Control over Money in Marriage

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Abstract

The basic question addressed in this chapter is "Who gets what in a marriage?" I begin with the observation that any marriage involves two individuals, each of whom has their own experience of that marriage. The focus is on the economic outcomes experienced by each partner, and the influences on those outcomes. Which partner has greater control over the family's finances? Which partner's preferences are represented in family consumption decisions? Much of the current research on this issue, which uses family expenditure data, encounters a severe limitation: there are very few consumption items which can unambiguously be assigned to men, women or children.

This paper answers the question "who gets what?" in a novel way. I use data on how families manage their finances, to find out who has access to, who manages and who controls the family finances. I also explore the determinants of financial control. Does an improvement in one spouse's bargaining position lead to greater control over money, or is control over money simply party of the couple's division of labor? The study is based on a new a survey of families with children in the Ottawa-Hull area carried out by the author.

The paper begins with a survey of recent developments in the study of intra-household resource allocation. What do we know about *how* resources are allocated inside households? What do we know about *why* the pattern of household resources is as it is? I then go on to describe the data set used in the research, and the main empirical findings. I do not find a systematic pro-male or pro-female bias in household finances. However I do find that, as predicted by theory, partners with greater incomes have greater control over money, younger spouses do better, and there is less income pooling when one partner, especially the man, has been married before.

Control over Money in Marriage

Introduction

The traditional economic view of the household is that, although there are differences in the roles men and women play in marriage, these differences represent an efficient division of labor, and both equally enjoy the rewards from cooperation. To put it another way, it is assumed that income received during marriage is "pooled" in a common pot. In economic theory this assumption is made whenever a married couple is treated as if they have a common budget constraint. At the policy level this assumption is reflected, in, for example, measurements of low income or income inequality that are based only on family income, or the use of a married couple's total income to determine tax liabilities or eligibility for government benefits.

Yet a growing body of research casts doubt on the traditional economic view of marriage. More and more, scholars are beginning to see marriage as a "cooperative conflict" (Amartya Sen, 1990). Spouses gain when they cooperate in raising children, sharing a home, or dividing labor so work can be done more efficiently. Yet spouses are in conflict over how the gains from marriage are to be distributed. For example, who gets to spend the money saved by preparing meals at home?

The chapters in this book describe several theories about marriage, and their predictions as to how the conflict will be resolved. For example, Shoshana Grossbard-Shechtman (1993, this volume), argues that the "wage" each spouse receives for their part of the marriage is the outcome of a "marriage market" process. The supply and demand for husbands' and wives' spousal labor determines who gets what within marriage. Anything that affects supply and demand, for example, the ratio of women to men, the availability of substitutes for spousal labor, government programs such as "Bridefare" (Robert

Cherry, 1998), or the attractiveness of alternatives to marriage, will change how spouses share resources.

Another approach, described by Joni Hersch (this volume) is to imagine a husband and wife bargaining over the gains to cooperation. In bargaining models, anything that improves a person's bargaining position, such as greater earning power (Zhiqi Chen and Frances Woolley, 1999; Shelly Lundberg and Robert Pollak, 1993), more favorable treatment under divorce law (Marjorie B. McElroy and Mary Jean Horney, 1981), or even physical strength and capacity for violence, will increase that person's share of the gains from marriage.

Studies testing the traditional economic view against newer approaches almost invariably find that the new approaches are better able to explain people's behavior. Factors which should have no real effects according to the traditional model, such as who receives government benefits, do in fact change families' expenditures patterns or labor force behavior. The implications of these findings go far beyond prescriptions for economic theorizing. The policy implications are profound. Measures of poverty that assume equal sharing within the household will mismeasure the true extent of poverty (Shelley Phipps and Peter Burton, 1995). The same is true for inequality measures (Woolley and Judith Marshall, 1994). Targeting transfers such as Earned Income Tax Credits on the basis of family income may miss people in "secondary poverty" - those without access to other family members' resources. It matters which family member receives government benefits. A family allowance paid to mothers may have quite different impacts from a tax deduction for dependants claimed by the higher earning spouse.

The basic question addressed in this chapter is "Who gets what in a marriage?" The problem is shown in Figure 1. The curve PP shows the gains to cooperation in marriage, and all possible divisions of those gains between the husband and the wife. Divisions in the upper left of Figure 1 are favorable to

husbands, divisions in the lower right favor wives. In this framework, two issues emerge. First, where on Figure 1 is a couple located? For example, are most marriages egalitarian in their distribution of individual utility, that is, located towards the center of Figure 1? Are the terms of marriages more favorable to one partner or the other? Second, what factors influence how the gains are shared? For example, do women who work for pay outside the home enjoy a greater share of the gains from marriage?

Economists rarely observe directly what happens within marriages. As a result, those wishing to understand marriage have generally used individual men's and women's consumption and work decisions, which are more readily observable, to infer how couples share resources. In the next section, I survey the contributions of some of this research, lessons we have learned, and some of the limitation of this research.

This paper answers the "Who gets what?" question in a new way: by using data on who controls family finances. Household finance data has been used extensively by sociologists, but very rarely by economists (one exception is Simone Dobbelsteen and Peter Kooreman, 1997). I describe how much control each partner has over the family finances and household decision making, based on a survey of three hundred families with children in the Ottawa-Hull area carried out by the author, together with Judith Madill. I then examine the factors underlying marital outcomes. Do partners with earnings of their own have a greater say in household decision-making? Do younger couples have more equal relationships than older couples? What impact do children have?

