Gender Differences in Wealth and the Role of Financial Literacy*

Anastasia Girshina[†] Swedish House of Finance at Stockholm School of Economics

Abstract

This paper seeks to understand how differences in financial literacy between women and men are related to the differences in their financial wealth. By using Dutch Central Bank Household Survey, this study shows that women are, on average, less knowledgeable about basic financial concepts and that households whose financial decisions are taken by women tend to have less financial wealth. The results of the decomposition of the gender wealth differential suggest that between 20% and 50% of the difference in financial wealth can be accounted for by financial literacy and that its role is higher for lower levels of wealth. (*JEL* D14, D31, D80, D91, E21, G11)

Keywords: gender wealth gap, financial literacy, financial education

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[†] Swedish House of Finance at Stockholm School of Economics; Drottninggatan 98, 111 60 Stockholm, Sweden. e-mail: anastasia.girshina@hhs.se

INTRODUCTION

In the recent years, much has been said about increasing wealth inequality in developed countries and about its consequences for the stability of the economy and of the political system. However, the issue that wealth inequality is present and is particularly acute across certain socio-demographic groups has been relatively understudied by academics¹ and largely neglected by policy makers. This study contributes to the literature by focusing on the wealth differences between women and men.

As is the case with the labor income, women have lower accumulated wealth than men. However, differences in wages and other sources of income do not seem to be able to explain the gender wealth differential entirely. Given the increased role of individual's ability to save for own retirement and the fact that women tend to have longer life expectancy, it is of critical importance to build understanding on what contributes to the women's disadvantageous position in the wealth distribution. This study in particular, will analyze how differences in financial literacy between women and men contribute to the differences in their accumulated financial wealth.

It is well documented that women are less financially literate than men (Bucher-Koenen et al. 2017; Lusardi 2008; Lusardi and Mitchell 2011 a,b,c, 2014; Lusardi, Mitchell, and Curto 2010; Xu and Zia 2012)² and that this is true in most of the countries where such studies have been conducted.³ In particular, it is found that both older (Lusardi and Mitchell 2008) and younger women (Lusardi and Mitchell 2009, 2014; Lusardi, Mitchell, and Curto 2010; Chen and Volpe 2002) display lower levels of financial literacy than their reference population. Bucher-Koenen et al. (2017) further report that women who are in charge of their own finances, namely single women and widows, are as likely to be less financially literate than men as those

^{1.} There is a body of research that studies wealth inequality across different socio-demographic groups. For example, Smith (1995) finds that differential inheritances, incomes, poorer health help to explain racial and ethnic wealth disparities. In a different domain, Zissimopoulos et al. (2015) show that wealth increases with the duration of the marriage. Regarding differences between women and men, although there exists a large literature studying gender gap in labor market outcomes, the research about gender wealth differential is relatively scarce.

^{2.} Lusardi and Mitchell (2014) survey the research on financial literacy and report that all studies looking at differences in financial knowledge between women and men find women to be less financially knowledgeable.

^{3.} In particular, this holds true in the United States, Germany, the Netherlands (Bucher-Koenen et al. 2017; Lusardi and Mitchell 2011b; Alessie, Van Rooij, and Lusardi 2011), as well as in Australia, France, Italy, Japan, New Zealand, Sweden, and Switzerland. Among the exceptions are Russia (Klapper and Panos 2011), Romania (Beckmann 2013), and East Germany (Bucher-Koenen and Lusardi 2011) where no pronounced differences in financial literacy exist between men and women. For a complete list of references and summary see Bucher-Koenen et al. (2017). For more details see Atkinson and Messy (2012) and country-specific studies.

living with a partner. Thus, the research has shown that gender differences in financial knowledge are present across all age groups, family statuses and in many countries.

