

The opportunity costs of childbearing: More than mothers' business

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Abstract. This paper is an argument about gender relations. It takes the entwined themes of men's interests in parenthood, the sex division of labour and its evolution, policy for gender equity and policy to support the level of social reproduction. The emphasis on women's employment as a determinant of low fertility has to be supplemented by an examination of the assumption that only women's time use is affected by child-rearing. Many forces tend to concentrate fathers' involvement on breadwinning, but they are not immutable and are already changing. It should be in the interests of promoting social reproduction, as well as gender equity, for policy interventions to facilitate complementarities in parenting and in its combination with paid work. Descriptive evidence about the paid and unpaid work of couples and parents is presented, largely secondary material from the UK.

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1. Low fertility, women's employment and fathers' involvement

Can societies achieve gender equality without jeopardising reproduction? The answer to this important question must lie in the terms on which men and women can co-exist in the home as well as the labour market. This paper explores the assumptions and some evidence about the work of men and women in the domestic sphere, and discusses their implications for gender equity and the future level of fertility in the post-industrial era.

The economic activities of women are common ground between economics and demography. Their implications for population change are one of the reasons the women's labour market receives attention in demography. One of the ways in which demographic change is forced upon the attention of economists primarily concerned with conventionally measured economic variables, is the influence of childbearing on female labour supply. Women's time is on the front line of the trade-off between production and procreation – the work-family interface. The reason women's employment, not men's, has been seen to trade off with childbearing, is because it is women's time that is assumed to be diverted from production, and home-time to be woman's business. I take the honour of being the Society's first woman president as an opportunity to review the roles of men as well as women in the analysis of family formation and policies to support it.

1.1 The costs of children: theirs, his or hers

Fathers certainly have a role in the conventional analysis of fertility. In the New Home Economics model of the family, examined below, the man is the breadwinner and parents are securely bound in a monogamous life-time union. They desire children to satisfy their demand for 'child services', which have a quantity and quality component. There is a cost to producing these services in terms of commodities purchased from the cash and time inputs. Utility from 'child services' and other items is maximised subject to the couple's budget constraint. The major diversion of time is the mother's, which has a consequent effect on her wage through forgone human capital accumulation (Willis 1974). The father takes on the role of provider of cash, and all income is shared ('happily ever after'). In our illustrative examples of the costs of rearing two children in Britain, direct expenditure on market goods and indirect costs of foregone earnings (sometimes loosely referred to as opportunity costs) happened to be about equal over this life-time (Davies and Joshi 1995). Under the assumption of pooling until death, the distribution of the costs of fertility between the parents is independent of which one of them incurs more time costs. The woman's foregone earnings become lost family revenue, and if this is pooled, the man suffers his share of the loss. Similarly, the woman is affected as much as the man by any change in the material expenses on children.

It is the lack of certainty about whether the costs of children will be pooled, and indeed how long the parents' partnership may last, which gives rise to the question of which parent bears the cost – 'Who Pays for the Kids?' in the words of Nancy Folbre (1994). The forgone earnings costs of children were never 'just mother's business', for they affect any partner supporting her. But, if such support becomes less certain or complete, the

balance of time use becomes relevant. Mothers have an incentive to earn their own cash and protect their own earning power by increasing employment and cutting fertility, particularly if the workload does not adjust in some way – automation, help from outside (purchased, subsidised by state or kin), or increased involvement of the man in domestic work. Fathers' involvement in unpaid child care is a direct way of sharing the costs – as well as the joys – of parenthood. It is likely to enhance the quality of children's lives, and perhaps to encourage rather than deter parenthood itself. Men who are uncertain that they will retain contact with children may be deterred from parenthood. Even more speculatively, for those who are worried about crime, more fathers' involvement in the activities of the home might help keep two generations of potential offenders out of trouble.

1.2 Gender equity and fertility

The Woman's Movement has on the whole paid more attention to claiming equal treatment with men in the public sphere of productive activities than in the domestic sphere of reproductive activities, despite the interconnections of the two sectors. The difficulties of taking advantage of market opportunities while encumbered by an unequal share of domestic responsibilities are likely to induce further falls in fertility. Folbre (1989) describes feminist economists as pursuing two possible 'Nirvanas'. In both of them, men and women would have equal access to education, and receive equal pay for equal human capital. In Nirvana number 1:

- The full-time labour force participation rate of women reaches that of men.
- [Identical taxation of male and female individuals]: no fiscal inducement to women to engage in non-market activities that diminish their market experience.
- Children are cared for by the most efficient means [unspecified].

In short: "Why can't a woman be more like a man?"

In Nirvana number 2:

- Men increase their hours of unpaid work ... Their labour force participation would decline to the level now characteristic of women. Men and women would have equal leisure time.
- Public Policies, including tax and social welfare policies, recognise and reward family labour and personal attention to health, welfare and education of children, adults and the elderly – wherever these responsibilities are shared by men and women.

In short: "Why can't a man be more like a woman?"

