Household Decisions on Financial Services:
The Role of the Wife

Salvador Ruiz de Maya[†]

Department of Marketing, University of Murcia (Spain)

Eva Tomaseti-Solano

Department of Management, Polytechnic University of Cartagena (Spain)

[†] Corresponding author

INTRODUCTION

As the financial economy has expanded worldwide, financial institutions have increased the number of products they sell to households, such as mortgages, mutual funds, stock trading accounts, loans, insurance and various forms of savings and retirement products. The result has been a profound deepening of households' involvement in financial market activities (Fligstein and Goldstein, 2012). For example, in credit markets, median household debt levels increased 179 percent from 1989 to 2007 as consumers took on an ever-wider array of credit card, home equity, mortgage, student and payday loans (Wolff, 2007). Similarly, with respect to investment products, the percentage of households with stock equities or equity mutual funds increased in the decade before and after the turn of the twenty-first century and the frequency of transactions more than tripled in this time period (Kremp, 2010). The understanding of household financial decisions requires a review of family decision making. Families represent two-thirds of households in the US, of which married couples and single parents with children account for more than 90 percent (Jacobsen and Mather, 2012). However, after decades of study of family decision-making, it seems clear that when it comes to financial decisions, the disparity in gender roles may lead to families handling their finances less effectively. Survey data has shown that more than half of households' financial decision making is shared equally between husband and wife (Barrington, 2013). However, where one or the other spouse takes the lead role, the husband assumes control more than two-thirds of the time. The future, however, seems better, as married women are increasingly better educated than their husbands (Wang et al., 2013). Lloyds TSB (2013) points out that younger women have definitely taken a firm grip on the purse strings, moving from the traditional role of managing the day-to-day spending, to planning and selecting where money is kept for the long-term. This chapter will focus on husband/wife family decisions, specifically, the changing influence of the wife in this joint decision-making unit. In order to better understand the increasing role of women in family decision-making, we will first review the literature on family financial decision-making. We will then examine how family decisions are related to risk aversion and analyze recent findings about these decisions through a meta-analysis.

FAMILY DECISION MAKING

People prefer not to live alone, with the family being the most basic and important social unit that combines us into groups (Smith et al., 2010). The family constitutes an important decision making unit as a result of the joint decisions and consumption acts carried out by its members (Boutilier, 1993). The influence of each family member in the decision-making process has interested researchers for many years (Cotte and Wood, 2004). Existing literature has covered family decision-making along with the negotiation processes and strategies that can explain family members' participation, as well as conflict resolution. Decision-making in couples is a complex process which has been classified according to how couples implement each of the following four types of negotiation patterns: (1) joint and equal decision-making couples, where both partners play an equal part in the discussion and decision-making, (2) joint decision-making with one partner leading the couple in making decisions, with the leading partner sometimes discussing options with the other partner, but having a "delegated" authority to make decisions without much consultation, (3) independent decision-making couples, where decisions are made independently by one or both members, usually with little discussion between them, (4) no decision-making couples, where no decisions are made on assets and debts (Rowlingson and Joseph, 2010). This typology has been widely used in research that characterizes decision authority as a spectrum ranging from the husband leading the decision to the wife leading the decision (for example, Ganesh 1997, Martínez and Polo, 1999, Qualls, 1982, Stafford et al., 1996). However, how spouses negotiate their joint decisions can be better understood through the analysis of the reasons that explain the negotiation pattern in each situation. Three theories offer widely accepted explanations for most decisions within the family: Resource Theory, Bargaining Theory and Ideology Theory. Resource Theory is related to traditional models that assume household decisions are based on pooled resources and common preferences (Jianakoplos and Bernasek, 2008), the balance of power will be on the side of that partner who contributes the greatest resources to the marriage (Blood and Wolfe, 1960). Traditionally, husbands had greater influence in purchase decisions because they had contributed a greater portion to the resources of the household. However, with increased level of education among females and a more equitable job market, changes in the decision-making process have occurred in favor of the increased role of wives in family decisions (Wang et al., 2013). Bargaining Theory, based on bargaining models, proposes that household decisions depend on the relative bargaining power of the spouses (Jianakoplos and Bernasek, 2008), which includes the respective ages of the spouses, education levels of each partner and the knowledge possessed by each partner concerning the product for which the decision is being made. As women have become more educated and provide more income for the family, their status in the decision process has increased. This has generated uncertainty about gender roles and responsibilities while the decision-making process has become more egalitarian (Belch and Willis, 2002, Elder and Rudolph, 2003). Ideology Theory points to the importance of social norms in decision-making. Many choices, rather than being negotiated, are assumed to be the outcome of established customs. That is, the culture into which the spouses are socialized affects the sex-role orientation and topics about which partner, deliberately and for different reasons, renounces negotiation. Sexrole is based on gender and holds that men, because of their physical stature and their position in society, hold a dominant position while woman hold a subordinate position (Qualls, 1987). In this sense, non-egalitarian and patriarchal societies foster less joint decision-making and more dominance by the husband (Ford et al., 1995). For traditional couples, spouses tend to conform to norms that prescribe involvement in gender-specific activities. For example, the wife administrates the finances that are necessary for the daily running of the household, whereas the husband controls the rest of the financial resources of the household and supervises the expenses made by the wife. On the contrary, culture can foster explicit negotiation processes, which may encourage couples to adopt more joint decisions (Dema-Moreno, 2009, Vasantha Lakshmi and Sakthivel Murugan, 2008). This higher power occurs more when the wife works outside the home, especially in a position of high occupational status, than when wives stay at home (Lee and Beatty, 2002). Negotiation and integration of spouses' preferences are the key elements behind the theories used to explain family decision-making but the stage of the family life cycle can also influence the negotiation process of the spouses. Wolgast's (1958) pioneering study on family decision-making showed that with advancing age, and perhaps increased length of marriage, joint decision-making declines. Latter findings have disputed this result. Webster and Rice (1996) found that as couples move toward the retirement years, significant marital power shifts in purchase decision-making take place among the more traditional and unequal-salaried couples, but not among equal-salaried couples. Also, when the husband retires, the role of the wife in the decision-making process has been found to increase even for traditional couples (Elder and Rudolph, 2003). Conflict resolution represents an additional perspective in the study of family decisions. The general tendency in family interactions includes the avoidance of conflict due to the cooperative nature of family decisions, sensitivity toward the other spouse's preferences, and the role of affection between husband and wife (Corfman and Lehmann, 1987 , Ruiz de Maya, 1994). Conflict influences family decisions because each spouse is motivated to pursue his or her own utility (Su et al., 2008). Although spouses with stronger preferences may get their way by using strong influence behavior in a purchase decision (Qualls, 1987 , Su et al., 2003), husbands and wives may follow alternative sex roles, with husbands following goals having immediate personal consequences and wives focusing on harmonious relationships. When one spouse expresses strong preferences for specific product choices that differs from those of the other spouse, husbands are more likely to ultimately affect the decision (Ward, 2006). The literature has identified conflict resolution strategies such as persuasion, negotiation, expert use, revenge or emotional influence (Makgosa and Kang, 2009, Sheth, 1974, Spiro, 1983), of which the first two are the most frequently used in family decisions (Palan and Wilkes, 1997).