The lack of financial knowledge among women is not area-specific. On the contrary, it is related to all aspects of finance from investment (Lusardi and Mitchell 2008, 2009; Van Rooij, Lusardi, and Alessie 2011; Alessie, Van Rooij, and Lusardi 2011) to borrowing (Lusardi and Tufano 2009, 2015). Furthermore, Van Rooij, Lusardi, and Alessie (2011) show that many women lack financial knowledge not only in the domain of advanced financial literacy where the gender differences are the largest, but also regarding basic financial concepts. Finally, the gender gap in financial literacy persist even after controlling for income, education and other relevant socio-demographic and economic characteristics (Bucher-Koenen et al. 2017; Fonseca et al. 2012). Thus, scholars agree that women seem to be less equipped to deal with everyday financial decisions compared to men.

It is clear, however, that financial literacy is closely related to wealth accumulation, wealth planning and management, and, ultimately, to financial well-being (Lusardi and Mitchell 2008). Financial knowledge affects the wealth profile through a variety of channels. In particular, individuals with higher financial literacy are more likely to plan for retirement (Lusardi and Mitchell 2007b, 2008, 2009, 2011a,b,c; Alessie, Van Rooij, and Lusardi 2011; Bucher-Koenen and Lusardi 2011; Van Rooij, Lusardi, and Alessie 2012; Xu and Zia 2012; Lusardi 2008), to do it successfully (Lusardi and Mitchell 2007a, 2008; Behrman et al. 2012), and to rely on formal financial advice (Lusardi and Mitchell 2011a). They are more likely to have sophisticated investment behavior (Xu and Zia 2012), and, in particular, to invest in stocks (Arrondel, Debbich, and Savignac 2015; Van Rooij, Lusardi, and Alessie 2011, 2012; Yoong 2011), to have more diversified portfolios (Guiso and Jappelli 2008), and to have higher returns on wealth (Jappelli and Padula 2013; Deuflhard et al. 2015). On the liability side, higher financial literacy is strongly associated with lower borrowing costs (Mottola 2013; Lusardi and Tufano 2015), lower default rates (Gerardi, Goette, and Meier 2010) and better mortgage outcomes (Xu and Zia 2012). More financially literate people are better in understanding fees and interpreting investment benefits (Hastings, Mitchell, and Chyn 2011; Hastings and Tejeda-Ashton, 2008) and, thus, are less likely to commit financial mistakes (Agarwal et al. 2009). Finally, individuals who are

more financially literate are less likely to make erroneous decisions in times of adverse economic conditions by making financial losses permanent (Bucher-Koenen and Ziegelmeyer 2014). Thus, overall, financial knowledge is strongly positively associated with net worth (Van Rooij, Lusardi, and Alessie 2012; Lusardi 2008; Lusardi and Mitchell 2007a, 2011b; Behrman et al. 2012).⁴

Given that women are, on average, less financially knowledgeable than men and that financial sophistication is closely related to financial well-being, one might expect that women, on average, have lower net wealth. In fact, it has been shown that gender wealth gap exists (Sierminska, Frick, and Grabka 2010) and that it is particularly severe at retirement (Neelakantan and Chang 2010). It has also been documented that stock market participation is much lower among women than among men (Van Rooij, Lusardi, and Alessie 2011; Haliassos and Bertaut 1995), that women are more likely to choose a fixed immediate lifetime annuity at the retirement than to be managing their own investments (Agnew et al. 2008), and that they are not likely to seek professional advice to compensate for their lack of knowledge (Bucher-Koenen et al. 2017). Finally, it has been documented that women do worse on the liability side as well by having more costly credit card behavior than men (Mottola 2013).

Although several explanations have been proposed for what might be driving the gender wealth gap⁵, only few works analyzed the relation between gender differences in financial literacy and in wealth. Among such is Almenberg and Dreber (2015), who find that gender gap in stock market participation decreases, but does not disappear, once basic financial literacy is controlled for, and Agnew et al. (2008) who show that differences in management of retirement wealth between women and men can partly be explained by differences in their risk preferences and in financial literacy. Thus, these few pieces of evidence indicate that differences in wealth between women and men exist and can be explained, at least partly, by differences in their financial sophistication.