There is nothing in the first model to ensure that sex equality will not entail further falls in fertility. If continued subordination of women is necessary to make sure they reproduce, this would be an obstacle to reaching Nirvana number 1. If it were achieved, but at unacceptably low fertility rates, this would be a drawback. The second model should be more conducive to parenthood than the first, though the present state of the world is so

remote from either, it can be questioned whether they are attainable. But Nirvana number 2 does bear some resemblance to the ideal of the family-friendly Swedish welfare state, which has already pioneered policies to encourage egalitarian parenthood, giving workers of both sexes facilities to combine employment and parenthood (e.g. Myrdal 1941; Leijon 1968; Persson 1990; Stafford and Sundström 1992; Gustafsson 1994, 1995; Walker 1995). It may be that the circumstances which brought this model into existence are unique – the auspicious conjunction of a feminist movement committed to motherhood and full-employment (Sandqvist 1987), so that other countries cannot be expected to follow suit. On the other hand, Sweden is still seen as a trail blazer in setting new demographic and family trends. It is a suitable place to be asking if an ungendered future is at least thinkable, if not (yet) practicable. Is it just the time of women that is required to produce and raise the next generation, or can increased involvement by men make a difference without prohibitive costs?

1.3 Plan of the paper

Before looking at the question of whether men do, or might, bear any of the time costs of children, we need to consider why it has generally been assumed that they do not, and should not. The rest of the paper is divided between considering some explanations of the gender division of labour, and some evidence about it. The conclusions return to policy questions, and try to take another step towards Nirvana.

2. Sexual division of labour: theories and arguments

I want to venture into the treacherous territory: the domestic division of labour. Everyone has their personal perspective on the subject. This is likely to be coloured by whether one is male or female, because the weight of tradition leads to different expectations and practice of and by men and women. My own overview of the topic is not original or impartial, and inevitably incomplete. I hope that it will kindle debate among those I may not convince. If traditional arrangements are economically efficient or sociologically functional does this mean the status quo is optimal? For whom is it optimal? This section reviews a mainstream statement of the economics of home life and some developments and criticisms of it. There is a brief section on the changing sociological view on the inevitability of traditional sex roles, and finally we look at what is meant by the concept of work, before turning in Sect. 3 to some evidence on how the division of domestic labour and the role of fathers are actually evolving.

2.1 The conventional economic view of the male breadwinner marriage

Specialisation of men in paid market work and women in unpaid reproductive and maintenance work has a long, if not quite universal tradition. The sexual division of labour appears to underpin the economics of the family, occupying the opening chapters of textbooks such as those by Gary Becker

(1981/91) and Alessandro Cigno (1991) and was also extolled by John Stuart Mill (Rossi 1970). According to the textbook model, each partner specialises according to their comparative advantage in household or market production, and they trade outputs. Because of increasing returns, and the opportunity for each specialist to invest in sector-specific human capital, the initial advantage of women in home activities need not be very great. A small, possibly biologically determined, difference could be magnified into wholesale separation of operations in the interest of efficiency, the maximisation of joint output. According to this view, wage differences between men and those women who are in the labour market are the outcome of women having made less investment in marketable skills, in anticipation of their domestic role, having accumulated less market experience and saving their energy and best efforts for the domestic side of their 'double burden' (Becker 1985). They may even invest their time in the human capital assets of their husbands – putting them through medical school for example, or having the boss to dinner (Carlin 1991 a). If the labour market discriminates in favour of men, this additionally generates a reason for women to allocate their time to the home (even if they have no particular domestic skill). This too would reinforce the adoption of a division of labour, though this might not be such an efficient one.

Unequal treatment in the labour market could also jeopardise the second stage of the specialisation process, the pooling of the maximised output. Women who have invested in marriage-specific skills can extract themselves less freely than the specialist in paid work, whose earning power is portable and adds to his options in the re-marriage market (where men are in any case better placed, given the 'double standard of ageing' among other things (England and Farkas 1986)). The 'good wife' knows that it is in her material self interest not to bargain too hard over her share of the consumption, or her say in family decision making. Amongst poorer couples, one of her domestic duties may actually be the management of the budget, but on the understanding she will go short herself before denying food or other necessities to her husband or children. The poor bargaining power of the housewife is reinforced by unequal treatment in the market – it lowers her 'threat point'. The housewife is particularly vulnerable if her efforts to retain her breadwinner's affections fail to prevent him exercising his option to move off, probably to another partner. As Cigno (1991) points out, there is a need for social reinforcement, such as Family Law, of rules about the mutual responsibilities of family members. Meanwhile, as elaborated by Paula England and George Farkas (1986), the conjugal 'contract' is becoming less enforceable and less permanent, more like the implicit contracts governing long-term but impermanent relationships in the labour market.

2.2 A model of bargaining and breadwinning

Becker's original model family is co-operative (or perhaps governed by a patriarchal altruist) which has been criticised, or elaborated in a literature on intra-household bargaining, which I will not attempt to cover comprehensively (see, for example, Bourguignon 1995; Ott 1991; Konrad and Lommerud 1996). In one recent paper, relevant to the implications for fer-

tility, Robin Wells and Maria Maher (1996) develop a non-co-operative and dynamic model of time and surplus allocation within marriage. Allocations are subject to ex-post negotiation in multiple periods. Women cannot be sure that re-negotiation will guarantee compensation for career assets sacrificed to childbearing. Because of the assumption of increasing returns (learning effects) and no complementarities (except for the suggestion that the bearers of babies are also blessed with an advantage at rearing them) complete specialisation would be efficient, but the need for re-negotiation, and a lack of confidence that the partner will not renege, make it unattainable. A traditional gender gap in wages keeps the career assets out of women's reach, and ensures a certain level of reproduction. Once the male-female wage differential becomes sufficiently close, women seize the career track and there is an abrupt fall in fertility, particularly of early childbearing. Career assets offer a private return, whereas time devoted to home production is a public good (as far as the household is concerned in this instance) Children are also a public good in the wider sense if fertility is sub-optimal, and people other than the parents would benefit from births that are deferred and avoided by well paid women protecting their career assets. Wells and Maher point out that reinstating gender discrimination in pay would be one way to restore 'efficiency', but would not satisfy criteria of equity. These authors have also analysed how the jobs of males and females can be restructured to offset some of the inefficiency associated with what they call the 'suppressed demand for children'. If couples cannot rely on each other to make a long-term commitment to poor resources, adaptations of employment options for men as well as women may influence decisions about childbearing. The model reveals the strategic value of sacrificing leisure to maintain employment continuity across motherhood, which would not be predicted by a co-operative model. The behaviour of some British mothers in recent years, those with more skill, is consistent with such a strategy (Joshi et al. 1996).