What Do Economists Know?

While North Americans cherish the ideal of egalitarian marriage, studies in developing countries show that family members frequently share unequally in the household's resources. In poor countries, unequal

access to resources can mean having less food or medical care, and the evidence of inequality is higher

morbidity and mortality, or stunted growth. Lawrence Haddad, John Hoddinott and Harold Alderman

(1997) provide a comprehensive survey of the literature. Some of the recurring findings from this

literature are that an increase in men's income is associated with more spending on tobacco, alcohol and

men's clothing, while transfers to women are significantly more likely to be spent on education, health,

and household services, and women are more likely to spend money on children (Duncan Thomas,

1990).

In rich countries, however, the question of "who gets what?" rarely takes the form of "who will

have enough to eat?" Rather it involves larger, more discretionary, expenditures. A number of studies

have examined expenditures, such as clothing, which can be assigned to men, women or children, as

shown in Table 1. Martin Browning, Francois Bourguignon, Pierre-Andre Chiappori and Valerie

Lechene (1994) and Shelly Lundberg, Robert Pollak and Terence Wales (1997) find a positive

relationship between women's share of family income and expenditures on women's or children's

clothing, even after controlling for other factors which might effect clothing expenditures, such as labor

force participation. Shelley Phipps and Peter Burton (1998) study expenditures in more general terms,

and find personal care, restaurant meals, women's clothing and childcare expenditures increase as

women's share of household income increases holding total household income constant. Tobacco and

alcohol expenditures, home food expenditures and men's clothing expenditures increase with men's

share of household income. Unfortunately many of these studies are based on the small number of

goods that can unambiguously be assigned to one family member, such as clothing. Other expenditure

information, such as spending on tobacco and alcohol, is unreliable.

An alternative approach is use information on how much paid labor each household member supplies to infer how resources are shared in marriage. Shoshana Grossbard-Shechtman (1993) has used the term "spousal labor" to describe household production for the benefit of a partner. The return to spousal labor is a "quasi-wage". She has estimated the quasi-wage received by women in marriage using labor supply data, hypothesizing that a decrease in the return to spousal labor will increase women's paid labor force participation. She argues, using US and Israeli data, that worsening marriage market conditions -- for example, the relatively large number of marriageable women relative to men in the 1960s and 1970s – tended to be associated with increased female labor participation and feminism, "a reflection of the growing frustration among women who were having a difficult time achieving the standard of living their mothers and older sisters had reached [through marriage] in the past" (1993: 98-99).   Grossbard-Shechtman and Shoshana Neumann's chapter in this volume provides further evidence on the interaction between marriage and labor markets.

A number of other authors have also used information on paid work to estimate how resources are shared inside families. For example, Patricia Apps and Elizabeth Savage (1989) and Patricia Apps and Ray Rees (1993) find that men and women do share unequally in the benefits of marriage, however their estimates of "who gets what" are sensitive to several assumptions, particularly assumptions on how much unpaid work is done by each spouse. Pierre-Andre Chiappori, Bernard Fortin and Guy Lacroix (1998) use a similar technique to Apps and Rees. They find, like Grossbard-Shechtman, that the "sex ratio", the number of men relative to women in an age group, is a key determinant of sharing. A one percent increase in the sex ratio raises transfers from husbands to their wives by around $2,500 per year. However their methodology makes strong assumptions about the efficiency and consistency of marital decision making, and ignores household production.[1]

These findings suggest that family income is not a common pool which all family members access equally. The traditional division of labor with men in the market and women at home is not benign. It is better understood as a transaction, where love and care, time and money, are exchanged. Yet little is known about transactions inside households. Are there financial flows inside households that even out disparities in earnings and unpaid work? Perhaps one of the simplest ways of answering this question is just to ask couples how they manage their financial resources.

How Families Manage Their Money

Sociologists have studied money and marriage extensively (Jan Pahl 1983, 1989; Gail Wilson, 1987, David Cheal, 1989, Judith Treas, 1993, Viviana Zelizer, 1994). Their work is informative, and also reveals the complexities and tensions that arise when studying a couple's finances.

Financial decision-making is double-edged. On the one hand, control over the family's finances is a source of power. For example, in Gary Becker's (1974) "rotten kid theorem", other family members act as the altruistic head of the household wishes, *because the household head controls the family's finances*. On the other hand, day-to-day money management can be time-consuming, and even tedious. Sociologists have come up with various phrases to mark this distinction. For example, Safilios-Rothschild (1976) uses the terms "orchestration power" and "implementation power" to distinguish between two types of decision-making authority:

> Spouses who have 'orchestration' power have, in fact, the power to make only the important and infrequent decision that do not infringe upon their time but that determine the family life style and the major characteristics and features of the family. They also have the power to relegate unimportant and time-consuming decisions to their spouse who can, thus, derive a 'feeling of

power' by implementing those decisions within the limitations set by crucial and pervasive decisions made by the powerful spouse (p. 359).