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^{4.} In terms of the magnitude of the effect, Van Rooij, Lusardi, and Alessie (2012), for example, find that a unit increase in basic literacy is associated with an increase in wealth of about $\[\in \]$ 12,000 (7% of the mean wealth); while a unit increase in advanced financial literacy raises household net worth by $\[\in \]$ 24,000 (14% of the mean wealth) in the OLS and 67,000 (40% of the mean wealth) in the IV specifications. Their OLS estimates on basic financial knowledge are roughly in line with mine in the sample of men while estimated coefficients for women are lower.

^{5.} For example, Sierminska, Frick, and Grabka (2010) underline such factors as differences in income and in labor market experience.

This paper contributes to the literature by studying how differences in financial knowledge between men and women are related to differences in their financial wealth.⁶ In particular, it uses Dutch Central Bank (DNB) Household Survey to, first, document these differences and, second, to investigate whether financial literacy helps to explain gender wealth gap at the mean, by using Blinder-Oaxaca decomposition (Blinder, 1973; Oaxaca, 1973), and across wealth distribution, by relying on re-centered influence function (RIF) regressions (Firpo, Fortin, and Lemieux 2007, 2009; Fortin, Lemieux, and Firpo 2011). Finally, to study how financial wealth of women could change had they financial knowledge of men, the counterfactual wealth distributions are simulated by assigning to women financial literacy indicators of men while keeping everything else constant.

The results show that women have lower financial wealth both at the mean and throughout the wealth distribution. As for the determinants of this gap, between 20% and 50% of the difference in financial wealth can be accounted for by financial literacy which importance is higher for lower levels of wealth. As for the contribution to the explained component, 30% to 40% of the explained difference in women's and men's financial wealth can be attributed to differences in their financial literacy. The main driver of this effect is the knowledge about risk diversification, which is the most difficult financial concept asked in the DNB Household Survey and related to which the difference in the proportion of correct answers between men and women is the largest. While the importance of the knowledge about interest rates compounding and inflation in explaining differences in financial wealth between the genders declines with wealth, the absolute contribution of knowledge about diversification stays relatively constant in absolute terms and, therefore its relative importance goes up along the wealth distribution.

Although the decomposition results provide striking evidence on the implications of women's lower financial literacy for their worse, relative to men's, wealth position, the effect of financial literacy cannot be

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^{6.} This paper focuses the analysis on studying gender differences in financial wealth. There are three main reasons for focusing on financial wealth. First, financial wealth accumulation is arguably more sensitive to financial literacy than acquisition of real assets when financial literacy is measured by such indicators as knowledge about concepts of compounding or risk diversification. Second, since real wealth also plays a role of durable consumption, concentrating on financial assets illustrates the point of the importance of financial literacy sharper. Third, when performing analysis at individual level, which is an important step in claiming the role of financial literacy in the gender wealth gap, the focus on financial wealth could be more justified since it can be more clearly divided and managed separately within the household than real estate. To address the concern that the results could be driven by the choice of analyzing financial wealth over the real wealth, I also perform robustness exercise by including real assets net of mortgage debt in the measure of wealth. The results stand this definition of wealth (Table 9).

interpreted causally. Indeed, despite the fact that causality between financial literacy and financial well-being has been acknowledged (Jappelli and Padula 2013, Behrman et al. 2012) and it has been shown that OLS tends to underestimate the effect of financial literacy on net worth (Jappelli and Padula 2013), the causality cannot be claimed in the setting of this paper as it has also been shown that wealth has a positive, albeit small, effect on financial knowledge (Monticone 2010) through greater financial experience (Fonseca et al. 2012), better opportunities for financial education and parental influence (Jorgensen and Savla 2010, Lusardi, Mitchell, and Curto 2010), which overall means that there is a reverse causality between financial literacy and wealth.

