Labour Economics 42 (2016) 123–137

Contents lists available at ScienceDirect

Labour Economics

journal homepage: www.elsevier.com/locate/labeco

Commitment in the household: Evidence from the effect of inheritances on the labor supply of older married couples☆

David M. Blau [a,*], Ryan M. Goodstein [b]

[a] Department of Economics, Ohio State University, United States
[b] Federal Deposit Insurance Corporation, United States

HIGHLIGHTS

- Receiving an inheritance causes a reduction in the recipient's labor supply.
- There is no impact of the inheritance on the labor supply of the recipient's spouse.
- This is evidence against the feasibility of full commitment within the household.
- The results are consistent with a model of limited commitment.

ARTICLE INFO

Article history:
Received 17 September 2015
Received in revised form 24 May 2016
Accepted 16 August 2016
Available online 24 August 2016

Keywords:
Retirement
Commitment
Inheritance
Household bargaining
Labor force participation

ABSTRACT

We study the effect of receiving an inheritance on the labor force participation (LFP) of both the recipient and the recipient's spouse in a population of older married couples. An inheritance is not subject to laws in the U.S. governing division of marital property at divorce, because it is not acquired with income earned during marriage. Hence it plays the role of a "distribution factor" in the intrahousehold allocation of resources, increasing bargaining power of the recipient. Controlling for inheritance expectations, we interpret the receipt of an inheritance as a shock to wealth. Our results indicate that receiving an inheritance reduces LFP of the recipient by four percentage points, comparable in magnitude to the effect of a self-reported decline in health. However, an inheritance has little or no effect on LFP of the spouse. These estimates are inconsistent with a dynamic, collective model of the household in which spouses have the ability to commit to an ex ante efficient allocation. The results are consistent with a model of limited commitment in which a shock to household resources can alter bargaining power. We discuss the implications for reform of Social Security spouse and survivor benefits.

1. Introduction

Cooperative bargaining models of intrahousehold resource allocation have been applied with increasing frequency to analyze and interpret intertemporal behavior of households in an environment of uncertainty (see Browning et al., 2014, for an overview). A key issue in this setting is whether household members are able to fully commit to a resource allocation plan (a "contract") agreed upon at the time the household is formed. If spouses can commit to a state-contingent resource allocation plan, then their relative bargaining power at the time of marriage determines the effects of subsequent income and other shocks on intrahousehold allocations. Such shocks would have wealth and/or substitution effects, but they would not cause renegotiation of the original contract.[1]

Commitment is an important issue because, as Mazzocco (2007) points out, it determines the impact of public policies that shift control of resources within the household. If households are able to commit to an ex ante efficient resource allocation plan, then policies that intentionally or unintentionally change control of resources within the household will have limited impact on intrahousehold resource allocation.[2] However, Voena (2015) argues that unilateral divorce laws, which are ubiquitous in the US today, limit the ability

☆ The views expressed in this paper are those of the authors and do not necessarily reflect the views of the FDIC.

* Corresponding author at: Ohio State University, Department of Economics, 445 Arps Hall, 1945 N. High St., 43210-1172 Columbus, OH, United States.
E-mail addresses: blau.12@osu.edu (D.M. Blau), rgoodstein@fdic.org (R.M. Goodstein).

[1] See Marcet and Marimon (2011) for a general discussion of contracting problems in which agents are subject to intertemporal participation or other constraints that affect the set of feasible contracts. Of course, a contract can always be renegotiated by mutual consent, regardless of commitment ability.

[2] Such policies also operate via the budget constraint, so they will have wealth and/or substitution effects. And they will affect the initial distribution of bargaining power in households formed after implementation of the new policy.

http://dx.doi.org/10.1016/j.labeco.2016.08.003
0927-5371/

of spouses to commit. In this legal environment, a shock that increases the relative value of the outside alternative for one spouse may result in a binding participation constraint, causing a shift in bargaining power within the household. In a cooperative bargaining framework this will cause renegotiation of the contract, leading to an ex post efficient outcome, given the new distribution of bargaining power. The new outcome could involve divorce, if that is efficient, or a reallocation of decision power toward the spouse whose participation constraint binds. But the inability to commit to an efficient resource allocation plan will lead to an ex ante inefficient outcome. For example, specialization of one spouse in home production activities and the other in the labor market may be optimal, but if the spouse who specializes in the market cannot commit to remaining in the household when his earnings are high, the optimal degree of specialization will not occur.[3]

Previous empirical studies of intertemporal household behavior in the cooperative bargaining framework have either assumed that spouses have full commitment ability and imposed the assumption in a structural estimation approach (Casanova, 2010; van der Klaauw and Wolpin, 2008), or have tested for full commitment by analyzing the implications for consumption or time allocation Euler equations (Lich-Tyler, undated; Lise and Yamada, 2014; Mazzocco, 2007).[4] The drawback of the first approach is clear: if full commitment is not feasible, the model is misspecified. A drawback of the second approach is that Euler equation methods are not well-suited to analyze labor supply. Labor supply decisions are typically discrete, especially at older ages, where the most common pattern of retirement is abrupt and complete withdrawal from the labor force.

