Just had a baby! When will you be going back to work? A duration analysis of mothers' post-childbirth re-engagement with the labour market

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Introduction

More so than in previous generations women are returning to paid work whilst still in active motherhood and their contribution to the UK economy is well documented (Jenkins, S. 2004:34; Gregory & O'Reilly, 1996:225-226; McRae, 2008: 79; Dex, Ward & Joshi. 2008: 65-75). Yet, these mothers remain more disadvantaged in terms of labour market opportunities than their childless female counterparts (Berthoud & Blekesaune, 2006:14- 7). In seeking a deeper understanding of the issues relating to this disadvantage, much prior work has focussed on the kinds of jobs that mothers return to and the sets of circumstances that such returns might be associated with. However, in this investigation I aim to reveal the particular role that time plays in this dilemma. The phase of motherhood is inherently a temporal process as, firstly, fecundity and the chances of becoming a mother represent a specific period of a woman's life and, secondly, active motherhood only lasts whilst the child(ren) remain dependent on her and ceases once the child(ren) achieve maturity. Unlike most other studies on UK mothers and their attachment to the labour market, I argue that the time dimension is also a pivotal element in the 'work decision' as the dilemma is imbued with time dependent issues, e.g. time-tied maternity leave and pay entitlements; the age of the child, the extent to which gendered job cultures exert a differential influence upon the speed of return, etc. I further argue that the notion of time in the return to work decision is only meaningful when considered in conjunction with childcare arrangements. At the point when the mother re-enters the workplace her capacity to deliver full-time childcare is curtailed. Where mother-delivered caring conflicts with job demands, the mother must seek to resolve these tensions by a twin process of drafting in childcare assistance and/or reducing job commitments. Of course, such a process is itself restricted by the scope the mother has in postponing/offloading job commitments and by her ability to find childcare assistance which is appropriate to her circumstances. As both of these inter-related factors are highly sensitive to time related issues, the timing of any re-entry into the workplace is also liable to be a reflection of the degree of success in achieving a harmonious match between childcare demands and job demands.

Using data from the UK Millennium Cohort Survey, I investigate the likelihood over time that a mother will re-renter the labour market following the birth of a child relative to the childcare options they use. Using specially constructed event histories, I conduct univariate analysis to provide an illustration of the lengths of time that elapse between birth and return to work and multivariate analyses of the chances associated with a return. This describes the circumstances of women with 21st century babies and how these circumstances relate to speeds of returns to work, but also allows for an analysis of the contributory factors which are likely to increase or decrease the chances of a return.

The evidence from this investigation shows that childcare is indeed a fundamental factor in shaping mother's labour market behaviour. Earlier returns to work are particularly associated with mothers who can look after their children whilst working and thus independently manage childcare requirements, or mothers who can resolve childcare issues jointly with their husband or partner without the need to draft in extra-household assistance. Furthermore, delayed returns to work are associated with forms of childcare that stipulate age related entry-criteria, i.e., playgroups and Early Years Education, as their use requires waiting until the child is old enough to reach the threshold.
The unique contribution of this investigation is the confirmation that any gendered analysis of labour market issues must take the issue of childcare seriously. For mothers who return to work whilst their children are young, childcare matters but, moreover, it matters in different ways at different times and to different groups of mothers. Therefore anyone who wishes to understand why some mothers return to work quickly, some more slowly and others not at all; needs to reflect on who they find to care for their children.

Background

When a woman has a baby her employment opportunities are limited by the fact that the child needs someone to look after it and by the extent to which that childcaring role falls on her shoulders, i.e., the extent to which that *someone* is *her*. Despite a certain amount of progress in gender equity, evidence for the UK shows that this childcaring role is still principally fulfilled by women, i.e., mothers (Paull, 2008; Joshi, 2002: Vlasblom & Schippers, 2006**,** Windebank, 2001: 270). Using data from the BHPS, Harkness finds that the household division of labour remains distinctly gendered. Unlike men, women have experienced great change in their working patterns over recent decades. However, these changes, which have particularly seen mothers spending more of their time in paid work, have not been matched by fathers taking corresponding amounts of time out of paid work to care for children. As Harkness says, working women have thus been forced to make adjustments when they have children: 'The assumption that children only affect women's time use remains largely true; for women who work full-time there is little accommodation in their working hours if they have children and, instead, mothers tend to adjust their work patterns by either leaving the labour market altogether or moving to part-time work.' (Harkness, 2008: 265).

Yet, mothers' job career trajectories are not entirely determined by the presence of dependent children. Some mothers take the minimum amount of time away from their job sufficient only to recover from the physiological demands of childbirth, some postpone the return to work until the child is somewhat older, and some postpone any return indefinitely or at least until the child is substantially older. Thus the time spent in the labour market for women is influenced by the presence of children but the degree of this influence is dependent on other factors. These factors operate at a level of conjunction and complexity that renders straight-forward analysis or discussion problematic. However, to aid clarity I treat them as broadly falling into two categories, i.e., either ideologically-based or resource-based. Ideologically-based factors include the mother's orientation to a job/family career, prevailing cultural attitudes regarding motherhood and the role of women, etc. Resource-

based issues include such aspects as having the wherewithal to either sacrifice labour market earnings and become a 'stay-at-home mum' or to fund paid-for childcare, having the social capital within a network of family and friends to assist in caring for the child, being able to find childcare that is appropriate to job commitments or, conversely, finding a job that fits in with childcare capabilities, etc.

It should be remembered that ideology and resources, as I have identified them, are also co-determinant of each other to a degree and should be regarded in this light. That is to say, this arbitrary bipartite framework serves only to organise the evidence. In reality, they are interconnected. Thus, the difficulty in studying this area is that the factors involved cross-cut each other in a myriad of configurations that transform as ideologies and resource capacities evolve. For example, a mother may plan to become a stay-at-home mum because she identifies with the psychological advantages of full-time motherhood for both mother and child but over time might find full-time domesticity either unstimulating or frustrating, and/or she might find that the household finances cannot support her lack of labour market earnings over the long term, and because she has access to free childcare in the form of her own mother and that the child is maturing and not as needy; the erstwhile attraction of stay-at home motherhood loses its appeal after a while and she returns to work sooner than originally anticipated. From this example we see that it is the interaction of these resource and ideological factors that determines the particular juncture at which the mother returns to work and it is individual configurations of these interactions that shape heterogeneity in the 'return to work' event.

Careers for mothers: what options are there?.....

Exactly how mothers decide to organise their work schedules is, for Hakim, becoming evermore a matter of preference:

> 'Personal preferences a[re] an important determinant of women's behaviour, ….attitudes, values and preferences are becoming *increasingly* important in the lifestyle choices of rich people in modern societies. This does not mean that economic and structural factors suddenly vanish, or cease to be important. However, their *relative* weight declines as the relative importance of lifestyle preferences steadily grows.' (Hakim 2000:17).
> 'Contextual influences and institutional constraints remain, but they are becoming less important…. it is more and more the case that the key factors are attitudinal: work-lifestyle preferences, motivation, aspirations, and determination to achieve goals.' (Hakim 2000: 275).

She suggests that as a reflection of personal orientation towards either a job or a family career, women fall into one of three categories. Firstly, 'committed' women place greater emphasis on their job career and are thus those who predominantly work in full-time jobs and spend less time in the family setting. Furthermore, due to their commitment to their job career, childcare is not an issue for these women as they are prepared to pay whatever

costs are involved. Secondly, 'uncommitted' women place greater emphasis on their family careers and are therefore more likely to be full-time mothers and only work when the domestic setup facilitates it. Childcare is not an issue for this group either as when it is required they fulfil the role themselves. Thirdly, 'adaptive' women fluctuate in their attachment to either job or family depending on their life stage. Thus a woman operates as a 'committed' worker prior to childbirth and once the child has grown up but during active motherhood operates akin to an 'uncommitted' worker. According to Hakim, this is only this group for whom childcare matters as it is a crucial tool in navigating a path through the competing demands of job and family (Hakim, 2000: 175-176). This theory of 'preference' acknowledges that some women are highly subject to socio-structural constraints and identifies these as 'adaptive' women in their balancing of work *and* family commitments. Conversely, it suggests that those 'committed' and 'uncommitted' women are relatively unaffected by such constraints in their choice between either work *or* family (Hakim 2000: 278).

However, this highlights the main difficulty with this approach, i.e., it points to an understanding of lifestyle choices guided by values and preferences but pays scant attention to manner in which these preferences are both generated and applied. Crompton and Harris note that preference theory is unable to entirely explain the process behind the allocation of women into the categories of 'committed', ''adaptive' or 'uncommitted'. From qualitative evidence, they find substantial variation in the management of the work/family balance amongst women who invested heavily in a job career. From this they conclude that it is not possible to ascribe women into the three categories as Hakim suggests; firstly because the exercise is too much of an oversimplification, and secondly, that appearances can be deceptive such that a woman might identify herself with the values of a 'committed' careerist but operate as an 'adaptive' due to the constraints placed on her. This raises the question of establishing exactly who these 'adaptive' women are. Are they women who choose to fluctuate between orientations towards a job or family career over the life-course or are they women who find themselves torn between the demands and rewards of family and job careers over the life-course? Thus, for Crompton and Harris, by presenting a theory of preference that posits women can be distinguished by their psychological attachments to either a job or family career and that some alternate in this psychology over the lifespan without an explanation as to why, Hakim 'contriv[es] to have the argument all ways at once' (Crompton & Harris, 1999: 133).

In addition, many have suggested that orientations to work or to family do not appear out of a vacuum and are themselves a consequence of socio-cultural influences, e.g., ethnicity, social class, geographies, etc. Giddens reminds us that social theory must take account of individual agency only in light of its freedom to operate within social structure. The parameters of personal choice are themselves reflections of socio-structures as 'agents are always rooted in a structural context…always and inevitably drawing upon their knowledge of that structural context when they engage in any sort of purposeful action' (Stones, 2005:17). Thus preference can rarely be understood without reference to social location. Equally, aside from any role in the construction of preferences, socio-cultural influences also have a tendency to exert a constraining effect on women's expression of preference. For

example, Reynolds' study of black women challenges the notion that the high work output of Caribbean women is a product of 'choice' and suggests that this is more a reflection of cultural and historical legacies of slavery, British colonialism and economic migration to post-war Britain. 'What connects each of these distinctive historical moments to each other is that black women in each of these instances are socially positioned as workers. Black women irrespective of a mothering status were expected to work alongside their men folk' (Reynolds, 2001).

In an empirical study of Pakistani and Bangladeshi women, Dale finds that women from South Asian communities typically prioritise family, marriage and childbearing over paid work. Despite those with higher qualifications being in a stronger position to negotiate a role outside the home, young single South Asian women 'asserted the importance of paid work in giving them recognition as an individual ….[but] accepted that after marriage individuality may be subsumed within family life' (Dale: 2005: 239). Furthermore, Bradley and Healy (2008) point to ethnicised gender segregation and discrimination as cultural constraints on employment opportunities minority ethnic women leading to 'blocked' career paths.

From a comparison of mothers from Neath Port Talbot and mothers from West Dorset, Jenkins highlights the complex situational factors of class within rural and urban settings. In the relatively affluent rural district of West Dorset many mothers attest to the pressure of community expectations to continue working whilst in active motherhood. One respondent commented, ' It just feels like pressure from everybody, I know my neighbours have tittle-tattled about my neighbour who doesn't work and she only has one kid, so I thought I don't want people thinking that and seeing my husband working all the hours and getting really tired, I need to pay my way and contribute' (Jenkins, S. 2004: 108). Conversely, in the patriarchal social culture of Neath Port Talbot with its coalmining heritage and men's working clubs, mothers typically reported the persistence of traditionally stereotyped male and female roles. Despite pit closures and major social and economic changes, these women expressed the expectation that they would have children and give up work (Jenkins, S. 2004: 107). Using evidence from the British Social Attitudes Survey and the British Household Panel Survey, Crompton and Lyonette (2008) examined class-differentiated attitudes to family life. They found that promotional aspirations differ by class and gender as women are less likely to pursue higher career goals than men, and both men and women in intermediate and manual occupations are less likely to aspire to promotion than professionals and managers. This is seen to reflect the relatively restricted employment opportunities open to manual and intermediate groups, coupled with the prevailing gender norms of the female caring and domestic role that impede women's career advancement. Furthermore, traditional attitudes to gender roles are found less markedly in professional and managerial classes. Yet, irrespective of class grouping, mothers who stayed at home whilst their children were young held more traditional attitudes towards maternal employment. They also found that mothers in intermediate, routine or manual work held relatively traditional views and thus identified with the female carer role; but took on a paid work role anyway. This indicated that they would rather work less but were constrained by economic need. This suggests that although traditional gender role attitudes are not the preserve of any particular class grouping, those with the greatest opportunity to exercise 'choice' are those who experience

less vulnerability to economic hardship. Thus a mother's relationship with her career is a matter of preference principally for those who enjoy a relative absence of constraint.

> 'class differences in attitudes – and behaviour as far as mothers' employment is concerned – are persisting, as is men's higher level of gender traditionalism….these very real structures of constraint, by both class and gender, should make us sceptical of widespread assertions to the effect that contemporary societies are increasingly characterised by more freedom and choice (Crompton & Lyonette, 2008: 216).

A further example of the attitudinal factors at play in the establishment and restriction of preference is demonstrated by the dominant ideology of the 'good' mother, i.e, that privileged relationship between mother and child which symbolises the duty of care owed by the mother to her child (McGlynn ,2001:325). In public discussions about working mothers there is a normative perception that mothers of young children should not be encouraged to go out to work, particularly in relation to those under the age of 2 (Houston & Marks, 2005: 98).

Yet, constructions of motherhood are grounded in cultural traditions. A comparison of cross-European social practices of motherhood identifies that differing institutional frameworks of welfare regimes give rise to differing understandings of what it is to be a mother. Welfare models based on 'public motherhood' entrench the notion that the childrearing is the responsibility of society in partnership with parents. One example is the Finnish emphasis on full employment integration of women, institutional recognition of women's work identities, comprehensive public childcare, etc. (Pfau-Effinger, 1999: 72-73). Further examples of cultural difference can be seen in the levels of public subsidy and universal childcare guarantee schemes offered by different European countries. In Rauch's analysis of publicly provided pre-school childcare in Denmark, Sweden, Norway, France, the Netherlands and Germany; we see substantial variation in the assistance available. Denmark and Sweden offer a relative high level of support whilst Norway and Germany offer a relatively low level of support. In France and the Netherlands the results are mixed due to differences in age thresholds governing access to support (Rauch, 2007:254-258). Such contrasting approaches to the balance between the public and private responsibility in delivering childcare indicates that the role that mothers play in rearing children is shaped not only at the personal level but also at the societal level.

In the UK, childcare has long been seen as a private matter for individuals to resolve without intervention from the state. Crompton notes that even in the recognition of the childcare needs of working mothers in modern Britain, the British Government subscribes to the view that these needs should be met by employers rather than the state. Furthermore, as mothers are encouraged to (re)join the labour market either to contribute to economic growth or to reduce welfare dependency, they are expected to make their own caring arrangements (Crompton, 1997: 66; León, 2005: 214).

In the last decade much policy attention has been directed at the relationship between childcare and maternal employment, e.g., the National Childcare Strategy, the Ten Year

Childcare Strategy, etc; and initiatives have been introduced to facilitate mothers into work, e.g., childcare tax credits, Extended Services providing wrap-around care, Early Years Development and Childcare Partnerships, etc. (Grover & Stewart, 2000: 238; Campbell et al, 2003: 958). However, despite this drive to provide affordable and good quality childcare, disparities in regional coverage exist, much of the assistance has been primarily directed towards those in the 'at risk' categories, and childcare in Britain is the most expensive in Europe (Jenkins, S. 2004: 44-46; Lewis, 2003: 221-224). Equally, Lewis argues that the 12 ½ hours per week free early years education sessions offered to all four year olds and the majority of three year olds does little to support mothers of younger children or those seeking eligibility for tax credits, given the 16 working hours per week tax credit threshold (2003, 224). Additionally, the promised national roll-out of the 'core-offer' of wrap-around childcare support between the hours of 8am till 6pm, particularly for primary school-aged children, has yet to fully materialise. Thus, despite the governmental promise of childcare support, a survey examining childcare usage and experiences in 2007 shows that parents are still largely required to make their own arrangements through private and informal care (Kazimirski et al, 2008). So, for many mothers the message remains: 'you can work if you want to and it could improve things if you do, but your children are still primarily your responsibility'. For mothers this presents a dilemma. As the women in Jenkins' study of Neath Port Talbot and West Dorset report, mothers feel pressurised into staying out of the labour market to be at home whenever their children need them but they also feel pressurised to access the financial rewards of working in order to fund access to a wider and improved range of experiences.