Building understanding on how financial literacy relates to differences in women's and men's wealth is of paramount importance for several reasons. Firstly, as shown by Lusardi, Michaud, and Mitchell (2017), 30 to 40 percent of retirement wealth inequality in the US is due to financial knowledge. Second, inequality between men and women is an important driver of overall inequality. Thus, by fostering women's financial education it is possible to have potentially large positive effects on wealth accumulation and welfare. Next, it has been suggested that lack of financial literacy might have played an important role in the subprime mortgage crisis (Gerardi, Goette, and Meier 2010). Finally, many financial initiatives and innovations, such as, for example, privatization programs, need to be accompanied by well-designed financial education programs to work effectively (Van Rooij, Lusardi, and Alessie 2011). If women are to remain less prepared to face day-to-day financial decisions, adverse economic events, an on-going stream of financial market developments, and the necessity to plan for their own retirement, a great part of the population could be disproportionately exposed to the risk of financial distress.

This paper proceeds as follows. Next section discusses the empirical framework. Data section describes financial literacy indicators and the individual data. Last two sections discuss the results, the mechanisms through which financial literacy might affects wealth accumulation, and conclude.

EMPIRICAL FRAMEWORK

Assume, that the i^{th} household's wealth is a function of its financial literacy and other attributes, such as income, education, age, and employment status, summarized by column vector z_i :

$$W_i = f(Financial\ literacy_i, z_i) \tag{1}$$

Assuming linearity, the regression model can be written as follows:

$$W_i = \beta_0 + \beta'_1 Financial \ Literacy_i + \beta'_2 z_i + \epsilon_i \tag{2}$$

where $Financial\ Literacy_i$ is a column vector of financial literacy indicators and z_i is a vector of socioeconomic attributes. From the previous studies relating financial literacy and wealth accumulation, discussed in the Introduction, the vector of coefficients β'_1 is predicted to be positive. Thus, differences in financial literacy could help to explain differences in wealth between individuals with low and high financial literacy, i.e. in our framework between women and men. To address this question the decomposition technique is used.

Specifically, to understand how differences in financial literacy between genders contribute to the differences in their financial wealth, the latter is decomposed into two additive parts: the one that can be attributed to the differences in observed characteristics and the one that is due to differences in returns, or coefficients. To do so, I perform, first, the detailed Blinder-Oaxaca decomposition at the mean of financial wealth (Blinder 1973; Oaxaca 1973), and second, the detailed decomposition across financial wealth distribution relying on re-centered influence function (RIF) regressions.⁷

To decompose gender difference in financial wealth, I, first, rewrite the equation 2 by denoting $j \in M, F$ the set of two groups, namely male and female, and X - the set of all the explanatory variables as follows:

$$W_j = \beta_{j,0} + \beta'_{j,1} X_j + \epsilon_j \tag{3}$$

^{7.} The details on unconditional quantile, or RIF, regressions and its properties are in Firpo, Fortin, Lemieux (2009); the survey of recent decomposition techniques and the underlying assumptions are in Fortin, Lemieux, and Firpo (2011); the examples of the applications of decomposition to different distributional statistics are Firpo, Fortin, Lemieux (2007), Chi and Li (2008), Longhi, Nicoletti, and Platt (2013), Nandi and Nicoletti (2014), Doorley and Sierminska (2015); the examples of the applications of decomposition techniques to wealth are Christelis, Ehrmann, and Georgarakos (2015), Christelis, Georgarakos, and Haliassos (2013), Haliassos, Jansson, and Karabulut (2015).