2.3 The efficiency of the male breadwinner marriage?

I turn to some other arguments that question the efficiency of traditional arrangements. The gender-typing of activities and education cannot be efficient if the true distribution of inherent abilities between males and females has some overlap. People with gender atypical talents have difficulty in developing and implementing them. It is hard to believe that the skills required of post-industrial society do not overlap in both the male and female population. Irene Breugel and Diane Perrons (1995) describe the sexual divisions of labour and power, within as well as outside, the labour market as 'the gender order' of contemporary Britain. These divisions, they argue, lock individuals into gendered but suboptimal positions and thereby lock the whole economy into a low training, low skill strategy which under-utilises potential human resources.

The individual escape route provides a rationale for not specialising, even when the technology is such that output of the couple's 'final goods' would be maximised if they traded (Wells and Maher 1996). The economic vulnerability of the housewife was also one of the objections to the 'trading' marriage offered by Valerie Oppenheimer (1994), particularly if the

man's income is subject to uncertainty even if his commitment to a breadwinner role is not. She also points out that neither partner in a pair of specialists is well equipped to cope if the other one is put out of action. Another argument from Oppenheimer challenges the efficiency of domestic specialisation in a post-transitional demographic regime. Low mortality means that women live longer, and need to spend less time rearing enough children to replace themselves. It therefore becomes an increasing waste of their productive potential not to develop and maintain skills in market production. Another critique of the comparative advantage case for the breadwinner model was offered by Susan Owen (1987). She focuses on the assertion of increasing returns elaborated by Becker (1985). The evidence from the literature on earnings functions seems to be that accumulating years of market experience has diminishing, rather than increasing returns, and she also questioned whether one's skills at domestic tasks would continue to improve with increasing repetition.

In the revised edition of his *Treatise*, Becker (1991:4) conceded on many of these points:

'The degree of specialisation in a marriage would be less extreme if one of the sectors, perhaps housework, were considered more boring and less worthwhile, or if divorce were more common.'

The idea that housework might be boring is interesting, for it implies that work, is not merely instrumental (yielding an intermediate good from which utility is derived) but yields utility (or in this case, disutility) in its very performance. Paid work very obviously has this quality for many people. Employment can be valued for reasons other than the pay packet or prospects. It keeps boredom away, it may be interesting and enjoyable in itself, people value the companionship of the workplace, and draw social status from having a job. This 'psychic income' is non-tradable, and would be denied to whichever partner specialised completely in housework (though it could in theory be compensated). Another source of psychic income is the sense of independence reported by employed wives, however small their earnings (Ward et al. 1996).

This is an old argument. Harriet Taylor, the wife and collaborator of John Stuart Mill disagreed with her husband on specialisation by spouses:

'... a women who contributes materially to the support of the family cannot be treated in the same contemptuously tyrannical manner as one who is dependent the man for subsistence.' (cited by Rossi 1970)

Becker (1985) also admits that the domestic division of labour need not be along sex lines. In some rather distant future:

'husbands would be more specialised to housework and wives to market activities in around half the marriages, and the reverse would occur in the other half.'

But, because he assumes that the differential rewards to human capital would still operate, this would not eliminate the wage disadvantage to specialising in home production.

2.4 *Sociological perspectives*

Economists have seen the institution of marriage and the division of labour it supports as permitting an efficient use of resources, but there is more to families than that. Some sociologists have stressed the functions of a stable family in the socialisation of the young, and as an emotionally secure haven for its adults and their sexuality. Talcott Parsons viewed the domestic division of labour as a condition that ensured these functions. Writing in the 1940s, he emphasised the functionality of divided sex roles and expressed the opinion that it would be dangerous to allow them to erode, fostering an unwelcome competition between men and women (Parsons 1949, cited in Oppenheimer 1994). A few years later, he had adjusted to the labour force participation of some married women, but could not foresee it ever being more than secondary to homemaking (Parsons 1955). Michael Young and Peter Willmott (1973) proclaimed that British society was on the march towards a 'symmetrical family' where men and women each had two equally important 'jobs' in domestic and paid spheres. In 1984, Kingsley Davis (1984), announced the arrival of a 'sex role revolution', though he wondered about its long-term sustainability.

The hitherto, at least, different roles of men and women in the family have also been ones of unequal power. Social, legal political and economic advantages of men ('patriarchy') reinforce the division of labour but also generate such institutions as double standards of sexual morality and occupational segregation by sex (England and Farkas 1986). Economic models allow for this, in a way. The inequality of the gender order can be expressed as wage discrimination, which reduces the opportunity costs of women rather than men staying out of paid work. But the 'structures of constraint', the cultural and macro-economic factors determining the opportunities open to men and women, may be less flexible than a price signal (the notion of structures of constraint has been elaborated by both England and Farkas 1986 and Folbre 1994). Because they see other more deep seated forces preventing those of the market bidding away wage discrimination, 'feminists reject the neo-classical interpretation of gender divisions in the home, and their mirror image of unequal outcomes in the labour market' (Humphries and Rubery 1995:27). In the face of the strength of vested interests in favour of the old gender order, it would not be surprising if the 'sex-role revolution' was not too far advanced, or even had stalled (Hochschild 1990). Jonathan Gershuny and colleagues (1994) argue that the advance towards a more egalitarian domestic division of labour has not ground to a halt, but that any such change is by nature very slow. Sex role attitudes and ideas of appropriate behaviour are acquired early in life, from parental role models, and so it may take generations to change them substantially.