Moreover, despite changing attitudes towards traditional gender roles and the increasing acceptance of working mothers, public discourses still emphasise a dereliction of maternal duty by those who take up paid work. A recent report conducted by The Children's Society into childhood experiences shied away from attributing any damage suffered by children to be a consequence of mothers' working; rather it suggests that it is the economic independence that paid employment brings women which leads to parental break-ups that damages children. Thus, the report argued that it is the quality of parental relationships that affects children and not that of having a working mother per se. 'It may be tempting to say that the root of many problems lies in the fact that too many mothers of small children are in regular employment and to suggest that the solution lies in a return to what is fondly imagined to be the traditional domestic pattern…[but] two salient issues identified are, first what we take for granted about work…and second, what kind of supplementary care is available when parents are working (Layard & Dunn, 170). However, the gender neutrality of this report was not reflected in mainstream media representations (see BBC News, 2009), which associated mothers' employment with negative outcomes for their children, thus reinforcing, reproducing and legitimising the primacy of stay-at-home motherhood.

Additionally, women are often precluded from following any innate dispositions freely. Normative assumptions of the female role as the care giver and the domestic worker disadvantage women in the labour market as it is often presumed that women will have need to concentrate on home life and family care to some degree and are therefore unfocused

employees (Le Feuvre, 1999: 171). Women are much more likely than men to spend extended periods out of the labour market to fulfil caring duties and are thus viewed as less reliable over the long term (Trewsdale & Tonman, 1993: 44). 'it is assumed that the typical woman worker will show less resistance to movement out of work in order to accommodate changing domestic circumstances and particularly to facilitate childcare' (Kremer, 1993: 193). Furthermore, that they continue this caring role, even after (re)entering paid work and the potential 'spill-over' of caring duties into paid work time has implications for a woman's employability. Such stereotypes of women as uncommitted employees are often cited as part of the explanation for the existence of 'glass ceilings' and 'sticky floors' where women suffer disadvantage in seeking promotion and increased wages at both the top and bottom of the skills spectrum (Barron et al, 1993; Booth et al, 2003; Filippin & Ichino, 2005; Ginther & Hayes, 2003). The effect of these restrictions on pay and career might make an earlier return more likely in order to signal commitment to the job. In this way, both the existence and presumption of a woman's caring role influence the pursuit of preference.

The above examples of socio-cultural influences on orientations to work all serve to show that the rate at which women return to work following childbirth is subject to a complex mixture of psychological, cultural, and structural elements. Of course, none of this denies either individual agency or that some mothers respond differently to specific circumstances; what it does show, however, is that mothers vary not only in their preferences but also in the social space to develop and effect preferences. In considering the influence of ethnic background, social class and the social construction of mothering and caring, I have demonstrated that 'preferred orientations' to labour market work are not fundamentally a matter of personal autonomy. Furthermore, I have suggested that the *preferred* timing of the return to work event does not necessarily map onto the *actual* timing. Of course, that women are constrained in their choice by the expectations placed on them, whether it be from themselves or society, is only part of the story. Regardless of how preference may be constructed, the pursuit of a 'preferred career' is contingent upon the possession and/or acquisition of the necessary assets required to support a particular preference.

<u>……And what options are achievable and sustainable?</u>

Women who have a dependent child to care for can experience one of three scenarios; firstly, they could leave the labour market altogether and provide care for the child themselves; secondly, they could return to a job that allows them to care for their child whilst working; and thirdly, they could find someone else to care for their child whilst they are working. Of course, the simplicity of this typology belies the complex reality of time dependence. That is, these three snapshot scenarios do not take account of the scheduling processes involved. For example, the point at which any entitlement to maternity leave ceases represents a turning point, as the mother is compelled to either give up their job and continue providing care themselves or seek childcare alternatives which facilitate labour market work. Equally, the point at which suitable childcare becomes available might propel a mother to re-evaluate the utility of staying out of the labour market against her potential earning power. Even considering just these two dimensions of childcare supply and leave

entitlements, it is possible to see how the way in which mothers experience any or all three of the scenarios is likely to differ relative to time. Firstly, the leave entitlement turning point might predate the childcare turning point and the mother might finish maternity leave to become a stay-at-home mum and then perhaps (re)enter paid work at a later date when the childcare becomes available. Secondly, the leave entitlement date might post-date the childcare date and the mother forgoes some part of her maternity leave where the expected utility from the childcare/paid work scenario outstrips that of the stay-at-home/maternity leave scenario. Finally, the childcare date and the leave entitlement date might coincide and the transition from maternity leave to paid work is synchronous. That this example does not take into account the scheduling effect of household funds and how long any withdrawal from the labour market can be supported, the amount of time it takes to find a job that has sufficient child-friendly practices, the speed at which children develop and mature, etc; highlights the level of sophistication required to unravel durational effects. Equally, any decision regarding a return to work is not necessarily a once and for all decision, i.e., it is subject to a constant process of re-evaluation in response to circumstances which change over time. Yet, the fundamental principle that underpins a mother's experience is that at any given point in time she has to find someone else to look after the child if she does not stay at home with her child or take her child to work with her.

The previous section has shown how mothers might identify themselves with a given scenario but in this section I aim to show that any such identification is inconsequential without access to relevant resources by, firstly, considering the supply of childcare options relative to the age of the child; secondly, considering the resources required to service these options; and thirdly, considering the degree to which job opportunities hinge on the marriage between childcare and job.

Does the age of the child matter in childcare?

As children mature their needs change and the level of maternal input required is expected to lessen as they progress towards adulthood. Very young children display a high level of dependency in that they can do little for themselves (Lansdown, 1984).

As they move through the toddler and pre-school stage they typically acquire a degree of skill in feeding, toileting, amusing themselves, and so on, which prepares them for the point at which they formally enter wider society through compulsory schooling. At this point, from the age of five for UK children, the expectation is that children will develop an individual identity in parallel to any identity within the family; thereby equipping them with skills for independent living (McNeil, 1969: 150-151). In this transition from babyhood, through childhood and onto adulthood the relative importance of hands-on mothering declines, i.e., the amount of physical time the mother needs devote to her offspring reduces as children are expected to create a life for themselves (Fredriksen-Goldsen & Scharlach, 2001: 98-99). This is not to say that children stop seeking support from parents simply because they grow older, but that the quantity of labour hours mothers can direct away from domestic production into market production typically increases relative to the degree of child maturity (Garcia et al, 2009: 20). Consequently, one might expect the point at which a mother

(re)enters the labour market to be a function of the age of the child as this represents intensity levels involved in childcaring and her scope to undertake paid work.

The age of the child also is associated with her capacity to engage childcare services; therefore the ability to delegate the childcaring role is also a function of the age of the child. Childcare opportunities typically diversify as the child ages, given increasing levels of independence linked to maturity and age thresholds into formal childcare such as nursery and school placement age restrictions. The difficulties in accessing childcare in the UK are well documented (Lewis, 2008:278; Leon, 2005: 214-215; Kazimirski et al, 2008: McRae, 2003: 327; Cohen et al, 2004: Randall, 2002:)**.** Public childcare assistance is delivered entirely through a system of claimed tax credits until the child reaches the age of three when an entitlement to free, part-time nursery provision lasts until the child starts school. However, childcare tax credits are only available to those in work, not those seeking work and this presents difficulties where childcare costs need to be covered before claims are processed, especially for those on low incomes (Wincott, 2006). Once a child reaches the age of five and is expected to attend school, the state provides a universal and notionally free form of childcare between approximately the hours of 9am and 3pm. Between these hours, a mother's time is her own but the mismatch between the hours of the school day and the hours of the standard working day limits her capacity to engage in labour market activity. That is, unless she can secure additional forms of childcare she is constrained to work part-time (Wetzels, 2001: 114). Thus to cover the shortfall in supply, any mother exploring her childcare options must look to either the market or social networks. Furthermore, the transitions between school and private childcare arrangements can themselves introduce fresh difficulties, as I discuss below.

The age of the child is a factor in market provided childcare also. Some nurseries, crèches and playgroups only accept children once they have reached a certain age, and so securing a place is directly related to how old they are. Some of them operate on the timings of the standard school timetable and therefore are also incompatible with standard working hours. Furthermore, parents often report the issue of trust as a key element in their selection of childcare provider (Kazimirski et al, 2008: 15: Jenkins, S. 2004:126-127): how certain can I be that the carer will nurture my child? As children develop communication skills and are able to communicate the childcare practices they are exposed to, the competency of the care provider becomes increasing transparent. Thus, a mother of a 6-month old baby is compelled to exercise a higher measure of faith in her childcare provider than a mother of a 4-year-old, as 4-year-olds have typically acquired a greater degree of language and communication skills (Burns, 1986: 123-124). Equally, as the child acquires the ability to rationalise logically, their account of the childcarer's behaviour will generally become more coherent and the care of older children tends to be characterised by a greater degree of transparency. Thus, where a child is too young to comment or report on the quality of the care, this tends to create an additional level of anxiety for the mother in arranging her childcare provision. Conversely, as the child grows up they begin to make their own evaluations (Berk, 2008: 512). This can also introduce tensions, for example when the child says they don't like going to nursery, or they don't like the other children at the childminders, or they don't like the childminder.

Employing a nanny or an au pair, where the care provision tends to take place within the home can also add to greater transparency, given the additional monitoring opportunities of the childcaring activity. However, the financial costs associated with this form of care often render it prohibitively expensive to all except those in high-income brackets.

Aside from publicly supported and market based childcare, Uttal (2002) notes that for very young and pre-school aged children parents often indicate a strong preference for relative care, that is, care by fathers, grandparents, etc. The presence of a resident natural father increases the opportunity of shared childcare responsibilities between mother and father. Whilst the existence of any other adult household member creates the space for the mother to go out to work whilst someone else is at home to fulfil childcare duties, having a natural father in the household optimises this space creation: on the basis that the father is likely to be more motivated to embrace the duties of caring for their own progeny (Hattery, 2001: 174-175). Furthermore, the mother enjoys a stronger bargaining position in discussions over childcare options: 'the child is yours too!' Equally, the inter-dependency of any such partnership promotes reliability within these arrangements; i.e., by definition, a partner is someone who works in collaboration and thus is more likely to be dependable (The Working Family Project, 1978: 76-79). Yet, this intra-parent form of reliability has no contractual basis and is therefore always subject to renegotiation; thereby creating the potential for conflict between parents (Dermott, 2005:97). However, in contrast to either childcare sourced outside the home or from any other adult in the home, a resident father is liable to be more accommodating in their provision of childcare due to their fundamental attachment and obligation to the child (Cronin & Curry, 2000). For example, when a child is ill and cannot be sent to the usual childcarer, either because the childcarer does not accept sick children or the child's condition dictates they must remain at home; the parents must provide the care themselves as they underwrite all other forms of care. This then involves a joint evaluation of which parent is best placed to cover the shortfall. However, where the natural father is not around, the mother shoulders the moral and practical obligation to either provide the care on her own or enter into negotiations with extended family or other adults in her social sphere. Of course, the former option harms performance in the job and the latter option offers no guarantees that help will be forthcoming.

Wheelock and Jones (2002) find that grandparents are often providing large volumes of childcare and that mothers of very small children are likely to view these arrangements as the 'next best thing' to providing the care themselves. Additionally, they find that such arrangements often do not involve financial recompense, i.e., the grandparents give their caring time freely as part of the family relationship. In light of all the difficulties associated with finding childcare and the acknowledged barriers that they present, we might expect that those mothers with existing and close by family support structures to return to work quicker given that they represent a cheap, trusted and flexible form of care.

Yet, this may not be the case across all cultural backgrounds. Where the family setting represents a stronger attachment to the traditional gender division of labour one might expect the period of time before the mother re-engages in the labour market to lengthen, perhaps indefinitely, as any family support for her to return to work is either not forthcoming

or may be conditional on her non-participation in the labour market. Studies on Pakistani and Bangladeshi mothers suggest that conventional attitudes asserting that women should attach priority to family and home renders today's Pakistani and Bangladeshi new mothers with an additional constraint. The proximity of family with strongly traditional attitudes towards mothers and paid work may create an additional hurdle in the route back to work rather than facilitating it (Dale, 2005).

Another source of childcare is that based on friendship networks. That these tend to be characterised by weaker social ties than those of kinship networks has implications for the mother's capacity to delegate childcaring tasks. Firstly, friendship relationships tend to operate at a higher level of reciprocity and this limits the mother to soliciting help only to the extent that she is prepared and able to return. A second and related issue is that the more onerous the childcare task the more restricted the mother is in soliciting the assistance of friends. As we saw earlier, caring for very young children requires a lot of input and thus the call for help is bigger for these children. This will likely deter mothers from seeking help on a friendship basis where the task burden overshadows the strength of the social bond: that is, where the friendship is not strong enough to withstand the demand, or where there will likely be an unattainable expectation to reciprocate correspondingly. For example, a mother with a 3-month-old baby might not feel in a position to ask a friend to look after the child as the effort required might not only place a strain on the relationship but that the friend might also ask a big favour in return. However, as the child matures and requires less looking after, the weight of the request diminishes. Thus the attractiveness of the friendship option increases relative to decreasing levels of burden and indebtedness.

I have argued above that as the child moves through different phases of their childhood the options available to a mother vary relative to the age of the child. Yet, shaping the path of this variation is the ability to secure and maintain desired care packages in terms of accessibility and affordability.

Childcare Providers: Sourcing and Resourcing.

In principle childcare can be categorised as either formal or informal. Formal childcare is characterised by arrangements made on a contractual basis and tends to involve financial recompense, whereas informal childcare embodies that which lacks any official footing and is thus often relatively cheaper or unpaid. Whilst contractual care might enable the mother to retain a higher degree of control and transparency in the care of her children, informal care can be regarded as offering greater flexibility and affordability. However, in both cases availability is a key issue.

Once children reach the age of five they are each offered a place at school. However, this universal allocation of places does not happen with other childcare types. Though partial provision for three- and four-year-olds has governmental funding, finding a nursery or Early Years place is the responsibility of the parent(s). Equally, securing all forms of pre-school and out-of-school-hours care requires knowledge about local providers. Social networks and

links to the local community can assist in finding a provider as does the existence of geographically close family members (Kazimirski et al, 2008:107-116).

Finding childcare is a matter of seeking out potential providers and assessing their suitability in terms of quality and affordability. This can involve interviewing nannies or au pairs, requesting a prospectus from centre-based providers or asking extended family members if they would be available and willing. As children attend school and playgroups, information opportunities regarding childcare options proliferate due to associations with school staff, playgroup organisers and with other mothers: 'school-gate' networks (Kazimirski et al, 2008:107). Mothers are able to compare their childcare strategies against those of other mothers and update estimations of how feasible certain options are. They are also able to develop networks of emergency childcare, for the occasions when making it to the school-gate on time proves difficult. However, with compulsory schooling comes a narrowing of choice. The erstwhile freedom to choose any childcare strategy that suits one's pocket and values is limited by the requirement to use a particular establishment backed by the Local Education Authority. Before the child reaches the age of 5 the mother can make what arrangements she likes but after the age of 5 the child must be formally educated and securing a school place is a process subject to meeting a strict range of official admission criteria. Furthermore, a mother who works standard hours rather than school hours will typically need to delegate the school drop-off and pick-up to tasks to someone else, thereby introducing the further complication of finding a carer prepared to escort the child(ren) to and from school.