By using the Blinder-Oaxaca approach, the difference in mean of financial wealth⁸ between women and men can be written as:

$$\overline{W}_M - \overline{W}_F = \widehat{\beta}_M'(\overline{X}_M - \overline{X}_F) + (\widehat{\beta}_M - \widehat{\beta}_F)'\overline{X}_F \tag{4}$$

where the first term is the so-called *composition effect*, which represents differences in the characteristics between women and men, or in other words the explained component; and the second term is the so-called *structure effect*, which is given by differences in returns (coefficients) between the two groups and reflects the unexplained component. The two effects can be further decomposed into the additive parts which allows identifying the contribution of various elements of the detailed decomposition to the overall differential:

$$\widehat{\beta_M}'(\bar{X}_M - \bar{X}_F) = \sum_{k=1}^K \widehat{\beta_{M,k}} (\bar{x}_{M,k} - \bar{x}_{F,k})$$
(5)

$$(\widehat{\beta_M} - \widehat{\beta_F})' \overline{X}_F = (\widehat{\beta_{M,0}} - \widehat{\beta_{F,0}}) + \sum_{k=1}^K (\widehat{\beta_{M,k}} - \widehat{\beta_{F,k}}) \overline{x}_{F,k}$$
 (6)

where $(\widehat{\beta}_{M,0} - \widehat{\beta}_{F,0})$ represents the differences in the intercept terms, or the omitted group effect, and $\overline{x}_{j,k}$ and $\beta_{j,k}$ are the k^{th} components of the vector of variables, including both variables related to financial literacy and other attributes, and the vector of coefficients respectively.

The advantage of the Blinder-Oaxaca approach is that it is the only method allowing for the detailed decomposition. However, in its standard version - decomposition at the mean - it is limited to only this statistic, thus not allowing studying the contribution of various components to the gender wealth differentials along the distribution. To overcome this drawback, I use the re-centered influence function (RIF) approach (Firpo, Fortin, and Lemieux 2009), which allows the decomposition of the differences in financial wealth between women and men at quantiles.

Specifically, the RIF is defined as a sum of the statistics of interest, in this case quantiles q, and the influence function IF(W; q_{τ}), given by $\frac{\tau - 1\{W \le q_{\tau}\}}{f_W(q_{\tau})}$:

$$RIF(W; q_{\tau}) = q_{\tau} + \frac{\tau - 1\{W \le q_{\tau}\}}{f_{W}(q_{\tau})}$$
 (7)

In the empirical application, the quantile q_{τ} is replaced by its sample analogue and the density function is estimated by using nonparametric kernel estimation.

^{8.} In the empirical analysis, I transform financial wealth using the inverse hyperbolic sine transformation in its log form: IHS $W = \ln(W + \sqrt{(1+W^2)})$.

Modeling the relationship of the conditional expectation $\mathbb{E}(RIF(W; q_{\tau})|X)$ and the explanatory variables X as a linear function, one can write down the so-called unconditional quantile regression (Firpo, Fortin, and Lemieux 2009) for both women and men to estimate $\mathbb{E}(RIF(W_i; q_{\tau})|X_i)$:

$$RIF(W_i; q_\tau) = \gamma'_i(q_\tau) X_i + u_i \tag{8}$$

After computing RIF and regressing it on the vector of covariates separately for women and men to obtain the regression coefficients, it is possible to decompose the differences in financial wealth between the genders at quantiles of interest in equivalent to the Blinder-Oaxaca at means method (Fortin, Lemieux, and Firpo 2011). In particular, the difference at quantiles can be written as:

$$\bar{q}_{M,\tau} - \bar{q}_{F,\tau} = \mathbb{E}(RIF(W_M; q_\tau) | X_M) - \mathbb{E}(RIF(W_F; q_\tau) | X_F) = \bar{X}_M \hat{\gamma}_{M,\tau} - \bar{X}_F \hat{\gamma}_{F,\tau}$$
(9)

where $\gamma_{j,\tau}$ are coefficients from unconditional quantile regressions for each group:

$$\hat{\gamma}_{i,\tau} = \left(\sum_{i \in I} X_i X_i\right)^{-1} \sum_{i \in I} \widehat{RIF}(W_{i,i}; q_{i,\tau}) X_i , \qquad j \in F, M$$
(10)