Safilios-Rothschild's work suggests that there are two key characteristics of a couple's financial management system: who has control, or orchestration power, over major financial decisions, and who manages finances on a day-to-day basis. Figure 2 puts control and management together in one diagram. The horizontal axis shows who does the day-to-day financial management: is it done by the male, by the female, or by both? The vertical axis shows control: is it exercised by the husband, wife, or do both partners have an equal say? These four quadrants in Figure 2 capture a wide range of family financial systems. In the upper left, for example, is the traditional British or American working class arrangement known as the "whole wage" system, described Pahl, 1983, or Zelizer, 1994. The husband hands over most of his paypacket to his wife for housekeeping. She manages the households' finances, but he usually makes the all important decision of how much of his paypacket to reserve for his own personal spending money. In the upper right are the more upper-class traditional arrangements (again documented by Pahl, 1983 and Zelizer, 1994), whereby husbands both manage and control the family's finances, sometimes giving wives a set "allowance" for housekeeping. In the center are "shared management" systems, where both partners share in the management of family finances.

In North America today, the ideal of marriage as an equal partnership is strong. In the couples we surveyed 56 percent of men and 48 percent of women when asked, "who would you say really controls the money which comes into this household," responded that they controlled the money together. Yet other studies have shown that there are wide variations across cultures and, within a given country, across social classes, in how couples manage their money. For example, studies of Asian family financial management, such as Hanna Papanek and Laurel Schwede (1988), have found that wives

dominate financial decision making. In 70.5 percent of the Indonesian couples surveyed by Papanek

and Schwede, the wife decided all money matters, possibly consulting with her husband or other

household members. Low income British families show a similar pattern. For example, Wilson (1987)

found that three quarters of the low income families she surveyed had one person managing the

household finances, and that person was usually the wife, while Pahl (1983) found wife-controlled

management systems in 70 percent of the British low income families she studied. However in the high

income families surveyed by Pahl (1983), three quarters had husband-controlled financial management

systems.   By way of contrast, Treas's study of 9000 American couples, based on the Survey of

Income and Program Participation, found that 64.4 percent had only joint accounts, and so "merge their

individual interests into a single economic collective" (Treas, 1983; 723).

The wide variation in forms of financial management used by couples suggests that evidence on

family financial management can be used to test the various models of marriage described in this volume.

For example, the marriage market approach suggests that a partner working inside the home should

receive some form of quasi-wage, some form of return, for their spousal labor. Family financial

management patterns testify to the existence – or absence – of returns to spousal labour.   A couple

with a traditional division of labor can institutionalize equal sharing by depositing all incomes into a joint

account to which both have access.   Alternatively, a wage earner can institutionalize unequal access to

resources by, say, keeping all financial accounts in his or her name.   Patterns of access, and information

about who has control over the financial resources provide some evidence about "who gets what" inside

a marriage. Where, in terms of Figure 1, do most couples fall?

To the extent that what happens inside marriage is determined by bargaining, we might expect

people to be aware of which partner has greater influence on household outcomes. While this may

seem like an obvious assertion, it is in fact controversial. As Bina Agarwal (1997: 15) argues,

differences (and inequalities) in men's and women's roles inside marriages may be accepted as a natural

and self-evident part of the social order. The male "head of the household" will not have to demand the

best and largest portion of meat if all family members unquestioningly accept his privilege as "tradition".

Yet for the Canadian couples that we are sampling – couples with children struggling to accommodate

vastly different gender roles than prevailed during their own childhood[2] – bargaining may be an explicit

process. If so, we may be able to find evidence of bargaining power by finding out who makes crucial

household decisions.

The project is different from that of Treas (1993). Treas models couples' decisions to merge

or keep separate their family finances on the presumption that, when money is kept in a joint bank

account, it can be accessed equally by both partners. The findings of this study call Treas's

presumptions into question. I will show that, even when couples have joint bank accounts, they play

separate and often unequal roles in the management of the family's finances. At the same time, I will call

into question the "separateness" of separate bank accounts. Treas (1993), for example, speculates that

a wife's account "may be more collective in character" (pp. 729-730) than a husband's. I am able to

provide evidence on the accuracy of this assertion with information on how much access and control

partners have over "separate" bank accounts.

Main Empirical Results

Our research is based on a sample of 300 couples in the Ottawa-Hull region in Canada during 1995.

The interviews consisted of one joint interview lasting about 20 minutes, two individual interviews lasting

about 40 minutes, and two individual self-completion questionnaires. The interviews were carried out in

the respondents' homes. The individual interviews were carried out in privacy whenever possible; this was facilitated by having the other partner fill out the questionnaire while the individual interview was being carried out.

The survey was limited to English-speaking couples with children under 18. Initial contact was made through a telephone call. In this initial phone call the potential respondent was asked pre-screening questions, the nature of the survey was explained, a time was agreed upon for the initial interviews. Of those surveyed, 88 percent are married and 11 percent are living in common law relationships. The median length of the relationship is ten and half years, 15.7 percent of male and 15.3 percent of female respondents have been married before, the median age of female respondents is 36, the median age for male respondents 38. We obtained income data from both male and female respondents independently; males reported a median household income in the $65,000 to $69,999 range (in Canadian dollars), while the median household income reported by females was $70,000 to $74,999; however the differences between male and female reported incomes were not statistically significant (Pearson chi squared=0.79).

Material Equality?

The starting point for the analysis was a sketch of who has access to, and control over, various financial resources. Respondents were asked "How many bank, credit union, trust company or other similar accounts do you have?", then asked a series of questions about access to and control over each account, for a maximum of six accounts. Table 2 shows, for accounts one through six, responses to the question "Whose name or names is the account in?" Recorded are the percentage of accounts held by

males and females, by other family members (e.g. children), as well as the percent jointly held, and the total number of couples having such an account.