Finding appropriate childcare, however, is not just a case of identifying providers; it is also substantially based on what costs are involved and whether they can be met.
Formal care tends to have a financial price tag, yet, paying for childcare engenders a level of control and transparency that is sometimes lacking in notionally free arrangements. Where the terms of the contact stipulate the quality of care to be provided, i.e., the level of child-adult interaction, the nutritional quality of meals and snacks, the times that care will begin and end; all parties have a relatively clear understanding of where the boundaries between parent and carer lie. This enables the mother to retain control over the care of her children, firstly, by maintaining open awareness of the quality of care expected and, secondly, having recourse to a contractual agreement where agreed standards are not met by the provider. However, the existence of a contract also places limits on what the mother can expect from her care package. For example, if on a given morning time pressures prevent the mother from giving her child an adequate breakfast, she can only expect her provider to supply a breakfast if the contract allows for it. Equally, if on occasions she needs to work a little longer than usual she can only expect her provider to temporarily extend care times by renegotiating the contract. Thus, control and transparency are often achieved at the sacrifice of flexibility.
However, this relationship between control, transparency and flexibility is reconfigured for those formal care arrangements conducted under the social contract, i.e., compulsory schooling. Our society deems it appropriate for all children to start school once they reach 5 and it is therefore paid for out of the public purse. Accountability of the quality and extent of the care provided in schools is thus a matter for society, given that it is society that foots the

bill. Schools follow a curriculum set by social policy guidelines, operate between a socially constructed set times, etc: all of which individual mothers have little control over. Nonetheless, schools generally offer clear indications of the academic and non-academic care they provide for their pupils. This affords a greater degree of understanding of the level of care on offer. Thus, whilst compulsory schooling is notionally free and its quality is relatively transparent, the rigid and non-negotiable boundaries it is characterised by tend to render it a restrictive and inflexible mode of care. It also serves to show that where care is paid for by the household, the mother has greater say in prescribing the care of her children whilst she is at work.

Childcare is a labour-intensive activity and therefore the expenses associated with entering such arrangements are often cited as a key barrier to mothers (re)employment. Consequently, such arrangements are often available only to mothers with relatively higher levels of household income. Those who lack the wherewithal to fund such measures must either leave the workplace or find cheaper/free forms of childcare.

We have seen above the extent to which mothers prefer to leave young children in family care both due to the sharing of parenting values and the tendency for it to be unpaid. However, this does not mean that there are no costs involved. In studying intergenerational reciprocity, Finch and Mason (1993) found that families offer assistance to other family members not on a quid pro quo basis but, given the capacity to provide it, on the understanding that help is offered and received where and when it is needed on a 'generalized reciprocity' basis.

> "[a] fairly immediate counter gift is not expected, or may not be expected at all. There is simply the expectation that payment will be made at some point, possibly to the same person but also possibly to a third party" (Finch & Mason, 1993:51)

Thus any costs involved using partners, grandparents, other relatives, etc; may not be readily apparent and will likely depend on future life events, e.g., caring for the grandparents in their declining years. The distinction to be made between using family on an unpaid basis and friends on an unpaid basis is highlighted by this difference between 'generalized reciprocity' and the more immediate and equivalised exchange in friendship reciprocity. As we saw earlier, friends tend to expect a more exacting give-and-take arrangement.

A further cost of using childcare on an unpaid basis applies to both family and friendship care, i.e., the control and transparency deficit. Once the arrangements are conducted as an exchange of goodwill, the ability of the mother to stipulate particular modes of care evaporates; rather, she must accept what is on offer or go elsewhere. Thus control over what the child eats, what kind of recreational activities they become involved in, etc., are in some sense surrendered. In the absence of a formal contract, it may also not be clear exactly what is expected from each party in the exchange. For example, where the arrangement is initially set up on an ad hoc basis but over time becomes a convention; neither party is sure how long the arrangement should or will last. Additionally, where the caring duties are carried out as a favour, it induces the mother to maintain an amicable

relationship with the carer. This may constitute an additional strain on the mother where tensions arise in the relationship. For example, if the mother finds dealing with the carer difficult, the onus is on the mother to be more accommodating due to her weak bargaining position. Furthermore, this type of assistance can be either temporarily or permanently withdrawn at a moment's notice which contributes to the general instability involved in the use of unpaid, informal care.

Whilst elements of control and transparency are relinquished in informal care, the lack of a regimented care plan opens up greater flexibility. The blurred boundaries bring about a more pliable and elastic set of arrangements. For example, where a mother wants to stay on at work for an extra hour on a particular occasion she can ask her friend, partner, mother, etc; to step in a way that she could not ask a nursery to stay open for an extra hour. However, due to the lack of formality there is no guarantee that the friend, partner or mother will help.

Overall, the decision of when to return to work involves an assessment of the expected utility of the rewards from working in the labour market minus the costs of childcare: a decision which is continually revisited as circumstances change. The ability to find childcare and then supply the resources to maintain them depends the stock of places available, how much one knows about the feasibility of certain options, and the ability and appetite to bear the costs, financial or otherwise. Such an assessment can only be carried out in relation to the type of job the mother wishes to return to and therefore it is necessary to consider how aspects of the job play a role in the return to work decision.

Does the childcare match the job or does the job match the childcare?

Preference theory suggests that women with a high attachment to their job will spend less of their time on maternity leave and return to their jobs more quickly, in line with primary orientation to work rather than to family (Hakim, 1996:133-134). Women who have made a strong investment in education and skill acquisition might be expected to fall into this category. Those who have spent a long time studying to work their way up the occupational ladder are likely to not wish to relinquish their hard fought position by spending longer lengths out of the labour market. Using NCDS & NSHD cohort data, Macran et al. identified this trend to be a particular feature of older mothers. 'Mothers, who have delayed their childbearing, are more likely to be better educated and to be working in higher level occupations…..they are also more likely to have adequate incomes to pay for childcare, more flexible working arrangements and be highly motivated into employment' (Macran, Dex & Joshi, 1996: 289). Where employers offer flexible and family-friendly job opportunities the mother might be able to effect a quicker return as the demands on her childcare package are relatively lighter. In 2003 legislation was introduced which entitled parents to request part-time/flexible-working. However, this right only extends to the ability to 'request' and the employer is merely bound to 'seriously consider' such requests without any obligation to grant the request (Lewis & Campbell: 2007: 19-20); and it is likely to be those more progressive employers that will accommodate these requests.

Consequently, where a woman works in a male-dominated industry which is insensitive to aspects of childrearing, the mother might need to return sooner in order to maintain her career status. Thus, where the prevailing job culture demands the prioritisation of job over family, the mother might be expected to return sooner. Yet, as we have seen this is dependent on her securing childcare. Where an accommodating childcare package proves too elusive, the mother is left with the choice of either finding a less demanding job or giving up work over the short or long term.

Restrictions that limit the mother to choose between part-time working or not working at all, have consequences in the terms of the earnings and job status she can expect. Full-time jobs tend to place relatively high demands on their worker; most obviously in terms of the amount of time spent in the workplace, but also in relation to commitment levels, reduced flexibility, etc. (Harkness, 2003; Fogarty, 1971: 52-54). Yet, where working full-time is not an option and the mother considers going back to work on a part time basis to take advantage of the reduced hours and flexibility in hours, she is likely to suffer a pay penalty and occupational downgrading. Part-time work offers the potential for the mother to structure her job around school hours or that of her partner or close relative who is available to supply free/cheap childcare for some of the time. Whilst this means that childcare is affordable, it has been found that part-time jobs tend to be concentrated in low status, low paid occupations (Manning & Petrongolo, 2008; Connolly & Gregory, 2008).

Studies investigating the difference between men and women's pay have found a declining disparity between the wages of men and childless women in recent times, but that women with children are still considerably disadvantaged in the pay stakes. This suggests that the present gender pay gap is more about being a mother than being a woman (Waldfogel, 1998: 137). This is, perhaps, symptomatic of the impact that having children to care for has on a mother's ability to exercise personal choice in the employment arena: she can only take on a job if she can find suitable childcare cover.

Additionally, these penalties associated with reduced pay rates and low status work have been found to exert a long shadow on the career trajectory of the women who take up this option, ie., where the decision is to return to work part-time, these penalties persist far beyond the period of active motherhood (Paull, 2008: 26). In analysing UK survey data, Olsen and Walby find that interruptions to full-time employment disadvantage women workers in their acquisition and retention of human capital and this deskilling impacts on their overall employment experience and contributes to the gender pay gap (Olsen & Walby, 2004). Consequently, these mothers tend to be found in low-paid, low-status jobs for the remainder of their working life; never having re-harnessed their labour market potential.

These differential rewards for full- and part-time work are important for those whom the need/desire to bring money into the household is particularly relevant. (Hattery, 2001: 127). The rise of the dual-earner family has increased the likelihood for women's wages to be used to support fundamental household costs, e.g., housing, utility bills, food, etc. (Houston, 2005: 8; Brannen & Moss, 1991: 80 – 81). Thus the length of time a mother takes before she returns to work is likely to reflect her vulnerability to and interpretation of economic

hardship. Where income needs are pressing, it is likely that mothers will return to work sooner, as the advantages of long leave entitlements are offset by the difficulties presented by diminishing income resources.
Conversely, there may also be those for those whom lifestyle affordability is not an issue and thus the level of pay attached to a job is of marginal consequence. As access to money from sources outside of their own employment increases, the impetus to return to work decreases (Killinsworth & Heckman, 1986). If their pre-childbirth household income level is sufficiently high to withstand the loss of dual incomes, or sufficiently low enough to trigger commensurate welfare benefits, the loss of the mother's income is of little financial significance all other things being equal (Eggebeen & Hawkins, 1990, 48). Nevertheless, even if income constraints make a mother keen to return sooner, her ability to do so will still depend on her ability to find childcare.

In investigating the relationship between job behaviour of Canadian mothers with newborns and statutory maternity leave entitlements, Baker and Milligan find that the longer women spend at home with their babies, the more likely they are to return to their pre-birth employer and thereby retain job continuity (Baker & Milligan, 2008: 687). The inherent benefits associated with longer maternity leave promote better outcomes in mother and baby's physical and mental health but are also likely to improve long term labour market outcomes. Thus, where a mother has longer to acclimatise to the arrival of a new baby and the challenges that these circumstances present, her long term job prospects are enhanced where she can return to the same employer through the retention of job-specific human capital, higher projected salaries associated with a good job/skills match, etc. (Waldfogel, 1998: 150-151).
Thus it would appear that the rewards are greater where a mother can postpone the timing of the return to work until the childcare support allows that transition to be into full-time work. An exception to these immediate and enduring part-time penalties has been shown to be where mothers are able to return to their erstwhile jobs on a part-time basis. (Lewis & Campbell: 2007: 19-20).

In summary, if, for whatever reason, a mother wants to return to work after childbirth she must either find a job that allows her to look after her child whilst at work or find someone else to look after the child. I have demonstrated how finding a reliable, trustworthy and flexible childcarer can be fraught with limitations such as the age of the child, the size of one's pocket and the availability and closeness of friends and family. Of course, finding childcare is also heavily dependent on what is required from the care package: how many hours does it need to be for? what times of the day and week does it need to cover? how comprehensive and involved an exercise does it need to be? All these factors are driven by the type of job the mother (re)enters.

Studies indicate that those with higher qualifications and higher up the occupational structure tend to return to work more quickly. Where mothers are unsuccessful in finding childcare that enables them to continue with the same employer and a move into part-time employment follows, they suffer a substantial disadvantage in labour market rewards. However, a

principle benefit of working part-time is the less demanding childcare requirement it presents.

To return to the question of whether the childcare needs to match the job, or whether the job needs to match the childcare, the obvious answer is that they need to match each other. Where a mother can exercise real choice in the job she pursues and finds childcare to match, one might see the fullest expression of women's preferences in the labour market. Yet for women with dependent children, real choice is constrained by the limitations of their childcare package which in turn constrains access to jobs. Types of childcare differ in terms of accessibility, affordability and quality; and this matters for working mothers in relation to the control, flexibility and transparency they can build into their package. As children mature, the relative merits of each childcare type are likely to alter as the demands on the package change. To see the extent to which different forms of childcare support quicker or slower returns and whether the type of job matters, we turn to empirical data detailing experiences of UK mothers in the 21st century.

Data and Methods

To examine the extent to which forms of childcare affect labour market behaviour, this investigation uses data form the UK Millennium Cohort Study (MCS) to identify rates of return into a job following childbirth. This dataset offers particular advantages for an analysis of the relationship between childcare and returns to work. Whilst it tracks the experiences of a cohort of children and is therefore not a representative group of mothers in the 21st century, it does offer information on mothers whose babies constitute a representative group of children born at the beginning of the 21st century.

Following a large sample of 18,818 babies born between September 2000 and January 2002, the MCS holds a wealth of information on the families that are raising them. The first sweep of data collection occurred when the children were approximately 9 months old, with subsequent sweeps at 3 years old and 5 years old (Crosby & Hawkes, 2008: 5). This investigation uses data from sweeps 1 and 2 (MCS1 and MCS2) so as to concentrate on the pre-school period. Children under compulsory school age are typically too immature to care for themselves to any degree and thus the mother *must* find someone else to fill the caring role if she is not available to do so herself. Equally, only when a child reaches the age of 5 is a school place is provided by the Local Education Authority for all children; thereby removing any necessity of private arrangements and the free choice of childcare placement, albeit only between the hours of 9am and 3pm. Thus the pre-school data offers a deeper insight into the dilemma faced by mothers who decide to return to work given the intensity of care required and the lack of comprehensive public childcare.

The sample design of the MCS incorporates oversampling of babies in areas with high proportions of child poverty, ethnic minorities, and from the smaller countries of the UK, i.e., Scotland, Wales and Northern Ireland (Kiernan and Smith, 2003). This design facilitates analyses that focus on ethnic minorities, social deprivation and regional difference as the

oversampling in these areas generates relatively more information on these groups. The particular advantage of this approach is that it offers the potential to shed greater light on less common phenomena. To take the hypothetical example of a minority group representing only one per cent of the total population it is clear that this group would not feature very much in a representative sample. One way to address this issue is to alter the sample design to include the minority group in a greater proportion. For example, a sample design drawing ten per cent of the sample from the minority group would seek ten times as much information on this group and therefore tell us more about those at the margins of society. This is especially valuable where little is known about these marginal groups or uncommon phenomena. However, this strategy compromises the representativeness of the sample as such groups would feature more strongly in the data than would be found in the true population. Yet, because it is known which groups and areas are oversampled it is possible to compensate for this disproportion by weighting the information accordingly. This weighting process operates by assessing the degree to which the probability of being selected in a sample is distorted by any oversampling and applying an inverse weight to correct for the distortion (Plewis, 2007a). In the above example, before any correction adjustment, one per cent of the population would be contributing ten per cent of the information. Applying an inverse weight would scale this information back to representing only one per cent of the total. Crucially, this retains the prospect of drawing on ten times the range of experiences and thus increases the scope to understand their social realty whilst maintaining sample representativeness.

A further problem that compromises representativeness is those who are selected as sample members but decline to participate. This constitutes an even greater problem where longitudinal studies follow sample members over time as co-operation from respondents is sought over a much longer time scale. Individuals may decline to answer some of the questions within a questionnaire (item non-response) or not to participate in an interview at all (unit non-response) at one or more points in time. Nonetheless, as it is either known which sample members do not answer either entire questionnaires or specific questions within a questionnaire, or it can be estimated how likely an individual is likely to respond (see Plewis, 2007b). It is then possible to correct for this by assessing the probability of contributing a complete set of responses and affording more weight to those with a lower predicted response rate (Groves et al, 2009: 351-352). That is to say, we understand something about the characteristics of those who are less likely to respond so greater importance is attached any contribution made by such a respondent.

Samples

Not all mothers return to work during the observation period and therefore it is necessary to consider two samples. The main estimating sample is restricted to all the children in the cohort as this provides information on the timing of the return to work event for all mothers. Extended analysis of the subset of mothers who *do* return to work and the jobs they return to

is further confined to a second sample of those who effect a return within the observation window.

As the purpose here is to study the circumstances surrounding a mother's return to work, I ignore the ten cases where the father of the cohort child was interviewed as the main respondent. Furthermore, I also ignore the 67 cases where the main respondent is not the *natural* mother of the child, as these individuals will not have experienced childbirth and therefore will not require the necessary recovery time from the ordeals of pregnancy and labour which one might expect to affect the duration of time from childbirth till the return to work.
I also do not consider the 35 cases where the mother of the cohort baby was under 16 years of age at childbirth, i.e., below working age, and therefore would constitute a particularly atypical group.

Table 1: Descriptive statistics across sample restrictions

	Whole sample	Main estimating sample	Returners
Mean maternal age at birth	29 yrs	30 yrs	30 yrs
	%	%	%
Above 'O' level	36	42	51
Ethnicity			
- White	86	91	93
- Mixed	1	1	0
- Indian	3	2	2
- Pakistani	4	2	1
- Bangladeshi	2	1	0
- Black Caribbean	1	1	1
- Black African	2	1	1
- Other ethnic group (inc. Chinese)	2	1	1
Occupational Class			
- High Managerial / Professional	6	8	10
- Low Managerial / Professional	23	27	34
- Intermediate	18	20	21
- Small employer/ Self-employed	4	4	4
- Low Supervisory/ Technical	6	6	5
- Semi-Routine	21	20	17
- Routine	14	13	8
- Never Worked	9	3	1
	14697	9807	5580

Source: MCS waves 1-2
Notes: All statistics shown to reflect percentage of relevant sample, except maternal age given in years old.