As in the standard Blinder-Oaxaca approach, the gender wealth differential can be re-written as a sum of explained and residual components:

$$\bar{q}_{M,\tau} - \bar{q}_{F,\tau} = \hat{\gamma}'_{M,\tau} \left(\bar{X}_M - \bar{X}_F \right) + \left(\hat{\gamma}_{M,\tau} - \hat{\gamma}_{F,\tau} \right)' \bar{X}_F \tag{11}$$

Similarly, the detailed composition can be performed to evaluate the contribution of each covariate:

$$\bar{q}_{M,\tau} - \bar{q}_{F,\tau} = \sum_{k=1}^{K} (\bar{x}_{M,k} - \bar{x}_{F,k}) \hat{\gamma}_{Mk,\tau} + \bar{X}_{F} (\hat{\gamma}_{M,\tau} - \hat{\gamma}_{F,\tau})$$
(12)

Thus, using this approach, the detailed composition at quantiles can be computed in the similar to the decomposition at means fashion.

Simulation

In the last part of this paper I perform a simple simulation exercise. In particular, I assess what would happen to the financial wealth distribution of women had they had the financial knowledge of men, keeping

everything else constant. To do so, I compute average financial literacy score in every analyzed domain for women and for men starting from the 10th quantile onwards at 5 - quantile intervals along the distribution of financial wealth. I then assign to women the financial literacy indicators of men in their wealth quantile. For example, for women whose wealth is between 45th and 50th percentile of female financial wealth distribution, I assign the portion of correct answers on each financial literacy question among men whose wealth is between 45th and 50th percentile of male financial wealth distribution. I further estimate RIF-regressions at the same quantiles for women and men to obtain gender- and quantile-specific returns, i.e. coefficients. To simulate women's counterfactual wealth distribution, I fit their financial wealth values by using their coefficients, corresponding men's financial literacy response rates, and women's sociodemographic and economic attributes. I then perform a similar exercise for men.

DATA, SAMPLE DEFINITION AND DESCRIPTIVE EVIDENCE

The main data source used for the analysis is the Dutch Central Bank (DNB) Household Survey waves 2005 and 2010. The DNB Household Survey is a panel survey data collected annually and it provides information on households' income, wealth, employment, as well as on a variety of demographic and other characteristics. The reason why the analysis is limited to the years 2005 and 2010 is that the data on financial literacy was collected only for these two years.

Despite the availability of a variety of financial literacy and retirement planning indicators in the data, only few of them are comparable across both waves. In particular, this paper focuses on three questions: interest rate numeracy, understanding of inflation and of risk diversification.¹⁰ The questions were phrased as follows:¹¹

^{9.} To be more explicit, financial literacy is computed as a mean for individuals within 5 percentiles intervals of financial wealth distribution by gender. Since I use gender-specific wealth distributions to compute quantiles and the average financial literacy indices, the average financial score within the cell depends on gender and the financial wealth rank in the distribution. Thus, it does not depend on other characteristics, which I allow varying in the regression. The first cell for which I estimate the rate of correct answers for each financial literacy question is given by all observations whose wealth is below the 10th percentile. Other cells are formed by observations within 5-percentiles intervals. This exercise is done separately for women's and men's financial wealth distributions

^{10.} For more details on financial literacy modules in DNB Household Survey data set, see Alessie, Van Rooij, and Lusardi (2011).

^{11.} The translation of questions is from Alessie, Van Rooij, and Lusardi (2011).

- 1. *Understanding of interest rates (numeracy)*: suppose you had €100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
 - (i) More than €102; (ii) Exactly €102; (iii) Less than €102; (iv) Do not know; (v) Refusal.
- 2. *Understanding of inflation*: imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
 - (i) More than today; (ii) Exactly the same; (iii) Less than today; (iv) Do not know; (v) Refusal.
- 3. *Understanding of risk diversification*: do you think that the following statement is true or false? Buying a company stock usually provides a safer return than a stock mutual fund.
 - (i) True; (ii) False; (iii) Do not know; (iv) Refusal.