FAMILY FINANCIAL DECISIONS AND RISK AVERSION

An appropriate level of financial risk aversion is important to a household because of the relationship between willingness to take on risk in return for the potential for growing wealth. Trends in pensions have shown that for more individuals and households, financial management and risk-taking decisions are shifting away from professionals such as financial advisors and brokers (Hanna and Lindamood, 2005). This is true especially for young people, who tend to use the Internet and other resources to obtain information on personal and household financial matters (please see Chapter 6 and related discussions on pension decision-making). Due to the shift away from professionals influencing household financial decisions and associated risk, it is relevant to analyze risk tolerance levels for married households; it would be especially interesting to examine how each spouse's individual risk tolerance contributes to that of the household as a decision unit.

Making successful investment choices is not a trivial accomplishment as such investments require knowledge of alternative rates of return and risk across different time horizons inherent in a variety of complex assets, combined with family-specific needs and goals about when the outcomes of these investments might be needed by the household. These investment decisions may well be among the most cognitively demanding that a family has to make (Smith et al., 2010). Three subjective measures of household preferences affect households' financial decisions: rate of time preference, risk aversion and interest in financial matters. Rate of time preference reflects the amount of financial return an individual expects to obtain by postponing consumption and it is negatively related with age. While women are more patient than men, most of the variation in rates of time preference cannot be explained by individual characteristics (Donkers and Van Soest, 1999). However, the variables which have been studied in depth in the literature on family decision-making are risk aversion and preferences for specific financial products. Research on the effects of risk aversion on financial decision-making has shown that women play an important role on this decision dimension. According to bargaining models, if women are more risk-averse, then households should exhibit less financial risk taking as the bargaining power of the wife increases (Jianakoplos and Bernasek, 2008). All other things being equal, wives are much less willing to take on financial risks than husbands and financial planners should try to quantify the risk tolerance levels of both the husband and the wife in prescribing financial advice. Risk aversion is also affected by demographic variables. For example, risk aversion increases with the age of the spouses, is positively related to the education level of the wife, but not affected by the husband's education level (Donkers and Van Soest, 1999 , Hanna and Lindamood, 2005 , Gilliam et al., 2011). Research has shown that interest in financial matters increases with income, is greater for men than for women and has a strong positive effect on the home purchase decision (Donkers and Van Soest, 1999). The participation of the husband in financial management of the household is positively related to his age and negatively related to the wife's level of education, pointing to the relevance of Bargaining Theory in understanding household financial decisions. The wife's level of education is positively associated with the household's quality of financial planning (Antonides, 2011). Research has also reported that the husband's influence is higher for decisions concerning financial products such as insurance (Bonfield, 1978, Cosenza, 1985, Jenkins, 1979, Martínez and Polo, 1999). For other financial products, there is disagreement concerning how spouses influence decision-making. For example, Jenkins (1979) found that husbands had greater influence for savings decisions while others have found that this decision is made jointly (Ford et al., 1995 , Hopper, 1995 , Martínez and Polo, 1999 , Qualls, 1982 , Wolgast, 1958). Economic decision-making is especially important in older ages, as individuals are increasingly asked to take greater control of their finances. They may, for example, need to adjust prior financial decisions relating to their household wealth and increase their focus on pensions and health care costs. Smith et al. (2010) carried out an investigation with a sample of couples aged over 50 years and obtained interesting findings. As in previous studies, they found that husbands were more likely to be the ones responding to financial questions than wives. This was particularly pronounced when the husband was much older than his wife. Higher education level of either spouse increased the probability of the husband being selected by the couple as the financial respondent. Education had a greater impact than age and the husband's education had a larger impact on him being selected as the financial respondent than that of the wife. The larger the fraction of family income from one spouse, the more likely it was for this spouse to be in charge of family finances.