The major conclusion from Table 2 is that stated ownership of bank accounts is most often joint. The primary account (the one mentioned first by the respondents) is, for 63.3 percent of couples, a joint account. The percentage of accounts that are held separately by one spouse, either the male or the female, rises as we move from the primary account into additional accounts, reaching a maximum of almost half of all "fourth" accounts. The accounts mentioned last are more likely to be in another family member's name.

When accounts are separate, they are as likely to be held by women as by men. The total number of "female" accounts is greater than the total number of "male" accounts (238 as opposed to 208). The impression of femaleness in Table 2 is reinforced by a "ladies first" convention, as women's accounts are reported prior to men's accounts.

One possible reason that women have more accounts is that they may be more involved in the households' day-to-day financial management. This would mean, in terms of Figure 2, that the average couple would be towards the center, or slightly to the left, of the diagram. The hypothesis that women have more day-to-day involvement is supported by a more detailed analysis of financial management practices. Tables 3 through 5 show who performs a range of activities according to whether the accounts are male-name, female-name or joint. The data given in these tables is for the account designated as "account 1" by the respondents. Similar data was collected for up to six bank accounts, but the basic pattern which emerges for accounts two through six is similar to the data for account one presented below. (Respondents were not instructed as to which account should be considered "first". I

have used account 1 information to avoid clouding the picture with data on little used, relatively unimportant accounts).

The key conclusion from Tables 3 and 4 is that if a bank account is in the name of one partner, that partner in most cases will have primary access to and control over that account. For both male and female held accounts, and for the five key activities identified, the activity was carried out by the account holder in the majority of cases. However there is female involvement in managing male-name accounts, as well as male involvement in female-name accounts. Cash withdrawals are more often or mostly done by women in 11.3 percent of male name accounts, and check-writing is done by women in 10.9 percent of such accounts. Men are involved in managing female-name accounts too, with the greatest involvement being in reconciling and recording transactions.

It might be wondered how one partner can make withdrawals or write checks on an account in the other's name. However partners may share bank cards for making cash withdrawals, or the account holder may sign checks filled out by the other spouse. Another possibility is that respondents are identifying as "separate" joint accounts where one person is the first named account holder, main contributor or most active user.

Tables 3 and 4 also show the average "male-ness" of male accounts and the average "female-ness" of female accounts. A value of 3 represents equality, values below 3 pro-male, above 3 are pro-female. Women's accounts are more "female" than male accounts are "male", although these differences are not statistically significant at p=0.05. Yet because there are substantially more female-held accounts (20.0 percent of primary accounts) than male-held accounts (13.7 percent), when finances are separate, financial management is more often in the hands of women.

Table 5 shows the same information for joint accounts. Table 5 shows that, even in nominally joint accounts, one person acts as "financial manager", carrying out managerial activities such as recording transactions, keeping track of the balance and reconciling the account. These activities are always or mostly done by the male partner in twenty to thirty percent of the households and by the female partner in forty to fifty percent of households. The mean value is pro-female (above 3.0) for all of these activities, and statistically significantly so (at p=0.05) for writing checks, recording, and keeping the account balance. The most female-dominated activity is check-writing. Women are responsible for check writing in over 50 percent of joint accounts, a fact no doubt linked with women's performance of grocery shopping and other tasks. The managerial activity men are most involved in is reconciling the accounts.

Of the five activities identified in the survey, the only one that is carried out equally by both partners in a substantial number (33.7 percent) of households, and the only activity done more often by men than by women, is making cash withdrawals. Cash withdrawals are special for a number of reasons. First, cash is not easily accounted for. Cash leaves no paper trail, in contrast to, say, credit cards. Cash use may reflect a partner's freedom not to account for expenditures. Second, cash is particularly convenient for small, discretionary expenditures, such as lunch at work, buying beer, or leisure activities. Historically, in whole wage systems, men's cash allowance was often referred to as "beer money". The pattern of cash withdrawals may reflect each partner's levels of discretionary expenditures. Third, cash is easy to carry, compared to say a check book. Men may use cash rather than checks because men do not carry handbags. Finally, and most importantly, cash withdrawals confer access and control over family resources, but not time consuming administration and management. The high level of male involvement in making cash withdrawals tells us that family financial

management is a less female dominated activity than one would think if one just looked at who writes most of the checks.

A detailed analysis confirms the initial impression: in terms of Figure 2, the average household is more likely to be on the left, with the wife slightly more involved than the husband in day-to-day financial management.   Yet is this a cause for feminist celebration? Financial management is a double-edged sword. It can confer power, but it also involves work.   Is managing the household's finances like being a CEO, deciding what happens when? Or is it more like being a cleaner, tidying up the mess others have left?

Determinants of male and female control

In this section I use regression analysis to explain the patterns of control documented in section 3.1 above. The hypothesis being tested is that the "male-ness" or "female-ness" of family financial management is influenced by each partner's economic position and opportunities, both inside and outside marriage.

Formally, I take as a dependent variable control over money (CM), measured from 1 (male always) to 5 (female always), as in Tables 2 to 5 above.   Each partner's economic position and opportunities affect how money is controlled in marriage, that is,

$$CM=f(\mathbf{X})+e$$

Where $\mathbf{X}$ is a vector of economic and other variables and e a random component, assumed to be normally distributed.