To assess the importance of framing, the wording in the last question was randomized in the 2005 panel and it was found that the way this question is asked has a substantial effect on the proportion of correct answers (Van Rooij, Lusardi, and Alessie 2011). However, since in 2010 there was no randomization, I do not control for the framing of this question. Thus, to create financial literacy indicators, I generate a dummy variable equal to unity if the question is answered correctly and zero otherwise for all three financial literacy questions.

In the baseline analysis, I use both 2005 and 2010 waves. As it has been shown that financial knowledge did not increase from 2005 to 2010 (Alessie, Van Rooij, and Lusardi 2011), I pool the two panels and account for changes between them by including a year fixed effect.

The advantage of using both waves is that it allows having more observations. The drawback, however, is that in 2005 only financially knowledgeable person (FKP)¹³ was asked financial literacy questions. Thus, to make the two waves comparable, the core results are obtained by defining household's financial literacy, as

^{12.} The importance of framing has been found to matter for advanced financial literacy concepts and not for basic ones (Van Rooij, Lusardi, and Alessie 2011). With regards to the risk diversification question, proportion of women who answered correctly is about 25 percentage points lower than that of men for both formulations of the question. Thus, the framing issue should not affect the results since I focus on the differences between women and men rather than on the absolute levels of financial literacy.

^{13.} Financially knowledgeable person is the person who is most involved with the financial administration of the household, where financial administration means making the payments for rent/mortgage, taking out loans, taking care of tax declarations, etc.

well as its gender and other socio-demographic characteristics, as those of the FKP. The financial wealth and income, on the other hand, are defined to be an overall amount for the whole household. In the robustness analysis, I relax this definition and repeat the analysis using individual-level financial knowledge and individual financial wealth using only 2010 wave.

The main results of this paper are based on the analysis of gross financial wealth and in the robustness section I show that the conclusions hold also for financial wealth net of short-term loans and for total net wealth, including real assets net of mortgage debt. The gross financial wealth is defined as the sum of checking accounts, employer-sponsored savings plans, savings and deposit accounts, deposit books, savings certificates, insurance policies, growth and mutual funds, bonds, stocks, and loans made to family and friends. Financial wealth is set to missing if the respondent provided no information on none of the financial wealth's components. Short-term debt is defined as a sum of private loans, credit lines, and credit card debt. As with the gross financial wealth, it is set to missing if no information is provided about its components. Finally, the net real wealth is calculated as a sum of all housing wealth and other real assets, such as vehicles and boats, net of outstanding mortgage debt.

To account for differences in income, I condition on households' gross income, which consists of gross salary, pension payments, unemployment benefits, social transfers, and profits, and is net of alimonies. The income is set to missing if any of the components, except for profits, is missing, while if the profit is missing, it is set to zero in the calculation of the gross income.

To adjust for skewness allowing for zero values, I transform both wealth measures and income using the inverse hyperbolic sine transformation in its log form: IHS $W = \ln(W + \sqrt{(1+W^2)})$. This transformation allows reducing the influence of extreme observations by downweighting large values but has an advantage over the log transformation since it admits zero and negative values of the transformed variable. Thus, by applying inverse hyperbolic sine transformation to wealth and income, there is no need to exclude households with nonpositive values from the analysis.¹⁴

^{14.} For more details on IHS transformation see, for example, Burbidge et al. (1988), Carroll et al. (2003), and Pence (2006).

Across both waves, the data has been collected for 3877 households, among which 1082 were interviewed in both years. To perform the analysis, I drop observations where information on at least one variable used in the analysis is missing. In particular, I drop observations if information is missing about financial wealth (929 observations), income (483 observations), marital status (370 observations), financial literacy (374 observation), and education (3 observations). This sample selection leads to 1718 observations, among which there are 1012 men and 706 women.

