# Limits to Specialization:
# Efficiency and the Division of Labor in Modern Families

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Can family members make credible promises about future behavior, or agree on rules for sharing future household resources? Very recently, economists have explored the implications of a couple's inability to make binding, legally-enforceable commitments about future behavior in a diverse set of theoretical models.[1] In most cases, they find that the inability of partners/spouses to engage in intertemporal agreements can lead to an inefficient allocation of household resources. In this paper, I argue that this development calls for a reexamination of family policy as a potentially efficiency-enhancing intervention.

The application of models of limited commitment to a household setting is new, but is in some sense a natural consequence of the introduction of non-unitary frameworks for studying families. In the traditional unitary model, a couple or family acts as a single agent, so that agreements or commitments about the future are not an issue. Once we recognize, however, that families are composed of individuals with separate preferences and objectives, several question arise--how do individuals arrive at an agreement about interdependent actions, how are these agreements are monitored and enforced, and what happens if intertemporal agreements within the family are subject to renegotiation?[2]

I use the simplest possible model of a two-person household to illustrate the problems that can arise in a dynamic treatment of family behavior, even when decisions in each period are efficient, and to show that policy interventions can increase the efficiency of outcomes. In a two-period model, a couple unable to make binding commitments about the division of household income in period 2 will adjust their period 1 behavior to reflect an expected future renegotiation. Each individual's time in period 1 is divided between market work, which generates income to buy private consumption goods, and the production of a household public good, which can be identified as children or child services. If market work increases potential earnings in the future, a partner who specializes in public goods production will be disadvantaged in any second-period renegotiation. If the family cannot commit to a division of second-period income that compensates the home worker for foregone earnings power, then the family will choose an inefficient level of specialization, and produce too little of the public good.

Increased divorce rates, nonmarital childbearing, and weakened extended family ties may have made intertemporal commitment in marriage and other intimate relationships more problematic. Increased labor force participation of mothers can be regarded both as a response to, and as a contributor to, an increased risk of household specialization. Various family-friendly policies that subsidize children or childrearing (the principal household public good), or offset the earnings losses of caregivers, can move the family towards a more efficient level of production—this is a straightforward application of the theory of the second-best. However, different policies have other implications for outcomes that society may care about, such as gender equity in the labor market, and the

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[1] Some examples are: Aura [2001], Basu [2001], Mazzocco [2000], Lich-Tyler [2001], Ligon [2000], Lundberg and Pollak [2001], Lundberg, Startz, and Stillman [forthcoming], Browning [2000], Wells and Maher [1998].

[2] Lundberg and Pollak [2001] argue that "one of the casualties of this paradigm shift from unitary to non-unitary models is the presumption that families are efficient." (p. 1).

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balance between home and market inputs in the production of child-services and other household public goods.

## I. Economics and Family Policy

Discussions of "family-friendly" policies by researchers, government officials, and lobbyists have focused on problems associated with the dual role of mothers as childcare providers and workers. The increasing market work of women, and particularly mothers of young children, that has occurred in most wealthy countries during the past couple of decades has generated intense concern about "work-family tradeoffs" and the "time squeeze" of both dual earner families and lone mothers. We fear that women sacrifice financial security and equality when they stay home to care for their children, and that children suffer when both parents work.

The traditional division of labor in the family, with mothers specializing in home production and father specializing in market work, has well-documented empirical implications for the market earnings of men and women. Women's wages fall substantially when they interrupt employment for childrearing,[3] while men's wage rates appear to be positively associated with the home time of their wives.[4] The effects of parental employment on child wellbeing are not so clear, but many studies have found evidence of negative impacts of both maternal and paternal employment on child health and cognitive skills.[5]

Suggested remedies for the perceived work-family crisis have been varied and often expensive: universal subsidized preschool care, direct compensation of family caregivers, etc. More popular in the United States are proposals to make work more "flexible," i.e. to mandate or encourage firms to provide benefits and implement practices that "enable workers to contribute to their business objectives and meet their family and personal responsibilities."[6] Flexible hours, on-site childcare, and portable benefits, however, can only mitigate and not remove the fundamental tradeoff between market work and childcare, between direct parental investments in children and investments in market productivity—mothers cannot really be in two places at the same time. The apparent tradeoff between the interests of women and their children has made it difficult to devise acceptable policies, though (somehow) increasing paternal childcare has been suggested as a more equitable response to the dilemma than sending women home.[7]

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[3] Davies, Joshi, and Peronaci [2000], Joshi, Paci, and Waldfogel [1999], Waldfogel [1998], Lundberg and Rose [2000].