2.5 *What counts as work?*

The technical definition of work which is used in economic theory and in the collection of time budgets is 'an activity of an individual is one which may be done by a third person (generally hired at a market price) without affecting the utility value returned to the individual' (Hawrylyshyn 1977).

This produces practical problem in classifying certain activities, like commuting, and some of the time parents spend with their children. Was the roller-blading father seen pushing a two-year old in a buggy, at great speed, across Hampstead Heath performing childcare or enjoying leisure? Feminists tend to complain that father's time with children is 'only the fun', but the time diarist would probably not count leisure shared with a child as work. In any case it is in both parents' interests to manage to enjoy time with their children, separately or together. It is a direct source of utility and it should help strengthen bonds. The direct utility of some paid jobs, and of performing some domestic ones is also worth noting and cultivating.

3. Breadwinners and fathers: some evidence on the sexual division of labour

There is other casual evidence of fathers' growing participation in unpaid child care. Taking Britain as an example, there are occasional 'father and child' facilities in places like motorway stations, or 'parent and child' parking lots at some supermarkets. The Working Mothers' Association has been transformed into 'Parents at Work', the new lobby to represent and inform mothers, fathers, unions employers and carers. Many employers now permit paternity leave despite the Conservative government's reluctance to make it statutory. There is a growing popularity of father-and-baby images, particularly in marketing material like mail order catalogues. Secondary (and tertiary) evidence about domestic specialisation and the role of fathers, again largely (but not exclusively) British, is presented in the rest of this section.

3.1 Patterns of participation in paid work

Table 1 shows data from Britain, on the distribution of economic status of couples at the 1981 and 1991 census. Couples where neither is economically active, largely the retired, are excluded. Most of the people included in the table are age 16–64, but those without partners are excluded. The two-earner couple has become the dominant form of partnership, increasing from 49% of all these couples in 1981 to 60% in 1991. The table shows that couples with dependent children are less likely to have two earners, and more likely to have the man as sole earner, than couples without such children. Employed mothers are also more likely than women without children to be in part-time employment. On the face of it, responsibility for children is affecting the woman's market participation, but not men's. This is consistent with the theory of specialisation according to comparative advantage but also with other stories, including continuing wage discrimination (Paci and Joshi 1996). But there are signs of continuing change. The relative importance of the dual full-time earning couple also increased (straight comparison is not possible because of the different treatment of the increased numbers of self-employed in 1991). More mothers are thus combining more paid work with child rearing (as in many other countries). In Britain this combination has been facilitated by improvements in women's education, later childbearing, accumulation of experience, the spread

Table 1. Patterns of employment within British couples of labour force age: 1981 and 1991

	All couples with at least one economically active partner (percentages)					
	Couples with dependent children		Couples without dependent children		All couples	
	1981	1991	1981	1991	1981	1991
	100.0	100.0	100.0	100.0	100.0	100.0
Two earners	44.0	55.5	54.9	63.9	48.8	59.6
Man only earns	47.0	34.0	32.7	22.4	40.7	28.0
Wife only earns	3.1	3.7	8.1	10.0	5.3	6.9
No earner	5.9	6.9	4.3	4.0	5.2	5.4
<i>Two earners</i>						
Both full-time,	14.6	15.4	33.9	33.8	23.1	24.8
He full-time, she part-time	29.2	27.0	19.4	15.6	24.9	21.2
Both part-time	0.2	0.3	0.9	0.9	0.5	0.6
He part-time, she full-time	0.1	0.2	0.6	0.6	0.3	0.4
Either self-employed*		12.5		12.8		12.7
<i>House-husbands?</i>						
She earns: husband 'other inactive'	0.5	0.3	1.4	0.1	0.9	0.2
Base nos '000	5387	5125	4248	5363	9635	10488

Source: Census of Population, Household Composition Tables. England and Wales, 1981, Great Britain 1991. In 1981, couples are self-reported married. In 1991 they included cohabiting couples following the introduction for the first time of a question on de facto 'living together'. Dependent children are all under 16 plus those under 19 living at home and in full-time education.

* Self employed are assigned to full- or part-time status in 1981.

of Maternity Leave, by better wages in full-time jobs, if not equal to men's and a large part-time sector. It has not been facilitated by any subsidy to childcare, or, according to this table, by any adjustment of men's employment behaviour sufficient to change their economic activity status.

As for men occupying non-traditional roles, it almost takes a data set the size of the census to find them. Dual earner couples where the man has a part-time job account no more than 1% of all the couples, most likely in the couples without children, when the man is semi-retired. The role sharing couple both doing part-time jobs while they bring up children did become more common over the decade, but only from the level of 2 to 3 per thousand. Another sort of role reversal is where the wife is the sole breadwinner, another fairly small, but still rising minority; Lynne Hamill (1978) found even fewer of them in earlier censuses. In most such cases the husband reports a reason for not being in paid work such as unemployment, study, retirement or permanent sickness. It is only those partners of sole-earner women described as 'other inactive' who could be classified as role-

reversing 'househusbands' – another minority well under 1% by 1991 (see penultimate row in Table 1).

