

Working Paper



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Non-marital childbearing and marital property laws: an application of the WIHO model

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Abstract

This article analyzes choice between marital and non-marital childbearing based on a conceptual model that considers the repercussions of marriage laws for the individual wellbeing of women and men living in couples. Childbearing responses to changes in three marriage laws are evaluated: (1) the annulment of coverture laws in the second half of the 19th Century and the first part of the 20th Century; (2) a switch in legal regime used to attribute marital property (from a British system generally less protective of the property rights of lower-earning spouses to a regime of community property), and (3) changes in the availability of Common law marriage in addition to regular marriage. The model is based on a WIHO (Work-In-Household) model and assumes that individual women and men make decisions regarding production and reproduction.

I. Introduction

The percentage of all births to unmarried women was 40.5% in the USA in 2020 (Osterman et al 2022). It varied by race and Hispanic-origin group, standing at 28.4% for non-Hispanic White, 70.4% for non-Hispanic Black, and 52.8% for Hispanic. A better understanding of what drives non-marital childbearing is important, especially in view of the connection between non-marital childbearing, female-headed households, and child well-being (e.g. Lichter et al 1997, Aizer and McLanahan 2006, Rossin-Slater 2017). Many have attempted to offer explanations, including economists Akerlof, Yellen and Katz (1996), Willis (1999), and Schmidt (2007). None of these articles point to an explanation linking non-marital childbearing to laws regulating individual access to marital property, the main focus here. Underlying the lack of attention that the previous economic literature on non-marital childbearing has paid to marriage laws is a tendency to overlook that women are likely to compare their personal benefits and costs from giving birth outside marriage as well as while married or part of an unmarried couple. In the latter scenario, marriage laws will affect the wellbeing of men and women who live in couples, married or not.

¹ Akerlof et al. (1996) and Willis (1999) have frequently been cited. According to Google Scholar by January 24, 2023, the first had been cited 696 times and the second 354 times.

The model presented here compares individual expected payoffs that a potential childbearer could derive from both marital and non-marital childbearing. The model is based on the concept of WIHO, where WIHO stands for "work in household' and refers to productive activities that benefit another adult in the same household. Childbearing is often an aspect of WIHO. In the first version of the WIHO model the work involved in bearing a child was called 'genetricial' work, a term found in the anthropology literature (Grossbard 1976). What often makes in-couple childbearing a form of work is that the other member of a couple typically also wants the child and could possibly compensate the WIHO worker for the value of their work.²

Bearing a child is an activity that women are uniquely equipped for and that is costly to them. Furthermore, as of this writing it is still often the case that women not only bear and deliver children, but also serve as their child's principal caretaker and educator, which can also be classified as a form of WIHO. The model focuses on potential childbearers, the women who do the genetricial work. They are assumed to be the principal agents deciding on whether to have a child or not, and if so, whether to have the child in couple or out-of-couple, in marriage or out-of-marriage. It is assumed that women weight the benefits and costs of the various strategies that can lead them to motherhood, with or without marriage. Men and lesbian women with a willingness to form couples with childbearing women for the purpose of having children also make decisions regarding their willingness to pay for this form of WIHO, i.e. they determine their demand for the work of genetricial women.

Like Akerlof et al (1996), Willis (1999), and earlier economic analyses of fertility based on Becker (1960, 1981), Mincer (1963) and Willis (1973), the model assumes that decisions about having children are made by comparing costs and benefits. Becker, Mincer and many others who went in their footsteps, assumed that couples, not individuals, make these decisions.³ In their models of non-marital childbearing Akerlof et al (1996) and Willis (1999) do give individuals decision-making power but their models assume away some crucial elements of costs and benefits a woman may face when deciding about her preferred childbearing strategy (in or out of couple/marriage). Neither of these models adequately integrates the possible benefits or costs entailed in a woman choosing a strategy of 'first marriage then children' versus non-marital

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² Other economists who have also viewed childbearing as work include Nancy Folbre (1994).