[4] One explanation for the male marriage wage premium is that men's market productivity is enhanced by wives who specialize in household production (Korenman and Neumark [1992], Ginther and Zavodny [2001], Gray [1997]).

[5] For example, see Ruhm [2002].

[6] Bailyn, Drago, and Kochan [2002], p. 49.

[7] Gornick and Meyers [forthcoming] identify a tension between two approaches to "family-friendly" policies: a feminist view that focuses on gender equality and supports policies that enable women to attain parity with men in employment and earnings, and a 'work-family' view that emphasizes child wellbeing and the need to reconcile women's employment with maternal care.

An interesting aspect of the policy debate has been the relative absence of economic rationales for societal intervention in family time allocation decisions. Distributional concerns have been paramount, but it is intrahousehold, rather than interhousehold, distribution that is the primary issue. Family-friendly policies that support mother's employment are seen as a way of promoting gender equality and reducing the economic dependence of women. Issues of efficiency seldom arise, though there is a general sense that, left to themselves, parents will underinvest in children. More explicitly, subsidizing children or families with children can be interpreted as the correction of a market failure if investments in children generate positive social externalities.

Economists have not played a central role in debates over the design of family policy. A bias towards laissez-faire solutions, together with a theoretical framework that takes the household, rather than the individual, as the agent in family decisions, has led to a degree of complacency about the adequacy of domestic arrangements in families above the poverty line. In the context of a unitary household, gender equality in command over resources need not require equality in market wages or earnings opportunities. If specialization in the household is efficient, due to comparative advantage or sector-specific learning, then it will also be socially desirable. Since childrearing takes up only a portion of the total lifespan, but tends to coincide with a period when intense investments in market skills are optimal for workers, an efficient family solution will involve some intertemporal redistribution. Family members who work in the market will compensate those who specialize in household production, both during the childrearing phase and later in life.

If this story seems ridiculous to family policy advocates, it is because it postulates a permanent, unanimous family. Concerns about gender equality and the financial security of family caregivers arise from a belief that the future compensation required as part of an efficient solution cannot be relied upon. In a multi-period bargaining model, it will be necessary to specify what social or institutional arrangements can enforce an intertemporal commitment, rather than simply ruling out renegotiation. The earliest reference I can find to this problem is in Pollak [1985], who notes that multiperiod bargaining models of the household will need to specify a "governance structure, required to protect each spouse against changes in threat points that strengthen the bargaining position of the other and leave the disadvantaged spouse vulnerable to opportunistic exploitation…" (p. 600).

The basic ingredients of the family life-cycle that is implicit in policy discussions are straightforward, and most have appeared in some form in previous research. Investments in an individual's earning power are privately appropriable, and can be carried away from the marriage in the event of future divorce or disagreement. Children are public goods within the household, and the skills acquired in raising them are likely to be family-specific. Mothers who specialize in caregiving, though they contribute to the welfare of all family members, will have foregone investments that will pay off for them outside the family.[8] If family contracts can be broken or renegotiated, therefore, women

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[8] For an institutionalist approach to the undervaluing of caring labor and public policy imp lications, see Folbre [1995,2001].

will be at a disadvantage.[9]  The model that follows attempts to formalize our intuitive understanding of the dynamic problems raised by household caregiving.

## II. Household Specialization and Intertemporal Commitment

A two-person household, consisting of a husband ($m$) and a wife ($f$), makes decisions about consumption and time allocation over two periods, $t = 1,2$.  The utility of each individual $i$ depends upon consumption of a household public good, $G$, and consumption of a private good, $c_i$.  There is no altruism, in the sense of individual $i$'s utility depending upon the consumption of individual $j$, and no borrowing or saving.  In period 1, husband and wife divide their time between market work at a fixed and common wage rate, $w$, and production of the household public good.  In period 2, both spouses work in the market exclusively, at a wage rate that depends positively upon the amount of market work performed in period 1.

