.820 (6.83)***	-0.787 (6.70)***	-1.860 (36.98)***	-1.617 (31.71)***	-0.795 (12.23)***	-0.740 (11.54)***
<b>Childhood Factors</b>								
Mother's parents ever separated or divorced		0.273 (3.50)***	0.204 (2.08)**	0.198 (2.06)**		0.112 (3.70)***	0.089 (2.55)**	0.086 (2.41)**
Mother ever in care during childhood		0.371 (1.66)	-0.271 (1.16)	-0.266 (1.10)		0.326 (3.07)***	0.072 (0.54)	0.079 (0.57)
<i>Ethnic origin: reference category White</i>								
Mixed		1.652 (4.05)***	0.703 (1.26)	0.767 (1.21)		0.428 (3.20)***	0.099 (0.74)	0.098 (0.73)
Indian						0.357 (2.85)***	0.349 (2.16)**	0.396 (2.40)**
Pakistani		0.643 (1.31)	1.069 (1.52)	0.979 (1.26)		0.982 (9.39)***	0.724 (6.09)***	0.733 (6.19)***
Bangladeshi		0.809 (2.02)**	1.068 (2.24)**	1.050 (2.24)**		0.972 (5.96)***	0.722 (4.16)***	0.717 (4.41)***
Black Caribbean						0.518 (3.36)***	-0.136 (0.88)	-0.147 (0.95)
Black African		1.191 (19.08)***	0.265 (2.26)**	0.130 (0.99)		1.008 (6.46)***	0.330 (2.65)***	0.380 (3.12)***
Other		0.309 (0.75)	0.429 (0.96)	0.536 (1.22)		0.438 (3.78)***	0.212 (1.45)	0.246 (1.64)
Mother left school at		0.384	-0.053	-0.055		0.489	0.137	0.107

Table 19 Continued

Less than 60% of median income	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
minimum age								
		(5.98)***	(0.47)	(0.49)		(16.06)***	(3.30)***	(2.56)**
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			-0.707	-0.723			-0.491	-0.490
			(10.33)***	(10.32)***			(13.32)***	(13.17)***
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			0.006	-0.008			0.045	0.058
			(0.04)	(0.06)			(0.68)	(0.89)
NVQ level 2 or equivalent			-0.300	-0.283			-0.197	-0.167
			(1.97)*	(1.92)*			(3.34)***	(2.87)***
NVQ level 3 or equivalent			-0.383	-0.359			-0.298	-0.247
			(2.03)**	(1.90)*			(4.69)***	(3.98)***
NVQ level 4 or equivalent			-0.888	-0.818			-0.516	-0.419
			(5.53)***	(4.69)***			(7.98)***	(6.41)***
NVQ level 5 or equivalent			-0.760	-0.715			-0.853	-0.615
			(2.88)***	(2.65)***			(5.47)***	(3.77)***
Overseas and other unclassified			-0.365	-0.400			0.094	0.115
			(1.30)	(1.37)			(0.99)	(1.20)
Total number of children in family			0.135	0.151			0.155	0.159
			(3.20)***	(3.55)***			(8.14)***	(8.34)***
Long standing illness, mother			0.024	-0.000			0.064	0.052
			(0.32)	(0.00)			(1.66)*	(1.33)
Partner present			-0.247	-0.231			-0.201	-0.070
			(1.73)*	(1.36)			(3.28)***	(0.91)
Partner employed			-1.420	-1.488			-1.427	-1.369
			(9.95)***	(10.35)***			(29.14)***	(26.69)***
<i>Country: reference category England</i>								
Wales							0.081	0.092
							(1.55)	(1.73)*