³ As stated by Schmidt (2007) "early theoretical work on the economics of the family assumed away the possibility of nonmarital childbearing".

childbearing: Akerlof et al focuses on possible outcomes of sexual relations not intended to lead to couple formation and the role of contraception and abortion as means to prevent unwanted pregnancies; Willis compares costs and benefits of in-marriage and out-of-marriage childbearing to both men and women but he assumes that marital childbearing decisions are made by a unified couple with a joint utility function and a combined budget constraint and thus ignores how the expected marital wellbeing of individual men and women depends on their access to the couple's assets. In both models there is no room for laws about individual rights to marital property during or after a marriage.⁴

In contrast to the models of Becker, Akerlof et al. and Willis, the WIHO model assumes that all decisions are made by individuals, including decisions about marital childbearing. Therefore, rules by which partners in a couple manage their income and laws that govern individual income in case of marital dissolution also matter. In particular, it follows from a WIHO-based model that the more laws governing marital property favor women, the more women will be willing to bear a partner's child (historically, a man's child) rather than bear a child out-of-couple or out-ofmarriage. To test this prediction Olivia Ekert-Jaffe and I followed the consequences of the passage of Community Property rules in New Zealand and the Canadian province of Ontario for out-of-couple fertility (Ekert-Jaffe and Grossbard 2008, CASE 2 below) and Hazem Alshaikhmubarak, Richard Geddes and I examined choice between marital and non-marital childbearing before and after another important change that affected women's access to marital property: the annulment of coverture laws in the USA in the second half of the 19th Century and the first part of the 20th Century (Alshaikhmubarak et al 2019; CASE 1 below). Victoria Vernon and I followed the consequences of the abolition of Common Law Marriage for teen fertility, which tends to be non-marital and often occurs out-of-couple (Grossbard and Vernon 2017; CASE 3 below).

This article adds not only to previous economic analyses of non-marital childbearing, but also to previous presentations of the WIHO model such as Grossbard-Shechtman (1984) and Grossbard (2015), where the focus was labor supply and consumer economics, Grossbard (1976) that focused on explaining the number of wives in a household, and Grossbard-Shechtman (1986) analyzing fertility in the context of polygamy. It also adds to the studies of non-marital and teen

⁴ Rosenzweig (1999) examines the effect of welfare benefits on non-marital and marital fertility.

fertility discussed here (Ekert-Jaffe and Grossbard 2008, Grossbard and Vernon 2017, and Alshaikhmubarak, Geddes and Grossbard 2019) that failed to emphasize the conceptual underpinnings of the WIHO model and how it diverges from previous economic models of marital and non-marital childbearing.

This paper is organized as follows. Section II presents a model of marital and extra-marital childbearing with individual women as principal agents. Section III presents the three cases involving a change in a law related to marriage and for which previous research has examined the association between that legal change and changes out-of-couple or out-of-marriage childbearing. This is followed by a discussion of the results in light of the model in Section IV. Section V concludes. One conclusion is that a better understanding of the causes of fertility—marital or not—requires dropping models of decision-making by unified households. Such models have previously been rejected by economists studying consumption (e.g Thomas 1990, Browning et al 1994, and Ashraf 2009). It is also time to drop them from economic analyses of childbearing.

II.A Fertility Model with Individual Women as Principal Agents

A woman is choosing between having a child in couple and having a child alone, i.e. unpartnered.⁵ Define *A* as the present value of her estimated net benefits from being an unpartnered mother. Alternatively, she can choose to become part of a couple prior to her child's birth. In that case, the present value of her total net benefits from being a mother includes the following elements:

- A', the present value of her own net benefits of having a child while in couple (A and A' could be the same).
- The present value of possible transfers from the partner. A partner in that couple who also wants a child may be willing to pay the woman to have their shared child and for part of the costs of raising that child. This could include 'genetricial' services related to childbearing that are beneficial to a partner. Such childbearing services, as well as the caring work that the woman devotes to the child after birth often are elements of WIHO (Work-in-Household) benefiting a partner who may be willing to pay for such work in the form of intra-household

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⁵ This section elaborates on the model presented in Ekert-Jaffe and Grossbard (2008).

transfers.⁶ Accordingly, define B as the present value of the transfers she expects to get from a partner as long as they are in couple. The couple may have a completely egalitarian relationship and B may be zero. B can be positive or negative: it may be a function of the price of WIHO that is partially established in marriage markets (see Grossbard-Shechtman 1984).

