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The Marriage Wealth Premium Revisited

Philipp M. Lersch

(University of Cologne; p.m.lersch@uni-koeln.de)

Abstract: In previous research, the continuously married have been found to have more household wealth compared to the never married or those with disrupted marital histories at older ages. Focussing on individuals' personal wealth rather than households, I revisit three aspects of the association between marriage and wealth that are underresearched. First, to address the problem of selectivity in marriage, I compare within-individual changes in wealth associated with marriage. Second, I examine whether the marriage wealth premium is similar for women and men. Third, I contrast the wealth outcomes of marriage and cohabitation. I use data on personal wealth from the German Socio-Economic Panel Survey (2002, 2007, 2012) with panel regression models. In preliminary analyses, I find an immediate marriage wealth premium in within-individual analyses in accordance with previous findings from between-individual analyses. The immediate marriage premium is similar for women and men. However, I find evidence for gender inequality in the cumulative marriage premium later in life. I also find evidence that marriage is unique in its wealth enhancing characteristics compared to cohabitation.

Introduction

Marriage remains a powerful social institution linking demographic behavior with various social outcomes. Previously, continuously married individuals have been found to have more household wealth compared to the never married or individuals with disrupted marital histories at older ages (Hirschl et al. 2003; Wilmoth and Koso 2002; Zagorsky 2005). I identify two major shortcomings in this literature. First, the exclusive focus on household-level wealth ignores that individuals' financial wellbeing may not be accurately captured by household-level measures alone (Bennett 2013; Deere and Doss 2006). Previous research has called for a gender-sensitive within-household perspective on the marriage premium in personal wealth (Ruel and Hauser 2013; Vespa and Painter 2011), but no research has been conducted to address this issue yet. Examining personal wealth of women and men instead of household wealth also allows to adequately address a second shortcoming in the literature (Lupton and Smith 2003). No previous study has examined within-individual changes in personal wealth associated with marriage. A within-individual analysis would allow tackling issues of selectivity in marriage that may bias previous results on the marriage wealth premium.

Focusing on individuals rather than households, I revisit three aspects of the association between marriage and wealth using unique longitudinal data from the German Socio-Economic Panel Survey (2002, 2007, 2012) which records individuals' personal wealth. First, to address the problem of selectivity in marriage, I compare within-individual changes in personal wealth associated with changes in marital status using within-individual fixed-effects regression. I compare these results to conventional household-level measures. Second, I examine whether the marriage wealth premium is similar for women and men drawing on the analyses of within-individual changes in marital status as well as retrospective martial history measures. Third, I contrast the marriage premium to changes in wealth associated with cohabitation to identify the particular consequences of marriage.

Background

Evidence for the household-level marriage wealth premium

Consistent evidence has been found for a marriage wealth premium at the household level. Continuously married spouses in their first marriages have more net wealth than the never married, divorced and widowed during mid-life and at older ages (Addo and Lichter 2013; Halpern-Manners et al. 2015; Keister 2003; Painter et al. 2015). The marriage wealth premium increases with marriage duration (Zissimopoulos et al. 2015). The wealth premium associated with re-marriage does not seem to be sufficient to offset the negative consequences of divorce for wealth, while widowhood seems to be offset by re-marriage (Addo & Lichter 2013; Wilmoth & Koso 2002). The marriage wealth premium is evident across the wealth distribution, but the gains from marriage seem to be larger at the upper end of the wealth distribution (Addo & Lichter 2013). The marriage wealth premium is also found when contrasting married to cohabiting couples (Wilmoth & Koso 2002). The evidence for the marriage wealth premium is exclusively drawn from between-individual comparisons. Angel et al. (2007) provides evidence from a within-individual comparison for the deleterious consequences of marital disruption for net wealth.

Explanations for the household-level marriage wealth premium

Explanations for the household-level marriage wealth premium mainly relate to (1) more available income during marriage that can be saved to accumulate wealth, (2) more profitable investment behavior during marriage and (3) selection into marriage (Zagorsky 2005).