If control over money confers and reflects power, we would expect partners with better bargaining positions to have greater control. The literature identifies a number of factors which affect the allocation of resources in marriage.   First, theoretically, a higher income enhances a person's bargaining

position (Chen and Woolley, 1999). A higher income improves a person's fall-back position – the well-being they can achieve without the cooperation of the other partner. Previous empirical work has found that income matters, as surveyed in section 2.1 above. Given that CM measures the "femaleness" of control, we would predict a negative coefficient on male income and a positive coefficient on female income.

Second, the better a person's "outside options," or the options available outside the current relationship, the better her bargaining position (Woolley, 1999). We use three variables to measure outside options. If the couple has a common law relationship, instead of being legally married, this will alter the options available to each of the spouses if the relationship breaks down. For example, the couple can part without going through formal separation and asset division proceedings. It is not obvious from a theoretical point of view whether living common favors men or women, but it may matter.

The spouses' ages and their age difference also affect their outside options. As a person gets older, his or her probability of remarrying decreases, diminishing the number of options outside the present relationship. However if remarriage prospects for both partners diminish with age, we would not expect *relative* bargaining positions to be much affected by age. However the greater the age difference between the spouses, the better, relatively speaking, the outside options of the younger spouse. For this reason we included the age difference, calculated as male age less female age, as an explanatory variable. As well as having theoretical support, this variable has been found by Grossbard-Shechtman and Neuman (1988) to affect the presumed quasi-wage of women in marriage, and by Browning, Bourguignon, Chiappori and LeChene (1994) to shift the "sharing rule" inside marriage in women's favor. The predicted coefficient on male age - female age is positive.

Education is another influence on outside options, as the educated have more employment and other opportunities. Yet there are other possible interpretations of education. Education, to a certain extent, measures socio-economic status. There is also a liberal notion that education, particularly university education, exposes people to a wide range of ideas and attitudes, and makes their behavior less subject to tradition and custom. Because education captures so many influences, I include "years schooling" in the regression equation, without having a strong prior on its sign.

Yet managing the household's finances involves work as well as conferring control. If the "work" aspect of financial management is relatively more important than the "control" aspect, we would expect managing money to be part of an overall division of labor within the household. One theory of marriage (see, for example, Francine Blau, Marianne Ferber and Anne Winkler, 1998) suggests that spouses can divide work efficiently by specializing where they are relatively more productive, for example, one spouse specializes in paid work and the other unpaid. We include two variables intended to measure the division of labor. The first is "full-time", a dummy variable indicating whether or not the female partner is in full-time paid employment. We used full-time rather than part-time employment because Canadian evidence suggests that women's part-time work permits couples to retain a traditional division of labor within the household (Statistics Canada, 1995). Women employed full-time are more likely to challenge – because of time pressure if for no other reason – the traditional division of labor within the household. If managing money is part of the work of grocery shopping and everyday household tasks, we would expect women employed full-time to do less money management. The one caveat to this prediction is that people employed in managerial or financial positions may be more likely to have knowledge, such as bookkeeping or spreadsheet skills, that make them good financial

managers. However the effect of skill should be captured, at least in part, through the education

variable.

Two other variables, "male - married before" and "female - married before" also capture

division of labor within the household. As Treas (1993: 728) argues, an individual whose previous

marriage ended in divorce or widowhood has less reason to expect permanence. Yet the traditional

division of labor renders the partner specializing in household production extremely vulnerable in the

event of divorce. When a partner has been married before, we would expect to see less specialization,

either towards men or women. "Married before" may, however, also proxy a number of other

variables, for example, attitudes towards marriage.

Some explanatory variables could not be included because of the nature of our sample. The

entire sample is composed of people who have children, so we cannot compare those with and without

children. Although we did experiment with, for example, family size, it had little explanatory power.

Broad population or geographic characteristics, such as sex ratios, could not be included because the

sample is drawn from a single geographic area.

Table 6 provides a summary of the explanatory variables used, along with their descriptive

statistics. Most of the information in the table is straightforward, however some points should be noted.

First, the sample is well-educated, with a mean 16 years of schooling. In part this reflects the nature of

the sample area: Ottawa's two main industries, government and the high technology sector, attract

highly educated employees. However it may reflect some sample selection bias. Second, the income

variable is the respondent's self-reported total income, reported separately by each partner. It is

categorical, ranging from 1 (no income) to 37 (150,000 or above). Although other income measures

are available in the data set, none fit so well as total income. Because the income measure used is

unconventional, it is not obvious that the magnitude of the regression coefficients has any meaningful interpretation. Yet given that the dependent variable is simply a scalar, one to five, measure of "female-ness" in money control, the sign and significance of the coefficients is our focus of concern.

Table 7 provides summaries of the linear regression results. The one striking finding is the significance of male income: males with higher incomes exert more control over money. This is yet another blow for the traditional economic view of the family as a unitary entity, treating their financial resources as a common pool. Part of the explanation for the findings may be comparative advantage. Men with higher incomes are more likely to have managerial or professional jobs that require knowledge of financial management. This may explain the particularly strong effect of male income on "who reconciles." Yet the comparative advantage explanation is unlikely to be the whole story. Making cash withdrawals hardly requires managerial or professional skills, yet men with higher incomes are still more likely to do so. Also, the coefficient on male schooling, while insignificant, is positive, suggesting more educated men are more likely to have joint or female control of family finances. Instead, the strong effect of male income supports bargaining models of the family, which predict that greater incomes will be associated with greater control.