THE INCREASING RELEVANCE OF WOMEN IN HOUSEHOLD MONEY MANAGEMENT AND FINANCIAL DECISIONS

Macro changes in societies around the world have shown different patterns in the evolution of family composition patterns, values, norms and behaviors. Most of these changes have favored a more central role for women in both societies and families. For example, technological change in Western societies has allowed women to delay child bearing and earn significantly higher wages (Miller, 2011). Cross-national research has also shown that increased female employment and educational homogamy (similar educational background) between partners are related to reduced poverty levels (Kollmeyer, 2012). In this new context, women's role in households' financial decisions is therefore stronger and needs to be better understood. The massive participation of women in the labor market is one of the most prominent social trends. It has also influenced financial and spending decisions (Dema-Moreno, 2009, Belch and Willis, 2002). If the wife contributes significantly to the household income, it is more likely that there is more equality in the amount of influence exerted in the decision-making process (Lee and Beatty, 2002, Martínez and Polo, 1999) Although a review of the literature on household decisions concerning financial services shows evidence of the important role of women in financial decisions (Belch and Willis, 2002, Ford et al., 1995, Razzouk et al., 2007, Webster and Rice, 1996), there is no clear demonstration of this trend. To overcome this gap in the literature, in this chapter, we have searched for studies analyzing family financial decisions, then conducted a meta-analysis to summarize the findings.