Note also from Table 1 indirect evidence of two other features representative of international trends: falling numbers of children and the recognition of informal cohabiting partnerships alongside married couples. Overall the number of dependent children in England and Wales fell by 7% between 1981 and 1991. The declining proportion of couples in the table with dependent children (56% in 1981 and to 49% in 1991) is another manifestation of falling fertility from the mid sixties to the beginning of the 1980s. The average number of dependent children per couple (with any) fell only slightly, from 1.86 to 1.84. The proportion of all dependent children being brought up by single parents rose from 12% to 17%. These families are not sufficiently numerous to offset the falling number of children among couples; they are also not shown in Table 1, which is primarily about couples.

The proportion of these couples who were cohabiting without being legally married was not reported in the 1981 census, though survey data suggest it would have been around 3% (Kiernan and Brown 1981). By 1991 unmarried cohabitation was sufficiently common and acceptable to be mentioned on the census form. As a result, 11% of couples (where the woman was under 60) were estimated to be currently cohabiting outside marriage in 1991. A higher and growing proportion had cohabited prior to marriage (Kiernan 1996). What Table 1 does not hint at is the increase in break-up and reconstitution of partnerships, and the consequent growing separation of men from their children (see Clarke et al. 1997). Maybe such considerations reinforce the influx of women into paid work, the reasons men continue to avoid complete domestic specialisation, and the hesitations both men and women may have about embarking on family formation.

3.2 Domestic time

I now turn to time budget data for more detail on how men are spending their time in view of changes in women's and whether parenthood affects the answer. The sources and methods of time budget data are reviewed by Thomas Juster and Frank Stafford (1991) and Jonathan Gershuny et al. (1994). In several countries for which data are available, time budgets show that the increased paid hours supplied by women has largely been drawn out of women's home (production) time, but for women in full-time jobs it has also reduced their leisure and sleep. Furthermore, despite their alleged comparative disadvantage, men have increased their average hours in unpaid work from low to less low levels, partially substituting for their wives.

Measured in terms of the share of unpaid work performed by men, the international estimates reported in Table 2 show an upward trend in a proportion somewhat more impressive than the proportion of British marriages with house-husbands. It was around one quarter in the 1960s in the USA, USSR, France and Hungary (and, in some places, such as United Kingdom, and the Netherlands, in the early 1970s), and approached 40% in the late 1980s, in the United Kingdom, Netherlands and Finland. Japan is a noteworthy exception, as reported also by Norman Stockman et al. (1995).

Table 2. Trend in men's share of unpaid work activities, various countries (percentages (men's hours))

	1961–1970	1971–1977	1978–1982	1983–1990
Canada (a)	–	34	37	–
USA (a)	26	32		35
USA (b)	21 (11.5)		31 (13.8)	
Norway (a)		34	39	
Norway (b)		27 (15.4)	34 (16.8)	
Sweden (b)				36 (18.1)
Denmark (b)	11 (3.7)	26 (9.1)	–	36 (12.8)
United Kingdom (a)	–	26	–	37
Netherlands (a)		28	31	41
France (a)	25	28	–	–
Hungary (a)	25	28	–	–
Finland (a)	–	–	35	39
USSR (Pskov) (b)	24 (9.8)	–	–	31 (11.9)
Japan (b)	8 (2.8)	–	–	11 (3.5)

Sources: (a) Gershuny et al. (1994) (married persons 20–60); (b) Juster and Stafford (1991) (population varies)

They compared families with young children from a Sino-Japanese Working Women's Family Life Survey (not shown in Table 2) with the same British dataset for 1987 as used by Gershuny in Table 2, the ESRC Social Change and Economic Life Study (SCLE). Stockman and colleagues' comparison also reveals that, in China, male participation in housework exceeds Britain and the USA. They further show a greater participation of extended kin in household work in the Far East than can be assumed in the lands of the nuclear family.

Table 3 provides information about the domestic division of labour collected in a slightly different way, not time budgets, but a self-completion questionnaire in a survey of British 33-year olds in 1991: the 1958 Birth Cohort (National Child Development Study, NCDS). Virtually all of the tasks mentioned display sex specialisation, housework by women, household maintenance by men, but in parenting, equal sharing was the modal response (except in the case of caring for a sick child, mother's business in two thirds of responses). For general child care, half the couples report sharing. For teaching a child discipline, the vast majority of parents report that they work together. This is fairly strong evidence for complementarity where commonness would expect to find it. The minority of couples in this cohort sharing other household task was greater among dual earner couples with approximately equal earnings (Joshi et al. 1995). This provides some evidence that, among dual career couples, there is some adjustment on the man's part towards involvement in domestic labour. Note, from the last column, that recourse to outside help, purchased or otherwise, is reported very seldom. The purchase of formal childcare was more frequent than the nil returns in this column might suggest, but not extensive (around one quarter of employed mothers), and was most likely to be used by the 'symmetrical' group of families with young children and a well-paid wife in full-time work (Joshi et al. 1995).