The coefficient on female income is of the expected sign, that is, a higher income increases the degree of female control. Yet the sign on female income is insignificant. The most likely explanation of this finding is that women are more likely than men to keep their incomes in separate accounts. Thirty-four percent of the women surveyed put their earnings into an account in their own name, as opposed to only 22 percent of men. Because the analysis is for the account labeled "account 1" only, a number of these separate, female bank accounts may be excluded from the analysis. Yet the fact that the

coefficient on female income is of the expected sign provides tentative support for the economic theories of the family.

The significance of the spouses' age difference in explaining cash withdrawals is another interesting finding supporting, as outlined earlier, the idea that younger women are in a relatively more advantageous bargaining position. It is noteworthy that the age difference is only significant for cash withdrawals which, I argued above, involve more discretion and less work than other aspects of financial management.

One thing that is striking about the results in Table 7 is the consistent significance of the marital status variables, particularly "male married before" and "common law". In order to understand why these variables mattered, I ran a multinomial logit regression, using the variables in Tables 6 and 7 to explain couples choice of "male", "female", or "joint" accounts as "account 1". The results of the regression are reported in Table 8. The way to interpret these results is as follows. A negative coefficient, such as the coefficient on male schooling in "male" means that, when men are more educated, "account 1" is less likely to be only in their name. Because the coefficient on male schooling in the female regression is negative also (though insignificant), we would conclude that, when men are more educated, they are less likely to have an own name, and more likely to have a joint, first account.

Table 8 sheds some light on the marital status findings. When the male partner has been married before, the first account is more likely to be in the man's name, and less likely to be a joint account. This replicates Treas's (1993) finding that people who have been married before are less likely to have joint finances. It may be, as Treas suggests, that people who have been married before expect less permanence from their relationship. Alternatively, when child or spousal support must be paid to a

former partner, the new partner may well will wish to keep finances separate, rather than having her income go to support another family.

Table 8 also reveals that, when people live in a common law relationship, "account 1" is more likely to be in the woman's name. I would suggest that this is because common law couples tend to be less likely to have a traditional division of labor, where men specialize in market, and women in home, work. Entering into a traditional relationship is more risky for the partner giving up paid work without protection of a marriage contract.

The multinomial logit methods used to create Table 8 can also be used to provide categorical, not linear, analysis of control over money. I ran multinomial logit regressions on the five control over money variables. From a theoretical point of view, the multinomial logit analysis is superior to the linear regression model. The linear model imposes an artificial cardinality on what are essentially categorical variables. Unfortunately, with five categories and a fairly small data set, the multinomial logit procedure encountered difficulties, and the validity of the model fit is uncertain.

Because of questions about the model's robustness, and because of space constraints, the results are not reported in full. However the basic findings of the multinomial logit model replicate the linear model. Higher male incomes lead to a significantly greater probability of male control over cash withdrawals, writing checks, recording transactions, keeping track of the balance or reconciling accounts. Female income was also significant in some of the multinomial logit regressions, being associated with more female control over, for example, cash withdrawals. Males who have been married before are more likely to control "account 1", however the parameter estimates in some cases are very large (tending towards infinity), and standard errors cannot be calculated. Education was significant in some regressions, for example, male education was associated with higher levels of "female

more" responses to "who writes checks" and "who keeps track of the balance", while female education was positive and significant in "equal" recording of transactions.

In general, an inspection of the multinomial logit results reveals that the linear results are primarily being driven by higher levels of male control associated with higher male incomes, male education or a previous marriage, and lower levels of male control associated with common law relationships. Equality is extremely difficult to predict: only one coefficient was statistically significant in all of the "equal" regressions.

Conclusions

A first analysis of a rich new data set was provided in this paper. There is much more work still to be done, yet even this analysis reveals much of significance. The family cannot be viewed as a separate entity, a model of harmony and sharing in a world of discord. People's economic and social circumstances shape how they live their family lives. The effects are not limited to who does the dishes. Access to, and control over, the family's financial resources is shaped by each family member's circumstances. Those with higher earnings have more control over money. Being married before leads to more separation, less pooling, of family resources. Living in a common law relationship is less likely to be associated with traditional financial management patterns. The results here are a challenge to anyone who believes the family can be treated as one for purposes of economic theory or public policy.

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Notes

Figure 1: Possible divisions of resources in marriage

Figure 2

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                          │ male
  "whole wage"            │            "allowance"
                          │
                          │
                          │
                          │
                          │                                 Day to day
 ─────────────────────────┼─────────────────────────        management
  female                  │                      male
                          │
                          │
                          │
                          │ female
                          │