Study Method and Data

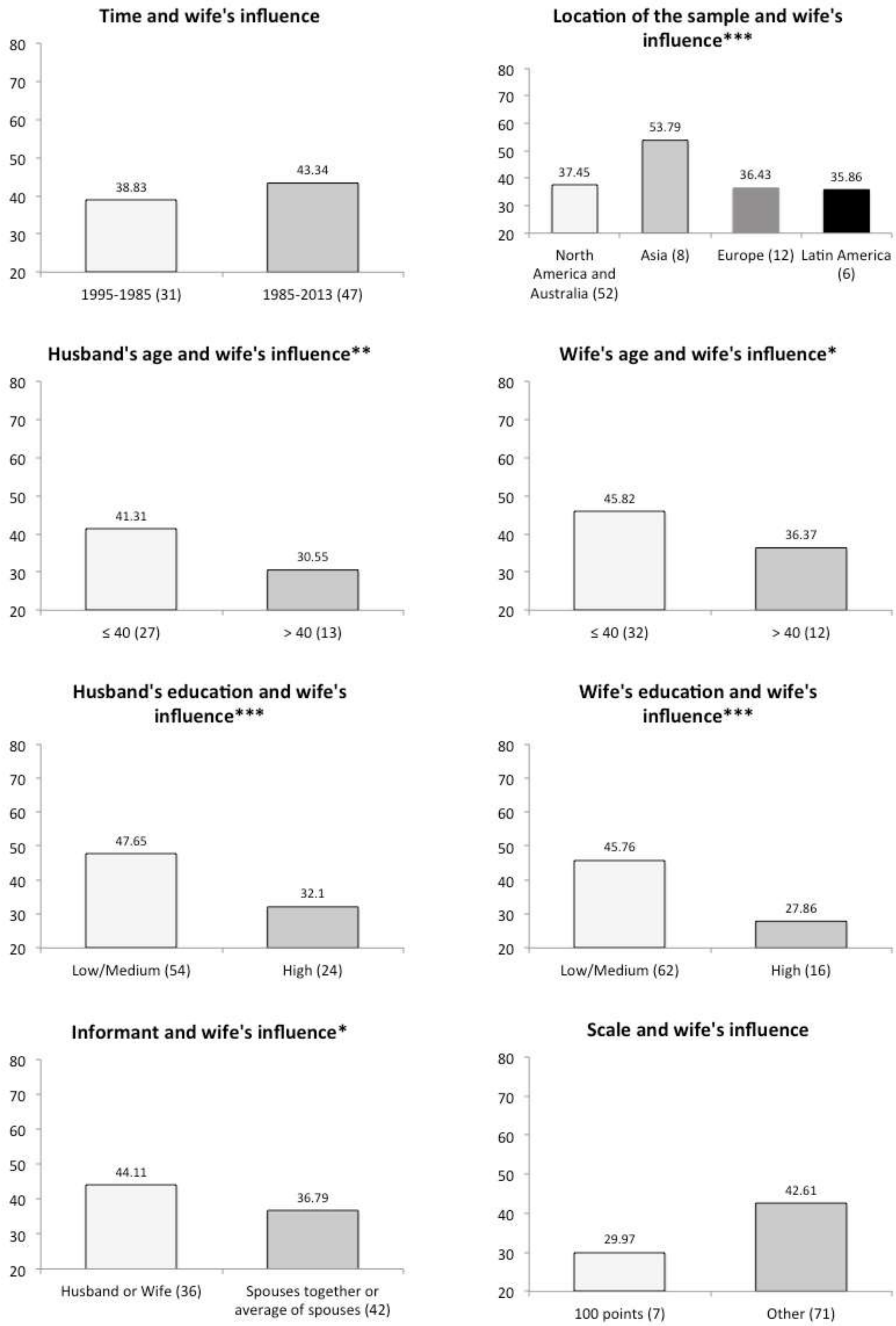
We first developed a database of research studies on family financial decisions by searching for relevant studies through the most popular research databases such as ABI/Inform, Business Source Elite, Emerald, Proquest, the Association for Consumer Research database and Google Scholar. Authors of unpublished studies were also contacted. Candidates for inclusion were empirical studies that quantified the husband's or wife's influence in financial decision-making. A total of 26 studies over a 47-year time period involving 13,239 participants were identified (see Appendix A). This meta-analysis focuses on the magnitude of the effect of study variables (i.e. the change in influence as an independent variable changes). The literature has mainly used three types of measures to report the husband's and wife's influence in financial decisions. A number of these studies use a one-hundred-point scale, where the influence of each spouse is a percentage of the overall influence in the decision (Jenkins, 1979 , Ruiz de Maya, 1994). Another group of studies have used internal scales of three and five points ranging from the husband dominating the decision to the wife dominating the decision (for example, Martínez and Polo, 1999, Stafford and Ganesh, 1996, Stafford et al., 1996). Finally, a third group uses independent items for each member (Belch and Willis, 2002). In order to express all measures on a common scale, we transformed 3- and 5-point bipolar scales (husband decides – wife decides) as well as independent point scales into percentages (for example, a 3.5 mean of influence from a 5-point scale, where 1 = husband decides and 5 = wife, was coded as 100(3.5–1)/(5–1) = 62.5 percent for the husband and as 37.5 percent for the wife). When the studies analyze influence in sub-decisions or decision stages, we averaged the results across key aspects of the decision (for example, when to buy or how much money to spend) or only considered spousal influence in the final decision stage. We also coded eight independent variables. First, to account for the evolution of women's participation in family financial decisions and the impact of culture, we coded the year of publication of the paper and the location of the study. Dummy variable coding was applied for the year of publication, such that we coded the period 1955–1985 as 0, and 1986–2007 as 1. The location of the sample was coded as North America/Australia, Asia, Latin America or Europe. We then coded other independent variables after reviewing the 26 studies found in the research database search. Variable selection was based on relevance to our research and data availability. We selected and coded the demographic characteristics of the samples in the 26 identified studies and associated methodological variables. Based on the previous literature review, spouses' age and spouses' education are variables that may influence the wife's participation in financial decisions. The husband's age was coded as 1 if the average age in the sample was over 40 and 0 otherwise. The same coding method was applied to wife's age. Husband's education was coded as Low/Medium when less than 30 percent of the sample had college degrees or High when more than 50 percent of the sample graduated from high school and more than 30 percent of the sample had college degrees. Again, the same coding method was applied to the wife's education level. We coded age and education with the aim of obtaining two subsamples of similar size, given the constraints in the number of observations in the database. When running meta-analysis, methodological variables are of interest because they can have a significant influence on the results while allowing for comparisons among the studies. More specifically, whether the spouse that responds to the questionnaire (as a single informant) and the scale used affect reported influence is largely an empirical question. We coded the informant as one of the spouses (in situations when the husband or the wife responded alone) and when the spouses responded together, the average of the spouses' responses were used (i.e., when the couple answered the questionnaire together). The scale was coded into three categories: 100 points (for studies that used this scale to report each spouse's decision influence), 3- or 5-point bipolar scales (ranging from the husband dominating decisions to the wife dominating the decisions), or 3–12-point scales (that assess the influence of only one of the family members' influence). In order to establish which variables determine the relative influence of the wife on family financial decisions, we first completed a series of one-way ANOVAs. Data were weighted by the inverse of the variance of the wife's influence (weight = p(1–p)/n, where p is the wife's influence) to assign greater weight to the more precise studies (Sultan et al., 1990). Explained variance was assessed by the unadjusted R^2 in linear regressions.

Results

Results (see Figure) show a non-significant change in wife's participation related to time period, although in the expected direction ($F(1,76) = 1.378$; $p > .1$, adj $R^2 = .005$). However, the location of the sample has a significant impact. Wives' participation in family fi nancial decisions varies geographically ($F(3,74) = 8.996$; $p < 0.001$, adj $R^2 = .238$). More specifically, while studies conducted in North America/Australia, Europe and Latin America result in nonsignificant differences in spousal influence on financial decisions, studies conducted in Asia reveal higher degrees of influence for wives when compared to studies conducted in North America/Australia, Europe and Latin America (Bonferroni test, $p < .05$ for the Asia-North America/Australia, Asia-Europe and Asia-Latin America post-hoc comparisons; similar results are obtained with the Kruskal-Wallis nonparametric test, weighting the cases by the inverse of the variance). Additionally, the wife's influence is lower when the husband is aged over 40 years old ($F(1,38) = 6.168$; $p < 0.05$, adj $R^2 = .117$), and when the wife is aged over 40 ($F(1,42) = 3.453$; $p < 0.07$, adj $R^2 = .054$). Contrary to Antonides (2011), with higher levels of the husband's education and higher levels of the wife's education, the participation of the wife in family financial decisions decreases ($F(1,76) = 24.975$; $p < 0.001$, adj $R^2 = .237$; and $F(1,76) = 22.821$; $p < 0.001$, adj $R^2 = .221$). The effect of who provides the information on the wife's influence is also significant ($F(1,76) = 3.750$; $p < 0.06$, adj $R^2 = .034$), while there is no effect of the type of scale used to collect data on the wife's influence ($F(1,76) = 2.021$; $p > 0.1$, adj $R^2 = .013$). The significant results found with the ANOVAs in previous analyses do not take into account collinearity (confounds) between predictors. We now use regression to analyze the changing role of wives in family financial decisions, including time (as a continuous variable) and geographic area, while accounting for covariates effects.