Table 19 Continued

Less than 60% of median income	Probit							
	Wales				UK			
Age at motherhood	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
Scotland							0.156	0.171
							(2.94)***	(3.24)***
Northern Ireland							0.291	0.284
							(4.83)***	(4.82)***
<i>Area Type: reference</i>								
<i>Advantaged</i>								
Disadvantaged ward			0.074	0.059			0.225	0.200
			(0.99)	(0.79)			(4.63)***	(4.13)***
Ethnic Ward							0.281	0.233
							(2.34)**	(1.97)**
<i>Partner's Highest</i>								
<i>Qualification: reference</i>								
<i>None</i>								
NVQ level 1 or equivalent				0.407				0.020
				(2.51)**				(0.22)
NVQ level 2 or equivalent				0.160				-0.204
				(1.38)				(3.81)***
NVQ level 3 or equivalent				0.073				-0.288
				(0.48)				(4.27)***
NVQ level 4 or equivalent				-0.315				-0.420
				(1.68)*				(6.94)***
NVQ level 5 or equivalent				0.245				-0.806
				(0.78)				(6.02)***
Overseas and other unclassified				0.275				-0.081
				(1.38)				(0.80)
Long standing illness, partner				-0.165				0.107
				(1.66)				(2.22)**
Constant	0.582	0.149	1.541	1.513	0.377	-0.120	0.911	0.891
	(9.04)***	(2.19)**	(7.30)***	(7.06)***	(10.48)***	(2.76)***	(8.65)***	(8.58)***
<b>Observations</b>	2357	2357	2357	2357	14723	14723	14723	14723
<b>F</b>	160.21	202.47	112.31	175.48	534.60	149.09	109.92	90.70

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Based on all natural mothers

**Table 20**  
**Analysis of Mother's Satisfaction with her Life So Far**

<b>Mother's Life Satisfaction: rated 7 or more on a scale of 1-10</b>	<b>Probit</b>							
	<b>Wales</b>				<b>UK</b>			
	<b>Model (1)</b>	<b>Model (2)</b>	<b>Model (3)</b>	<b>Model (4)</b>	<b>Model (1)</b>	<b>Model (2)</b>	<b>Model (3)</b>	<b>Model (4)</b>
<b>Age at motherhood</b>								
<i>Reference category: up to 19 years</i>								
20 to 24	0.166 (2.41)**	0.098 (1.41)	-0.056 (0.78)	-0.067 (0.89)	0.167 (4.75)***	0.118 (3.33)***	-0.006 (0.16)	-0.028 (0.74)
25 to 29	0.574 (8.03)***	0.456 (6.07)***	0.140 (1.79)*	0.056 (0.67)	0.556 (15.02)***	0.460 (11.76)***	0.203 (4.78)***	0.130 (2.96)***
30 plus	0.649 (6.70)***	0.505 (5.48)***	0.169 (1.64)	0.049 (0.45)	0.592 (14.89)***	0.469 (11.09)***	0.165 (3.43)***	0.055 (1.09)
<b>Childhood Factors</b>								
Mother's parents ever separated or divorced		-0.191 (3.06)***	-0.142 (2.20)**	-0.136 (2.16)**		-0.126 (3.93)***	-0.102 (3.03)***	-0.096 (2.83)***
Mother ever in care during childhood		-0.901 (6.07)***	-0.714 (4.40)***	-0.718 (4.49)***		-0.403 (3.83)***	-0.342 (3.19)***	-0.334 (3.08)***
<i>Ethnic origin: reference category White</i>								
Mixed		-0.486 (1.32)	-0.393 (1.13)	-0.326 (0.94)		-0.172 (1.25)	-0.119 (0.86)	-0.107 (0.79)
Indian		0.243 (0.50)	0.223 (0.46)	0.055 (0.11)		-0.437 (5.25)***	-0.460 (5.26)***	-0.442 (5.06)***
Pakistani		-0.184 (0.33)	-0.064 (0.12)	-0.022 (0.04)		-0.190 (2.35)**	-0.145 (1.53)	-0.097 (1.00)
Bangladeshi		0.281 (0.76)	0.405 (1.07)	0.501 (1.31)		-0.131 (0.79)	-0.122 (0.63)	-0.072 (0.36)
Black Caribbean						-0.336 (2.78)***	-0.141 (1.14)	-0.129 (1.04)
Black African		-0.418 (8.29)***	0.019 (0.25)	0.042 (0.50)		-0.406 (3.32)***	-0.203 (1.91)*	-0.170 (1.63)