In period 1, we assume that the couple maximizes an objective function that is a weighted average of identical individual utilities, with the wife's utility having a weight $\boldsymbol{a}$.

$$W = U_1(c_{m1}, G) + U_2(c_{m2}) + \boldsymbol{a}[U_1(c_{f1}, G) + U_2(c_{f2})] \tag{1}$$

The public good is produced with inputs of husband's and/or wife's time, $0 \leq l_i \leq 1$, such that $G = h_m l_m + h_f l_f$.  Women are assumed to be more productive in the home, so that $h_f > h_m$.[10]  Each individual's time endowment is normalized to one, and all time allocated to public good production is spent in market work, so that the household's budget constraint in the first period is:

$$c_{m1} + c_{f1} = w(2 - l_m - l_f) . \tag{2}$$

Second period wages are augmented by human capital acquired in first-period jobs, such that $w_i = w(\boldsymbol{b} - l_i)$.  Private consumption in the second period can be specified, without loss of generality, as private market income plus or minus a cash transfer between the spouses, so that:

$$c_{m2} = w(\boldsymbol{b} - l_m) - t$$
$$c_{f2} = w(\boldsymbol{b} - l_f) + t \tag{3}$$

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[9]  Working against the strategic disadvantage of caregivers, however, is the possibility that mothers can limit access to children in the event of divorce or disagreement.

[10] Vagstad [2001] analyzes the incentives to acquire household production skills when specialization is efficient, but market work increases bargaining power within the household.  He shows that the tradeoff between the strategic disadvantage of such investments and the joint advantages produces strongly asymmetric incentives for spouses with small differences in initial skills.  Engineer and Welling [1999] show that gender-specialized training can act as a coordination device when matching is determined by "true love."

If first period utility is strongly separable in the private and public goods, then:

$$U_1(c_{i1}, G) = u_1(c_{i1}) + g(G)$$

a. With Commitment

We first assume that the couple is able to credibly commit in the first period to a level of interpersonal transfer in the second period, so that the household problem will be to maximize, with respect to first-period consumption, first-period household production, and the transfer:

$$W = u_1[w(2 - l_m - l_f) - c_{f2}] + g(h_m l_m + h_f l_f) + U_2[w(b - l_m) - t]$$
$$+ a\left[u_1(c_{f1}) + g(h_m l_m + h_f l_f) + U_2[w(b - l_f) + t]\right] \tag{4}$$

The first-order conditions with respect to $l_m, l_f, c_f$ and $t$ are:

$$(1 + a)h_m g'(G) - w[u_1'(c_{m1}) + U_2'(c_{m2})] = 0 \quad \text{and} \quad 0 < l_m < 1, \text{ or} \tag{5a}$$
$$(1 + a)h_m g'(G) - w[u_1'(c_{m1}) + U_2'(c_{m2})] < 0 \quad \text{and} \quad l_m = 0$$

$$(1 + a)h_f g'(G) - w[u_1'(c_{m1}) + aU_2'(c_{f2})] = 0 \quad \text{and} \quad 0 < l_f < 1, \text{ or} \tag{5b}$$
$$(1 + a)h_f g'(G) - w[u_1'(c_{m1}) + aU_2'(c_{f2})] > 0 \quad \text{and} \quad l_f = 1$$

$$u_1'(c_{m1}) = a u_1'(c_{f1}) \tag{5c}$$

$$U_2'(c_{m2}) = a U_2'(c_{f2}) \tag{5d}$$

In the case in which $a = 1$, (5d) ensures that the consumption levels of husband and wife in the second period will be equalized by a transfer $t = w(l_f - l_m)/2$. Given (5d), it is clear from (5a) and (5b) that interior solutions in both $l_m$ and $l_f$ will not be optimal—either the husband will be fully specialized in market work, or the wife will specialize in household production, or both. The outcome of this problem is fully efficient; an optimal quantity of the household public good, $G$, will be produced in the first period, time allocation will reflect the husband's comparative advantage in market work and the wife's comparative (and absolute) advantage in household production, and income will be distributed within the household to equate the weighted marginal utilities of consumption.

b. Without Commitment

Achievement of the efficient solution in (a.) requires an enforceable intertemporal contract, privately negotiated between the husband and wife. Legal limits to the enforceability of such contracts within families are well-known. Weiss and Willis [1985] and Lommerud [1989] analyze, respectively, the *ex post* and *ex ante* effects of divorce on contracting within families. In Weiss and Willis, children are collective consumption goods to divorced parents. Within marriage, the public goods problem is avoided by "mutual trust, altruism, and proximity," but after divorce the noncustodial parent is unable to monitor the custodial parent's expenditures on own consumption and child consumption. Since divorce settlements cannot be conditional on child expenditures, voluntary transfers from the noncustodial parent will tend to be inefficiently low. In Lommerud, emotional ties are crucial to the enforcement of implicit marital contracts. The weakening of such ties with divorce implies that "voice enforcement" of contracts between the (ex-)spouses is no longer feasible. In his model, the prospect of future divorce alters incentives to make marriage-specific investments through this enforceability constraint.