Married (and cohabiting) couples enjoy economies of scale compared to singles, which allows couples to save more of their income at the same household income level compared to singles (Hao 1996). The legal protection of the marriage contract may also increase specialization within marriage. Specialization may increase productivity and labor incomes for men (Becker 1981; Hao 1996). Empirical evidence, however, shows that gains from specialization for men may be too small compared to the increased need from living with a spouse to increase need-adjusted household incomes (Light 2004). Specialization in marriage is becoming weaker across recent marriage cohorts resulting in less economic differentiation between wives and husbands (McManus and DiPrete 2001). In addition, married couples have a tax advantage compared to non-married couples in Germany which increases post-tax incomes especially if spouses earn unequal incomes (Apps and Rees 2005). Additional welfare provisions provide income protection for married spouses not available in cohabitation, for instance survivor pensions help to mitigate negative economic consequences after the death of a spouse (Addo & Lichter 2013). Next to higher incomes during marriage, direct wealth transfers may be higher for married couples as family bonds are more institutionalized compared to the non-married (Hao 1996).

Marriage may also be associated with investment behavior. The legal security of marriage and the "normative expectations of permanence" (Vespa & Painter 2011: p. 958) may facilitate saving among spouses (Knoll et al. 2012).[1] The obligations towards the spouse and potential children legally codified in marriage may also increase savings and investments such as life insurances (Hao 1996). The legal obligations and rights and the expectation of relationship stability associated with marriage are the main differences compared to cohabiting unions which are likely to increase the marriage wealth premium compared to a cohabitation premium (Painter and Vespa 2012).[2] In addition, marriage is culturally linked to homeownership and homeownership may lead to higher net wealth compared to those remaining in rental tenure (Dew and Eggebeen 2010). As married couples often pool at least part of their economic resources, more efficient investments during marriage may be possible (Lauer and Yodanis 2011).

More wealthy and economically resourceful individuals select into marriage (Schneider 2011) which may have led to an overestimation of the marriage wealth premium in previous research (Hao 1996). Because marital sorting is associated with parental wealth, marriage

[1] Theoretically, marriage also provides an insurance function which may reduce saving (Lupton and Smith 2003).

[2] Cohabiting unions may mimic some of the legal characteristics of marriage through private contracts, but few cohabitants do so (Wilmoth and Koso 2002).

will increase their wealth for wealthy individuals (Charles et al. 2013). Selection may also work on third (unobserved) variables related to marriage and wealth. Lupton and Smith (2003: p. 148) proposes that "prudent" individuals may be more likely to marry and save. Previous research has acknowledged these sources of selectivity, but because researchers only applied between-individual comparisons, little has been done to disentangle selection from causation. Within-individual designs would rule out some of the selection effects (Wilmoth & Koso 2002).

Gender inequality in the personal-level marriage wealth premium

Investigating wealth at the household level may conceal considerable inequalities in personal wealth between individuals living in the same household and, thereby, may conceal gender inequalities (Deere & Doss 2006). Personal wealth refers to the sum of all financial and non-financial assets net of all debts owned by individuals plus their respective share of jointly owned assets. Personal wealth is relevant during cohabitation where individual property rights are essential, for instance, to benefit from the safety net function of wealth. During marriage, partners are more likely to pool their resources and in most cases assets are equally split at divorce (Kan & Laurie 2014). During marriage it then seems less important to disaggregate wealth to the personal level at first sight. Even during marriage, however, personal wealth remains relevant. For instance, spouses can mostly independently manage their personal wealth and exclude their spouses from some benefits of wealth, e.g. income, during marriage. In addition, personal wealth may be associated with bargaining power, in particular if partners' threat points are determined by non-cooperation rather than divorce (Sierminska et al. 2010). Finally, even marital unions may be increasingly individualized – in particular in higher-order unions (Lauer & Yodanis 2011). In these individualized marriages personal wealth may provide autonomy and financial security beyond the potentially fragile current relationship situation.

While the explanations for the household-level marriage wealth premium would suggest that both partners benefit in their personal wealth accumulation from marriage, there are also several reasons, why one may expect an unequal marriage wealth premium for women and men if the assumption of a unitary household unit is relaxed. First, specialization in marriage traditionally leads to earning increases for men (Killewald & Gough 2013); however these increases may not be sufficient to offset additional needs at the household level (Light 2004). Marriage is often associated with having children which leads to earning losses for women (Waldfogel 1997). If men have higher earnings within marriage, these

gains may not be equally shared with their spouses (Burgoyne 1990) leading to unequal personal wealth accumulation. Second, men are older on average at marriage formation than their spouses. Due to their higher age, they may have accumulated more wealth prior to their marriage (Sierminska et al. 2010) and the higher wealth may lead to increased accumulation rates within marriage, e.g. due to compounded interest. Third, if children are present within marriage, increased consumption for children may be first of all the responsibility of mothers (Lundberg et al. 1997), which reduces their wealth accumulation. Fourth, due to higher labor market participation rates among married men, men may be more likely to receive additional work-related wealth benefits, e.g. occupational pension (Chang 2010). However, if married partners join their resources, women may benefit from the wealth of their partners, which is higher for men than for women on average.