Table 20 Continued

Mother's Life Satisfaction: rated 7 or more on a scale of 1-10	Probit							
	Wales				UK			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<b>Age at motherhood</b>								
Other		-1.029	-1.039	-0.972		-0.251	-0.211	-0.196
		(2.60)**	(2.87)***	(2.69)***		(2.10)**	(1.72)*	(1.63)
Mother left school at minimum age		-0.157	-0.030	-0.026		-0.153	-0.009	0.006
		(2.98)***	(0.50)	(0.43)		(5.22)***	(0.25)	(0.17)
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			0.156	0.099			0.111	0.073
			(2.23)**	(1.54)			(3.84)***	(2.55)**
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			0.017	0.025			-0.022	-0.024
			(0.16)	(0.23)			(0.42)	(0.46)
NVQ level 2 or equivalent			0.279	0.269			0.085	0.058
			(2.70)***	(2.68)***			(1.68)*	(1.13)
NVQ level 3 or equivalent			0.152	0.121			0.093	0.056
			(1.27)	(1.05)			(1.57)	(0.92)
NVQ level 4 or equivalent			0.281	0.178			0.247	0.173
			(2.00)**	(1.32)			(4.32)***	(2.93)***
NVQ level 5 or equivalent			-0.280	-0.356			0.298	0.188
			(0.80)	(1.05)			(3.00)***	(1.84)*
Overseas and other unclassified )			0.141	0.142			0.059	0.063
			(0.66)	(0.68)			(0.58)	(0.61)
Total number of children in family			-0.077	-0.068			-0.050	-0.041
			(2.46)**	(2.13)**			(3.50)***	(2.95)***
Long standing illness, mother)			-0.259	-0.236			-0.361	-0.348
			(3.13)***	(2.82)***			(12.23)***	(11.88)***
Partner present			0.550	0.458			0.539	0.427
			(7.45)***	(6.41)***			(14.78)***	(10.71)***
<i>Country: reference category</i>								

Table 20 Continued

Mother's Life Satisfaction: rated 7 or more on a scale of 1-10	Probit							
	Wales				UK			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<b>Age at motherhood</b>								
<i>England</i>								
Wales							0.040	0.054
							(0.86)	(1.16)
Scotland							0.061	0.073
							(1.71)*	(2.08)**
Northern Ireland							-0.016	0.005
							(0.30)	(0.10)
<i>Area Type: reference</i>								
<i>Advantaged</i>								
Disadvantaged ward			-0.069	-0.053			-0.026	0.006
			(0.72)	(0.55)			(0.93)	(0.19)
Ethnic Ward							-0.028	0.010
							(0.54)	(0.20)
<i>Equivalised Grouped</i>								
<i>Household Income: reference</i>								
<i>0-£150</i>								
£150-£300				0.084				0.157
				(1.01)				(3.82)***
£300-£450				0.315				0.318
				(2.73)***				(5.94)***
£450+				0.545				0.433
				(4.11)***				(7.07)***
Constant	0.557	0.808	0.464	0.460	0.540	0.760	0.410	0.370
	(10.20)***	(11.12)***	(2.76)***	(2.69)***	(20.98)***	(19.22)***	(4.95)***	(4.46)***
<b>Observations</b>	2586	2586	2586	2586	16381	16381	16381	16381
<b>F</b>	27.81	19.47	23.98	23.18	125.63	41.83	42.59	39.60

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Based on all natural mothers