- Define p_d as the probability of dissolution. The present value B is multiplied by $(1-p_d)$, for the traditional woman is only expecting to get B while she is in couple.
- The third component of the present value the woman expects if she has a child in couple is the present value of benefits accruing to mothers in case of the couple's dissolution (D).

Adding all these elements the woman's expected present value of having a child in couple, Y, is

(1)
$$Y = A' + (1 - p_d) B + p_d D$$
.

A woman's decision on whether to have a child out-of-couple or in-couple is then based on a comparison of the present value of her benefits from having a child out-of-couple and that present value assuming she first forms a couple with a partner. It could take the following form:

$$(2) \quad R^* = A - Y$$

These present values and their components are not observed. They are functions of observable factors that may raise *A* but not *Y*, or vice-versa: raise *Y* but not *A*. Depending on what elements in (2) change, the change in *Y* or *A* will increase or decrease the likelihood that a woman prefers to have a child out-of-couple versus a child in couple.

Partners or potential partners have some control over the outcome. Men or women who want a relationship with a woman who bears their child can encourage marital childbearing by offering higher B, higher D, or if B is higher than D acting in ways that lower the likelihood of dissolution. Offering a higher B may imply offering a higher price of WIHO to their child's mother after she gives birth.

The focus here has been on the best interest of women choosing between marital and non-marital childbearing. Men's best interest is often likely to be inversely related to that of

⁶ More about the WIHO model can be found in Grossbard-Shechtman (1984) and Grossbard (2015).

women, to the extent that women are the WIHO-workers and some men have a demand for their reproductive work. Men don't have the option to bear children on their own. However, higher B or D benefits to women are likely to be more costly to men, so they may prefer laws that imply lower B, lower D, or both.

III. Testing the model based on three changes in marriage laws.

Richard Geddes and Hazem Alshaikhmubarak and I have applied this model to test whether women's choice between non-marital and marital fertility in the USA changed when states were eliminating coverture laws (Alshaikhmubarak et al (2019), CASE 1). By eliminating coverture and giving women the right to own their own assets or keep their own earnings states were increasing both B and D, the material benefits from being married. According to the model this would lead to an increased likelihood that a woman would first marry and then have a child and a decreased likelihood of a non-marital birth. Replacing laws that are vague about who owns what in a couple/marriage or place weight on who purchased the property with laws that clearly assign half of all assets to each partner (community property laws) implies that the woman's benefit from in-couple fertility rises relative to her benefit from out-of-couple fertility. The model predicts that such change would reduce the likelihood that women will have children out-ofcouple. This was tested in joint work with Olivia Ekert-Jaffe (Ekert-Jaffe and Grossbard (2008), CASE 2). The third study, CASE 3, is about a distinction between regular marriage and Common law marriage in the USA. Some states offer two forms of marriage—regular marriage and Common Law marriage. Victoria Vernon and I examined whether changes in the availability of Common Law marriage is associated with the likelihood that teens become mothers, and when they become mothers they often do so out-of-couple (in part because they may not be authorized to legally marry, Grossbard and Vernon 2017). Table 1 lists the three cases that tested the model. Next, these empirical studies are briefly summarized.

CASE 1 Comparing the prevalence of single motherhood BEFORE and AFTER the abolition of Coverture in the USA.

In the majority of U.S. states, prior to 1850 the English common law system of *coverture* was applied. As a result, a married woman relinquished property and wages to her husband. Between

1850 and 1920 many U.S. states passed acts that expanded married women's rights so they could own their market earnings or separate property. Alshaikhmubarak et al (2019) tests whether the abolition of coverture in the USA is linked to changes in marital and non-marital births given that as long as coverture was the law of the state, for women marriage entailed serious loss of their control over their assets and labor force earnings after marriage. Coverture thus reduced women's material benefits from being married. Conversely, the passage of the Married Women Earnings Acts or the Married Women Property Acts led women to derive higher material benefits from being married, but the passage of these acts did not affect the material benefits from being a lone mother. It thus follows from the model that these acts would be associated with a lower likelihood of non-marital childbearing.

Tests involved merging three sets of data: (a) data on law passage specifying the year when a state passed the Married Women's Property Acts and Earnings Acts (between 1850 and 1920 all but five states passed these laws, but the states passed these laws at different times); (b) state-level data from the U.S. decennial census summary reports about some state characteristics that may influence non-marital fertility, such as female labor force participation rates; and (c) individual-level data from IPUMS, the Integrated Public Use Microdata Series (IPUMS-USA), that inform us about household composition, including whether the household included an unmarried mother and her child (under age 6).