Finally, I only include those cases where the natural mother has lived as a couple with the natural father over the entire observation window or the natural mother has lived as a lone parent over the entire observation window, i.e., the natural father has either always been or never been in the household since childbirth. This involves excluding 3,610 cases where mother had either a partner who was not the natural father of the child or alternated between partners across the two waves.
After excluding all these cases and further eliminating those cases suffering from either unit or item non-response, i.e., listwise deletion, this leaves a main estimating sample of 9,807 unweighted cases. In essence this means that my analysis is confined to those present in both waves and who provide information on the all variables of interest so as to ensure complete information across the observation period.

Table 1 reports the impact of these restrictions on sample characteristics. This shows that those excluded from the main estimating sample tend to be slightly younger as their exclusion raises the average sample age at childbirth by one year. They also tend to less educated, non-white and of routine, semi-routine or never previously worked occupational class.

To consider the types of job that mothers return to it is necessary to focus on the subset of mothers who return to a job before the time we stop observing them. This second sample of mothers therefore represents all those mothers from the main estimating sample who return to work sometime after birth but before the wave 2 interview. These are the mothers who display the most labour market attachment given that they have made a return whilst their child is relatively young. In this group of mothers, 20 respondents report working in excess of 60 hours per week. These may represent cases of measurement error, i.e., somewhere an invalid response was recorded, or there may truly be mothers working over 60 hours per week whilst they have pre-school aged children. However, even where the latter scenario was to prove true, such cases are atypical and thus dropped from the sample. That this group of mothers exhibit relatively higher educational qualifications and are more concentrated in professional occupational classes is consistent with the notion that those who have invested more in their career tend to be more job career focused and thus return to work sooner than otherwise.

Variables

To investigate the relationship between childcare and labour market participation of women with pre-school children the following variables were identified and constructed from the data within the MCS. They included a dependent variable relating to the amount of time between the birth of the baby and the first return into a job, and independent variables, that were either considered to be directly relevant to the analysis or of importance due to a potential confounding effect which requires ‘control’.

Dependent variable

- Duration from childbirth till return to work

This variable was constructed from the date of birth of the child cohort member and the first reported (re)entry in to work up until the date of the wave 2 interview. This also represents the age of the child at the time of the mother's labour market (re)entry.

Covariates

- Childcare usage

I have argued that access to childcare is the crucial factor in enabling a mother to return to work. Unfortunately the MCS data does not contain details regarding what sorts of childcare are *available* as it only records the types of childcare that mothers *use*. A perhaps more interesting study would investigate the type of childcare a mother actually uses in relation to the range of childcare options open to her, as this might reveal any element of choice within childcare and job match. Whilst this is not possible with the MCS data, future research projects might offer some illumination.

For many mothers childcare usage has a tendency to change over time for all the reasons discussed above. Equally, there is the potential for mothers to use multiple childcare options at the same time. In order to exploit the data to the fullest and capture any such variation and multiplicity, the data was organised into 'person-months': for each mother I separately identified each month they appear in the data and information on their child care usage and employment status for each of those months. This allowed the construction of dichotomous variables showing the particular childcare types used by that mother in that month; and enabled me to measure how long in months particular childcare options and packages were sustained through the measurement of the duration of particular childcare configurations. To show the effect of whether the childcare type is used at all and not just whether it is used rather than another, dummy variables are constructed for all the options in the multiple response child care question.

By combining the data from MCS1 and MCS2 the childcare types were grouped in 10 categories: -

1. Self
2. Resident husband/partner
3. Grandparents
4. Other relatives (including non-resident partner)/ Nanny/Au Pair
5. Friends/neighbours
6. Childminder
7. Nursery/Crèche
8. Playgroup/Family-child centre
9. Early Years education
10. Other

Whilst the data facilitated a separate category relating to the use of a nanny/au pair, preliminary analyses identified that of this type of childcare option was so rarely used that its contribution was difficult to determine in the multivariate analyses. To avoid any forfeiture of the data, the use of nannies or au pairs was merged into the category 'other relatives'. One of the principal characteristics of the use of family members is that the mother is likely to be well acquainted with the childcare practices of relatives and that there tends to be a stronger social bond between mother and carer, given the family connection. Nannies and au pairs care for children in the child's own home and might also 'live in' as part of the arrangement. The close proximity this creates between mother and carer, engenders a similar level of awareness of the childcare activity in terms of desirability and practice. For example, a mother who has the potential to engage her own sister to care for her child(ren) is likely to be highly familiar with the parenting approach used by her sister, given any co-residency and/or shared exposure to the same parenting values whilst children . This enables an informed choice on whether the care offered by sister is appropriate in the mother's view. Equally, the care provided by a nanny living within the household would be highly visible to the mother; thereby allowing a similar degree of awareness.
However, the bond between mother and nanny/au pair is essentially a commercial one. Even where a relationship flourishes into a stronger connection than that of merely employer/employee, the mother is still paying for the nanny/au pair to provide care. Thus, to a degree, the strength of the relationship is based on the need for the nanny/au pair to earn a salary. In terms of social location within the household hierarchy this likely renders such a relationship akin to that of a member well known to the household but outside of core family relationships, such as partners and own parents. This can be seen as analogous with the mother's wider family relationships with siblings, non-resident fathers, aunts, etc. where such relationships are <u>of</u> the household but not <u>in</u> the household, given that nannies/au pairs are <u>in</u> the household but not <u>of</u> the household.

In wave one of the MCS childcare used whilst working or studying is recorded separately to childcare used whilst engaged in other activities. As MCS2 does not make this distinction, I have collapsed the MCS1 data into childcare usage whatever the activity. Equally, MCS1 also does not report any 'self' or 'husband/resident partner' usage for those activities outside of working/studying. Whilst this likely reflects differing conceptualisations of parent-delivered childcare relative to that delivered by others, it should be acknowledged that parent-delivered childcare is liable to be underestimated in the MCS1 data.

- Simultaneous childcare usage (squared)

We might suspect that combining childcare types to form a package creates wider opportunities for mothers via the differential advantages that each type offers in terms of control, flexibility, affordability, etc. To investigate this, a count of how many childcare types were used in a given person-month was constructed.
Yet, it might also be the case that the incremental use of differing but concurrent childcare types might invoke additional tensions into the package. If a mother can secure one childcare type that satisfies all her job demands then she need only to manage one relationship between herself and the carer. As additional childcare types are required to

satisfy the overall childcare need, the more convoluted a process this becomes as more and more relationships need to be managed.
Thus we might expect the utility to be derived from increasing the number of childcare types in a package to alter disproportionately, i.e., not in a linear sense. To establish the degree to which any such relationship was curvilinear, a squared exponent was also constructed.

- Childcare paid for

I argue above that whether or not childcare is paid for has implications in terms of the control a mother can exercise over her childcare arrangements. However, paying for childcare introduces an important limitation for those whose return to work is driven by the desire to maximise household income. To indicate whether or not the childcare had a financial cost attached to it, a dummy variable was constructed to show whether or not it was paid for.

- SES

To categorize not only occupational class, but also to account for likely differences in earnings potential the aggregate NS-SEC 7 category measure was used. This data is based on present or previous occupation for those who were not working at the time of the interview but had once worked (Bradshaw et al, 2008: 73). Those who had not previously worked were not classified and therefore a further category of 'Never worked' was constructed for these mothers.

1. High Manager / Professional
2. Low Manager / Professional
3. Intermediate
4. Small Employer / Self Employed
5. Low Supervisory and Technical
6. Semi-routine
7. Routine
8. Never worked

- Education

A dummy variable was constructed to indicate whether the respondent has qualifications higher than an 'O' level or its equivalent as this denotes academic success at the 16+ level. Educational attainment at this higher level might be expected represent a stronger emphasis on a job career, i.e., the level of personal investment required is likely to more intense. After the age of 16 young people have the latitude to leave formal education and enter the job market. However, most good quality jobs require educational qualifications at the 16+ level. Thus we might anticipate someone who has carried on into non-compulsory education and devoted the time and effort to succeed academically to be those focussed on securing and maintaining a good job career.

Equally, good quality jobs tend to yield greater rewards in the labour market. Thus those who have spent longer in education to get a good job are likely to enjoy better pay, higher status, etc. The attractiveness of these preferential rewards might also be expected to increase labour market attachment.

- Ethnicity

In the MCS data the 2001 Census ethnicity categories were used to compile aggregate groupings of ethnic identity (Dex & Rosenberg, 2008). In this analysis I used the 8 category classification, using the white ethnic grouping as a reference category; thus all estimates regarding ethnicity report marginal effects with respect to white mothers. As discussed earlier, ethnic identities can play a particular role in influencing mother's attitudes towards paid work and the level of childcare assistance offered through family support. Those mothers who come from cultural backgrounds which typically favour traditional values might be expected to take longer to return to work, if at all. This is in contrast to mothers from ethnic groups that can be considered to embrace more egalitarian views, and thus do not experience the reconciliation between paid work and motherhood in the same way.

- Lone parent

This binary variable was constructed to reflect whether either the mother had always lived without a partner OR always had the natural father living in the household. I have shown above how having the natural father as a partner is likely to increase the bargaining power of the mother in terms of the household gender division of childcare and perhaps is liable to be more attached to the child as the child is the natural child of both of them. Equally, by only considering the perpetually partnered or perpetually not-partnered removes further ambiguity as the arrival or departure of the father is likely to be accompanied by a certain period of instability which may predate/postdate his coming or leaving. Thus the dichotomy of 'always lone' or 'always with natural dad' denotes a degree of household stability without the upheaval of changing paternal residency.

In the analysis conducted on the sub-sample of mothers who had returned to work during the observation period further variables were introduced to identify the relationship between the timing of the return to work and the characteristics of the job.

- Hours per week

Additional hours in the workplace are most likely to be associated with an increase in childcare demands. However, the more hours one works the more one can generally expect to earn. Equally, entitlement to certain welfare benefits requires working for at least 16 hours per week. Furthermore, studies have shown that full-time hours tend to be associated with higher quality jobs and superior rates of pay. (Connolly and Gregory, 2008; Manning & Petrongolo, 2008; Rubery, 1998). Nonetheless, evidence points to women's partiality for part-time working measured as fewer than 30 hours per week (Booth and van Ours, 2008). To establish whether the chances of an earlier return are affected by the hours the job entails, a variable is constructed that allows for varying relationships at the under 16, over 16 hours but less than 30, and 30 or more hours per week intervals.

- Returned to the same job

As outlined above, those who are able to return to the same job are best placed to recover and reuse job-specific skills acquired prior to childbirth. They have the advantages of

familiarity with working practices and the resumption of a pre-existing employer/employee relationship. Thus any prior investment in a work career is forfeited to a much lesser degree. However, the statutory right to return to the same job is accompanied by the requirement to return with set time frames. For the mothers in my sample, (i.e., births in 2000-2002), the maximum entitlement to maternity leave was 14 weeks but for a mother with 2 years continuous service with the same employer (5 years if working part-time and for more than 15 hours per week), any return could be delayed up to a ceiling of to 29 weeks after the birth (Income Data Services, 2003:30-31). Thus, returning to the same job offers the opportunity to maintain work career continuity but it also likely imposes stricter time limits on any return to work.

- Working mostly with men /Working with colleagues sympathetic to parental responsibilities

Apart from any other aspect of the job one returns to, it might be expected that the working environment and job culture would influence the speed of return. Where colleagues are less tolerant or aware of the difficulties associated with combing paid work and family care, any transition into work might be made all the more difficult.
Equally, any traditional male emphasis on breadwinning and the censure of workplace interference from family related issues might engender a working environment ill-suited to the needs of those trying to combine motherhood and paid work. To identify the degree to which it is the male orientation of the job or merely the attitudes of co-workers that influences speed of return, two dummy variables are constructed: one to indicate whether or not the respondent feels that her colleagues understand the pressures of caring for children and another to indicate whether the profession is dominated by men.

- Flexible working

To reduce the demands on the care package and possibly aid the search for a childcarer, a mother may opt to build flexibility into her job. The less rigid the job, the less accommodating the package need be and this likely attenuates her reliance on childcare. To establish the role that such working arrangements play in facilitating mothers back into work a series of particular dummy variables were constructed to reflect the use or non-use of the following flexible working practices:-

1. Part-time
2. Job sharing
3. Flexi-time
4. Work from home occasionally
5. Work from home all the time
6. Special shifts (evenings, school hours, etc.)
7. 9 day fortnights/ 4 day weeks
8. School contracts

- Whether had a job whilst pregnant

Any mother who had a job whilst they were pregnant and is able to exercise a right to return to work after a period of maternity leave, is liable to return to work more quickly. Firstly, such

mothers already have a job to return to and thus do not necessarily have to search for a job in order to participate in the labour market. Secondly, in order to exercise their 'return to work' maternity rights, under employment law mothers have to return to work with a specified period of time and are compelled to return by a certain date if they want to retain their job.[1] By contrast women without a job whilst pregnant are likely to be less attached to the labour market and as they are not covered by employment rights they are also not subject to their time restrictions and deadlines.

In addition to all the above, certain variables are included in the both the analysis of the main and sub samples as it is recognised that they are liable to influence the duration between childbirth and first return to work: whether it was the mother's first baby, the age of the mother at childbirth, how many other children are in the household, the health of the mother, the health of the child and the temperament of the child.

Definitions and descriptions of all variables are given in appendices I and II.

Estimation Methods

The aim of this investigation is to explore the relationship between the covariates and the timing of the return to work, not simply at a set point in time but also to see how this relationship changes as time unfolds. This requires the use of duration analysis methods as standard regression techniques are not suited to analysing issues of 'time dependency', that is, the notion that things change relative to time (Blossfeld et al, 2007: 30 – 31).

Duration analysis seeks to understand the issues surrounding the timing of change and typically expresses these in terms of survival in a particular state until the 'change' event occurs.[2] Measuring the elapse of time from the start of being in a particular state until the point when this event occurs gives a duration or 'spell' length.[3] Thus, the length of time a

[1] For the mothers in this study, the length of maternity leave entitlement represented two tiers. 'General maternity leave' equated to 14 weeks for all women and this could commence at any time following the 11th week before the baby was due. For those women who had been continuously employed with the same employer for two years prior the 11th week before the baby was due (or five years if employed part time) , the maternity leave period could be extended their baby was 29 weeks old (Income Data Services, 2003: Chp 2&3).

[2] Events can occur repeatedly or multilaterally, e.g., a mother can enter one job then leave it and enter another, etc; or a mother can leave full-time motherhood into full-time work *or* part-time work, etc. Here attention is confined to a single spell event where no individual experiences more than one event and all events are treated equally i.e., the transition from full-time motherhood into a *first* post-birth job.

[3] Events can occur under a discrete or continuous time conceptualisation. Examples of discrete time reflect a cyclical event process where transitions form one state to another only occur at disjunctive intervals, e.g., time from onset of menstruation till pregnancy measured in menses. However, as this analysis measures duration in

mother spends between childbirth and returning to work is the spell length of her time as a full-time mother. The point at which the spell ends is commonly known as the 'failure' time, given that the individual has not succeeded in remaining in the original state (Box-Steffensmeier & Jones, 2004: 7 - 8). Conceptualising survival and failure in this way allows us to express the manner in which mothers return to work, ie., how long do they 'survive' as a full-time mother, or how quickly they 'fail' and so return to work.[4] From this it also possible to consider the 'hazard rate', *h(t),* associated with making a transition from one state to another, i.e, what is the risk of experiencing this transition at a given point relative to the chances of survival up to that point (Allison, 1984: 22 - 23). Thus, duration analysis concerns itself with estimating the length of spell durations and/or the risk associated with experiencing an event.