              Control
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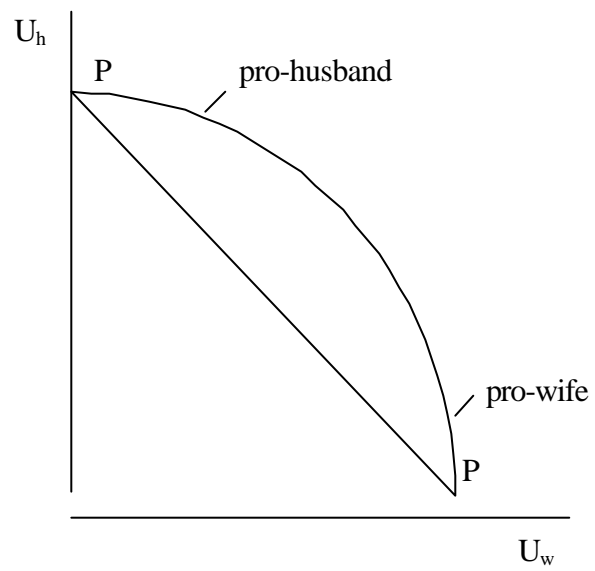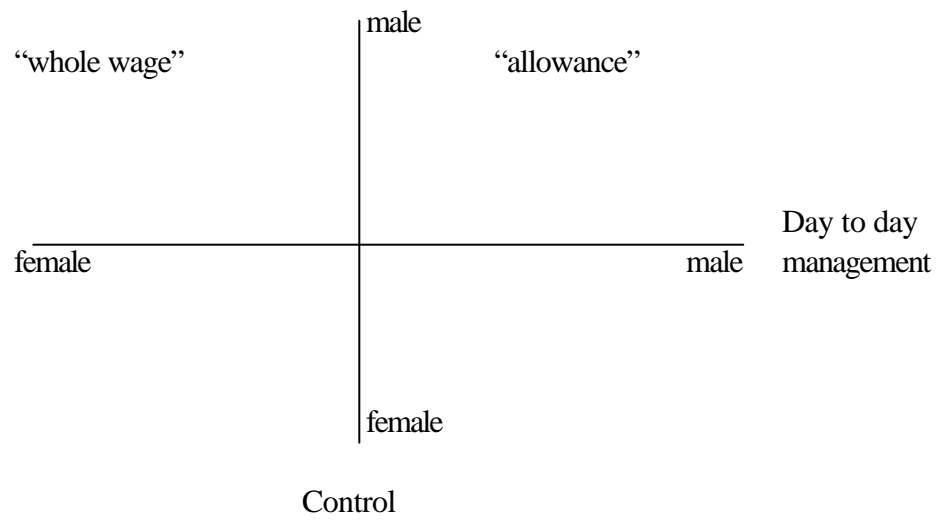
Table 1: Studies based on family expenditure data

Browning et al (1994)	Canada, Family Expenditure Survey 1978, 1982, 1984, 1986, married couples in full-time employment without children	Expenditure on women's clothing increases with • Women's share of total household income • Total household expenditures • Wife's age-husband's age
Lazear and Michael (1986)	United States, 1970 and 1979 Current Population Surveys, families with children	Results estimated from spending on adult clothing, tobacco, and alcohol. Income available to children higher in more educated male-headed households, lower in Southern, rural households, *not* controlling for total household income. Children receive on average 40 percent as much of household income as does an adult.
Lundberg, Pollak and Wales (1997)	United Kingdom, Family Expenditure Survey, before and after 1979 child benefit change	Child benefit reforms transferring on average £400 from husbands to wives increased expenditures on children's clothing by £54 and women's clothing by £39.
Phipps and Burton (1998)	Canada, Family Expenditure Survey, 1986; couples with both partners in full time employment	Personal care, restaurant meals, women's clothing and child care expenditures increase as women's share of household income increases Tobacco and alcohol expenditures, home food expenditures and men's clothing expenditures increase with men's share of household income.

Table 2: Account holder

	Male	Female	Joint	Other	N=	Active
			All figures in percentages			
Account 1	13.7	20.0	63.3	1.7	300	96.7
Account 2	15.6	24.7	53.8	4.4	275	93.1
Account 3	21.1	26.8	31.9	18.8	213	86.4
Account 4	28.1	19.9	20.5	28.8	146	87.7
Account 5	30.9	12.8	21.3	28.7	94	84.0
Account 6	18.0	24.0	22.0	24.0	50	82.0

Figures calculated by the author from own survey data. Percentages do not add to 100 because of refusals. Accounts are designated as active if they have been used in the last 12 months.

Table 3: Who does what in male-name accounts

	Cash withdrawals	Writes checks	Records	Keeps track of balance	Reconciles
	As percentage of all male-name accounts				
Male always (1)	61.0	67.6	38.5	66.7	33.3
Male more (2)	2.4	8.1	0	0	0
Equal (3)	7.3	0	10.3	7.7	2.6
Female more (4)	8.9	2.7	0	2.6	0
Female always (5)	2.4	8.1	7.7	7.7	2.6
Mean value (standard error)	1.68 (0.21)	1.39 (0.22)	1.91 (0.31)	1.64 (0.23)	1..40 (0.29)
Nobody/not done	9.8	13.5	43.5	15.4	61.5
N=	N=41	N=37	N=39	N=39	N=39

Figures calculated by author from family financial management survey. Figures refer to "account 1" only.

Table 4: Who does what in female-name accounts

	Cash withdrawals	Writes checks	Records	Keeps track of balance	Reconciles
	As percentage of all female-name accounts				
Male always (1)	1.7	0	4.9	6.6	4.9
Male more (2)	1.7	1.7	1.6	0	0
Equal (3)	5.0	1.7	0	1.6	1.6
Female more (4)	10.0	0	1.6	1.6	3.3
Female always (5)	75	78	52.5	73.8	42.6
Mean value (standard error)	4.66 (0.11)	4.80 (0.12)	4.57 (0.20)	4.63 (0.16)	4.50 (0.22)
Nobody/not done	5.0	16.9	39.3	16.4	47.5
N=	N=60	N=59	N=61	N=61	N=61

Figures calculated by author from family financial management survey. Figures refer to "account 1" only.