More recent work has focused on the implications of limited commitment in intact families. In dynamic bargaining models, decisions made in one period can alter the relative bargaining power of individual family members in future periods. Ligon [2000] allows a restricted form of limited commitment in a collective model of family decision-making—allowing renegotiation of the sharing rule only when one partner would be better off outside the relationship under the old rule. Basu [2001] shows that, when the household's balance of power is endogenously determined and there is no intertemporal commitment (i.e. the division of family resources is renegotiated each period), then strategic considerations can lead to inefficient outcomes.[11] Wells and Maher [1998] find that, when market earnings affect intrahousehold allocation, the level of fertility can be "too low." Lundberg and Pollak [2001] use a two-stage model of a married couple's location decision to show that marital decisions that affect future bargaining power need not be efficient unless the husband and wife can make binding agreements regarding their future actions. Aura [2001] examines a married couple's consumption and savings choices when they are unable to commit to not renegotiate their decisions in the future, and the efficiency implications of different divorce asset division regimes.

In the problem in (a.), an efficient solution requires that the couple commit in the first period to a transfer from husband to wife, $t^*$, in the second period. In general, the husband's promise to share market income equally (or in some agreed proportion) with his wife will not be legally enforceable, and renegotiation of individual control over family resources may occur, conditional on potential earnings in period two. If the expected value of the transfer is less than $t^*$, the allocation of time in the first period will

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[11] In this paper, the objective function of the family "agent" is a weighted average of the preferences of the husband and wife, and so changes over time as the balance of power in the household changes. This formulation suggests an interesting parallel between the inability of a household to make intertemporal commitments and the self-control problem of a hyperbolic-discounting individual (Laibson [1997]), where a current "self" is playing a game against future "selves."

change as well. If $t < t^*$, then $aU_2'(c_{f2}) > U_2'(c_{m2})$ and the second term on the left-hand side of (5b) (the marginal cost of wife's home production time) will increase relative to the equivalent term in (5a) (the marginal cost of the husband's home production time). If both husband and wife were completely specialized in the efficient solution, a reduced transfer may leave both at a corner solution, but any change in time allocation will involve a reduction in the wife's home production or an increase in the husband's. Compared to the efficient solution, there will be less specialization in the equilibrium without intertemporal commitment. This leads to an increase in the implicit price of the public good. In general, an inability to commit to compensation for the partner who is the low-cost producer of the household public good reduces the equilibrium level of $G$ below the socially-efficient level.[12]

A failure to commit to the optimal second-period transfer can be rationalized in a number of ways. If divorce occurs with some exogenous probability, *p*, between periods one and two, then the actual transfer will be determined by property division laws and court decisions, though it may be voluntarily augmented by the high-income spouse. Lommerud assumes, as a limiting case, that $t = t^*$ if the marriage remains intact, but $t = 0$ if there is a divorce. The model above predicts that, as the probability of divorce rises, production of the public good and specialization in the first period will fall.[13] Using longitudinal data, Lundberg and Rose [1999] find that couples who eventually divorce are less specialized during their marriage.[14]

Alternatively, the couple may renegotiate in period 2, conditional on the earnings that the first period allocation has determined. If family agreements, implicit or explicit, cannot be legally enforced, the relevant question is not why a high-income husband would not comply with the ex ante optimal transfer to his wife, but rather why he would. If the second period division of family resources is renegotiated, it is necessary to specify what determines the *ex post* sharing rule. In an explicit bargaining model, possible fall-back positions for the husband and wife include divorce, or a noncooperative equilibrium in which each spouse controls his or her own labor income. In either case, individual shares of total family income will depend upon individual market incomes, and the agreed transfer is unlikely to satisfy (5d).[15] This means that first period contributions to the household public good will decrease expected second period consumption, and implies that the family will be unable to achieve an efficient level of public goods production.