**Table 21**  
**Analysis of Mother's Malaise**

Mother's Malaise: reports adverse symptom on at least 3 out 9 questions	Probit							
	Wales				UK			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<b>Age at motherhood</b>								
<i>Reference category: up to 19 years</i>								
20 to 24	-0.083 (1.21)	-0.011 (0.17)	0.074 (1.16)	0.080 (1.26)	-0.097 (2.79)***	-0.055 (1.57)	-0.002 (0.05)	0.007 (0.18)
25 to 29	-0.303 (3.97)***	-0.184 (2.37)**	-0.008 (0.09)	0.032 (0.36)	-0.297 (8.47)***	-0.196 (5.30)***	-0.077 (1.84)*	-0.041 (0.99)
30 plus	-0.418 (5.16)***	-0.277 (3.48)***	-0.102 (1.10)	-0.041 (0.43)	-0.361 (9.60)***	-0.232 (6.07)***	-0.084 (1.82)*	-0.022 (0.48)
<b>Childhood Factors</b>								
Mother's parents ever separated or divorced		0.081 (1.76)*	0.050 (1.04)	0.047 (1.00)		0.139 (4.68)***	0.134 (4.43)***	0.131 (4.27)***
Mother ever in care during childhood (incare)		0.873 (4.31)***	0.781 (3.72)***	0.781 (3.72)***		0.352 (3.59)***	0.313 (3.20)***	0.308 (3.17)***
<i>Ethnic origin: reference category White</i>								
Mixed		-0.104 (0.29)	-0.239 (0.68)	-0.264 (0.75)		0.098 (0.78)	0.074 (0.57)	0.074 (0.57)
Indian		0.326 (0.58)	0.254 (0.44)	0.336 (0.61)		0.440 (4.38)***	0.445 (4.03)***	0.438 (3.92)***
Pakistani		-0.119 (0.29)	-0.163 (0.46)	-0.197 (0.56)		0.471 (7.12)***	0.414 (6.02)***	0.392 (5.68)***
Bangladeshi		-0.529 (1.38)	-0.609 (1.58)	-0.650 (1.68)*		0.226 (1.98)**	0.211 (1.71)*	0.189 (1.50)
Black Caribbean						0.246 (2.22)**	0.194 (1.61)	0.189 (1.55)
Black African		-0.681 (12.15)***	-1.025 (10.36)***	-1.037 (10.76)***		0.005 (0.04)	-0.089 (0.92)	-0.108 (1.14)
Other)		0.929	0.846	0.794		0.155	0.102	0.090

Table 21 Continued

Mother's Malaise: reports adverse symptom on at least 3 out 9 questions	Probit							
	Wales				UK			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<b>Age at motherhood</b>								
		(2.42)**	(2.24)**	(2.14)**		(1.62)	(1.03)	(0.92)
Mother left school at minimum age		0.212	0.111	0.108		0.141	0.062	0.052
		(2.59)**	(1.41)	(1.38)		(4.92)***	(1.83)*	(1.53)
<b>Contemporary Factors</b>								
Mother Employed when pregnant with cohort child			-0.064	-0.038			-0.062	-0.046
			(0.99)	(0.57)			(1.91)*	(1.38)
<i>Highest Qualification: reference None</i>								
NVQ level 1 or equivalent			-0.377	-0.380			-0.026	-0.028
			(3.29)***	(3.28)***			(0.52)	(0.56)
NVQ level 2 or equivalent			-0.302	-0.296			-0.065	-0.055
			(3.00)***	(2.94)***			(1.62)	(1.36)
NVQ level 3 or equivalent			-0.338	-0.327			-0.118	-0.103
			(2.96)***	(2.81)***			(2.33)**	(1.98)**
NVQ level 4 or equivalent			-0.368	-0.308			-0.149	-0.110
			(2.95)***	(2.39)**			(2.96)***	(2.05)**
NVQ level 5 or equivalent			-0.194	-0.151			-0.166	-0.102
			(1.03)	(0.80)			(1.97)**	(1.14)
Overseas and other unclassified			-0.328	-0.329			0.103	0.099
			(1.64)	(1.65)			(1.24)	(1.19)
Total number of children in family			-0.006	-0.011			0.025	0.020
			(0.20)	(0.40)			(2.00)**	(1.53)
Partner present			-0.135	-0.091			-0.128	-0.081
			(1.98)*	(1.31)			(3.44)***	(1.97)**
<i>Country: reference category England</i>								
Wales							0.059	0.053
							(1.60)	(1.44)
Scotland							0.022	0.017
							(0.64)	(0.49)