We found that for all states, granting married women the right to own property in their name is associated with a lower likelihood that single women have a young child. This finding is consistent with the prediction stated above and the assumption of rational choice by women. However, it is also to be expected that the abolition of coverture would make men less likely to want to marry and have children. From this point of view, one expects more non-marital motherhood after the abolition of coverture. The finding implies that women's added incentive to first marry and then have a child dominates men's diminished gain from getting married.

For the whole sample we did not find that the passage of the Earnings acts was associated with changes in the likelihood that women would be unmarried mothers. However, when we took the state's female labor force participation rates into consideration we found that in states with higher than average labor force participation of women, the passage of the earnings acts is associated with a lower likelihood that single women have a child. Again, this makes sense: in

states with high female labor force participation, women's right to keep their own earnings after marriage becomes more important and turns out to be more related to their decision to have a child outside marriage than in states were married women have a low probability of participating in the labor force.

Furthermore, we found that abolition of coverture is only negatively associated with non-marital childbearing among U.S.-born women, not among foreign-born women. This also makes sense since women who migrated here from other countries would have been less informed about the possible costs that marriage entails in US states with coverture laws. The abolition of coverture in their state of residence would therefore be less related to the likelihood that foreign-born women have a child outside marriage than was the case among US-born women.

CASE 2 Comparing prevalence of single motherhood BEFORE and AFTER passage of Community Property rules in case of divorce.

This study follows the same logic as the one stated in CASE 1. Here the change in laws ruling women's rights to marital property took the form of a switch to a community property regime from a regime based on English law which placed more emphasis on who acquired property and where the law did not clearly attribute rights to marital property to a couple's lower earner. Community property laws tend to benefit a couple's lower earner and this tends to be the woman in the case of heterosexual couples. In case of marital dissolution, under community property this lower earner is entitled to half the assets, which is typically more than they contributed to the marriage financially. It follows from the model in Section II that unmarried women with low earnings potential would be more likely to opt for a strategy 'first marriage, then marital birth'—rather than give birth extra-maritally--if a country switches from a regime that does not clearly prescribe how property should be divided at marriage dissolution to a regime of community property attributing half of all acquired assets to the lower earner.

New Zealand made that switch in 1976. Prior to 1976 New Zealand followed the British Common Law system and offered low protection to low earners in case of dissolution: there was no clear division rule. In 1976 the country adopted a Community Property System. Ekert-Jaffe and Grossbard (2008) shows a significant drop in the likelihood that a woman gave birth out-of-couple after that switch. New Zealand exhibited a rate as high as 15% before the Matrimonial Property Act of 1976 was passed, instituting Community Property; unpartnered births for the

period 1976-1995 then fell to 9%. This change was not only statistically significant, but large. We estimated the association between division rules in case of marital dissolution and the likelihood that women give birth out-of-couple, not only outside marriage, since the law often treats marriages and unmarried couples in similar ways. This switch towards in-couple childbearing reflected changes in women's best interest: after the passage of Community Property law, it became more advantageous for women who expect to be the lower earner in their couple to first form a couple and then have a child.

The Canadian province of Ontario made a similar switch in 1985. However, in this case the drop in the likelihood that a woman gave birth out-of-couple was not statistically significant. In the same paper we also observed an association between regime regulating division of assets at marriage dissolution and proportion of out-of-couple births when comparing all countries and provinces who participated in the same fertility survey and therefore had comparable data for out-of-couple births. Table 2 ranks a number of Western countries by generosity of laws regarding division of property towards the member of a couple with lower earnings. The table first lists countries offering low protection to low earners in case of divorce: they either had common law rules implying no clear division rule (as is the case in most of Canada and the USA)⁷ or they only considered some acquired assets as community property (in the case of Austria). Four countries (Belgium, France, Finland and Germany) applied community property only to assets acquired during the marriage.. The legal regimes most generous to low earners were those with unrestricted community property laws, meaning that all assets were subject to a 50/50 division rule in case of dissolution, even assets acquired prior to marriage. The two countries with such rule in our sample were Norway and Sweden. It can be seen from Table 2 that, overall, the percent of births to out-of-couple unpartnered mothers was particularly high in countries or provinces with low degrees of community property, whereas Norway and Sweden, countries with a high degree of community property, had low proportions of out-of-couple births.