Table 3. Who does which tasks at home? Men and women aged 33: with partners, Great Britain

	Sex of respondent	I do (%)	Partner does (%)	Share equally (%)	Someone else (%)
Cooking	Men	5	79	16	1
	Women	77	6	16	1
Shopping	Men	6	62	32	0
	Women	66	6	28	0
Cleaning	Men	1	71	18	2
	Women	75	2	20	3
Laundry	Men	1	88	8	3
	Women	85	2	10	3
Repairs	Men	72	4	20	4
	Women	6	66	23	5
Managing money	Men	34	39	27	0
	Women	46	24	30	0
Care sick child	Men	1	65	34	0
	Women	64	1	35	0
General child care	Men	1	49	50	0
	Women	45	1	54	0
Teaching children behaviour	Men	4	11	85	0
	Women	16	2	82	0

Approximate sample size: men=3060, women=2390

Source: National Child Development Study (Ferri 1993)

Table 4 goes back to time budget data, showing estimates of the minutes per average day spent in active childcare. To be classified as active this must also be the main activity. For example, cooking, or eating, a meal while responsible for children would not be counted, nor time 'on call'. Hours thus classified as childcare have been on the increase as time recorded as routine housework fell, especially for women. They also increased, for both mothers and fathers, as hours in full-time jobs fell. And for fathers' as the proportion with employed wives rose. Hours of childcare depend on the age of the youngest child, the employment status of the mother, but crucially to present purposes, it shows that fathers' input of time to children is minor, well below an hour a day, though, for employed fathers this has been rising. Note also that this is a narrow definition of childcare. The regression analyses of SCEL data by Stephen Jenkins and Nigel O'Leary (1995) takes into account the extra housework induced by the presence of children as well as directly measured 'active childcare'. They provide estimates of the response of unpaid work to the presence of children in the home. Evaluated for married men with 2 children, one under 5, the marginal effect of children on domestic work comes out at around one hour per average day, more than the narrower definition in Ta-

Table 4. Time spent mainly in active childcare: women and men aged 20–60, Great Britain

	Minutes per average day		
	1961	1975	1985
<i>Women</i>			
Full-time employed			
pre-school children	19	28	107
school children	9	7	12
Part-time employed			
pre-school children	44	57	73
school children	34	12	22
Non- or unemployed			
pre-school children	95	81	137
school children	31	24	37
<i>Men</i>			
Full-time employed			
pre-school children	11	14	44
school children	3	4	8
Non- or unemployed			
pre-school children	48	37	37
school children	25	4	11

Source: Hewitt (1993) based on datasets from Gershuny. The column labelled 1985 is a combination of the SCEL time budgets collected in 1987 and the ESRC Time Budget Survey of 1983–1984. The data labelled 1975 were collected over several years in the mid 1970s.

Note: The striking increase in hours of childcare by mothers of pre-school children in '1985' to exceed those by mothers of pre-schoolers with part-time jobs is likely to reflect the greater chance of the full-timers having very young children. Women who remain in employment after maternity leave (which was uncommon before the 1980s) typically remained in full-time employment. Those who returned after a break typically took part-time jobs. They would thus be over-represented among mothers of 4 year olds, and the full-timers have relatively more infants and 1 year olds (Joshi et al. 1996). It should also be remembered that the various surveys from which Table 4 is constructed were not necessarily designed to be completely comparable, and that the sample of mothers of preschool children with full-time jobs in the earlier years was very small (Hewitt 1993).

ble 4, but about half the impact on women's time (except in the model which controls for paid work time, which lowers the impact on women and raises it for men). Whether the time input is narrowly or broadly defined, both Table 4 and the Jenkins-O'Leary analysis agree that the mother's contribution of time exceeds the father's noticeably.

Björn Gustafsson and Urban Kjulin (1994) report regressions of Swedish time budget data taking active childcare and other housework as separate dependent variables. They include paid work time among the controls. Active childcare time decreases as children get older, but other housework time falls less. This displays a smaller gender gap and smaller scale economies than active childcare. Their estimate of the total domestic work costs of children can be expressed in hours per average day, for the average child. Assume first that the couple does not use outside day care. For par-

ents of children under two, these costs are: 1 hour 50 min by the mother; 1 hour 3 min by the father. For the average child aged 2–7, the time cost is 1 hour 6 min for the mother and 45 min for the father. The use of day-care facilities made little difference to the time devoted to active childcare, but saved the ‘other housework’ component of both parents’ time.

But Sweden is a special case, where one might expect relatively high involvement of fathers (given the early introduction of leave for fathers in the parental insurance system, for example). Peter Kooreman and Arie Kapteyn (1987) estimate allocation of time in a household production framework for the United States, allowing for seven categories of unpaid activities for men and women. They find that the presence and age of children have large effects on the time women spend on the care of children, but the allocation of time of the husbands is hardly affected by the presence of children. The Dutch data set used by Henriette Maassen van den Brink and Wim Groot (1996), for example, simply assumes that only women’s time use needs to be collected. A more pertinent finding for the United States is that father’s domestic work and ‘quality time’ with their children is higher in those states where divorce settlements are more favourable to the wife (Carlin 1991 b). This finding supports the bargaining approach to household labour, and suggests a positive link between role sharing and marital stability (also suggested by Wells and Maher 1996).

3.3 Paid work and fatherhood

The impact of fatherhood on men’s labour supply is not widely studied. The presumption that there is nothing to find would be more or less correct. If the presence of children is entered into regressions explaining men’s labour supply it is not significant (e.g. Biddle and Zarkin 1989; Shaw 1987; Ransom 1987). In the case of the latter two of these studies, based on various parts of the US PSID (not time budgets), men’s labour supply was affected indirectly by the presence of children, in so far as it was sensitive to the wife’s employment status. There is some evidence that the paid work hours of men with young children are, if anything, higher than those of other men. (Pencavel 1986; Marsh 1991; Horrell et al. 1994). Data from the 1990s puts the average paid work hours of British fathers of children under 10 at 47 (30% over 50 h) in contrast to mothers whose hours of paid work seldom exceed 40 (one in 16 of mothers employed full time) (Burgess and Ruxton 1996). The extra overtime of British fathers of small children contrasts also with Sweden, where fathers with the youngest children have the shortest paid hours. This may reflect the various institutions in Sweden which enable (induce) workers of both sexes to adjust their hours to family purposes, and the high participation rate in paid work of mothers (76% where children under three) removing the need for cash facing a family that has lost an earner and gained a child (Nasman 1991).