Table 21 Continued

Mother's Malaise: reports adverse symptom on at least 3 out 9 questions	Probit							
	Wales				UK			
	Model (1)	Model (2)	Model (3)	Model (4)	Model (1)	Model (2)	Model (3)	Model (4)
<b>Age at motherhood</b>								
Northern Ireland							0.027	0.017
							(0.65)	(0.40)
<i>Area Type: reference Advantaged</i>								
Disadvantaged ward			0.162	0.155			0.115	0.098
			(2.23)**	(2.09)**			(3.56)***	(3.01)***
Ethnic Ward							0.001	-0.018
							(0.02)	(0.30)
<i>Equivalised Grouped Household Income: reference 0-£150</i>								
£150-£300				-0.043				-0.035
				(0.57)				(0.99)
£300-£450				-0.116				-0.145
				(1.46)				(2.95)***
£450+				-0.309				-0.226
				(2.45)**				(3.68)***
Constant	-0.444	-0.676	-0.353	-0.351	-0.500	-0.716	-0.619	-0.600
	(8.38)***	(10.55)***	(2.46)**	(2.43)**	(18.27)***	(19.37)***	(8.45)***	(8.29)***
<b>Observations</b>	2586	2586	2586	2586	16401	16401	16401	16401
<b>F</b>	9.76	40.75	21.66	21.69	39.77	19.93	13.86	12.92

Absolute value of t statistics in parentheses \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Based on all natural mothers

**Table 22**  
**Descriptive Statistics for Chapter 4**

		Wales		UK	
		Weighted Proportions	Unweighted Proportions	Weighted Proportions	Unweighted Proportions
<b><i>Country Factors</i></b>					
	England	-	-	0.82	0.61
	Wales	-	-	0.05	0.15
	Scotland	-	-	0.09	0.13
	Northern Ireland	-	-	0.04	0.11
<b><i>Area Factors</i></b>					
	Advantaged ward	0.54	0.30	0.62	0.41
	Disadvantaged ward	0.46	0.70	0.34	0.48
	Ethnic Ward	-	-	0.04	0.11
<b><i>Childhood Factors</i></b>					
	Mother's parents ever separated or divorced	0.31	0.33	0.29	0.27
	Mother ever in care during childhood	0.01	0.02	0.01	0.02
	Mother left school at minimum age	0.48	0.52	0.46	0.49
	Ethnicity				
	White	0.98	0.97	0.90	0.86
	Mixed	0.00	0.01	0.01	0.01
	Indian	0.00	0.00	0.02	0.02
	Pakistani	0.00	0.00	0.03	0.04
	Bangladeshi	0.01	0.01	0.01	0.02
	Black Caribbean	0.00	0.00	0.01	0.01
	Black African	0.00	0.00	0.01	0.02
	Other	0.01	0.01	0.01	0.02
<b><i>First Birth</i></b>					
	Cohort member is the first born				
<b><i>Age at Motherhood</i></b>					
	up to 19	0.22	0.27	0.17	0.21
	20 to 24	0.27	0.29	0.25	0.28
	25 to 29	0.30	0.26	0.30	0.28
	30 plus	0.21	0.18	0.28	0.23
<b><i>Contemporary Factors</i></b>					
	Mother Employed when pregnant with cohort	0.67	0.63	0.69	0.64