Duration analysis techniques can be regarded by their degree of parameterisation, i.e., the extent to which they impose a functional form on the data. Non-parametric methods operate in a 'bottom-up' manner, identifying a data-led durational relationship. This is useful because it does not require any assumptions to be made about how this relationship should evolve over time. However, such methods are also problematic as they do not allow for the modelling of covariates and therefore are only of practical use when comparing survival experiences across qualitative groupings, e.g., white mothers vs. non-white mothers, etc. (Cleves et al, 2004:91). Parametric methods enable the modelling of duration and/or risk in relation to time and covariates. However, they also require that some theoretical assumptions are made about the shape of the hazard function. Different parametric methods allow for different shapes as some specify that the hazard rate always rises or always decreases or remains constant or rises then decreases, etc. However, the point is that no one parametric form allows for all of these shapes and thus a 'top down' application is required. This can be particularly problematic where there is insufficient evidence on which to base theoretical assumptions (Allison, 1984: 33).

One way of circumventing the need to assume a particular shape of the baseline hazard rate is to use a semi-parametric method that leaves the shape of the baseline hazard unestimated and instead estimates the proportional change in the hazard rate, i.e., the Cox model (1972). It follows the standard premise of proportional hazards models, i.e,

$$h(t, X_i) = h_0(t)\, e^{\beta' X_i} \qquad (1)$$

'clock-time' and theoretically the return to work could occur at any point, all discussions and results will assume a continuous time approach.

[4] The language of duration analysis might appear an unnatural, if not provocative, lexicon for the purpose here. However, it genesis lies in biostatistical rather than social science and thus the terminology derived from areas of medical research where survival and failure (death) have natural meaning. (Box-Steffensmeier & Jones, 2004: 7)

where:-

$h_0(t)$ = the baseline hazard and depends on *t* but not on X and can take any form as it is derived from the data

$e^{\beta' X_i}$ = a non-negative function of individual characteristics that scales the baseline hazard up and down.

However, rather than focusing on the time at which an event occurs, the Cox model considers the order in which events occur and thus models the prospect that, where an event occurs at time t_j, it will be experienced by individual *i* from the pool of individuals at risk at that time (2).

$$\frac{\text{Risk of Individual } i \text{ experiencing an event at } t_j}{\text{Risk that an event occurs a } t_j} \qquad (2)$$

The numerator in (2) represents the hazard rate for individual *i* at time t_j, and the denominator represents the sum of the hazards of all individuals in the risk pool at time t_j. Thus, re-expressing (2) in terms of (1) yields:-

$$\frac{h_0(t_j)\, e^{\beta' X_i}}{\sum_{l \in Rj} h_0(t_j)\, e^{\beta' Xi}} \qquad (3)$$

Where:-

$h_0(t_j)\, e^{\beta' Xi}$ = the hazard for individual *i* at time t_j

$\sum_{l \in Rj} h_0(t_j)\, e^{\beta' Xi}$ = summation of hazards for all individuals in the risk pool at time t_j

As the baseline hazards cancel out in (3) this be further re-expressed as

$$\frac{e^{\beta' Xi}}{\sum_{l \epsilon Rj} e^{\beta' Xi}} \qquad (4)$$

That equation (4) no longer requires any parameterisation of the baseline hazards shows how the principal advantage and disadvantage of the Cox model, i.e., it liberates us from any assumptions about the baseline hazard but also removes the capacity to comment on its profile as it remains unestimated (Jenkins, SP. 2004:79). Thus, this method cannot tell us anything about expected durations. However, as this investigation seeks to understand the proportionate change in the hazard as covariates change, this problem can be set aside. That is to say, this investigation is concerned with evaluating how the *risk* of making the transition into work alters with respect to differences in age, occupational class, ethnic grouping, etc; rather than the length of time we might expect it to take before a mother returns to work relative to such characteristics.

As this estimation method is only concerned with the ordering of particular failure times, introducing variables that change over time is simply a case of splitting up the spell durations into episodes at the point where events occur. Individual characteristics across the risk set can then be assessed at each occurrence point to establish whether any changes or lack of change in characteristics have influenced the propensity for an individual to experience an event (Jenkins, SP. 2004: 80).

An additional problem with using the Cox model is, as with all proportional hazard methods, it assumes that the hazard functions of any two individuals with different characteristics vary by a proportionality that is constant over time. That is to say that, the hazard rate can vary with time and with characteristics but the effect of a characteristic is assumed not to vary over time (Box-Steffensmeier & Zorn, 2001, 93- 95). For example, the effect of being a white mother relative to that of being a non-white mother is presumed to remain the same. This is not say that the influence of ethnicity is expected to remain static; only that any changes in the effect of being white will be mirrored by a proportional change in the effect of being non-white. Formal tests exist to establish whether this assumption is violated (see Box-Steffensmeier & Jones, 2004:133-137); however, due to the complexity of the dataset used here such tests are precluded due to computational limitations. Furthermore, Allison suggests that misspecification of the model, i.e., that model is deficient in some way, loads more heavily on the omission of pertinent explanatory variables, measurement error, etc. (Allison, 1984: 38).

A further problem is associated with the ordering process that the Cox uses to produce estimates. Where individuals experience events at the same time, the order in which the events happen must be defined, i.e., did individual *a* experience the event before individual *b* at time point t_j or vice versa. If the events happen instantaneously this can be problematic but this will also be uncertain if the data is collected so that it is unclear whether *a* had an event before *b* or not. The data in the MCS shows the month in which a mother returns to work, but not the day, hour, minute, second, etc. Thus, where multiple individuals return to work in the same calendar month it is not possible to identify the true order. Several methods exist for handling these 'tied' events with varying levels of approximation accuracy. However, again due to computational limitations, this investigation uses the simplest technique, i.e., the Breslow method. This works by overlooking the fact that the risk pool will be affected by whether *a* experiences the event before *b*, etc.[5]

Finally, a key issue in duration analysis is the handling of censored data. Censoring occurs where the beginning or end of a spell is not observed and thus our understanding of the sequencing of events is compromised. Whilst the Cox model is not concerned with how long the spell lasts, it is concerned with the order in which events occur, i.e., which individual experiences the event *first*, which individual *second*, etc. In these calculations it is necessary to know who is at risk of facing an event at each occasion, i.e., the first individual leaves the risk pool having experienced the event, etc. Thus, when using the Cox technique, the only contribution made by censored observations is in determining the size of the risk pool as these individuals are at risk of an event occurring but nothing is known about event occurrence (Box-Steffensmeier & Jones, 2004:51-52). This highlights a particular drawback with this modelling technique, i.e., it does not utilise any of the data regarding spell duration times and is thus an inefficient estimator (Allison, 1984: 34). Therefore, if one can be fairly certain about the true shape of the baseline hazard, using the parametric technique with the appropriate hazard function is liable to yield more informative estimates as it draws on more of the data; but crucially, if the assumption about the hazard shape is incorrect then the estimates will be biased. Consequently, although the data is not exploited to its fullest potential, this investigation uses semi-parametric techniques in the form of the Cox model to best insure against mis-specification of the hazard function.

Results

[5] As individuals experience an event, the risk pool decreases because the amount of individuals left at risk of experiencing an event decreases. If *a* truly experiences the event first, then they will not be in the risk set when *b* experiences the event and this will affect their conditional failure time probabilities. The Breslow method calculates probabilities with 'replacement' for tied events, i.e., it calculates the probability for *a* with *a* and *b* in the risk pool and then the probability for *b* also with *a* and *b* in the risk pool.

The principle thrust of this investigation is to establish the degree to which pursuing a labour market career whilst responsible for the care of small children is dependent on childcare options. This section presents an analysis of the data, firstly by considering childcare usage: who uses what; secondly, by identifying the survival distributions of returns into work: how long before a return to work is likely to happen; and finally a multivariate analysis of the relationship between the two: how the duration until a return is related to the use of childcare dimensions.

Childcare Usage

Table 1 shows the distribution of childcare usage broken down across ethnic group, occupational class and whether the father has always or never been resident in the household. This information was compiled by aggregating all the 367,631 person-months in

Table 1: Distribution of childcare usage by ethnicity, occupational class and lone parent status

	Self		Husband/ Partner		Grandparents		Other relatives (inc. Non-resident father)		Friends/ Neighbours		Childminder		Nanny/Au Pair		Nursery/ Creche		Playgroup/Family Centre		Early Years Education		Other	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Overall	**342**	**3.49**	**1,889**	**19.26**	**4,053**	**41.33**	**1,110**	**11.32**	**388**	**3.96**	**1,148**	**11.71**	**233**	**2.38**	**2,160**	**22.03**	**676**	**6.89**	**951**	**9.7**	**108**	**1.1**
Ethnicity																						
White	317	3.56	1,754	19.67	3,745	42	960	10.77	366	4.1	1,085	12.17	218	2.45	1,968	22.07	632	7.09	864	9.69	96	1.08
Mixed	2	2.67	5	6.67	24	32	8	10.67	1	1.33	8	10.67	2	2.67	16	21.33	4	5.33	8	10.67	3	4
Indian	9	4.27	53	25.12	99	46.92	26	12.32	4	1.9	20	9.48	1	0.47	58	27.49	18	8.53	27	12.8	1	0.47
Pakistani	6	2.67	20	8.89	81	36	47	20.89	8	3.56	4	1.78	3	1.33	18	8	3	1.33	15	6.67	3	1.33
Bangladeshi	2	3.7	11	20.37	19	35.19	14	25.93	0	0	0	0	0	0	5	9.26	1	1.85	4	7.41	1	1.85
Black Caribbean	3	2.75	13	11.93	30	27.52	28	25.69	1	0.92	13	11.93	0	0	40	36.7	8	7.34	12	11.01	2	1.83
Black African	1	1.01	14	14.14	15	15.15	14	14.14	4	4.04	8	8.08	7	7.07	21	21.21	2	2.02	11	11.11	1	1.01
Other ethnic group (inc. Chinese)	2	1.69	19	16.1	40	33.9	13	11.02	4	3.39	10	8.47	2	1.69	34	28.81	8	6.78	10	8.47	1	0.85
SES																						
High managerial /professional	21	2.79	96	12.77	264	35.11	38	5.05	39	5.19	145	19.28	80	10.64	366	48.67	54	7.18	101	13.43	4	0.53
Low managerial/ professional	62	2.34	499	18.84	1,159	43.77	264	9.97	99	3.74	517	19.52	85	3.21	846	31.95	212	8.01	284	10.73	39	1.47
Intermediate	76	3.92	336	17.33	931	48.01	237	12.22	74	3.82	228	11.76	19	0.98	420	21.66	149	7.68	197	10.16	21	1.08
Small emp. & self-employed	98	24.08	84	20.64	133	32.68	40	9.83	25	6.14	46	11.3	24	5.9	69	16.95	34	8.35	48	11.79	5	1.23
Low supervisory & technical	9	1.57	126	21.91	248	43.13	79	13.74	28	4.87	44	7.65	4	0.7	78	13.57	37	6.43	43	7.48	6	1.04
Semi routine	33	1.65	516	25.8	840	42	265	13.25	69	3.45	124	6.2	14	0.7	240	12	123	6.15	179	8.95	23	1.15
Routine	41	3.34	225	18.31	420	34.17	156	12.69	51	4.15	37	3.01	5	0.41	113	9.19	55	4.48	84	6.83	9	0.73
Never worked	2	0.78	7	2.72	58	22.57	31	12.06	3	1.17	7	2.72	2	0.78	28	10.89	12	4.67	15	5.84	1	0.39
Family Status																						
Nat. father always in household	330	3.8	1,880	21.65	3,636	41.88	875	10.08	342	3.94	1,053	12.13	223	2.57	1,961	22.59	632	7.28	849	9.78	94	1.08
Nat. father never in household	12	1.07	9	0.8	417	37.07	235	20.89	46	4.09	95	8.44	10	0.89	199	17.69	44	3.91	102	9.07	14	1.24
N = 367,637 person-months																						

Source: MCS waves 1-2 ; All statistics weighted using MCS weights

Notes: Favourite option, second favourite option

the data and identifying what proportion of the total was associated with particular childcare options. (As mothers are able to use more than one childcare option at any one time, individuals may appear in more than one column simultaneously in a given row and thus percentages are not constrained to sum to 100 per cent). From this we see that overall the favourite childcare option is grandparents used 41 per cent of the time. This is roughly twice the amount of the next most popular options, nursery/crèche at 22 per cent and husband/partner at 19 per cent. When considering the breakdowns, the evidence still shows a strong attachment to the use of grandparents as they are the most used option across almost all groups. The notable exceptions are Black African, and Black Caribbean mothers and those from the high managerial class. However, all three of these groups see grandparents as the second most used option, thereby establishing that for most groups, grandparents and nursery/crèche are the two top options.

Though, this is not the story for everyone. Pakistani and Bangladeshi mothers use grandparents for childcare the most but the second most popular option is 'other relatives'. This is perhaps unsurprising given the low rates of labour market participation in general among women from these groups. Moreover, as Pakistani and Bangladeshi women experience a sharp wage disadvantage they are also less likely to be able to pay for formal childcare. Additionally, the availability of female relatives without employment commitments might make this a more attractive option for some families. There is some evidence that specific childcare for these groups is short in supply and this may be another reason for resorting to relatives where that is an option. Some Pakistani and Bangladeshi mothers cite concerns regarding the observance of culturally specific forms of tradition as impediments to the use of formal childcare. They suspect that, compared to childcare provided by family members, formal childcare settings display a reduced tendency to respect particular religious practices, the use of Halal meat, preserving cultural language skills, and so on (Tackey et al, 2006:51-52: Aston et al, 2007: 61-62).

Equally, for the self-employed or those working for small employers the most popular option after grandparents is to use oneself. Of course, these mothers are likely to be in a unique situation given that they are either themselves the employer and so can dictate terms and condition of employment to suit their circumstances; or, being employed in a small business concern, are likely to have a stronger and closer attachment to their employer and thus likely have a greater potential to influence their employer. For these workers, this creates an enhanced opportunity to either work from home or take the child to work.

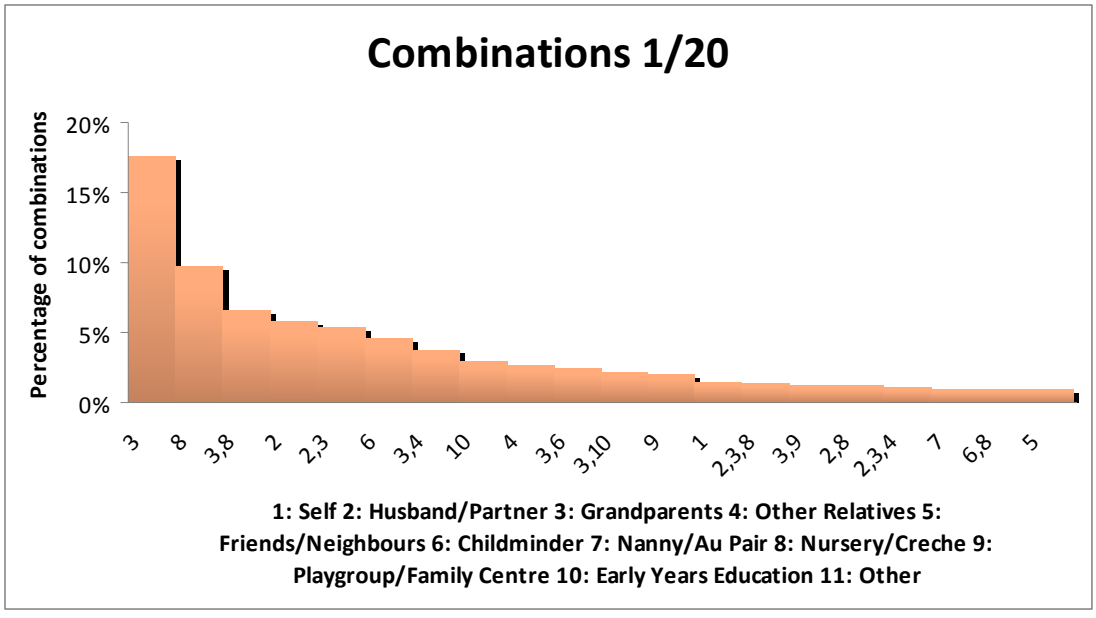
At the lower end of the occupational class spectrum the popularity for using grandparents remains uppermost but the nursery/crèche option shows as fourth most popular for low supervisory and technical, semi-routine and routine workers; behind husband/partner and other relatives. This picture is broadly similar in the case for those who had never worked, except that the husband/partner option is much less used. However, a high proportion of this group are lone parents who thus have

limited access to this option. Nonetheless, we have seen how low paid jobs tend to be concentrated in low occupational class jobs and thus the financial costs associated with nursery/crèche care might likely prove prohibitive for these individuals. Also, whether due to traditional attitudes or otherwise, those who have no plans to work after the birth of their child might regard these fee-based forms of childcare as unwarranted: as we have seen in the childcare usage patterns of Pakistani and Bangladeshi mothers.