In running the regression analysis, three issues had to be considered. First, because deleting observations with missing values for spouses' age and education would have dropped the sample size, these variables were removed from the analyses. Second, while the use of multiple observations from a single manuscript is common practice in meta-analysis (Farley and Lehmann, 1986, Szymanski and Henard, 2001), it may result in correlated errors across observations. To control for this, we included dummy variables representing the studies. This allows us to determine whether some studies found an unusually large or small influence for either spouse. Third, collinearity exists among the predictor variables. In order to capture key results in a parsimonious model, we therefore employed a three-step procedure. First, we regressed all the independent variables and the dummy variables representing the studies on the influence of the wife. However, while in the ANOVAs we used a dummy variable to assess the effect of time, the centred continuous variable time (mean centred), was used in the regressions. Second, we dropped insignificant study dummies and re-ran the regressions. Third, we dropped variables that were not significant to obtain a more parsimonious model. The regression analysis (see Table) shows statistically significant overall results ($F(6,71) = 28.46$; $p < 0.001$; Adj. $R\ 2 = .681$). More specifically, it shows that wives' influence in family financial decisions has significantly increased over the period covered by the studies ($b = .004$ (standardized $b = .436$), $p < .001$) and with a significant effect of the location (continent where data were collected), and was higher both in North America/Australia ($b = .094$ (standardized $b = .313$), $p < 0.01$) and Asia ($b = .175$ (standardized $b = .539$), $p < 0.001$), compared with Europe. Considering methodological variables, the wife's influence is lower when it is reported by one of the spouses instead of a joint response ($b = –.082$ (standardized $b = –.243$), $p < 0.01$). The measurement scale used to capture the influence of each spouse does not exert any influence. Only one study reports significantly higher degrees of the wife's influence (Wolgast, 1958, $b = .248$ (standardized $b = .411$), $p < 0.001$), and one study reports significantly lower levels of wife's influence (Stafford and Ganesh, 1996, $b = –.322$ (standardized $b = .630$), $p < 0.001$).

Figure: Determinants of wife's influence in family financial decisions (cell size)



Vertical axes represent percentage of wife's influence in family financial decisions
Statistical significance assessed through ANOVAs
*** p<.01; ** p<.05; * p<.1

Table: Wife's influence in family decision making.
Regression analyses. Unstandardized betas (std. errors)

Variable	Wife's influence
(Constant)	-8.283***
Time	.004***
Location of the sample. North America	.094***
Location of the sample: Asia	.175***
Informant: spouses together or average of spouses	-.082***
Wolgast (1958)	.248***
Stafford and Ganesh (1996)	-.322***
Adjusted R^2	.681
n	78

***p<.01

CONCLUSION AND MANAGERIAL IMPLICATIONS

Based on a database involving 13,239 participants from 26 empirical studies, we used metaanalysis to assess the evolution of the wife's influence in financial decision-making. Results show that the wife's influence depends on time and cultural context, as well as the spouses' ages and education levels, on methodological aspects of the study and the informant who reports spousal influence levels. Although there is some indication in the literature for increasing influence of the wife in financial decisions in the last twenty years (Belch and Willis, 2002, Ford et al., 1995, Razzouk et al., 2007, Webster and Rice, 1996), our study confirms that this is indeed a real trend. Moreover, while some geographical areas show more balanced spouse participation in financial decisions (North America/Australia and Asia), the observations from Europe and Latin America reveal that husbands exert a stronger influence on those decisions. Our findings are also consistent with previous literature concerning the effects of personal characteristics. Spouses' age and education are negatively related to the wife's participation in family financial decision-making. Concerning the former variable, Smith et al. (2010) show that as the husband's and wife's ages increase, the importance of economic decisions also increases, especially for men. Moreover, risk aversion also increases with age (Donkers and Van Soest, 1999, Hanna and Landamood, 2005, Gilliam et al., 2011). As the husbands become older they will see financial decisions as more important as they become more risk-averse, which will motivate them to take more responsibility in such decisions, thereby increasing their influence. A similar phenomenon occurs with respect to the spouses' education levels. Although previous research proposes a positive relationship between the wife's education level and her participation in financial decisions (Antonides, 2011), we have found the opposite. This could be explained by the possibility that woman with higher levels of education usually have a partner with a similar level of education, taking into account that the husbands' education has a higher impact on family decisions than wives' (Smith et al., 2010), it may be that the husband's education determines the influence of both spouses on financial decisions. At this point, we also have to acknowledge that our results depend on the representativeness of the 26 empirical studies used. Because not all cultures, countries, demographic variables and financial decisions were included in our sample, the results are limited. Furthermore, because of the different methodologies used in previous studies on this topic, some studies were not used for reasons such as not providing information about the wife's influence (for example, Dema-Moreno, 2009, Smith et al., 2010), showing strong incongruence between the spouses (for example, Antonides, 2011), inaccuracy in the information they supplied (for example, Elder and Rudolph, 2003), omitting crucial information to calculate the wife's influence (for example, Bobinski and Assar, 1991), or including the influence of other people not directly related to the family, such as friends, relatives, neighbors, experts or sales persons (for example, Lee and Beatty, 2002). The implications of our findings for managers are straightforward. First, it is easier to understand family financial decisions once we know who participates in them and by how much. The analysis of how preferences are integrated will give highly valuable information to marketers of financial products. Second, from a marketing research perspective, the growing participation of the wife in family decisions and the fact that this reported influence depends on methodological issues such as the spouse being interviewed, confirm Kim and Lee's (1997) recommendation for using multiple informants in market research into family decision-making