Table 22 Continued

	Wales		UK	
	Weighted Proportions	Unweighted Proportions	Weighted Proportions	Unweighted Proportions
child				
<i>Highest Qualification</i>				
NVQ level 1 or equivalent	0.08	0.10	0.08	0.08
NVQ level 2 or equivalent	0.31	0.32	0.30	0.30
NVQ level 3 or equivalent	0.15	0.14	0.14	0.14
NVQ level 4 or equivalent	0.29	0.24	0.30	0.26
NVQ level 5 or equivalent	0.03	0.02	0.04	0.03
Overseas and other unclassified	0.01	0.02	0.02	0.03
None	0.13	0.16	0.11	0.15
Total number of children in family *	1.92	1.94	1.89	1.95
	(1.41)	(1.12)	(1.61)	(1.10)
Long standing illness, mother	0.22	0.22	0.22	0.21
<i>Equivalised Grouped Household Income</i>				
0-£150	0.28	0.33	0.22	0.29
£150-£300	0.31	0.33	0.30	0.31
£300-£450	0.26	0.22	0.27	0.24
£450+	0.15	0.12	0.21	0.16
Employment of mother	0.53	0.48	0.52	0.48
Claming benefits	0.43	0.49	0.35	0.42
Less than 60% of median income	0.32	0.38	0.27	0.34
Mother's life satisfaction	0.81	0.79	0.81	0.80
Mother's malaise	0.26	0.29	0.24	0.26
<b>Partner Factors</b>				
Partner present	0.83	0.79	0.86	0.83
Partner employed	0.71	0.66	0.77	0.71
<i>Partner's Highest Qualification:</i>				
NVQ level 1 or equivalent	0.06	0.06	0.06	0.06
NVQ level 2 or equivalent	0.23	0.23	0.23	0.22
NVQ level 3 or equivalent	0.12	0.12	0.13	0.12
NVQ level 4 or equivalent	0.25	0.21	0.27	0.23
NVQ level 5 or equivalent	0.05	0.03	0.05	0.05
Overseas and other unclassified	0.02	0.03	0.02	0.03
None	0.08	0.09	0.09	0.10
No partner qualifications	0.19	0.23	0.15	0.19
Long standing illness, partner	0.16	0.16	0.18	0.16
Observations (unweighted)		2719		17820

Notes: \*mean and standard deviation

## Bibliography

**Dex, S. and Joshi, H. eds. (2004)**, Millennium Cohort First Survey: User's Guide to Initial Finding, Centre for Longitudinal Studies, London  
<http://www.cls.ioe.ac.uk/library.asp?section=00010001000600060006>

**Ermisch, J. and Pevalin, D. (2003)**, Does a Teen Birth Have Longer-term Impact on the Mother? Evidence for the 1970 British Cohort Study, Working Paper no. 2003-28, Institute of Social and Economic Research, Colchester: University of Essex.

**Futing Liao, T. (2003)**, Mental Health, Teenage Motherhood, and Age at First Birth among British Women in the 1990s, Working Paper 2003-33 , ISER, Colchester: University of Essex .

**Geronimus, A. and Korenman, S. (1992)**, The Socioeconomic Consequences of Teen Childbearing Reconsidered, Quarterly Journal of Economics, vol. 107, pp. 1187-1214.

**Goodman, A., Kaplan, G. and Walker, I. (2004)**, Understanding the Effects of Early Motherhood: The Effects on Mothers, Mimeo, London: The Institute of Fiscal Studies

**Hawkes, D. (2003)**, Education, Earnings, Ability and Early Child Bearing: Evidence from a Sample of UK Twins, PhD Thesis, Queen Mary, University of London, London.

**Hawkes, D., Joshi, H. and Ward, K. (2004)**, Unequal entry to motherhood and unequal starts in life: Evidence from the first survey of the UK Millennium Cohort. CLS Cohort Working Paper No. 6. November 2004. London: Centre for Longitudinal Studies, Institute of Education, University of London.

**Joshi, H., and Wright, R. (2005)**, Starting life in Scotland, in: D. Coyle, W. Alexander and B. Ashcroft (eds.), *New Wealth for Old Nations*, Princeton, Princeton University Press, in press

**Plewis, I., Calderwood, L., Hawkes, D., Hughes, G., and Joshi, H. (2004)**, Millennium Cohort Study First Survey: Technical Report on Sampling. 4<sup>th</sup> Edition. I. Plewis (ed.). *CLS Technical Report* June 2004 London: Centre for Longitudinal Studies, Institute of Education, University of London.

**Pevalin, D. A. (2003)**, Outcomes in Childhood and Adulthood by Mother's Age at Birth: evidence from the 1970 British Cohort Study, Working Paper 2003-31, ISER, Colchester: University of Essex.

**Shepherd, P., Smith, K., Joshi, H. and Dex, S. (2003)**, The Millennium Cohort Study First Survey: Guide to the SPSS Data Set, Centre for Longitudinal Studies, London: Institute of Education, University of London.

**Smith, K. and Joshi, H. E. (2002)**, The Millennium Cohort Study, Population Trends, vol. 107, pp.30-34.

**Social Exclusion Unit (1999)**, Teenage Pregnancy Unit, London, TSO.