Summarizing Cases 1 and 2 suggests that when laws regulating control over marital assets make couple formation more attractive to women from a financial point of view, women appear to be less likely to have children out-of-couple (Case 2) or out-of-marriage (Case 1). Under such laws

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⁷ A minority of US states have community property. Since most follow Common Law, we classified the USA as a country offering low protection to lower earners. The fertility survey we used did not report separate data for each US state.

women have more incentives to marry prior to having children. In other words, where the law requires that partners or spouses treat the providers of genetricial services more generously from a financial point of view, women respond to the incentives by opting for more in-couple or in-marriage childbearing.

What about men's incentive to marry?⁸ In Case 1, the case of coverture, after the acts were implemented and states eliminated coverture men may have been less eager to marry. In Case 2, the case of community property laws, men may prefer lower degrees of community property and they may have wanted to reduce their willingness to form a couple or to marry after the legal change. Therefore, if men's response to new incentives had dominated that of women, we would have found the opposite results. It thus seems that in both Case 1 and Case 2 the interests of women dominated those of men.

CASE 3 Comparing prevalence of teen motherhood BEFORE and AFTER abolition of Common Law Marriage in the USA. ⁹

In the USA marriage can be established unilaterally when couples either cohabit, especially if they have a child (cohabitation can be short, even minimal) or they hold themselves out as spouses by calling each other husband and wife in public, using the same last name, filing joint tax returns, or declaring their marriage on applications, leases, birth certificates and other documents. Some states recognize Common Law Marriage but most do not. Once a Common Law marriage is accepted by one state, it is also accepted by all other states and federal government institutions such as IRS or welfare agencies. A regular divorce procedure is required in case one of the partners wants to dissolve the union.

Victoria Vernon and I examined the effect of the abolition of Common Law Marriage on the likelihood that a teen gives birth. We used a large data set with thousands of respondents (Current Population Survey) for a twenty-year period (1990-2010) and selected US-born men and women aged 15 to 21. Over this period Common Law Marriage had been abolished in 4 states: Ohio (1991), Idaho (1996), Georgia (1997), and Pennsylvania (2005). We created panel data allowing us to compare prevalence of teen pregnancy in the states that abolished the law and the other states. We found that the availability of Common Law Marriage is associated with

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⁸ During the period and for most of the countries we examined lesbian marriages were illegal.

⁹ This section is based on Grossbard and Vernon (2017).

lower teen-age birth rates, especially if women are younger than 18. This indicates that after states abolished Common Law Marriage teen-age birth rates went up compared to where those rates stood when the laws were still effective and compared to these rates in other states that did not have Common Law Marriage throughout this period.

This last finding is not consistent with women choosing a strategy that best serves their interest. Under Common Law Marriage it is easier for mothers to obtain a shotgun marriage from the child's father. It would therefore follow that as long as the law is applicable women would be more likely to have children out-of-wedlock. This also applies to teenage mothers who are often not legally allowed to marry. In contrast, availability of unilateral Common Law Marriage is not in the best interest of men who may not want to commit to woman: Common Law Marriage may force them to face obligations they did not intend to confront. Consequently, relative to men in other states, men residing in Common Law Marriage states are expected to be relatively more careful to avoid relationships that involve intimate relations with women they don't intend to marry, such as teenage women. The result that under Common Law Marriage there are fewer births to teenagers (Grossbard and Vernon 2017) indicates that men's preference to avoid getting teen women pregnant seems to have dominated teen women's higher willingness to have relations. In other words, it appears that men's costs of Common Law marriage (a higher probability of "shotgun" marriage to a woman who carried their child) play a more important role in deterring teen pregnancies than teen women's benefits from state laws facilitating the "shotgun marriage" option.