Acknowledgment: The authors thank the two editors for their helpful comments. This research was supported by grant ECO2012–35766 from the Spanish Ministry of Economy and Competitiveness and by the Fundación Séneca-Agencia de Ciencia y Tecnología de la Región de Murcia (Spain), under the II PCTRM 2007–10. The authors also thank the support provided by Fundación Cajamurcia.

Appendix A

List of studies with quantitative information on spouses' influence in financial decision making

Authors (Year)	Type of financial decisions			Average wife influence (%)
	Finances (bank, savings, financial services)	Insurances (life, house, others)	Retirement Plan	
Belch and Willis (2002)		X		51c
Blood and Wolfe (1960)		X		37.50a
Bonfield (1978)		X		20.75c
Burns and DeVere (1981)		X		38.60a
Cosenza (1985)		X		41.45a
Davis and Rigaux (1974)	X	X		28.37c
Ford, LaTour, and Henthirne (1995)	X	X		49.61c
Granbois (1962)		X		31.45a
Harcar and Spillan (2006)	X	X		35.86b
Hopper (1995)	X			35.20b
Jenkins (1979) (*)	X	X		29.24b
Kasulis and Hughes (1984)		X		30.65a
Martinez and Polo (1999)	X	X		37.97c
Na, Son and Marshall (1998) (*)		X		59.66a
Putnam and Davison (1987)	X			43.25c
Qualls (1982)	X	X		35.72a
Razzouk, Seitz, and Capo (2007)	X	X		48.09c
Ruiz de Maya (1994) (*)	X		X	25.16c
Safilios-Rothschild (1969)		X		31.07a
Sharp and Mott (1956)		X		33.46a
Shukla (1987)	X	X		33.83a
Stafford y Ganesh (1996)		X		17.91b
Webster (1994)	X			46.46c
Webster and Rice (1996)	X			49.18a
Wolgast (1958)	X			56.43a

a Most of the data come from a questionnaire which assessed the influence in a family decision concerning to buy a product, i.e., a general question which do not refer to any aspect or stage of the decision making.
b Mean score for the influence obtained throw the average of sub-decisions.
c Mean score for the influence in the final decision stage out of other decision stages.
(*) Children also participate in the study

REFERENCES

Antonides, Gerrit (2011), "The Division of Household Tasks and Household Financial Management," *Journal of Psychology,* 219 (4), 198-208.

Barrinton, Richard (2013, "Why Mothers Should Play a Bigger Role in Family Finances," *Forbes,* retrieved February 1, 2014, from http://www.forbes.com/sites/moneybuilder/2013/04/15/why-mothers-should-play-a-bigger-role-an-family-finances/

Belch, Michael A. and Laura A. Willis (2002), "Family Decision at the Turn of the Century: Has the Changing Structure of Households Impacted the Family Decision-Making Process?," *Journal of Consumer Behavior,* 2 (2), 111-124.

Blood, Jr., Robert O. and Donald M. Wolfe (1960), *Husbands & Wives. The Dynamics of Married Living,* The Free Press of Glencoe, Illinois.

Bobinski, George S. and Amardeep Assar (1991), "Routine Financial Tasks Versus Investment Tasks: Gender-Related Division of Responsibility in Babyboomer Couples", *Gender and Consumer Behavior*, 1, 9-18.

Bonfield, Edward H. (1978), "Perception of Marital Roles in Decision Processes: Replication and Extension," *Advances in Consumer Research,* Vol. 5, ed. Kent Hunt, Ann Abor: Association for Consumer Research, 300-307.

Boutilier, Robert (1993), "Pulling the Fmily's Strings," *American Demographics*, 15 (8), 44-48.

Burns, Alvin C. and Stephen P. DeVere (1981), "Four Situations and Their Perceived Effects on Husband and Wife Purchase Decision Making," *Advances in Consumer Research*, 8 (1), 736-741.

Corfman, Kim P. and Donald R. Lehmann (1987), "Models of Cooperative Group Decision-Making and Relative Influence: An Experimental Investigation of Family Purchase Decisions," *Journal of Consumer Research*, 14 (June), 1-13.

Cosenza, Robert M. (1985), "Family Decision Making, Decision Dominance Structures Analysis: An Extension," *Journal of the Academy of the Marketing Science,* 13 (Winter), 91-103.