Data and Analytical Strategy

I use longitudinal data from the SOEP (version 30) which is a large, nationally representative, multi-purpose household panel survey for Germany established in 1984 (http://www.diw.de/en/soep). Personal wealth is recorded in 2002, 2007 and 2012. While only three measurement points reduce the power of longitudinal analyses, the SOEP offers personal wealth measures. The data is multiply imputed with five sets of imputed values (Frick et al. 2013 [2010]). The sample is restricted to household heads and their opposite-sex partners in couple households and household heads in single households aged 20 to 89 years (inclusive).

I examine three measures of wealth. (1) *Personal net wealth* is the sum of all wealth personally belonging to an individual respondent including real and financial assets, life insurance and private pension plans, business assets and valuable assets such as jewelry. From these assets, personal debts and loans are subtracted, so that respondents may have negative net wealth. I top- and bottom-code the extreme 0.1% of reported wealth values. Additionally, I apply an inverse hyperbolic sine transformation to adjust the right-skewed wealth distribution which includes negative and 0 values. (2) *Household net wealth* is the sum of all personal wealth in the household. This measure has conventionally be used in studies of the marriage wealth premium. (3) *Per capita net wealth* adjusts the household wealth for the household size by dividing the household wealth by the number of household members aged 18 and above.

I present results from two types of regression models. First, I present results from fixed-effects regression models to examine the changes in personal net wealth associated with

changes in marital status for respondents aged 18-59. Second, I conduct pooled cross-sectional OLS regression to examine the association between marital history and late-life personal net wealth for respondents aged 60-89. These models are estimated for each of the three wealth outcome variables and all analyses are stratified by gender.

Preliminary Results

Preliminary fixed-effects regression results show that the entry into marriage is associated with more personal net wealth for men and women aged 18-59 (Table 1). There is no statistically significant and only a small substantial gender difference in the association of marriage with personal net wealth. Cohabitation is not significantly associated with personal net wealth. For men, marriage is significantly stronger associated with personal net wealth than marriage, but for women I do not find a significant difference in these associations. Considering the alternative wealth measures, I also find evidence for a marriage wealth premium. The marriage premium in household net wealth and per capita net wealth is substantially larger for women than for men, but the gender difference is statistically non-significant. This is potentially due to the low statistical power of the analyses. Interestingly, cohabitation is associated with more household net wealth and per capita net wealth for women and men, while it is not associated with more personal net wealth.

These within-individual analyses are limited because individuals are observed at not more than three points in time which are not more than 10 calendar years apart. To complement these analyses, I also test for a marriage wealth premium in later life (age 60-89) using retrospective marital history measures. However, these estimates are likely more biased due to selectivity in marriage. Table 2 shows the results of pooled OLS regression models. I find a positive association of being in a first marriage compared to having never married with personal net wealth for men, but not for women. The association of first marriage compared to having never married with personal net wealth is significantly larger for men compared to women. Divorced women have less personal net wealth than never married women, which is not the case among men. Widowed men have more personal net wealth than never married men, which is not the case among women. Remarried women but not men have less personal net wealth than the never married. Considering the alternative wealth measures, I find men and women to have more household net wealth and per capita net wealth in their first marriage compared to the never married. Across gender, men have substantially more net wealth compared to the never married than women, but these differences are statistically non-significant.

Table 1: Linear fixed-effects regression of wealth by gender during mid-life (age 18-59)