The suggestion from this evidence is that family connections to childcare are important to almost everyone and, where the bond between relatives is more powerful and family cohesion is stronger, such connections translate into enhanced childcare opportunities. Equally, cost appears to be a factor as the distinctions between occupational classes highlight how those with greater earnings are likely to use more paid-for childcare, and those lower down the spectrum tend to rely on the notionally free care given by family.

Mothers are sometimes required to use what León refers to as 'jigsaws' of care to manage incompatibilities in any mismatch between childcare requirements and childcare options (León, 2005: 215); e.g., where a grandmother picks a child up from nursery as the nursery closes before the mother finishes work. Figure 1 shows the twenty most used childcare packages out of all the packages employed up until wave 2. This represents an aggregation of all the time across the 367,637 person-months of mothers' childcare use across the types of child care.

Fig 1. Distribution of childcare packages (1/20 of a total 306 packages)

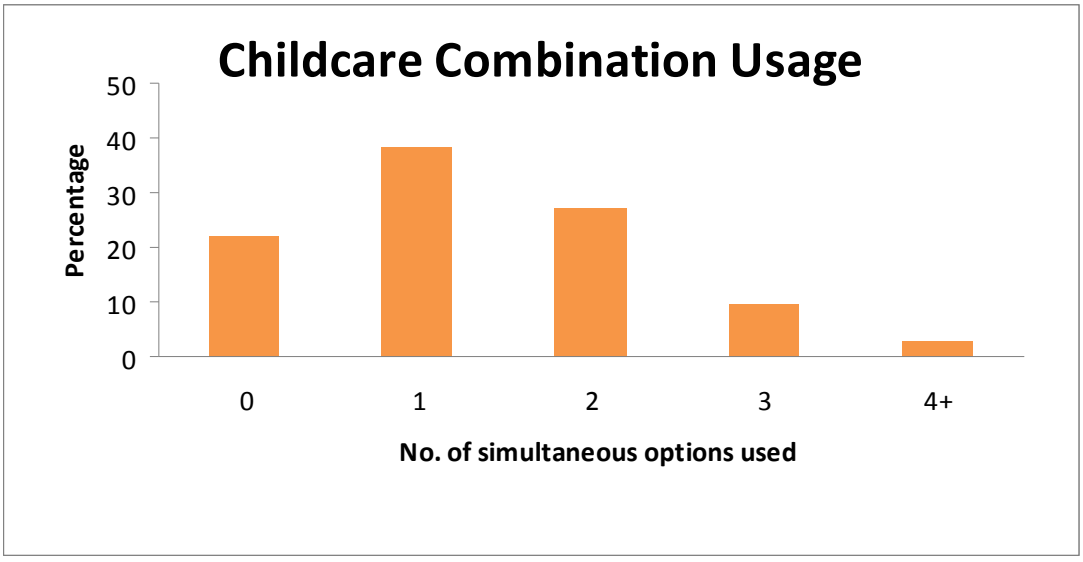


Source: MCS waves 1-2 ; All statistics weighted using MCS weights

We see that the most used package is the single option of using grandparents comprising 18 per cent of all childcare usage. That is to say, from adding up *all* of the time that *all* of the mothers were observed using childcare, 18 per cent of this total related to the use of grandparents alone. Although the single option of nursery/crèche is the second most popular package, it is only used for 10 per cent of the time; about half as much as grandparents alone. Furthermore, when taking into account the dual option of grandparents and nursery/crèche, we see that a third of the time involves these first three most popular packages; again attesting the importance of grandparents for issues of flexibility and cheapness and the importance of nursery/crèche for issues of control and the relative freedom from social obligation that paying for care brings.

Figure 2 summarises the degree to which the mothers in the sample use more than one option at any given time. This shows that out of the 367,631 person-months, mothers did not use any childcare for 22 per cent of the time, only one childcare option 38 per cent of the time, two childcare options simultaneously 27 per cent of the time, and so on. By summing the categories denoting the use of more than one option, the data shows that for 40 per cent of the time more than one option was used. However, as the number of synchronous options increases beyond one, the popularity of combining options declines.

Fig.2 Distribution of childcare options within a package



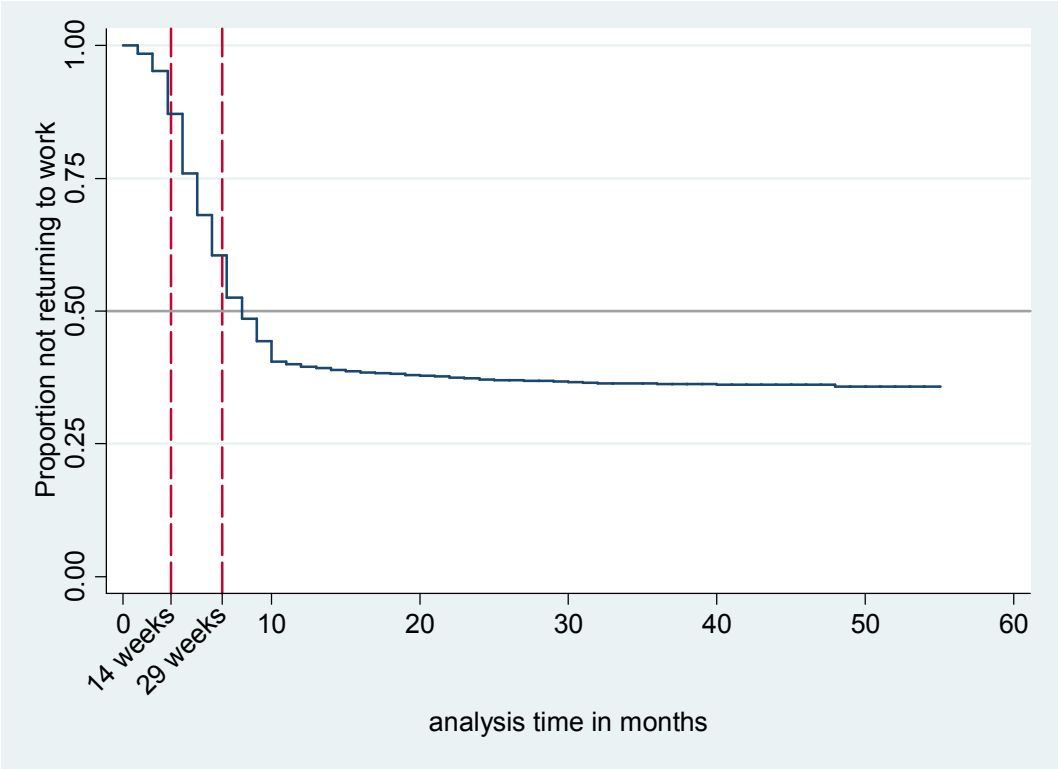
Source: MCS waves 1-2 ; All statistics weighted using MCS weights

Median durations

Figure 3 depicts the shape of the survival function portraying the pattern of returns to work. At the outset all the mothers begin in a non- working position as childbirth requires, at the very least, a small interlude for the birth itself and the necessary

recuperation. As mothers make their individual transitions back into the workplace, their departure from the remaining pool of non-working mothers is shown by the downward slope of the survival function. This shows a relatively sharp rate of moves into work during the initial months whilst those who postpone a return to work until after 10 months tend to rejoin the labour market much more slowly, if at all. Thus a third of the mothers in the sample have not experienced a return to work during the observation period. We see that by 8 months half of all mothers have returned to work. Given that the data used in this analysis covers the period of births in 2000/1/2; all these women were entitled to 14 weeks maternity leave. For women with 2 years continuous service with the same employer (5 years if working part-time and for more than 15 hours per week), this could be extended to a period of up to 29 weeks after the birth (Income Data Services, 2003:30-31). It is thus unsurprising that a substantial proportion of those who returned to work during the observation period did so within 29 weeks.

Fig. 3 Survival function of return to work



I have suggested that the age of the child is important for the type of childcare a mother has available to her. Yet, it would appear that the relationship between a child's age and a mother's return to work is not uniformly proportionate; that is to say, with each increasing month that the children age, we do not see a corresponding increase in mothers returning to work. Rather, we see the majority return by about 10 months but then see little change. However, this investigation focuses only on returns to work whilst the child is a pre-schooler. Given that compulsory schooling

provides notionally free childcare and constitutes an enforced intermission of self-delivered care, the mother is somewhat exempted from childcare duties. This creates additional opportunities for paid market work. Further analysis of data when the children reach the age of 5 and beyond would likely establish the degree to which compulsory schooling plays a role in mothers' returns to work as we might expect the increasing maturity of the child and the social acceptability of the mother and child separation via school attendance to translate into a relaxing of return to work constraints.

Table 2 further identifies the survival distributions by outlining the elapse of time required for 25 per cent, 50 per cent and 75 per cent of the mothers to return to work broken down by ethnic group, occupational class and lone parenthood status. Considering ethnic diversity, we see that the same pattern is followed broadly by all groups except Bangladeshi and Pakistani mothers who initially tend to return much slower and we do not observe half of them returning within the observation window. This is likely to be symptomatic of a stronger cultural attachment to traditional gender roles or a relative lack of good quality job options as outlined earlier. However, that mothers of mixed heritage display an initial tendency to return at a pace comparable to the overall group but then relatively much slower is less clear, thereby warranting further investigation in the future.
Turning to occupational class we see that more mothers in high managerial/ professional jobs make it back into work, with 75 per cent of them returning within ten months. Conversely, those at the lower end of the spectrum typically take longer to return as it takes at least ten months for half of them to return. Yet, over the short-term, mothers in professional and managerial careers tend to return no quicker than mothers in any other type of career. By five months a quarter of them have returned and this is comparable to routine workers, but for all other workers it only takes three or four months for a quarter to have returned. Again the self-employed/ small employer group present as a distinct category given that they tend to return more quickly over the short- and mid-term. This can be explained by the level of investment that these individuals have in their work and working relationships with clients and colleagues. Greater autonomy in working practices as enjoyed by the self-employed enhances job satisfaction but also that commercial responsibility to their business typically engenders a stronger attachment to work (Hundley, 2001:313; Drago et al, 2009: 592).

However, over the intermediate to long term we begin to see wider variation between the classes. The relatively sharper initial return rate of self-employed/small employer, semi-routine and low supervisory/technical groups tail off considerably such that less than three quarters return by wave 2. This provides some support for the notion that those with perhaps a greater focus on their job career, i.e., those in professional jobs, return quicker; but only over the long/intermediate term. In the short term, the only group with a slower tendency to return are those who have never worked before, i.e., the least attachment to the labour market. Furthermore, for workers in jobs that tend to be of poorer quality and segregated at the bottom of the spectrum, we might expect that something other than personal orientation is motivating any early returns. Given their weak investment in a job career, preference

theory would suggest a stronger emphasis on family matters; however, the evidence shows that this is not always the case.
This variation we see in the data is consistent both with the view that personal preference is not the sole driving force in shaping mothers' behaviour in the labour market and, given the differing trajectories of returns, with the observation that time is important in understanding a mother's relationship with her job.

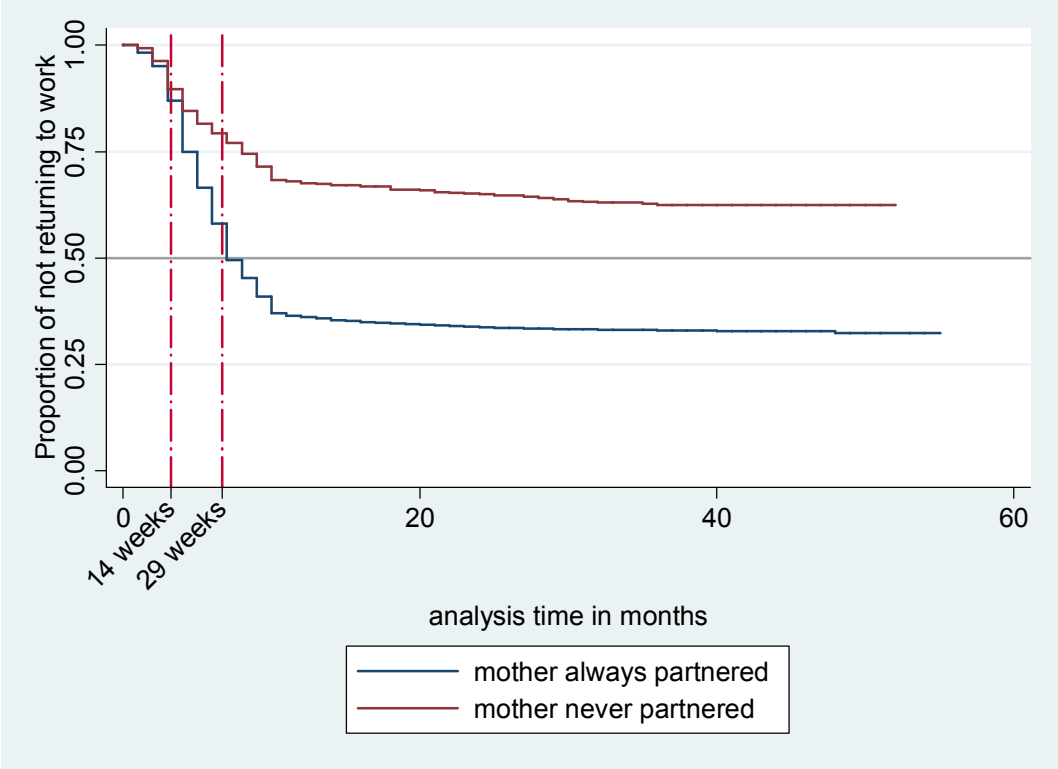
Table 2: Distribution of durations of time till return at 25th, 50th and 75th sample percentiles.			
	Failure time		
	25%	**50%**	75%
Overall	5	**8**	.
Ethnicity			
White	5	**8**	.
Mixed	5	**25**	.
Indian	6	**9**	.
Pakistani	10	**.**	.
Bangladeshi	8	**.**	.
Black Caribbean	6	**9**	.
Black African	5	**9**	.
Other ethnic group (inc. Chinese)	5	**10**	.
SES			
- High Managerial / Professional	5	**7**	10
- Low Managerial / Professional	5	**7**	.
- Intermediate	5	**8**	.
- Small employer/ Self-employed	3	**6**	.
- Low Supervisory/ Technical	4	**10**	.
- Semi-Routine	4	**10**	.
- Routine	5	**.**	.
- Never Worked	.	**.**	.
Lone Parent			
- Yes	8	**.**	.
- No	4	**7**	.

Source: MCS waves 1-2 ; All statistics weighted using MCS weights

Finally, we see that mothers lacking a resident partner to assist with childcare duties generally return to work slower than partnered mothers. A graphic illustration of this is shown in figure 4, where we see substantial differences open up between partnered and non-partnered mothers. By 14 weeks the lone-mother pattern of (re)entry to work is akin to that of partnered mothers. However, after this point the proportion of lone-mothers not (re)entering work is markedly higher. By 29 weeks approaching one half of the partnered mothers have returned to work as opposed to less than one quarter of the lone-mothers. Equally, although after approximately 10 months there is not much change in the proportion returning to work for either group,

the variation between the groups remains fairly steady at around 30 per cent more partnered mothers having returned to work.

Fig. 4 Survival function of returns to work by family status



This is reflective of the particular disadvantage faced by lone mothers in terms of the childcare options they have at their disposal. They not only face the prospect of taking on the de facto sole responsibility of orchestrating care packages but they most likely have to do so without a partner that is fully committed to the family unit and is to some degree acting on his own account. This has implications for the amount of hands-on assistance they can expect but also for their financial constraints. However, that the proportions of returns to work begin to level off at around the same time for each group (albeit at different levels), indicates that lone and partnered mothers are subject to the same kinds of limitations; it is just that lone mothers experience them more intensely. Fig. 4 shows that in the first 14 weeks after the baby is born mothers with and without partners display comparatively similar return to work patterns. After 14 weeks greater variation opens up between the proportion of partnered mothers returning compared to the proportion of lone mothers returning, with the steeper slope of partnered mothers indicating a relatively greater tendency to return. However, once the baby is around 10 months old, movements back into work tail off similarly for both lone and partnered mothers. This suggests that although partnered mothers are likely to be more successful in finding a workable job/childcare match in the medium term, subsequent success varies little by partnership status.