Cotte, June and Stacy Wood (2004), “Families and Innovative Consumer Behavior: A Triadic Analysis of Sibling and Parental Influence,” *Journal of Consumer Research*, 31, 78-86.

Davis, Harry L., and Benny P. Rigaux (1974), “Perception of Marital Roles in Decision Processes*,” Journal of Consumer Research,* 1 (June), 51-62.

Dema-Moreno, Sandra (2009), “Behind the Negotiations: Financial Decision-Making Processes in Spanish Dual-Income Couples,” *Feminist Economics,* 15 (1), 27-56.

Donkers, Bas, and Arthur Van Soest (1999), “Subjective Measures of Household Preferences and Financial Decisions,” *Journal of Economic Psychology,* 20, 613-642.

Elder, Harold W., and Patricia M. Rudolph (2003), “Who Makes the Financial Decisions in the Households of Older Americans?,” *Financial Services Review,* 12, 293-308.

Farley, John U. and Donald R. Lehmann (1986), *Meta-Analysis in Marketing: Generalization of Response Models,* Lexington, MA: Lexington Books.

Fligstein , Neil and Adam Goldstein (2012), “”The Emergence of a Finance Culture in American Households, 1989-2007,” Working Paper Series, Institute for Research on Labor and Employment, UC Berkeley.

Ford, John B., Michael S. LaTour, and Tony L. Henthirne (1995), “Perception of Marital Roles in Purchasing Decision Processes: A Cross-Cultural Study,” *Journal of the* Academy of Marketing Science, 23 (2), 120-131.

Ganesh, Gopala (1997), “Spousal Influence in Consumer Decisions: A Study of Cultural Assimilation,” *Journal of Consumer Marketing,* 14 (2), 132-155.

Gilliam, John E., John E. Grable, and Vickie L. Hampton (2011), “The Impact of Decision Power on Financial Risk Tolerance and Asset Allocation,” *Journal of Business & Economics Research,* 9 (5), 27-40.

Granbois, Donal Harry (1962), “A Study of the Family Decision-Making Process in the Purchase of Major Durable Household Goods,” unpublished dissertation, Indiana University.

Hanna, Sherman D., and Suzanne Lindamood (2005), “Risk Tolerance of Married Couples,” paper presented at the *Academy of Financial Services Meeting*.

Harcar, Talha and John E. Spillan (2006), “Exploring Latin American Family Decision-Making Using Correspondence Analysis,” *Journal of World Business,* 41, 221-232.

Hopper, JoAnne Stilley (1995), “Family Financial Decision Making: Implications for Marketing Strategy,” *Journal of Services Marketing,* 19 (1), 24-32.

Jacobsen, Linda A., Mark Mather and Mark Mather (2012), “Household Change in The United States,” *Population Bulletin* 67, no. 1.

Jenkins, Roger L. (1979), “The Influence of Children in Family Decision-Making: Parents’ Perceptions,” *Advances in Consumer Research,* Vol. 6, ed. William L. Wilkie, Ann Abor: Association for Consumer Research, 413-418.

Jianakoplos, Nancy Ammon, and Alexandra Bernasek (2008), “Family Financial Risk taking When the Wife Earns More,” *Journal of Family and Economic Issues,* 29, 289-306.

Kasulis, Jack J. and Marie Adele Hughes (1984), “Husband-Wife Influence in Selecting a Family Professional,” *Journal of the Academy of Marketing Science,* 12 (2), 115-127.

Kim, Chankon and Hanjoon Lee (1997), “Development of Family Triadic Measures for Children’s Purchase Influence,” *Journal of Marketing Research,* 34 (August), 307-321.

Kasulis , Jack J.and Hughes , Marie Adele(1984), “Husband-Wife Infl uence in Selecting a Family Professional” , *Journal of the Academy of Marketing Science,* 12 (2), 115 – 27.

Kim , Chankonand Lee , Hanjoon(1997), “Development of Family Triadic Measures for Children’s Purchase Influence” , *Journal of Marketing Research,* 34 (August), 307 – 21.

Kollmeyer, Christopher (2012), “Family Structure, Female Employment, and National Income Inequality: A Cross-National Study of 16 Western Countries.” *European Sociological Review,* 0, 1-12.

Kremp, Phillippe (2010), “From Main Street to Wall Street? The determinants of stock-market participation and their evolution from 1995 to 2007,” Working paper. Department of Sociology. Princeton University.

Lee, Christina K.C. and Sharon E. Beatty (2002), “Family Structure and Influence in Family Decision Making,” *Journal of Consumer Marketing,* 19 (1), 24-41.

Lloyds TSB (2013), “’Money Mummies’ Are Taking Control of the Family Purse String,” retrieved February 1, 2014, from http://www.lloydsbankinggroup.com/globalassets/documents/media/press-releases/lloyds-bank/2012/2809_mummies.pdf

Makgosa, Rina and Jikyeong Kang (2009), “Conflict Resolution Strategies in Joint Purchase Decisions for Major Household Consumer Durables: A Cross-Cultural Investigation,” *International Journal of Consumer Studies*, 33, 338-348.

Martinez, Eva and Yolanda Polo (1999), “Determining Factors in Family Purchasing Behaviour: An Empirical Investigation,” *Journal of Consumer Marketing*, 16 (5), 461-481.

