The Impact of Post-Marital Maintenance on Dynamic Choices and Welfare of Couples

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Extended Abstract

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Marital breakdown often has severe financial consequences for the lower earning spouse in divorcing couples. In the U.S. the poverty rate among women who got divorced in 2009 was 21.5%, compared to 10.5% for divorced men and 9.6% for married people (Elliott and Simmons, 2011). Divorce law in many countries therefore mandates post-marital maintenance payments, such as alimony and child support, to insure the lower earner in married couples against losing access to their partner's income upon divorce. In this paper I look at the impact of post-marital maintenance on dynamic decisions and welfare of couples.

In the past decade there have been active political debates about reducing post-marital maintenance payments in several countries, including the U.S., Germany, the U.K. and France. The political discussion was typically dominated by two inherently economic arguments: Those opposed to high maintenance payments emphasize that a divorcee who receives high maintenance payments has little incentive to work and become economically self-sufficient after divorce. Those in favor of high maintenance payments argue that people who invest little in their careers after getting married, e.g. because they spend a lot of time on child-care or housework, should be insured against the potential drop in financial resources upon divorce. How quantitatively relevant is each of these arguments? And how should post-marital maintenance policies be designed if both arguments play a role? I adresses these questions by studying post-marital maintenance

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payments using a formal economic model.

In particular to study the welfare implications of post-marital maintenance payments I build a dynamic structural model of life-cycle labor supply, consumption, savings and (endogenous) marital status and estimate the model using Danish register data, that include information on post-marital maintenance payments. I then use the estimated model to simulate counterfactual policy scenarios and to asses the impact of policy changes on couples' dynamic decisions and welfare. The main channels through which maintenance policies impact welfare in my model are: 1. Provision of insurance against financial losses upon divorce. 2. Facilitating efficient intra-household specialization and 3. Distortion of labor supply incentives of divorced couples. While aspect 1. and 2. speak in favor of high post-marital maintenance payments, aspect 3. pushes towards low maintenance payments.

In modelling decision-making in marriage I build on the limited commitment framework (see Marcet and Marimon, 2017) that has previously been used to model intertemporal household decision making e.g. by Voena (2015) and Mazzocco (2007). In limited commitment models of the household a change in one spouse's value of divorce may lead to a shift in intra-household bargaining power from the spouse who wants to stay married to the spouse who wants to divorce. Changes in maintenance payments impact each spouses' value of divorce and thus may trigger shifts in bargaining power within couples or lead to divorce. Decision-making of divorced couples is modeled as non-cooperative (dynamic) game. Each divorced spouse decides strategically about work hours and savings, taking into account how own choices impact her/his ex-spouses optimal choices and how the stream of post-marital maintenance payments is affected. My model includes savings in a risk-free asset and "learning by doing" human capital accumulation, i.e. by working during marriage model agents can increase their future expected wages and thus self-insure against losing resources upon divorce. By this mechanism lower mandated maintenance payments strengthen the individual incentives to supply labor and thus reduce the possibilities for intra-household specialization according to comparative advantage. Maintenance payments thus facilitate efficient household specialization, while lowering maintenance payments promotes two-earner households.

I estimate the model using longitudinal data from Danish administrative records. Besides marital status, labor supply and wages, the data include information on post-marital maintenance payments between ex-spouses, the number of children a couple has together, the age of these children and who the children stay with, if a couple divorces. The estimated model is used

for simulating counterfactual policy scenarios, in which the levels of child support and alimony payments are changed. The model allows me to assess how policy changes affect labor supply and savings of married and divorced couples, separation rates and couples' welfare.

This paper relates to at least two strands of the literature. I incorporate post-marital maintenance payments into a dynamic model of household decision-making, taking into account the strategic interaction that arises between ex-spouses, if maintenance payments are computed based on both ex-spouses incomes. I thereby contribute to the literature that estimates economic models to study the impact of divorce law changes on household decisions and welfare. A large part of this literature is focussed on studying switches from mutual-consent to unilateral divorce and the division of household assets upon divorce (e.g. Chiappori, Fortin and Lacroix, 2002; Voena, 2015; Bayot and Voena, 2015; Fernández and Wong, 2016 and Reynoso, 2018). Less attention has been paid to policies like child support or alimony payments, that make spouses financially interdependent beyond divorce. Notable exceptions are Del Boca and Flinn (1995), who rationalize observed child support payments in a static economic model, and Brown, Flinn and Mullins (2015), who study the impact of child support on child investments and fertility. To date no study considered child support and alimony policies taking into account the strategic interdependence that such policies induce between ex-spouses' labor supply and savings decisions. This paper fills this gap by studying both, alimony and child support policies in a framework that fully accounts for the strategic interaction between divorced spouses who are linked by child support and alimony payments.

Supporting evidence for the key mechanisms of my model is provided by the quasi-experimental literature that estimates the impact of divorce law changes on household decisions. A large part of this literature considers the effect of introducing unilateral divorce on divorce rates (e.g. Friedberg, 1998 and Wolfers, 2006) and on labor supply of married and divorced couples (e.g. Gray, 1998; Stevenson, 2007 and Stevenson, 2008). This literature finds that household labor supply and divorce rates do respond to divorce regime changes and that the magnitude of the effects depend on the asset division regime.[1] Fewer studies consider post-marital maintenance policies: Rangel (2006) and Chiappori et al. (2016) provide quasi-experimental evidence that the introduction of alimony payments leads to a reduction in female labor supply and housework hours and an increase

[1] In particular, the cited literature finds that unilateral divorce led to an increase in married and unmarried female labor supply Stevenson (2008), a decrease in household specialization Stevenson (2007) a (short-run) increase in divorce rates Wolfers (2006).

in male labor supply in existing couples.[2] Rossin-Slater and Wüst (2016) study the impact of child support payments on labor supply decisions of divorced couples, finding that higher child support payments lead to a reduction in the labor supply of fathers, who have to make these payments. While the quasi-experimental studies by Rangel (2006), Chiappori et al. (2016) and Rossin-Slater and Wüst (2016) provide valuable evidence on the impact of changes in post-marital maintenance payments on household decisions, they obviously cannot make statements about the welfare implications of post-marital maintenance policies. Relying on a structural model allows me to move beyond the findings of this literature, by assessing the overall welfare implications of maintenance policy changes.

[2]Rangel (2006) and Chiappori et al. (2016) both exploit the introduction of alimony payments for cohabiting couples (albeit in different countries). In particular Rangel (2006) finds a significant reduction in female labor supply and housework hours, but no significant effect for males. Chiappori et al. (2016) find a significant reduction in female labor supply and a siginificant increase in male labor supply.