It must, however, be noted that these all these differences in the rates of return do not account for other factors that may be associated with these groups such as age, educational qualifications, number of children, and so on. It is therefore important to recognise that these findings should only be interpreted in light of the upcoming multivariate analysis which identifies the marginal effects by taking these other factors into consideration.
Having separately illustrated both the incidence of childcare usage and the durational implications of diverse ethnic and social groupings on returns to work, the two subsequent sections discuss a multivariate analysis of the relationship between any likely return to work and childcare options, on account of personal characteristics in the first section and job characteristics in the second section.

Childcare, ethnicity and occupational class
Table 3 presents results which highlight how childcare usage affects the timing of returns to work across different ethnic and occupational/social groups. As referred to earlier, the Cox model estimates the risk of an individual leaving the risk pool at the next event occurrence and thus the estimates are to be interpreted in terms of event sequence rather than absolute or relative measures of time. Thus the results in model 1 suggest that before taking childcare options into account, increasing age slightly reduces the risk of return whereas being educated above 'O' level standard slightly increases the risk of return. In terms of ethnicity the results show that of the mothers in the sample those of mixed heritage, Indian, Pakistani and Bangladeshi exhibited a smaller risk of moving into work relative to their otherwise similar white counterparts, whilst the remaining ethnic groups displayed a greater risk. However, only the estimate for Pakistani mothers is statistically significant at the ten per cent level. Nonetheless, this does offer some support to the notion that cultural ethnic differences in labour market attachment play a role in mothers' different rates of return to work**.**

Model 1 also indicates that all occupational classes display an increased risk of returning to work relative to workers in routine jobs. This shows that as one moves up the occupational skills spectrum the general trend is one of increasing risk of return relative to routine workers, although it is not entirely linear. Yet again, those in the self employed/ small employer show themselves to be at greatest risk of return, as might be expected given their special investment in their work. Predictably, having a job whilst pregnant increases the risk of returning to work nearly six times. That workers who have a job to go back are liable to return earlier is to be expected, given that these workers will likely have stronger links to the workplace, be constrained by contractual maternity entitlements, etc. Furthermore unsurprisingly, lone parents demonstrate a substantially reduced risk of returning to work, i.e., a 41 per cent reduction in their chances of returning to work relative to partnered mothers. This suggests that having the support of a partner is perhaps more important than any financial incentive to return to work.

Table 3: Cox Proportional Hazard model hazard ratios. Duration of time from childbirth till first return to work.

	Model 1	Model 2
Age at birth	0.999***	0.999**
Educated above 'o' level or equivalent (1=yes 0=no)	1.085**	0.991
Ethnicity		
- White	Ref.	Ref.
- Mixed	0.878	0.842
- Indian	0.848*	0.836*
- Pakistani	0.647***	0.692**
- Bangladeshi	0.698	0.756*
- Black Caribbean	1.124	1.070
- Black African	1.099	1.365***
- Other ethnic group (inc. Chinese)	1.004	1.034
SES		
- High Managerial / Professional	1.279***	1.104
- Low Managerial / Professional	1.232***	1.108
- Intermediate	1.084	1.014
- Small employer/ Self-employed	1.631***	1.342***
- Low Supervisory/ Technical	1.161*	1.130
- Semi-Routine	1.179***	1.108
- Routine	Ref.	Ref.
- Never Worked	0.614*	0.612*
Had job whilst pregnant (1=yes 0=no)	5.870***	4.008***
Lone Parent (1=yes 0=no)	0.589***	0.672***
Childcare type		
Self		1.959***
Husband/Partner		1.746***
Grandparents		1.331*
Other relatives (inc. non-resident father)/ Nanny/ Au Pair		1.121
Friends/neighbours		1.095
Childminder		1.168
Nursery/Creche		0.913
Playgroup/family centre		0.665**
Early Years Education		0.613***
Other (not specified)		0.550***
Childcare is paid for		1.451***
Number of simultaneous childcare types used (0 – 4+)		2.617***
(Number of simultaneous childcare types used) squared		0.822***
Overall contribution of childcare options χ^2 / F (df.)		46.92***
N (person-months)	367631	367631

Source: MCS waves 1-2 ; All statistics weighted using MCS weights

Notes: Exponentiated coefficients; *p<0.1, **p<0.05, ***p<0.01. Additional controls not shown here= mother's age at birth, education, ethnicity, health; child's health and temperament; other children in the household, mother's first baby and whether mother had a job whilst pregnant. Full details appear in Appendix III

Yet once the use of childcare is incorporated, the picture changes somewhat. Model 2 shoes that older mothers still exhibit a reduced risk of returning to work as do Pakistani mothers and lone mothers. Equally, self-employed mothers, those working for a small employer and those who had a job when pregnant still display a higher risk. Thus for these mothers differences in risk relate to something not captured in this analysis. However, childcare appears to be relevant for Black African mothers. Without considering which type(s) of childcare they use, there seems to be little difference in risk of return when compared against otherwise similar white mothers. However, once the comparison is conducted on the basis that these mothers use the same sort of childcare, Black African mothers experience a 36 per cent increase in risk of return. Thus, where childcare is allowed to take any form the increased return to work propensity for Black African mothers is obscured and only revealed when childcare use is specified. This indicates that Black African mothers are subject to stricter childcare limitations than white mothers and that they return at similar rates despite this. If they had access to a wider range of options, whether through affordability or accessibility, they would have an increased rate of return than otherwise similar white women.

Furthermore, the differences in risk experienced across the occupational spectrum lose statistical significance when childcare is considered; although the self-employed/small employer category retains an acceptable degree of statistical significance. We have seen earlier how the self-employed/small employer group is somewhat unique. This evidence is consistent with the notion that something other than childcare usage explains the increased risk of return experienced by these workers. However, the suggestion in preference theory that childcare will not matter to those in top jobs because they will pay any costs to facilitate a return is not borne out by the data. In fact, once childcare use is defined, we see the disappearance of any evidence indicating that those in jobs higher up the spectrum have a higher return risk. Thus those in professional/managerial jobs are as subject to the ordeals of securing childcare as any other group (excepting self-employed/small employer). They return to work faster in absolute terms, (see Table 2), because they are more prepared to or better able to use contractual forms of childcare. But if those from other social groups used the same childcare options they would return at a similar rate, it would seem. This is interesting because assumptions about attachment to work are often heavily class centred. Of course, we cannot reject the reverse explanation that fewer mothers from other social classes use contractual childcare because they do not intend to return quickly, whereas if they were highly job-centred (and therefore like those from the higher social classes) it's an option they would use. Nonetheless, it is illuminating to find that class-based understandings of mothers' labour market behaviour are incomplete without reference to specific forms of childcare. This clearly shows that childcare usage is a crucial factor in the return to work event.

The argument that affordability, availability and quality of childcare are three vital elements in the return to work is somewhat borne out by these results. If the mother pays for childcare, her risk of returning is increased by 45 per cent. However, this could mean that because she pays for childcare she has more control over her

package and is better placed to dictate terms and thus tends to return quicker; or that because she elects to return quicker for financial or personal reasons, etc., she is required to pay for childcare as other options are not available soon enough. Furthermore, if the mother uses additional options within a childcare package her risk of return increases, although the evidence show this turns to a negative relationship with each additional childcare type above a single option. [6]This confirms the suggestion that as the 'jigsaw' of simultaneous options becomes more complex, the utility be derived from combining care options into a care package is offset by the level of management required to maintain the package.

If a mother is able to care for the child whilst working she experiences an almost doubled risk and using a husband/partner increases her risk of return by 75 percent. That using a playgroup/family centre and Early Years education reduces the risk of returning to work is consistent with the contention that child age constrains care options, i.e., this type of care is not available from birth and only becomes available when the child has aged somewhat. Thus any mother who uses this particular type of care uniquely must postpone her return accordingly. Yet, this is also the stage where social interaction with peer groups and time spent away from the mother becomes developmentally important. Consequently, it is unclear as to whether the risk here is associated with a mother who might find a return to work too problematic until this type of care becomes *available or* that, due of the desirability of this mother/child separation, the mother has more childfree time to engage in paid work.

However, perhaps the most interesting point that these results raise is that apart from financial cost and age thresholds dictating availability of care placements the advantages and disadvantages of differing types of care do not appear to have so much consequence. Grandparents provide substantial amounts of care and are considered by many to represent high quality, yet this does not appear to affect the risk of returning to work. The only form of childcare that represents a statistically significant relationship with the timing of a return to work aside from cost and age thresholds is that conducted within the household unit, i.e., self and partner. This points to the particular advantages of internal care arrangements within the household, i.e., the simplicity of a care package that means the children are cared for by a parent, within their own home. Such an operation precludes the additional organisational tasks of ferrying children to and from the carer with the correct clothing, toys, etc; ensures that a parent is on hand at all times to make important child welfare decisions, thereby allowing the mother to focus more directly on her job whilst at work; etc. Additionally, to the extent that raising children can be seen as a joint project on the part of both parents, sharing childcare duties between parents enables the production of joint goods. By working collaboratively, both mother and father can benefit mutually from the increased income associated with dual-earner households without the need to farm their children out. Furthermore, both parents are

[6] The turning point occurs at the use of 1.2 childcare types. Of course the use of 1.2 childcare types can only be understood theoretically, but this does tell us that using a single type is part of an upward risk trend but the use of more than one represents a downward trend.

better able to appreciate the advantages and disadvantages of the work/family balance they collectively choose and make joint assessments as to the feasibility of either a later or earlier return. Thus, mothers who share childcare responsibilities with fathers experience logistical, economic and cooperative advantages which translate into earlier returns.

Childcare and job match

Clearly, childcare is important factor in the timing of a return to work event but as I have previously suggested childcare by itself is only half the story as the childcare requirement is in large part determined by the job one wishes to return to. Table 4 considers only those who experienced a return in the observation period and the characteristics of the job they returned to. [7] As these are the mothers who have returned to a job whilst their child are still quite young, we might regard them as having a strong attachment to the labour market. Moving between model 1 and model 2 does not appear to uncover a potent impact of childcare usage on return timings as the risk ratios do not vary substantially. However, precisely because these mothers are the ones that have overcome all the hurdles that their stay-at-home counterparts have not, any variation is particularly informative.

From model 1 we see that those who return to the same job exhibit a predictably higher risk of return, 79 per cent greater than those who return to a different job. This suggests that those looking to maintain job continuity return more quickly. One explanation for this trend is that these mothers seek to maintain as much of the status quo as possible in terms of earnings, career status, etc., and thus fit the child around the job rather than the job around the child. This implies a certain amount of autonomous choice in electing when to return. However, an alternative explanation points to the imposition of triggers that precipitate returns back to work such as the thresholds for statutory maternity leave. That so many of the mothers who do experience a return before wave 2 make their return within 29 weeks of the birth indicates that mothers' labour market behaviour might be largely a matter of public policy than free individual choice. The potentially wide range of policy implications this might connote points to the value of further research in this area; especially as longer maternity leaves are found to be advantageous for mother and child (Baker & Milligan, 2008; Waldfogel, 1998). Since the mothers in this sample were having their babies, maternity leave entitlements have been extended. In April 2003 the length of maternity leave open to all increased from 14 weeks to 26 weeks. In addition, those meeting continuous service qualifications could add a further 26 weeks onto this initial period (Income Data Services, 2003: 30-67). As a consequence, mothers can now take up to a year's leave after the birth and exercise a right to return. As and when appropriate data becomes available on mothers who gave birth after April

[7] The picture portrayed in relation to personal characteristics from the data in table 3 remains largely the same and is therefore not discussed here. However, these attributes are included in the models and full details can be seen in Appendix III

2003, it would likely prove enlightening to compare return rates before and after April 2003 to highlight any impact of these policy changes.

Where increasing amounts of time are spent in the workplace, I have suggested that the additional strain on the childcare package might limit a mother's capacity to effect an earlier return. The evidence shows some support for this view as whilst the change in risk associated with working an additional hour per week is relatively small, roughly two per cent higher in both models 1 and 2, it is clear that the cumulative corollary of this is that full time working correlates to earlier returns. However, despite all that we understand about women's attachment to part-time working or the eligibility for welfare benefits, the raised risk associated with each additional hour is roughly the same for both full-timers and part-timers. Equally, from model 2, childcare appears to matter very little in its relationship to hours; however, this may all be a reflection that the correlations between childcare, job culture, flexible working and job continuity; matter more than the workplace time.

I have previously suggested that the speed of any return back into work is likely to be affected by the prevailing atmosphere of the workplace. I argued that where a mother feels that her working environment is sensitive to her needs as a working mother, she would likely return sooner as her path back into work would be made all the easier: however, the evidence shows little or no support for this. Where co-workers are sympathetic to the needs of a working parent the data indicates a lower risk of return than where co-workers are unsympathetic. However, this is only statistically significant at the 10 percent level in model 1 and once childcare factors are incorporated it is no longer significant. As these are all mothers who must have resolved their childcare issues to a satisfactory degree in order to make it back into work, it is perhaps unsurprisingly that the tone of colleagues attitudes is inconsequential in the light of effective childcare arrangements.
Perhaps equally unsurprising, is the effect of working in a male dominated environment. That mothers who work with mostly men experience an increased risk of return is consistent with the view that, in order to succeed, women in masculine careers have to behave like men, i.e., keeping child/family related issues outside of the workplace. This is further substantiated in model 2 where, irrespective of childcare use, there is an increased tendency for a mother in a man's job to return to work sooner. These mothers are settling for any childcare package that enables a return, even if it is not the most favourable childcare/job match. Mothers who work in male environments may feel pressurised into quick returns, or it may simply be that they have chosen this type of career because they identify with feminine/maternal roles to a lesser degree and find motherhood difficult.

In relation to forms of flexible working we also see from model 1 that those who return to a job where they can work from home all the time experience an increased return risk of 51 per cent and those who can tailor their hours to working in the evening or school hours have an increased risk of 68 per cent. Moreover, in model 2 we see that once childcare is also considered the increased risk of return associated with working from home or special shifts is lower. This is consistent with the notion that mothers who can fit their job around their children likely make earlier returns

partly because their childcare demand is less intense. Part of the higher return risk reflected in model 1 is due to the childcare opportunities related to these flexible working patterns. This is further evidenced by the effect of being able to work from home occasionally. Model 1 tells us that two mothers who differ only by their ability to work from home occasionally are no more likely to return to work than each other. However, model 2 indicates that where these two mothers use the same type of childcare, the mother who can work from home occasionally displays a 17 per cent increase in her chances of return.

Table 4: Cox Proportional Hazard model hazard ratios. Duration of time from childbirth till first return to work for those who returned to work during observation period

	Model 1	Model 2
Returned to same job (1=yes 0=no)	1.786***	1.734***
<=16 hrs per wk	1.022***	1.019***
16<=30 hrs per wk	1.017***	1.014***
>30 hrs per wk	1.019***	1.016***
Colleagues are sympathetic to parental responsibilities (1=yes 0=no)	0.944*	0.956
Work with mostly men (1=yes 0=no)	1.096**	1.117**
Part time working	1.064	1.029
Job sharing	1.015	0.998
Flexi-time	1.026	1.025
Work from home occasionally	1.133*	1.173**
Work from home all the time	1.513**	1.452**
Special shifts, eg. Eves, school hrs	1.682***	1.524***
9-day fortnights, 4-day weeks	0.324***	0.355***
School term contracts	1.045	1.095
Childcare Type		
Self		1.495**
Husband/Partner		1.165
Grandparents		1.036
Other relatives (inc. non-resident father)/ Nany/Au Pair		0.922
Friends/neighbours		0.968
Childminder		0.924
Nursery/Crèche		0.807
Playgroup/family centre		0.858
Early Years Education		0.705*
Other (not specified)		0.741
Childcare is paid for		1.160***
Number of simultaneous childcare types used		1.479**
(Number of simultaneous childcare types used) squared		0.949***
Overall contribution of childcare options χ^2 / F (df.)		11.02***
N (in person-months)	209030	209030

Source: MCS waves 1-2 ; All statistics weighted using MCS weights

Notes: Exponentiated coefficients; *p<0.1, **p<0.05, ***p<0.01. Additional controls not shown here= mother's age at birth, education, ethnicity, occupational class, health; child's health and temperament; other children in the household, mother's first baby and whether mother had a job whilst pregnant. Full details appear in Appendix IV

Thus, those who cannot work from home as part of their childcare package and have to make other arrangements are less likely to return quickly. This again suggests that where the demands on the childcare package are minimised, an earlier return is likely.
Those who compress their working week or fortnight across fewer days experience a 68 per cent *decrease* in their risk of return. This suggests that extending the margins of a handful of working days in order to manufacture a non-working day creates additional restraints. If a mother contrives to complete a week's work over four days, one might imagine that this would allow her to devote the remaining day to spending time with her child and also avoid her having to find childcare for every weekday. However, one might also imagine that this process would also include the need to find childcare cover for the unsocial periods of early mornings and late evening/nights on the four extended days thereby placing increased strain on the childcare package. In addition to any problems of securing childcare, the extra pressures of organising and running of a household such that it can cope with her extended absence over the four days each week might delay a return to this work regime.