IV. Discussion

Findings and their implications for women's control over their childbearing. The first two cases examined the likelihood of unmarried or out-of-couple childbearing as a function of laws regulating married women's rights to own property or keep their earnings (CASES 1 and 2). In both cases the evidence indicates that the more women stood to gain from first becoming part of a couple (married or not) and then having a child, the more they were likely to bear a child in marriage or in couple rather than extra-maritally or out-of-couple. These outcomes are consistent with how the legal changes affected women's financial best interests. They are not consistent with how the changes affected men's financial best interests. It thus appears that in these two cases the legal changes served women's best interests more than men's.

The main finding in CASE 3 is that the availability of Common Law Marriage discourages teenage fertility. There is no contradiction between that result and those of CASE 2 regarding the effect of switches to Community Property if one differentiates between teenagers and adults. In Ekert-Jaffe and Grossbard (2008; CASE 2) we showed that the discouraging effect of Community Property on out-of-couple births does not apply to teenage mothers. Compared to older women, teenagers were less likely to respond to incentives such as the type of financial protection they would obtain in case they form a couple and the union dissolves. The model in Section II thus seems to apply more to adults than to teens. In CASE 3 the men who have children with teenage mothers seem to have gained from the abolition of Common Law Marriage. When Common Law Marriage was in effect men seem to have made more efforts to avoid intimate relations with teenage women for that type of marriage could be costly to them in case they got a teen pregnant.

Women above age 19 thus seem to act in their best financial interest when making choices about marital (in-couple) and out-of-marriage (or out-of-couple) childbearing in reaction to changes in laws governing marriage. To the extent that both men and women act strategically and in their best interest it appears that women's preferred childbearing strategy dominated that of men. Women may have prevailed in imposing their childbearing strategy given that they are the principal agents involved in bearing children.

Evidence from CASE 1 also shows that, historically, women born in the USA acted more in line with their best interest than immigrant women. This is consistent with US-born women having a better understanding of the legal repercussions of various childbearing strategies than was the case with immigrant women.

Implications for analyzing decision-making about fertility and childbearing. Section II presented a model whereby women choose between marital and non-marital childbearing (could be couple versus out-of-couple). It is based on the assumption that individuals are independent decision-makers at every step in their lives: before couple formation, while in couple, and in case of dissolution of the couple (see Grossbard (2011). Each individual makes decisions based on his or

her objectives and circumstances, including their priors as to how existing laws affect their access to marital property. 10

In contrast, most economists analyzing childbearing have followed Gary Becker and Jacob Mincer (e.g. Becker 1960, 1965, 1981; Mincer 1963) who also applied cost/benefit analysis to predict fertility choices, but they assumed that fertility decisions were made by couples. They overlooked that men and women may have different interests with respect to whether to have a child or not, and under what circumstances (married or not). Becker and Mincer assumed that households were conflict-free units making decisions as if they were a single individual. Therefore, in their research, they did not analyze how laws regulating marriage affect out-of-marriage versus in-marriage childbearing. Those who addressed the topic of non-marital childbearing either focused on a particular case (shotgun marriages in Akerlof et al 1996) or they assumed that marital childbearing is a consensus decision not involving disagreements among the two parties (Willis 1999).

An interesting question worth exploring is whether the approach presented here is consistent with cultural explanations for out-of-couple or out-of-marriage childbearing. For example, in their analysis of the higher rate of out-of-couple births in East Germany, relative to that in West Germany, Jirjahn and Chadi's (2020) conclude that differences in the childbearing choices of Germans can be partly attributed to different gender role models under communist and democratic regimes and partly to cultural differences that predate the 1945 division of Germany. Are cultural differences related to differences in laws regulating the allocation of marital property that prevailed in different parts of Germany prior to World War II?

V. Conclusions

This article analyzed choice between marital and non-marital childbearing based on a conceptual model that considers the repercussions of marriage laws for the individual wellbeing of women and men living in couples. Childbearing responses to changes in three marriage laws were evaluated in light of this model: (1) the annulment of coverture laws in the second half of the 19th

¹⁰ The same analytical framework is also helpful when the goal is to better understand the labor supply or consumption decisions of married individuals (see Grossbard-Shechtman (1993) and Grossbard (2015)).

Century and the first part of the 20th Century; (2) a switch in legal regime used to attribute marital property (from a British system generally less protective of the property rights of lower-earning spouses to a regime of community property), and (3) changes in the availability of Common law marriage in addition to regular marriage. In the third case the focus was on teen childbearing, which is related to out-of-couple fertility.