Table 5: Who does what in joint accounts

	Cash withdrawals	Writes checks	Records	Keeps track of balance	Reconciles
Male always (1)	13.2	13.4	20.8	26.9	27.4
Male more (2)	21.1	11.8	0.5	5.4	5.9
Equal (3)	33.7	15.5	10.4	14.5	8.1
Female more (4)	17.9	27.3	10.4	10.8	3.8
Female always (5)	8.9	25.1	36.6	36.0	37.1
Mean value (standard error)	2.88 (0.09)	3.36 (0.11)	3.43 (0.13)	3.25 (0.13)	3.21 (0.15)
Nobody/not done	4.7	6.4	21.3	6.5	17.7
N=	190	187	183	186	186

Figures calculated by author from family financial management survey. Accounts designated as "account 1" only.

	Minimum	Maximum	Mean	Median	n
Table 6: Descriptive Statistics on Explanatory Variables					
Male Income	No income (1)	150,000 and above (37)	38,000 to 39,999 (19.41)	45,000 to 49,999 (21)	297
Female Income	No income (1)	120,000 to 129,999 (34)	20,000 to 21,999 (10.92)	20,000 to 21,999 (10)	292
Male Age	19	63	38.99	38	273
Male - Female Age	17	-13	1.99	2.0	273
Male Schooling	30	4	16.35	16	300
Female Schooling	32	9	15.53	16	300
Male married before	0	1	0.157	0	299
Female married before	0	1	0.153	0	299
Common Law	0	1	0.111	0	296
Female Full-Time	0	1	0.463	0	300

Calculated by author from Family Financial Management data set.

Table 7: Determinants of control over money

	Cash Withdrawals	Writes checks	Who records	Who keeps track of balance	Who reconciles
Constant	2.18***	2.74***	3.772***	3.166***	3.886***
	(0.717)	(0.819)	(1.048)	(0.939)	(1.125)
Male Income	-0.0225**	-0.0268**	-0.021**	-0.0343***	-0.040***
	(0.011)	(0.012)	(0.014)	(0.014)	(0.016)
Female Income	0.0171	0.0237	0.0487	0.0270	0.0463
	(0.015)	(0.017)	(0.021)	(0.021)	(0.022)
Male Age	0.0167	0.0217	0.0216	0.0091	-0.0025
	(0.015)	(0.016)	(0.020)	(0.018)	(0.022)
Male - Female Age	0.0498**	0.0347	-0.0167	0.0118	0.0578
	(0.024)	(0.028)	(0.034)	(0.032)	(0.038)
Male Years Schooling	0.0360	0.0152	-0.0208	0.0340	0.0003
	(0.028)	(0.031)	(0.037)	(0.035)	(0.040)
Female Years Schooling	-0.0043	-0.0297	-0.190	-0.0182	0.0143
	(0.033)	(0.040)	(0.049)	(0.043)	(0.052)
Male married before	-0.418	-0.612*	0.233	-0.318	-0.939**
	(0.292)	(0.064)	(0.437)	(0.390)	(0.477)
Female married before	0.145	-0.151	-0.505	-0.208	-0.116
	(0.270)	(0.306)	(3.90)	(0.352)	(0.799)
Common Law	0.662**	0.888**	1.025**	0.968**	1.178**
	(0.313)	(0.362)	(0.442)	(0.396)	(0.024)
Female Full-Time	-0.264	-0.0817	0.151	-0.258	0.081
	(0.244)	(0.270)	(0.332)	(0.429)	(0.348)
n	244	235	232	233	178
Significance	0.025	0.060	0.064	0.127	0.022
R^2	0.083	0.075	0.091	0.065	0.114
Adjusted R^2	0.043	0.034	0.040	0.023	0.062

Regression coefficients, standard errors in parentheses. *** indicates significance at p=0.01, ** significance at p=0.05, * significance at p=0.10

	Male Account	Female Account
Table 8: Multinomial logit regression results		
	β	β
	(s.e.)	(s.e.)
Constant	3.71**	-1.01
	(1.77)	(1.41)
Male Income	-0.0039	-0.0666***
	(0.030)	(0.026)
Female Income	-0.0240	0.0621**
	(0.041)	(0.032)
Male Age	-0.0855**	0.0091
	(0.040)	(0.028)
Male - Female Age	0.0282	0.100**
	(0.055)	(0.048)
Male Years Schooling	-0.170**	-0.0425
	(0.076)	(0.058)
Female Years Schooling	0.0347	0.0109
	(0.087)	(0.065)
Male married before	1.476**	0.476
	(0.610)	(0.527)
Female married before	0.474	0.220
	(0.581)	(0.498)
Common Law	-0.607	1.318***
	(0.776)	(0.523)
Female Full-Time	-0.185	-0.232
	(0.606)	(0.485)
n=256, Pseudo r-squareds: Cox and Snell: 0.209, Nagelkerke: 0.256, McFadden, 0.139 Significance at p=0.01 indicated by ***, p=0.05 by **, p=0.10 by *.		

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[1] I am grateful to Shoshana Grossbard-Shechtman for pointing this out to me.

[2] For example, in Canada the percentage of women between 25 and 44 employed in the paid labor market has increased from 49.9 percent in 1976 to 74.3 percent in 1999, with the most dramatic increases being recorded for women with young children (Sources: http://www.statcan.ca/english/Pgdb/People/Labour/labor20b.htm, Statistics Canada (1995) *Women in Canada: A Statistical Report, Third Edition* Ottawa: Statistics Canada.