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[12] The structure and intuition of this problem are very similar to the model of child labor in Baland and Robinson [2000]. Inefficient child labor can arise, even when parents are altruistic, if children cannot commit to compensate their parents in the future for letting them go to school, rather than work.

[13] In Lommerud's model, domestic human capital acquisition provides an alternative way to shift resources into the second period, and the effect of the divorce probability on the degree of specialization is ambiguous.

[14] It is possible, however, that lower levels of specialization cause divorce, as well as the probability of divorce inhibiting specialization.

[15] Evidence that control over income affects the distribution of resources within the family is surveyed in Lundberg and Pollak [1996]. Lundberg, Startz, and Stillman [forthcoming] show that the decrease in consumption spending at retirement appears to be a collective response to the changing relative bargaining power of husbands and wives when husbands retire.

The problem here is that a credible promise to compensate public goods production in the first period with consumption in the second period cannot be made, and this reduces incentives to specialize in public goods production. Can credit markets make a difference? In general, the husband could compensate his wife for public goods production with a lump-sum transfer in the first period, possibly financed with a loan based on second-period earnings.[16] This assumes consumer credit markets of unrealistic perfection--credit constraints resulting from the inadmissibility of human capital as collateral are likely to prevent the average husband from making a large enough transfer to a stay-at-home wife. Also, this mechanism requires the maintenance of individual control over assets between the first and second periods. Aura [2001] notes that when divorce is a possibility, intertemporal control of assets requires a common-law type property-division regime. Community property standards may prevent the couple from attaining an *ex ante* efficient allocation by restricting their ability to assign permanent property rights to assets.

In a model like Lommerud's where "voice" enforcement of agreements within marriage is possible, limits to intertemporal commitment are caused by the possibility of divorce. An increase in the cost of divorce will, in this case, permit a more efficient level of specialization within families. Renegotiation within intact marriages, however, presents a different set of enforceability problems. It is possible that community and extended family ties can enforce norms regarding the intrahousehold distribution of resources and ensure that high-earning husbands do not exploit the limited options of their wives later in the marriage. If the maintenance of cooperative behavior in repeated games requires the ability to punish players for noncooperative actions, the scope for such punishment may be limited within a single (aging) marriage. A social network of neighbors and relations (including grown children, who have intimate knowledge of family resources) may provide better enforcement of intrahousehold distributional norms. If such ties have weakened with increases in geographic mobility, this may also contribute to the increased reliance of women on their own market earnings.

It is also possible that the increasing labor force participation of mothers has itself contributed to reducing the enforceability of family contracts. Following the logic of the Akerlof, Yellen, and Katz [1996] argument about the decline in "shot-gun" marriages following increased availability of abortion and contraception, increased availability and reduced stigma of employment for mothers of young children may have limited the ability of women who place a high value on maternal child care to extract a promise of lifetime financial support from husbands.

III. Family policy:

How might policy interventions eliminate, or reduce, the disincentive effects of limited commitment on household public goods provision? The most direct measure would be to make marital contracts legally enforceable. Weitzman [1981] and others have argued that privately negotiated family contracts should be treated as any other

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[16] Both Lommerud and Wells and Maher make this point.

contract, and made enforceable by the courts.[17] An alternative would be to make divorce more costly, but this would not eliminate renegotiation within intact marriages. In this section, I limit the discussion to a few standard policy approaches.

1. Childcare subsidies or the public provision of childcare.

Representing childcare policy requires a modification of the model to allow for market inputs to the production of $G$. Restricting our attention to households in which the husband is fully specialized in market work, let $G = G(l_f, g)$ where $g$ is market childcare purchased at a price, $p$. The first order conditions of the household's problem with respect to $l_f$ and $g$ are:

$$(1 + \boldsymbol{a})\boldsymbol{g}'G_1 - w[u_1' + \boldsymbol{a}U_2'(c_{f2})] = 0$$

$$(1 + \boldsymbol{a})\boldsymbol{g}'G_2 - pu_1' = 0$$

where $G_i$ is the marginal product of input $i$ in public good production. With full commitment, the household allocates inputs to $G$ such that the total value of the marginal product of each input is equal to the marginal cost. The marginal cost of purchased childcare is just the cost of foregone consumption in period 1, while the cost of parental time includes the value of lost income and consumption in period 2. As in the previous problem, suboptimal transfers in period 2 increase the cost of maternal home time, and lead to a suboptimal level of $G$. If purchased child care is a good substitute for parental home time, then the inefficiency in the provision of $G$ will be mitigated, but $G$-production will be too market-intensive as a result of the inflated full cost of maternal time.