Each of these laws had opposite implications for individual women and men. In the first two cases the laws either gave women more control over marital assets (CASE 1, annulment of coverture) or offered better financial protection to lower earners in a couple (often women; CASE 2, switch to community property). CASE 3, the abolition of Common Law marriage, took away women's right to force fathers into assuming the legal responsibilities of fatherhood, which often translate into financial obligations.

In CASES 1 and 2 changes in childbearing observed among adult women (towards more or less in-marriage or in-couple childbearing) were consistent with women acting in their best financial interest, which was in conflict with men's financial interests. In these instances women seem to have dominated the decision-making process regarding choice between marital and non-marital childbearing (or in-couple versus out-of-couple childbearing). More research on this topic is needed. If the results reported here are confirmed by other studies this would give further reasons to question economic models of the family that assume that couples make decisions about childbearing and fertility as if they are one unified decision-making unit. That assumption continues to be commonly made in economic analyses of fertility, even though in other areas of economics of the household, such as consumer economics, models assuming individual decision-making in households, with individuals having their own preferences and constraints, tend to dominate. These models include the bargaining models of Manser and Brown (1980), McElroy and Horney (1981) and Lundberg and Pollak (1993), the consensus-based models of Apps and Rees (1988) and Browning et al. (1994), and Grossbard-Shechtman's (1984) WIHO model.

It is hoped that this paper will raise awareness of how the childbearing choices of individual women are often based on interests that conflict with those of individual men. In-couple individual interests may also be in conflict where only one partner bears children in a lesbian relationship. In-couple conflicts of interest about financial matters or adequate compensation for

WIHO-work may occur even if the two members of a couple get along and share concern for their shared children's best interest.

References

Aizer, Anna and Sara McLanahan (2006). "The impact of child support enforcement on fertility, parental investments, and child well-being." *Journal of Human Resources* 41(1): 28-45.

Akerlof, George A., Janet L. Yellen, and Michael L. Katz (1996). "An analysis of out-of-wedlock childbearing in the United States." *The Quarterly Journal of Economics* 111(2): 277-317.

Alshaikhmubarak, Hazem, R. Richard Geddes, and Shoshana Grossbard (2019). "Single motherhood and the abolition of coverture in the United States." Journal of Empirical Legal Studies 161(1): 94-118.

Apps, P. F., & Rees, R. (1988). Taxation and the Household. *Journal of Public Economics*, 35(3), 355-369.

Ashraf, Nava. 2009. "Spousal Control and Intra-household Decision Making: An Experimental Study in the Philippines." *American Economic Review*, 99 (4): 1245-77.

Becker, Gary S. (1960). "An Economic Analysis of Fertility." In *Demographic and Economic Change in Developed Countries*, a Conference of the Universities--National Bureau Committee for Economic Research. Princeton, N.J.: Princeton University Press.

Becker, Gary S. (1965). "A Theory of the Allocation of Time." *The Economic Journal*, 75: 493-517.

Becker, Gary S. (1981). A Treatise on the Family. Harvard University Press.

Browning, M., Bourguignon, F., Chiappori, P. A., & Lechene, V. (1994). Income and outcomes: A structural model of intrahousehold allocation. *Journal of political Economy*, *102*(6), 1067-1096.

Ekert-Jaffe, Olivia and Shoshana Grossbard (2008). "Does Community Property Discourage Unpartnered Births?" *European J of Political Economy* 24(1):25-40.

Folbre, Nancy (1994). Who Pays for the Kids? Gender and the Structures of Constraint. London, Routledge.

Grossbard, Amyra (1976). "An Economic Analysis of Polygamy: The Case of Maiduguri," *Current Anthropology*, 17 (4): 701-707, 1976.

Grossbard, Shoshana (2011). "Independent individual decision-makers in household models and the New Home Economics" in *Household Economic Behaviors* edited by J. Alberto Molina. New York: Springer.

Grossbard, Shoshana (2015). The Marriage Motive. Springer.

Grossbard, Shoshana & Victoria Vernon (2017). "Common Law Marriage and teen births." *J of Family and Economic Issues* 38(1): 129–145.

Grossbard-Shechtman. Amyra (1986). "Economic Behavior, Marriage and Fertility: Two Lessons from Polygyny," *Journal of Economic Behavior and Organization* 7:415-424.