Conclusion

Current debates regarding working mothers and their attachment to the labour market have tended to emphasise the importance of either personal choice or the constraints of cultural divides across class, ethnicity, etc. In this study I have looked at the effect of childcare and the passage of time on when a mother first returns to work after her baby is born. Perhaps the main conclusion to be drawn from this analysis is that any consideration of gendered labour market behaviour that does not appropriately consider the various dimensions of childcare is in someway limited. Overwhelmingly, it is women who cover society's childcare requirement and, for mothers, where this is fused with engaging in paid work, the practicalities of finding someone else to care for your children can be quite restrictive. Thus whilst choice and constraint are important, the nature of this importance changes over time as childcare opportunities evolve.
The apparent variation in timings of returns to work by occupational class has much to do with access to childcare and rather less to do with investment in a job career, although these two factors are likely to be inter-related. Equally, the estimates show evidence that ethnic background has an impact on the likelihood of a return to work where traditional gender attitudes lessen the chances of a return and variation in access to childcare produces further limitations. Predictably, I find those mothers without the support of a live-in partner tend to take much longer to make a transition into work; however, I find the reasons for this to be beyond personal characteristics and childcare usage. Nonetheless, the evidence shows that childcare access is important for lone-mothers and further research looking at childcare availability rather than usage or with a specific focus on lone-parenting might prove fruitful.
Of all the different dimensions of childcare I find that its financial cost plays arguably the biggest role. This is not particularly surprising as, for many mothers, at least one

of the motivations for returning to work is to earn some money and, where a large proportion of one's earnings are consumed by childcare expenses, this is likely to have an impact. Equally, if one is paying for childcare this equips the mother with a certain amount of control over the proceedings which is likely to affect her ability to create a harmonious balance between work and life. This aspect of control is further seen in use of simultaneous childcare types, as when packages become more difficult to control they also become associated with a slower return.
Somewhat more surprising, however, is the absence of any findings related to trust and quality of a package. I suggested that in dealing with the care of very young children, who have limited capabilities of reporting on the calibre of their care provider, mothers might source childcare from those they know best and thus feel most comfortable with. Interestingly, despite evidence showing that that the quantity of childcare provided by family members is considerable, this is only associated with a higher chance of moving into work for those who use their live-in partner for childcare. That providing the care oneself is also associated with a higher chance of return suggests that this is as much about logistical arrangements and the production of joint goods as it is about trust.
Whilst the estimates do not show a noteworthy effect of childcare on the chances of return for those mothers who we see make it back into work, it must be remembered that these are the women who have, at least in part, successfully resolved their childcare issues where others have not. In terms of the job they return to, the hours of the job make little difference unless we consider when and where they are to be completed. Increasing the amount of hours per week is associated with a very slight increase in the risk of return but working from home and at times that suit domestic arrangements exhibit a much higher risk of return. However, squeezing ones hours across fewer days reduces the risk of return.
I further find that if they maintain a career by returning to the same job and/or they work in a male/dominated environment their chances of an early return is much greater; indicating that the world of paid work is still overwhelming geared towards men and women who can sidestep family caring responsibilities.
Consequently, it is not necessarily the amount of workplace hours that is central to the chances of return; rather it is the job culture determining the way in which mothers work that can be crucial.

All of these results corroborate the notion that childcare matters to mothers who work, although the ways in which it matters develops over time and differently for different mothers. Enhancing gender equity in labour market issues and encouraging mothers back into work is therefore not simply a matter of understanding individual motivations or socio-cultural forces: it is all of these things, but only in relation to *who* looks after the children *and* when *and* why.

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APPENDIX I: Definition of variables

Variable	Definition
Duration from childbirth till first return to work	Month- date of first return to work minus month-date of childbirth
Maternal age at childbirth	Month-date of childbirth minus month-date of maternal birth date
Educated above 'o' level or equivalent	Dummy variable equal to 0 if highest academic qualification is not higher than an 'o' level and 1 otherwise
Ethnicity	UK 8-category classification:- 1=White, 2= Mixed, 3= Indian, 4= Pakistani, 5=Bangladeshi, 6=Black Caribbean, 7=Black African, 8= Other (including Chinese)
SES	NS-Sec 7 category classification with an additional category codifying those who have never worked:- 1= High Manager / Professional, 2=Low Manager / Professional, 3= Intermediate, 4=Small Employer / Self Employed, 5=Low Supervisory and Technical, 6=Semi-routine, 7=Routine
Mothers poor health	Dummy variable equal to 1 if mothers self-reported health status is poor in MCS1 and MCS2, and 0 otherwise
firstbaby	Dummy variable equal to 1 if cohort member is mother's first baby and 0 otherwise
No. of other children in household	Number of children in the household other than the cohort member
Had job whilst pregnant	Dummy variable equal to 1 if respondent has a job whilst pregnant and 0 otherwise
Lone Parent	Dummy variable equal to 1 if respondent has always been a lone parent since the birth of the cohort member and 0 if the respondent has never been a lone parent since the birth of the cohort member
Returned to same job (1=yes 0=no)	Dummy variable equal to 1 if respondent returned to the job they held directly prior to childbirth and 0 otherwise
Work with mostly men (1=yes 0=no)	Dummy variable equal to 1 if respondent has a job working with mostly men and 0 otherwise
Working hours	Spline variable with knots at 16hrs and 30hrs per week
Colleagues are sympathetic to parental responsibilities	Dummy variable equal to 1 if colleagues are sympathetic to parental responsibilities and 0 otherwise
Part time working	Dummy variable equal to 1 if used flexible working option 'part-time' and 0 otherwise
Job sharing	Dummy variable equal to 1 if used flexible working option 'job-sharing' and 0 otherwise
Flexi-time	Dummy variable equal to 1 if used flexible working option 'flexi-time' and 0 otherwise
Work from home occasionally	Dummy variable equal to 1 if used flexible working option 'working from home occasionally' and 0 otherwise
Work from home all the time	Dummy variable equal to 1 if used flexible working option 'work from home all the time' and 0 otherwise
Special shifts, eg. Eves, school hrs	Dummy variable equal to 1 if used flexible working option 'special shifts' and 0 otherwise
9-day fortnights, 4-day weeks	Dummy variable equal to 1 if used flexible working option '9-day fortnights, 4-day weeks' and 0 otherwise
School term contracts	Dummy variable equal to 1 if used flexible working option 'School term contracts' and 0 otherwise
Child in good health	Dummy variable equal to 1 if number of hospital admissions/ health problems of cohort member=0 and 0 otherwise
Child is 'difficult'	Dummy variable equal to 1 if child is 'almost always' / 'often' 'fretful in a new place or situation' or 'becomes upset when does not get what it wants' ; or has

	'severe'/'definite' emotional or behavioural difficulties and equal to 0 if 'almost never' / 'rarely' 'fretful in a new place or situation' or 'becomes upset when does not get what it wants' ; or has 'minor'/'no' emotional or behavioural difficulties
Childcare type	
Self	Dummy variable equal to 1 if childcare type 'Self' is used and 0 otherwise
Husband/Partner	Dummy variable equal to 1 if childcare type 'Husband/Partner' is used and 0 otherwise
Grandparents	Dummy variable equal to 1 if childcare type 'Grandparents' is used and 0 otherwise
Other relatives (inc. non-resident father)/ Nanny/Au pair	Dummy variable equal to 1 if childcare type 's Other relatives (inc. non-resident father' or 'Nanny/Au pair' is used and 0 otherwise
Friends/neighbours	Dummy variable equal to 1 if childcare type 'Friends/neighbours' is used and 0 otherwise
Childminder	Dummy variable equal to 1 if childcare type 'Childminder' is used and 0 otherwise
Nursery/Crèche	Dummy variable equal to 1 if childcare type 'Nursery/Crèche' is used and 0 otherwise
Playgroup/family centre	Dummy variable equal to 1 if childcare type 'Playgroup/family centre' is used and 0 otherwise
Early Years Education	Dummy variable equal to 1 if childcare type 'Early Years Education' is used and 0 otherwise
Other (not specified)	Dummy variable equal to 1 if childcare type 'Other (not specified)' is used and 0 otherwise
Childcare is paid for	Dummy variable equal to 1 if childcare is paid for and 0 otherwise
Number of simultaneous childcare types used	Number of childcare types used contemporaneously; taking the value range 0,1,2,3,4+
(Number of simultaneous childcare types used) squared	Squared values of simultaneous childcare type usage to indicate non-linear function

APPENDIX II: Description of all variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Duration from childbirth till first return to work	10975	18.90159	15.79839	0	55
Maternal age at childbirth (in months)	10973	357.7066	67.35868	192	617
Educated above ‘o’ level or equivalent	10958	0.398248	0.489559	0	1
Ethnicity	10953	1.516114	1.461504	1	8
SES	10855	4.244035	2.232079	1	8
Mothers poor health	10947	0.024116	0.153417	0	1
First baby	10155	0.416642	0.493027	0	1
No. of other children in household	10948	1.202503	1.046033	0	12
Had job whilst pregnant	10967	0.680861	0.466164	0	1
Lone Parent	10948	0.127786	0.333867	0	1
Returned to same job (1=yes 0=no)	10975	0.353713	0.478143	0	1
Work with mostly men (1=yes 0=no)	10975	0.081549	0.273689	0	1
Working hours	5997	14.7352	2.995814	1	16
	5997	6.618476	5.864166	>16	30
	5997	2.157079	4.426481	>30	60
Colleagues are sympathetic to parental responsibilities	6729	0.71021	0.453699	0	1
Part time working	10975	0.425239	0.494402	0	1
Job sharing	10975	0.064875	0.246316	0	1
Flexi-time	10975	0.19918	0.399402	0	1
Work from home occasionally	10975	0.083098	0.276043	0	1
Work from home all the time	10975	0.068064	0.251867	0	1
Special shifts, eg. Eves, school hrs	10975	0.107608	0.309899	0	1
9-day fortnights, 4-day weeks	10975	0.06287	0.24274	0	1
School term contracts	10975	0.074533	0.262648	0	1
Child in good health	10975	0.958451	0.199565	0	1
Child is ‘difficult’	10557	0.441413	0.496579	0	1

Childcare type					
Self	10975	0.03262	0.177647	0	1
Husband/Partner	10975	0.181321	0.385302	0	1
Grandparents	10975	0.398633	0.489639	0	1
Other relatives (inc. non-resident father)/ Nanny/Au pair	10975	0.136674	0.343519	0	1
Friends/neighbours	10975	0.03836	0.192072	0	1
Childminder	10975	0.109339	0.312079	0	1
Nursery/Crèche	10975	0.208474	0.406236	0	1
Playgroup/family centre	10975	0.065513	0.247439	0	1
Early Years Education	10975	0.094214	0.29214	0	1
Other (not specified)	10975	0.011481	0.106536	0	1
Childcare is paid for	10975	0.381048	0.485666	0	1
Number of simultaneous childcare types used	10975	1.27344	1.011885	0	4
(Number of simultaneous childcare types used) squared	10975	2.645467	3.381323	0	16

APPENDIX: III

Table 3a: Cox Proportional Hazard model estimates. Duration of time from childbirth till first return to work.

	Model 1	Model 2
Age at birth	0.999***	0.999**
Educated above 'o' level or equivalent (1=yes 0=no)	1.085**	0.991
Ethnicity		
- White	Ref.	Ref.
- Mixed	0.878	0.842
- Indian	0.848*	0.836*
- Pakistani	0.647***	0.692**
- Bangladeshi	0.698	0.756*
- Black Caribbean	1.124	1.070
- Black African	1.099	1.365***
- Other ethnic group (inc. Chinese)	1.004	1.034
SES		
- High Managerial / Professional	1.279***	1.104
- Low Managerial / Professional	1.232***	1.108
- Intermediate	1.084	1.014
- Small employer/ Self-employed	1.631***	1.342***
- Low Supervisory/ Technical	1.161*	1.130
- Semi-Routine	1.179***	1.108
- Routine	Ref.	Ref.
- Never Worked	0.614*	0.612*
Had job whilst pregnant (1=yes 0=no)	5.870***	4.008***
Lone Parent (1=yes 0=no)	0.589***	0.672***
In poor health (1=yes 0=no)	0.738***	0.713***
Mother's first baby (1=yes 0=no)	0.804***	0.879***
No. of other children in household	0.895***	0.971
Child in good health (1=yes 0=no)	1.023	1.058
Child is 'difficult' (1=yes 0=no)	0.962	1.012
Childcare type		
Self		1.959***
Husband/Partner		1.746***
Grandparents		1.331*
Other relatives (inc. non-resident father)/ Nanny/ Au Pair		1.121
Friends/neighbours		1.095
Childminder		1.168
Nursery/Creche		0.913
Playgroup/family centre		0.665**
Early Years Education		0.613***

Other (not specified)		0.550***
Childcare is paid for		1.451***
Number of simultaneous childcare types used (0 – 4+)		2.617***
(Number of simultaneous childcare types used) squared		0.822***
Overall contribution of childcare options χ^2 / F (df.)		46.92***
N (person-months)	367631	367631

APPENDIX: IV

Table 4a: Cox Proportional Hazard model estimates. Duration of time from childbirth till first return to work for those who returned to work during observation period

	Model 1	Model 2
Age at birth	0.999***	0.999***
Educated above 'o' level or equivalent (1=yes 0=no)	0.965	0.961
Ethnicity		
White	Ref.	Ref.
Mixed	0.661	0.723
Indian	0.644***	0.660***
Pakistani	0.944	0.987
Bangladeshi	0.728**	0.775
Black Caribbean	0.862**	0.886
Black African	0.982	1.073
Other ethnic group (inc. Chinese)	0.795	0.782
SES		
High Managerial / Professional	0.808**	0.848*
Low Managerial / Professional	0.840**	0.868
Intermediate	0.861	0.888
Small employer/ Self-employed	1.488***	1.392**
Low Supervisory/ Technical	0.9211	0.944
Semi-Routine	1.0313	1.028
Routine	Ref.	Ref.
Never Worked	0.357***	0.375***
Had job whilst pregnant (1=yes 0=no)	2.516***	2.383***
Lone Parent (1=yes 0=no)	0.781***	0.828***
In poor health (1=yes 0=no)	0.832	0.779*
Mother's first baby (1=yes 0=no)	1.002	1.012
No. of other children in household	1.011	1.019
Child in good health (1=yes 0=no)	1.159**	1.175**
Child is 'difficult' (1=yes 0=no)	1.020	1.035
Returned to same job (1=yes 0=no)	1.786***	1.734***
<=16 hrs per wk	1.022***	1.019***
16<=30 hrs per wk	1.017***	1.014***
>30 hrs per wk	1.019***	1.016***
Colleagues are sympathetic to parental responsibilities (1=yes 0=no)	0.944*	0.956
Work with mostly men (1=yes 0=no)	1.096**	1.117**
Part time working	1.064	1.029
Job sharing	1.015	0.998

Flexi-time	1.026	1.025
Work from home occasionally	1.133*	1.173**
Work from home all the time	1.513**	1.452**
Special shifts, eg. Eves, school hrs	1.682***	1.524***
9-day fortnights, 4-day weeks	0.324***	0.355***
School term contracts	1.045	1.095
Childcare Type		
Self		1.495**
Husband/Partner		1.165
Grandparents		1.036
Other relatives (inc. non-resident father)/ Nany/Au Pair		0.922
Friends/neighbours		0.968
Childminder		0.924
Nursery/Crèche		0.807
Playgroup/family centre		0.858
Early Years Education		0.7045*
Other (not specified)		0.741
Childcare is paid for		1.160***
Number of simultaneous childcare types used		1.479**
(Number of simultaneous childcare types used) squared		0.949***
Overall contribution of childcare options χ^2 / F (df.)		11.02***
N (in person-months)	209030	209030