Government subsidies will reduce the price of purchased childcare, and free provision of care can be treated as a transfer of some fixed quantity $\overline{g}$ of market care. Both policies, unless they are compensated for with increased taxes, will have positive income effects on families with children that increase demand for private and public goods. The subsidy, and public provision if it reduces the marginal price of child care purchases to zero, will increase demand for $G$ and so reduce the inefficiency associated with underprovision of the public good. However, both policies will also shift production of the public good to a more market-intensive mode, and so increase the distortion caused by limited commitment. This result is completely intuitive: a reduction in the price of one input in household public goods production will increase demand, but shift production towards the now cheaper input. A full analysis of the welfare implications of these policies probably requires a more complete specification of the production and value of "child services" or "child quality." If market childcare is considered to be of lower quality than parental care, and if there is a quality-quantity tradeoff in parental utility, then reducing the price of purchased care can result in more $G$ of lower quality.

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[17] Pollak [1985] discusses the advantages and disadvantages of this approach.

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2. Family leave.

Unpaid parental leave, whether provided voluntarily by firms or mandated by government, permits workers to maintain attachment to a job and/or employer while spending a limited amount of time at home with a new child. This allows workers to reduce the wage losses associated with a work interruption by maintaining a good match and the value of firm-specific human capital. Lundberg and Rose [2000] find that the 'family gap' in women's wages in the United States is due entirely to employment interruptions of at least one year and Waldfogel [1998] finds that women in both the U.S. and Britain who had maternity leave coverage and returned to work after childbirth did not experience negative wage effects of childbearing. It is therefore reasonable to represent unpaid leave in the model above as a reduction in the period 2 wage losses attributable to $0 < l_f \leq \overline{l}_f$. Paid leave will have the additional effect of replacing a portion of lost wage income during period 1.

The introduction of mandated unpaid leave can be expected to reduce the relative price of maternal time in the production of $G$, up to the limit, $\overline{l}_f$. With heterogeneous households, this policy will have important distributional effects. For women who choose to allocate more time to household production than is permitted by the leave policy, there will be no change in the constraints that they face.[18] A reduction in the full cost of a limited quantity of maternal time will generate a kinked budget constraint for household public good production, and we can expect that more households will choose to locate at the kink-point where $l_f = \overline{l}_f$. Some women who would have chosen lengthy interruptions in labor market activity will return to work more quickly, while others will choose a limited leave and continued job attachment rather than no interruption at all.[19] For some households, then, the introduction of parental leave will imply an increase in the home-intensity of public goods production (and thus mitigate the bias caused by limited commitment) and for others an increase in market-intensity. For all households that take advantage of unpaid leave, the price of $G$ will fall and the quantity produced will increase.[20]

3. Income supports for lone mothers.

Income guarantees in period 2, whether they take the form of vested pension rights or means-tested transfers, provide insurance against divorce/separation and act as a substitute for market earnings in period 2. Increased generosity of such payments can be expected to increase specialization in public goods production in the first period and,

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[18] Except that mandated leave increases the cost to employers of hiring women of childbearing age, and may reduce the wages of all women. Ruhm [1998] finds that parental leave in several European countries is associated with increased female employment but with reductions in the relative female wage.

[19] In general, empirical studies find that the right to leave with job security speeds up the return to work. For example, see Ronsen and Sundstrom [1996].

[20] Some studies find that maternity leave provisions increase fertility (Hoem, Prskawetz, and Neyer [2001], Averett and Whittington [2001]); several others report that changes in maternity leave benefits in Canada have not (Gauthier and Hatzius [1997], Zhang, Quan, VanMeerbergen [1994], Phipps [2000]).

without consideration of distortions introduced by financing such payments, increase household efficiency.

IV. Conclusion

Recent work on collective models of family decision-making has extended them from a one-period to a dynamic setting. In this framework, the ability of family members to make binding commitments regarding future behavior is critical to maintaining efficient family outcomes. This paper presents a very simple two-period model with limited commitment, and shows that inefficient levels of specialization and underprovision of household public goods (i.e. children or child services) are likely outcomes. Stylized family policies that subsidize the public good or limit the private compensation required for family caregivers will tend to move households in the direction of a first-best equilibrium.

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