Miller, Amalia R. (2011), “The Effects of Motherhood Timing on Career Path,” *Journal of Population Economics*, 24, 1071-1100.

Na, W., R. Marshall, and Y. Son (1998) “An empirical study of the purchase role structure in Korean families,” *Psychology & Marketing*, 15(6), 563-576.

Palan, Kay M. and Robert E. Wilkes (1997), “Adolescent-Parent Interaction in Family Decision Making,” *Journal of Consumer Research*, 24, 159-169.

Putnam, Mandy and William R. Davidson (1987), “Family Purchasing Behavior: II Family Roles by Product Category,” in *Management Horizons Inc., a Division of Price Waterhouse*, Columbus, Ohio.

Qualls, William J. (1982), “Changing Sex Roles: Its Impact upon Family Decision Making,” *Advances in Consumer Research*, Vol. 9, ed. Andrew Mitchell, Ann Abor: Association for Consumer Research, 267-270.

Qualls, William J. (1987), “Household Decision Behavior: The Impact of Husbands’ and Wives’ Sex Role Orientation,” *Journal of Consumer Research,*14, 264-279.

Razzouk, Nabil, Victoria Seitz, and Karen Prodigalidad Capo (2007), "A Comparison of Consumer Decision-Making Behavior of Married and Cohabiting Couples,"*Journal of Consumer Marketing,* 24 (5), 264-274.

Rowlingson, Karen, and Ricky Joseph (2010), "Assets and Debts Within Couples," *Institute of Applied Social Studies, University of Birmingham.*

Ruiz de Maya, Salvador (1994), "Relative Influence in Family Decision Making: The Measurement of Members Perception Agreement," unpublished dissertation, University of Murcia.

Safilios-Rothschild, Constantina (1969), "Family Sociology or Wives' Family Sociology? A Cross-Cultural Examination of Decision-Making*," Journal of Marriage and Family*, 31 (2), 290-301.

Sharp, Harry and Paul Mott (1956), "Consumer Decisions in the Metropolitan Family," *The Journal of Marketing,* 21 (2), 149-156.

Sheth, Jagdish N. (1974), "A Theory of Family Buying Decisions," in *Model of Buyer Behavior: Conceptual, Quantitative, and Empirical,* ed. Jagdish N. Sheth, New York: Harper & Row, 17-23.

Shukla, Archana (1987), "Decision Making in Single- and Dual-Career Families in India*," Journal of Marriage and Family,* 49 (3), 621-629.

Smith, James P., John J. McArdle, and Robert Willis (2010), "Financial Decision Making and Cognition in a Family Context," *The Economic Journal,* 120, 363-380.

Spiro, Rosann L. (1983), "Persuasion in Family Decision-Making," *Journal of Consumer Research,* 9, 393-402.

Stafford, Marla R. and Gopala K. Ganesh (1996), "Perceived Spousal Influence in the Service Decision-Making Process: A Cross Cultural Investigation," *Journal of Applied Business Research,* 12 (4), 53-69.

Stafford, Marla R., Gopala K. Ganesh, and Barbara C. Garland (1996), "Marital Influence in the Decision-Making Process for Services," *Journal of Services Marketing,* 10 (1), 6-21.

Su, Chenting, Edward F. Fern, and Keying Ye (2003), “A Temporal Dynamic Model of Spousal Family Purchase-Decision Behavior,” *Journal of Marketing Research,* 40, 268-281.

Su, Chenting, Kevin Zheng Zhou, Nan Zhou, and Julie Juan Li (2008), “Harmonizing Conflict in husband-Wife Purchase Decision Makign: Perceived Fairness and Spousal Influence Dynamics,” *Journal of the Academy Marketing Science,* 36, 378-394.

Sultan, Fareena, John U. Farley, and Donald R. Lehmann (1990), “A Meta-Analysis of Applications of Diffusion Models,” *Journal of Marketing Research,* 27 (1), 70-77.

Szymanski, David M. and David H. Henard (2001), “Customer Satisfaction: A Meta-Analysis of the Empirical Evidence,” *Journal of the Academy of the Marketing Science,* 29 (1), 16-35.

Vasantha-Lakshmi, Pinni and M. SakthivelMurugan (2008), “The Influence of Marital Roles on Product Purchase Decision Making”, *Journal of Consumer Behavior,* 3 (1), 66-77.

Wang, Wendy, Kim Parker and Paul Taylor (2013), “Breadwinner Moms”, Pew Research Center, http://www.pewsocialtrends.org

Ward, Cheryl B. (2006) “He Wants, She Wants: Gender, Category, and Disagreement in Spouse’s Joint Decisions,” *Advances in Consumer Research,* 33, 117-123.

Webster, Cynthia (1994) “Effects of Hispanic Ethnic Identification on Marital Roles in the Purchase Decision Process,” *Journal of Consumer Research,* 21, 319-331.

Webster, Cynthia and Samantha Rice (1996), “Equity Theory and the Power Structure in a Marital Relationship,” *Advances in Consumer Research,* 23, 491-497.

Wolgast, Elizabeth (1958), “Do Husband or Wives Make the Purchasing Decisions?,” *Journal of Marketing,* 23 (October), 151-158.

Wolff, Edward (2007), “Recent Trends in Household Wealth in the United States: Rising Debt and the Middle-Class Squeeze-an Update to 2007,” Levy Institute Working Paper 589. Bard College.