Our paper introduces a new approach to empirical analysis and testing of commitment in married-couple households. We estimate the impact of receiving an inheritance on the labor force participation (LFP) decisions of older individuals and their spouses. Inheritances provide a useful new source of identification for studying commitment, because they are not subject to marital property law in the US. In most US states these laws specify that earnings during marriage and the assets acquired with those earnings are community property, divided equally or “equitably” between the spouses in the event of divorce, regardless of which spouse formally holds title to the asset (Mazzocco, 2007; Voena, 2015). For example, an employer-provided pension account held by one spouse is considered community property in the event of a divorce if the job was held during the marriage. In contrast, inheritances belong exclusively to the recipient since they were not acquired with earnings during marriage. Inheritances unambiguously increase the value of the outside option of the recipient but not of the spouse. Given the exclusion of inheritances from laws governing marital property in the US, inheritances are not contractible. This implies an inability to commit, at least with respect to inheritances.

We use inheritances to test for commitment in a discrete choice labor supply framework. Our approach is similar in spirit to Mazzocco (2007), but our test is for labor supply rather than consumption, imposes weaker assumptions, and uses a new source of identification.[5] Under the null hypothesis of full commitment ability, the effect on the husband's LFP of an unexpected inheritance received by him should be equal to the effect on his LFP of an unexpected inheritance received by his wife, and conversely for the wife's LFP. Under full commitment, decision power at the time of marriage determines the allocation of resources in the couple's state-contingent contract. For example, if both spouses perceive a high probability that the wife will inherit a large sum in the future, her decision power at the time of the marriage will tend to be relatively high. The actual receipt of an inheritance will affect LFP of the spouses via wealth effects as determined by their initial decision power, regardless of which spouse is the recipient. A pattern in which a husband's inheritance affects only his LFP and a wife's inheritance affects only her LFP is inconsistent with full commitment, but is consistent with a limited commitment model in which contracts are renegotiated when a shock causes a participation constraint to bind. We develop a simple model in the next section to illustrate this point.

Our empirical analysis uses longitudinal data from the Health and Retirement Study (HRS) on inheritances *and* inheritance expectations of both spouses in married-couple households. Controlling for inheritance expectations, we interpret inheritance receipt as a shock. This is a rare example of a measureable household resource shock that unambiguously accrues to a specific household member. It is important to focus on inheritance *shocks*, because an inheritance that is anticipated at the beginning of the marriage should not affect the bargaining power of the recipient at the time of receipt.

We find that receiving an inheritance reduces LFP of the recipient by 4 percentage points, and has virtually zero impact on LFP of the spouse, controlling for inheritance expectations, lagged LFP, lagged inheritances, household wealth, and many other determinants of labor supply. The estimates of the own-inheritance effects for husbands and wives are similar in magnitude. We reject the null hypothesis of full commitment in many though not all specifications. The results are quite robust to alternative definitions of employment, alternative regression specifications, and alternative estimation approaches.

This finding confirms results from previous studies that have analyzed the impact of changes in control over resources within the household resulting from exogenous policy changes, but our context is quite different. Previous studies have focused mainly on spending on children as a function of who controls income entering the household.[6] Our study is one of the first to focus on the impact of control over household resources on LFP.[7] We contribute to the literature on commitment by using unanticipated inheritances as a new source of identifying information, and by studying retirement, a major life decision. In the concluding section we discuss reform of Social Security spouse and survivor benefits as an important example of a policy change the effects of which depend on commitment ability.

Our paper is most closely related to two recent papers. Brown et al. (2010) exploit the HRS survey data on anticipated and actual receipt

[3] The legal environment governing household dissolution and property division for cohabiting couples is very different than for married couples. Hence we do not analyze or discuss cohabiting couples, although many of the same issues are relevant.

[4] An exception is Lundberg et al. (2003), who analyze the change in household consumption expenditure following retirement of the husband, and interpret the results in terms of an intertemporal bargaining model without the assumption of commitment. Our approach is similar, as it develops a test based on a model and imposes minimal assumptions in the estimation. Mazzocco et al. (2007) estimate a dynamic collective labor supply model without commitment for young couples. Gemici (2011) estimates a dynamic cooperative Nash bargaining model of family labor supply and migration. She assumes that utility is transferable, leading to an efficient outcome despite lack of commitment ability. Voena (2015) specifies a model in which commitment is assumed to be feasible in a mutual-consent divorce regime and infeasible in a unilateral divorce regime. Several papers have used a non-cooperative bargaining approach to modeling retirement behavior of couples: e.g. Gallipoli and Turner (2013) and Gustman and Steinmeier (2009). By construction, there is no commitment ability in such models.

[5] The assumptions of the Euler equation approach include intertemporal separability of preferences and the absence of liquidity constraints.

[6] See Lundberg et al. (1997), Bobonis (2009), Duflo (2003), and Duflo and Udry (2004).

[7] Chiappori et al. (2002) use a static framework to analyze the effects of various “distribution factors” on hours of work in two-earner households, but they do not study the participation decision. A number of studies treat the ratio of the spouse's wage rates as a distribution factor, but the wage ratio is unlikely to be exogenous. Lise and Yamada (2014) study commitment in a model of time allocation, using deviations of wage growth from the path anticipated at the time of marriage as a measure of resource shocks. To implement this approach, they specify a wage forecasting model that is assumed to be used by individuals. An advantage of our approach is that we do not have to make assumptions about how expectations are formed.