Tying the double-knot: The role of assets in marriage commitment

By Jeanne Lafortune and Corinne Low*

Marriage rates are decreasing all around the world, but in the US there also seems to be a growing gap between socio-economic groups in marriage rates. Why would some groups find marriage less and less attractive? What are the benefits that marriage grants that are not offered by cohabitation?

We present a robust stylized fact not previously documented: marriage rates are higher for individuals with more assets. Homeowners have barely seen their marriage fall over the last 50 years. could be because marriage tends to predict homeownership, rather than the other way around, but it is still indicative of a relationship between assets and marriage. To explore this more deeply, we use the panel nature of the Survey of Income and Program Participation (SIPP) to show that single individuals who have more assets in the first wave are more likely to marry in subsequent periods. While assets are clearly correlated with other characteristics, we show that conditional on factors such as education, race, and even income, those with more assets still marry earlier.

We argue this may be driven by the fact that marriage and cohabitation have, over the years, become relatively similar in a number of ways except for the way assets become marital property to be divided upon divorce in marriage while they remain individual property in the case of cohabitation. We document how assets and income are treated by US divorce laws, arguing that as non-marital parental rights and responsibilities have increased, and divorce has be-

come easier, having assets creates an additional commitment to marriage, and disincentive to divorce. Furthermore, evidence by Farham et. al (2011) and others, show that having assets subject to price fluctuations, such as houses, may lock some individuals into marriage, making divorce too costly to them.

So, why would individuals who face potentially the highest divorce cost be the ones to seek marriage? In Lafortune and Low (2017), we sketch a model where we combine the fact that marriage provides a better environment for investments in children (made by one partner) with the fact that unilateral divorce may allow a partner to divorce "too easily." The richer partner is unable to promise ex-ante that he will not seek exit from the union. The poorer partner will thus be unwilling to make individually costly, but jointly optimal, investments in children, since they may be potentially left with only their own (lowered) income in the case of marital breakup. We then suggest that given that asset division rules make divorce particularly costly to couples with assets, this will provide "insurance" for the partner who is paying the investment cost in case of separation, thus making them willing to enter into marriage in the first place.

This idea is highly consistent with the suggestion raised by Lundberg and Pollak (2015) that marriage has remained valuable for those seeking to invest highly in children, because marriage provides a framework to contract over such long-term investments. However, the source of differentiation here stems not from desire to invest in children, but in the ability to insure such investments for the partner who makes them against marriage dissolution. Couples who possess assets have this ability, since assets will be divided at the time of divorce.

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Couples who have only their earnings cannot insure the spouse who endogenously becomes lower earning through parental investments, and therefore will not be able to harvest this value of marriage, and thus may choose non-marital fertility instead, if it is a good substitute for marriage on dimensions other than asset division.

This paper relates to previous literature on out-of-wedlock childbearing and changing divorce and child-support policies over time. Many authors have explored the reasons for declining marriage rates, and accompanying increases in non-marital fertility: from the introduction of abortion (Akerlof, Yellen, and Katz, 1996), to black male incarceration (Mechoulan, 2011), to the fall of marriage-dependent welfare benefits (Duncan and Hoffman, 1990), to changing social approval (Nechyba, 2001). Better child-support enforcement can also influence marriage rates, decreasing the appeal of non-marital fertility for men compared to marriage in some work (Aizer and McLanahan, 2006 and Tannenbaum, 2016)) while increasing it in others (Rossin-Slater, 2016). Related to our explanation, Ekert-Jafe and Grossbard (2008) argue that countries with community property laws face lower unmarried birth rates.

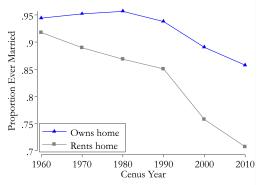
In terms of the impact of easier divorce, Friedberg (1998) shows that unilateral divorce substantially increased divorce rates, while Wolfers (2006) demonstrates that in an efficient bargaining model, we may not expect increases in divorce following such a policy change. Voena (2015) provides a model, however, where changes to divorce policy can affect divorce and household divisions, due to an inefficient autarky period prior to divorce. Our model, like that of Voena (2015), assumes non-Pareto optimal decisions for divorce.

I. Stylized facts

The decrease in marriage rates has been well documented previously. In the United States, while the fraction of ever married 31-35 year olds was above 90 percent in the 1960 Census, that number had fallen to around 70 percent in 2010. What has been

less well documented is the relationship between that decrease in marriage propensity and asset ownership. In particular, Figure 1 shows that the fall in the propensity to marry has been particularly striking for those who do not own a home at the time of the Census.

Figure 1: Fraction married by home ownership status, by Census year



Source: United States Censuses, 1960-2010. US-born men between 41 and 45.

However, this may be due to an inverse relationship: people who marry are more likely to own houses. Thus, we turn to the Survey of Income and Program Participation (SIPP), since its panel nature allows us to look at assets ownership when single and the subsequent propensity to marry.

We assemble all 16 waves of the 2008 SIPP panel, which covers the period from 2008-2012 (each wave representing one quarter). Starting with individuals who are listed as never married in the first wave and between 21 and 35 years old, we classify them based on *individual* assets as either "asset holders" or "non-asset holders." We then track their rates of marriage over the subsequent four year period.

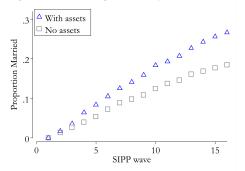
Figure 2 shows that individuals initially unmarried in the 2008 SIPP are much more likely to marry if they have non-zero assets at baseline.