There is a large literature on the impact of childbearing on women’s wages (e.g. Becker 1985; Gronau 1988; Korenman and Neumark 1992) to which we added evidence from the British cohort studies (Joshi et al. 1996). We confirm that loss of employment experience lowers earning power, as does working part-time in the British context, but find only weak support for Becker’s conjecture that a woman contending with the double burden must be too tired to

work as productively as a worker who gets more leisure. Studies of men's earning power suggest it is raised, if anything by parenthood (or spuriously associated, Korenman and Neumark 1991; Davies and Peronaci 1997). On the whole fathers have higher wages than single men as well as women. If this is not indeed evidence of a reverse causation it could perhaps arise from operation of the 'family wage' predicated on the breadwinner model, and trapping families into reproducing it.

The expenditure costs of childbearing are also, technically, opportunity costs. The resources to cover these may have to be found by mothers, as well as the time costs, if they are unsupported by the father, be he absent or a co-resident non-sharer. On the whole co-resident fathers probably still provide more cash than home time to the costs of childbearing. Opportunities on the male labour market are therefore still important determinants of family formation, and they generally show a positive association with both partnership and fertility in the econometric literature (for example: Montgomery and Trussell 1986; Ermisch 1988; Olsen 1994). Some argue that the effects of men's opportunities are more important than women's, for example Easterlin (1980). Oppenheimer (1994) attributes deferred marriage rates in the United States over the 1970s and 1980s mainly to deteriorating economic prospects for young men. The link between youth unemployment, social assistance, single teenage motherhood and the absent father is another feature of the 'gender order' not pursued in further detail here. Without partnership, labour cannot be divided.

3.4 Fathers in fashion

The separation of mothers and fathers has brought fathers to the attention of social policy, and, perhaps no co-incidence, of demographic analysis and data collection (Coleman 1996). Most industrial countries complement social support for lone mothers with attempts to elicit a cash contribution from the absent parent, 'child support'. In the United Kingdom the failure of the courts to collect much child maintenance, led to the setting up of the Child Support Agency (1993) to assert the financial responsibility of 'errant' breadwinners. It has encountered many difficulties and rising unpopularity. One consequence has been to politicise a group of fathers, who are discontent about being pursued for cash and/or being denied access or custody, which the courts still normally grant to mothers. Even fathers who haven't left home, and especially those few who do form lone father families are questioning the presumption that their role is confined to that of breadwinner and giver of family discipline. Some men, at least, want to be involved in the more intimate, nurturing activities of parenthood, traditionally allocated to mothers. The very tradition forms obstacles to a redefinition of parenting, but at least the word is entering the vocabulary. The growing trend of fathers to be present at the birth of their children symbolises changing fatherhood (Lewis and O'Brien 1987; Hewitt 1993; Burgess and Ruxton 1996).

3.5 Cognitive dissonance

The slow erosion and diversification of the breadwinner model has brought changes of attitude in its train, but attitudes about what gender roles are ap-

propriate in the public arena tend to change more slowly than practice. On the other hand, in the private arena of home life, at least among young adults, the ideology of sex equality runs ahead of practice. Social attitude surveys suggest that men's attitudes adapt more slowly than women's (Kiernan 1992; Gershuny et al. 1994). The transition, if such it be, generates guilt, anxiety and domestic conflict. Arlie Hochschild (1996) suggests that for some people it is the workplace rather than the home that is the haven, which does not bode well for the process of social reproduction.

'The extent to which domestic tasks are managed with equanimity or mutual feelings of resentment depends on hidden images each partner has about what should be' (Daniel 1996).

Jane Wheelock (1990) and Lorna McKee and Colin Bell (1985) each offer qualitative research on the experience of families with an unemployed man in the United Kingdom. Some avoided housework and discouraged their wives from earning, in an attempt to preserve their old gender identity. They would have been underwritten in this by 'breadwinner model' rules of social security, creating a poverty trap for the spouses or cohabitants of claimants of social assistance. Other cases, particularly in Wheelock's Wearside study, where wives were in employment, adopted more positive strategies of adaptation. It may therefore not be totally hopeless to suggest policies allowing for changes in domestic responsibility (or more options) for men.

4. New men in Nirvana?

The theme of John Ermisch's Presidential Address was 'Women's Employment and Fertility Again' (Ermisch 1990). This one adds a concern for Men's: As Well – not Instead. Since it takes both a man and a woman to bring a child into the world, and, usually, to rear it, gender relations are inescapable in positive and policy questions in Population Economics (as in life!). To conclude, I review what has been said about the division of labour and turn to some implications for the study of fertility and the need for policy.