	Personal net wealth			Household net wealth			Per capita net wealth		
	Men b (SE)	Women b (SE)	Gender difference	Men b (SE)	Women b (SE)	Gender difference	Men b (SE)	Women b (SE)	Gender difference
Current partnership status (ref. single)									
Cohabiting	0.163	0.466	n.s.	1.249 **	1.525 ***	n.s.	0.869 *	1.216 **	n.s.
	(0.40)	(0.34)		(0.42)	(0.39)		(0.40)	(0.38)	
Married	1.110 **	1.021 **	n.s.	1.434 **	2.097 ***	n.s.	1.085 *	1.791 ***	n.s.
	(0.43)	(0.36)		(0.44)	(0.41)		(0.42)	(0.40)	
Ever divorced	-0.975	-0.206	n.s.	-1.081	0.029	n.s.	-1.003	0.020	n.s.
	(0.64)	(0.52)		(0.67)	(0.55)		(0.63)	(0.52)	
Age	0.060 ***	0.052 ***	n.s.	0.064 ***	0.049 ***	n.s.	0.057 ***	0.045 ***	n.s.
	(0.02)	(0.01)		(0.02)	(0.01)		(0.01)	(0.01)	
Constant	5.212 ***	4.921 ***		5.409 ***	5.328 ***		5.448 ***	5.203 ***	
	(0.73)	(0.64)		(0.71)	(0.68)		(0.68)	(0.64)	
p-value test cohabiting vs. married	0.011	0.097		0.604	0.098		0.520	0.077	
Observations	12,532	14,833		12,532	14,833		12,532	14,833	
Individuals	5,553	6,470		5,553	6,470		5,553	6,470	

Source: SOEP (v29) 2002, 2007, 2012 (unweighted, multiply imputed).
Notes: Linear fixed-effects regression models of household wealth, per capita wealth and personal wealth (all inverse hyperbolic sine transformed); cluster-robust standard errors; * p<.05, ** p<.01, *** p<.001 (two-tailed tests).

Table 2: Pooled OLS regression of wealth by gender at older age (age 60-89)

	Personal net wealth			Household net wealth			Per capita net wealth		
	Men b (SE)	Women b (SE)	Gender difference	Men b (SE)	Women b (SE)	Gender difference	Men b (SE)	Women b (SE)	Gender difference
Marital history (ref. never married)									
First marriage	1.920 ***	0.201	*	2.720 ***	1.731 ***	n.s.	2.077 ***	1.102 **	n.s.
	(0.57)	(0.36)		(0.56)	(0.35)		(0.56)	(0.35)	
Divorced after first marriage	-0.635	-2.333 ***	*	-0.658	-2.108 ***	+	-0.689	-2.152 ***	+
	(0.68)	(0.48)		(0.68)	(0.48)		(0.67)	(0.48)	
Widowed after first marriage	2.058 ***	-0.411	***	2.074 ***	-0.186	**	1.967 **	-0.255	**
	(0.62)	(0.39)		(0.61)	(0.38)		(0.60)	(0.37)	
Remarried	0.245	-1.151 *	+	1.428 *	-0.045	+	0.851	-0.556	+
	(0.63)	(0.47)		(0.62)	(0.47)		(0.61)	(0.46)	
Constant	11.624 ***	11.402 ***		11.342 ***	12.263 ***		10.860 ***	11.845 ***	
	(1.35)	(1.35)		(1.34)	(1.29)		(1.27)	(1.24)	
Controls	included	included		included	included		included	included	
p-value test divorced vs. first marriage	0.000	0.000		0.000	0.000		0.000	0.000	
p-value test widowed vs. first marriage	0.614	0.004		0.015	0.000		0.675	0.000	
p-value test remarried vs. first marriage	0.000	0.000		0.000	0.000		0.000	0.000	
Observations	5,964	6,118		5,964	6,118		5,964	6,118	
Individuals	3,697	3,691		3,697	3,691		3,697	3,691	

Source: SOEP (v29) 2002, 2007, 2012 (unweighted, multiply imputed).
Notes: Linear OLS regression models of personal net wealth, household net wealth, and per capita net wealth (all inverse hyperbolic sine transformed); cluster-robust standard errors; additionally controlled for age, immigration status, cohabiting, cohort, number of siblings, parental occupational status, in East Germany in 1989, sample membership; * p<.05, ** p<.01, *** p<.001 (two-tailed tests).

Discussion

I find evidence for a marriage wealth premium in within-individual analyses using fixed-effects regression and personal as well as household-level measures of wealth. I find no evidence for gender inequality in the immediate marriage wealth premium. I find evidence that marriage is contributing to wealth accumulation differently than cohabitation which may relate to the legally secured long-term characteristics of marriage. At older ages, I find a gendered marriage wealth premium with women aged 60 to 89 not having more personal wealth than never married women, while married men have more wealth than never married men. The present analyses do not allow to differentiate whether even small (statistically non-significant) gender differences in the immediate wealth premium found in the first part of the analysis accumulate to a large gender gap at old age identified in the second part of the analysis, or whether gender inequalities at older ages vanish in younger cohorts. This and further extensions of the analyses such as the estimation of quantile regression models will be added in the near future.

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