Lundberg et. al (2016) show that there is a big marriage gap by educational attainment. It thus may be that the asset gap

¹Although the SIPP data contain information on each month, we use only the data from the reporting month, due to well-known issues with "seam bias"—overly serially correlated reports—within each reporting wave.

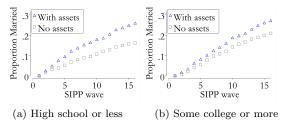
we find is simply due to the fact that individuals with higher education also hold more assets. Figure 3 shows that this cannot explain the full role of assets as the positive relationship between asset holding and propensity to marry holds even *within* educational categories.

Figure 2: Marriage rates by asset status



Source: 2008 SIPP. US-born men between 21 and 35 and unmarried at first wave.

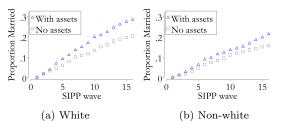
Figure 3: Marriage rates by asset status, by education



Source: 2008 SIPP. US-born men between 21 and 35 and unmarried at first wave.

The literature also shows that there is a very large marriage gap by race, with white individuals continuing the tradition of marriage at much higher rates than other races. However, Hamilton et. al (2015) demonstrate that while the white-black income gap is large, the white-black asset gap is substantially wider. If there is a relationship between marriage and assets, assetholding may help explain the racial gap in marriage. To confirm that our pattern between assets and marriage is not merely picking up the non-marital election of minorities, though, in Figure 4 we divide our sample between whites and non-whites. We show that while the propensity to marry is lower among non-whites than whites, the relationship between asset holding and marriage probability holds within each racial group.

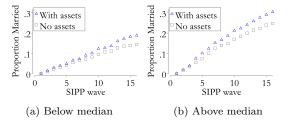
Figure 4: Marriage rates by asset status, by



Source: 2008 SIPP. US-born men between 21 and 35 and unmarried at first wave.

But are assets just a proxy for general socioeconomic status? Figure 5 shows that this is not the case, as the relationship between assets and marriage rates hold even within income groups.

Figure 5: Marriage rates by asset status, by income level



Source: 2008 SIPP. US-born men between 21 and 35 and unmarried at first wave.

Together, these figures suggest a role for assets in determining the value of marriage, even controlling for other characteristics that have been linked to marriage decisions in previous literature.

II. Framework

Historically, marriage and non-marital fertility were different in a number of important ways. On the father's side, only through marriage could paternal rights over children be established, and thus visitation and legal decision making rights. On the mother's side, only through marriage could financial support be legally mandated (Edlund, 2006). Moreover, this financial support was guaranteed to be fairly long term, as divorce was difficult, and extremely rare (Kay, 2000). In the last 50 years, there has been a convergence between the benefits offered by marriage and non-marital fertility,

both due to an increase in legal rights and responsibilities for non-married fathers, and an erosion of the commitment offered by marriage. First, starting in the 1960s, divorce rates began to increase, spurred on by state level legal changes that gradually made divorce easier, and created the concept of "no fault" divorce (Kay, 2000). Soon after, enhancement in non-marital rights and responsibilities started to make nonmarital childbearing a closer substitute to marriage. As part of the welfare reform in the 1990s, to limit state support for children born outside of marriage, a number of policies were enacted to establish paternity and enforce child support provision even outside of marriage (Mayeri, 2016).

This change made the income sharing that would be guaranteed through marriage and non-marital fertility highly sim-What remained different, however, was how marriage treated assets: Assets, such as a family home, would be divided either evenly (in community property states) or "equitably" (Kay, 2000) upon divorce. Since custody is often given to mothers, the family home is also more often allocated to the mother (Weitzman, 1981). In the case of non-marital fertility, individuals retain separate ownership of assets. Thus, we propose, in Lafortune and Low (2017), that perhaps the reason individuals with assets marry more than those without is that the ownership of assets allows marriage to retain its commitment value.

One may wonder why pre-marital assets should predict marriage behavior, as shown in our stylized facts, when pre-marital assets are supposed to be protected in divorce. However, if pre-marital assets are used for the down-payment on a family home, then these assets predict acquiring joint marital assets.²

We thus wish to construct a model in which the key difference between marriage and non-marital fertility is the treatment of assets, and which can explain why marriage may be more attractive to individuals with more assets, or marrying partners with more assets. We set up a model where couples select between singlehood, non-marital fertility, and marriage, electing the option that maximizes the overall surplus of the couple. Individuals differ in their endowment, and men in their asset-holding.

One of the spouse may make an investment into a public good, children, but this is costly in terms of income in the next period. Marriage offers higher return to that investment but also involves a higher cost of separation in case of a bad "love shock." In particular, we assume unilateral divorce, and, given that men have higher endowments than women, they tend to want to divorce too much compared to the social optimum. Equal division of assets upon divorce make that behavior more costly for high asset men. This makes couples with assets less likely to divorce and more likely to have higher investments in children, and thus more likely to marry in the first place.

III. Conclusions

Assets may be an unexplored reason behind diverging marriage patterns. We propose a framework where assets increase the commitment of partners to marriage, thus improving its value. Our framework also provides empirical predictions. In particular, individuals who have more assets at the time of marriage should divorce less, specialize more, and invest more heavily in children. In addition, improvements in contracting around non-marital fertility (e.g., paternity establishment and child support enforcement) should particularly influence the marriage rate of individuals without assets. Finally, the advent of unilateral divorce should have decreased the marriage rate of those with limited assets, but affected individuals with more assets less. These are confirmed by the data as shown in Lafortune and Low (2017).

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²In fact, any intermingling between pre-marital property and property acquired in marriage can remove the protected status of pre-marriage property.

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