Grossbard-Shechtman, Shoshana (1993). *On the economics of marriage*. Westview Press (reprinted in 2019 by Routledge)

Jirjahn, Uwe and Cornelia Chadi (2020). "Out-of-Partnership Births in East and West Germany." *Review of Economics of the Household* 18(3): 853-881.

Lichter, Daniel T., Diane K. McLaughlin, and David C. Ribar. 1997. "Welfare and the Rise in Female-Headed Families." *American Journal of Sociology* 103(1): 112-43

Lundberg, S., & Pollak, R. A. (1993). Separate spheres bargaining and the marriage market. *Journal of political Economy*, 101(6), 988-1010.

Manser, M., & Brown, M. (1980). Marriage and household decision-making: A bargaining analysis. *International economic review*, 31-44.

Mincer, Jacob (1963). "Market Prices, Opportunity Costs, and Income Effects." In *Measurement in Economics* edited by C. Christ. Stanford, CA: Stanford University Press.

McElroy, M. B., & Horney, M. J. (1981). Nash-bargained household decisions: Toward a generalization of the theory of demand. *International economic review*, 333-349.

Osterman, Michelle J.K., Brady E. Hamilton, Ph.D., Joyce A. Martin, M.P.H., Anne K. Driscoll, Ph.D., and Claudia P. Valenzuela (2022) Births: Final Data for 2020. National Vital Statistics Reports Volume 70, Number 17 February 7.

Rosenzweig, Mark R. (1999). "Welfare, marital prospects, and nonmarital childbearing." *Journal of Political Economy* 107(Suppl 6):533-564.

Rossin-Slater, Maya. (2017). "Signing Up New Fathers: Do Paternity Establishment Initiatives Increase Marriage, Parental Investment, and Child Well-Being?" *American Economic Journal: Applied Economics*, 9(2): 93- 130.

Schmidt, Lucie. (2007). "Murphy Brown Revisited: Human Capital, Search and Nonmarital Childbearing Among Educated Women." Manuscript, Department of Economics, Williams College, March.

Thomas, Duncan. (1990). "Intra-Household Resource Allocation: An Inferential Approach." *The Journal of Human Resources*, 25(4): 635-664.

Willis, Robert J. 1973. "A New Approach to the Economic Theory of Fertility Behavior." *Journal of Political Economy* 81(2), Part II: S14-64.

Willis, Robert J. 1999. "A Theory of Out-of-Wedlock Childbearing." *Journal of Political Economy* 107(6), Part II: S33-S64.

Table 1. Three cases of family laws regarding ownership in marriage and their possible association with either non-marital births or teen births.

Case	Outcome	Laws	
1/ Coverture laws 1850-	Out-of-marriage moms	Married women can	
1920, USA		keep money	
2/ Do divorce laws	Out-of-couple moms	Financial arrangement	
assume community		if marital dissolution	
property			
3/ States that have	Teen moms	Common Law Marriage	
Common law marriage			
vs other states in the			
USA			

Table 2. Unpartnered First Births and Rules for Division of Marital Property in Case of Divorce

Country and Year of Survey	Rule for Division of Marital Property	Degree of Community	Unpartnered First Births ^a
USA 1995	Common Law	LOW	15
Canada 1995 b	Common Law	LOW	19
Austria 1995	Some Acquired Assets	LOW	20
Quebec + Ontario ^c 1995	Acquired Assets d	MEDIUM	11
Germany 1992	Acquired Assets	MEDIUM	11
Belgium (Flanders) 1992	Acquired Assets d	MEDIUM	3
France 1994	Acquired Assets d	MEDIUM	7
Finland 1990	Acquired Assets / Unrestricted Community ^e	MEDIUM	10
Norway 1989	Unrestricted Community ^e	HIGH	13
Sweden 1993	Unrestricted Community ^e	HIGH	8

Notes: a) Percent of women with unpartnered status observed three months before birth; mothers born in 1946-1970 giving birth in 1962-1992; b) Excludes Quebec for the entire period and Ontario after 1978; c) Ontario: for births after 1985; d) Community property only for assets acquired during the marriage; e) Community property is unrestricted: includes assets acquired before and after marriage.

Source: Ekert-Jaffe and Grossbard (2008).