4.1 The division of labour: a recapitulation

Is the sex division of domestic labour optimal or anachronistic? Its near universal practice further justifies the assumption made in much New Home Economics that it obtains. It does not however justify the assumption that it is inevitable and immutable. It tends to be perpetuated by self-fulfilling expectations of appropriate behaviour for men and women by teachers, employers, men and women themselves and by children. This does not prove that the equilibrium is efficient let alone equitable. The terms of trade between work inside and outside the family have already changed a good deal in most industrial societies – more paid work for women, and less security in marriage (see Ermisch 1990; Olsen 1994). Fathers' involvement in parenthood, for those who acknowledge it, is grad-

ually extending beyond attendance at birth as well as conception. A transition towards a more egalitarian family, based on self- and mutual respect has started (Wheelock 1990; Gershuny et al. 1994; Oppenheimer 1994). Such a re-modelled family should be able to raise more children more successfully than do the contemporary arrangements. In these, many people are grappling with dissonance of expectations and practice. Role models are in turmoil. Old codes have yet to be replaced. In the process of negotiating possibly multiple new codes, it will not be helpful to invoke an economic law of comparative advantage to decree men should keep away from the physical and emotional work of the home. In the first place, most of these skills required, at home and at work, in a post-industrial society have no inherent biological basis for a systematic comparative advantage of all men over all women. Secondly much of what is needed as the output of 'home production', particularly child rearing, involves complementarities between partners, such as would always have suggested a limit to specialisation.

4.2 Implications for the prospects of fertility

Fathers' slowly diversifying roles in parenthood means that explanations of fertility need to look at men's interests as well as women's, at the implications of partnership instability for men as well as women and children. Improved opportunities for birth control liberate men, even more than women, from unwanted parenthood (women are still generally expected to make the arrangements for contraception, and necessarily for abortion). We also need to consider the nature of partnerships and the institutions and processes which distribute the costs of rearing children at various standards of 'quality'. Improvements in the technology of home production need to be observed and developed. My favourite technical fix was the self-vacuuming house specified by a pro-natalist British feminist in the 1930s. In the Third World context, policy makers seek to interest men as well as women in Family Planning (Kabeer 1992). In the rich countries, low fertility cannot just be discussed as a 'Revolt of the Women'. One must ask why family life does not seem more attractive to men, and compare successes and failures to sustain childrearing partnerships. As women's expectations of their role have changed to something more like men's, a complementary revision, of the ideal male identity may (yet) emerge. If the old division between motherhood and fatherhood does not give way to new definitions of parenthood, will parenthood itself give way?

4.3 Policy implications

'The division of responsibilities for social reproduction has developed historically and untidily, and is reflected in complex interrelationships between the state, households and the labour market. ... Partial adjustments which occur autonomously or as policy initiatives may have knock-on effects creating intolerable pressures elsewhere ... Equal opportunity policies must be orchestrated around these relationships' (Humphries and Rubery 1995:2).

As individuals develop their sometimes painful private adaptation to a diverse new set of role models, policies of state, employer and unions need

to adapt as well (Coote et al. 1990; Hewitt 1993; McLaughlin 1995). Many formal and informal structures are still based on a presumption of a breadwinner model, at least in the United Kingdom. This hampers the renegotiation of family life by restricting the options, adds to its stresses, and arguably detracts from the performance of paid work. It probably jeopardises the quality and prospects of life for children. Employers and unions used to offer the 'family wage' as the labour market's support for reproduction. Gender equity requires this to be replaced by a 'family friendly' employment structure which ensures there is enough time for caring activities. Despite doubts about the replicability (or even sustainability) of the Swedish model, the European Union has been encouraging the introduction of such measures as paternity leave and supporting child care provision elsewhere in the Union. My arguments have already been put forward by Brussels and are being reflected in the social policy of the European Union:

'The gender-based division of family and employment responsibilities not only constrains women's lives but deprives men of the emotional rewards resulting from the care and development of children' (EC 1993).

'Greater solidarity between men and women is needed if men are to take on greater responsibility for the caring role in our societies and if flexibility in employment is not to lead to new pressures on women to return to the ranks of the non-salaried population or be obliged to accept paid work at home in isolation from the community' (EC 1994).

'Men should be encouraged to assume an equal share of family responsibilities, for example they should be encouraged to take parental leave by means such as awareness programmes' (UNIE, CEEP and ETUC 1996).

Old Home Economics, as still taught in some British schools, almost exclusively to girls, is being transformed into 'Life and Consumer Science' (!) to cater, possibly compulsorily, to all pupils, boys as well as girls as training for the parents of the future. While the British authorities have not, so far, seemed to want to force the pace of gender change, it is seen as something for which the next generation might be prepared. If the cultural and economic 'structures of constraint' can indeed be manipulated to lead men as well as women to chose an egalitarian model of parenthood, the evolution of New Man, or even the attainment Nirvana number 2 may not be impossible. If the issue of men's shared responsibility for their children is avoided, if childrearing becomes increasingly only mothers' business, it could be a business with a bleak future.

5. The academic division of labour: a postscript

I feel I have ventured into dangerous territory, within the private 'black box' of home life, but growing numbers of economists have already trodden this way. I have ventured also into territory that may be alien to the more specialised economist, in drawing on the work of other social scientists, particularly sociologists and demographers. I find the border area between social sciences worthy of cultivation. It is left relatively unattended, perhaps because of career structures within each discipline. I trust I am not

the only member of the Society concerned with cross-fertilisation between the economist's approach to population and those of other social sciences. There are some excellent examples of interdisciplinary synthesis from Americans such as Richard Easterlin (1980), Paula England and George Farkas (1986), Robert Pollak and Susan Watkins (1993), and Nancy Folbre (1994). I trust that members of this society will continue to follow their example, communicating and collaborating with people outside the circle of the economics. Our profession is in danger of acquiring a reputation as exclusive, inward-looking and irrelevant. At least when the subject is population and the family, economics is not enough. There are complementarities to be exploited between economists and other scholars, just as there are between men and women.

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