As can be seen from Table 1 and Figure 1, households whose FKP is a woman have significantly lower gross and net financial wealth both at mean and across distribution.¹⁷ These households also have lower income levels and lower portion of them responded correctly on the financial literacy questions, with this difference being remarkably striking in what concerns the rate of correct answers about risk diversification (Figure 2), which is consistent with the results reported by Alessie et al. (2011).

[Insert Table 1 about here]

[Insert Figure 1 about here]

[Insert Figure 2 about here]

As regards to other characteristics, male FKPs are, on average, older than female FKPs, have slightly bigger households, and fewer of them are widowed or divorced, while there is no difference in the proportion of never married. As for the education and employment, male FKPs have, on average, higher educational attainment, and more of them are self-employed or retired, where the latter reflects differences in age.

Thus, there seem to be differences in the characteristics of households whose FKP is a man and those whose FKP is a woman, with the latter, on average, having worse economic conditions and being less educated and financially knowledgeable.

^{15.} When it comes to variables constructed of several components (wealth or income), I treat them in the following way: (1) the household wealth (income) is missing only if all household members' individual wealth (income) are missing. If at least one member has a non-missing value, other members' missing individual wealth (income) is set to zero; (2) the individual wealth (income) is missing only if all components of the wealth (income) are missing. If at least one component has a non-missing value, other missing components of individual wealth (income) are set to zero.

^{16.} One concern regarding the sample selection is how it affects the main variables of interest. To address it, I construct the descriptive statistics for the full sample: gender differences in both financial wealth and financial literacy questions persist and they are very similar quantitively to the ones observed in the selected sample.

^{17. 3.5%} of all households have negative gross financial wealth due to the negative position on the checking accounts.

RESULTS

In the first step of the analysis, I estimate mean and quantiles of financial wealth distribution by gender using OLS and RIF-regressions. The results show that, conditioning on a range of socio-demographic and economic characteristics, financial literacy is overall positively associated with the level of financial wealth for both women and men (Table 2). Interestingly, at the mean, the coefficient is significant only for those households whose FKP is a male, while it is not statistically different from zero for the female-headed households. The question that seems to be having the strongest association with the financial wealth is the one on risk diversification: it is positive and statistically significant across distribution for both men and women, but its point estimate is higher for the former (Figure 3).¹⁸ The knowledge about inflation matters for all the man-headed households, with the exception of those in the top of the distribution, while for woman-headed ones it plays role only at the bottom of the distribution. Finally, understanding of interest rates, which is the question where the most of the households - 95% among men and 90% among women gave the right answer, seems to matter the least: it is statistically different from zero for men at the mean and at the bottom of the distribution, and for women - only at the 75th percentile.

[Insert Table 2 about here]

[Insert Figure 3 about here]

The decomposition results show that most of the difference in financial wealth between households where FKP is a man and those with a woman can be attributed to differences in the observed characteristics. In particular, at the mean and in the lower half of the distribution, differences in characteristics play a great role in contributing to the gender wealth gap, while differences in coefficients oppose this effect. At the top of the distribution, both differences in covariates and in coefficients increase the gap and their contribution is roughly half-half. As for what contributes to the explained part of the gender wealth gap, 30% to 40% of

^{18.} One possible explanation to the fact that coefficients associated to the financial literacy could not be estimated precisely in the sample of women is the lack of statistical power: the sample of women is smaller than that of men. In fact, when financial literacy measures coming from three indicators are pooled to a single indicator (number of correctly answered questions and an indicator that all questions are answered correctly), the coefficients related to financial literacy are statistically significant also for women, although they are smaller than that of men. Even though the effect of financial literacy in the estimated model specifications cannot be interpreted causally, the smaller magnitude of the coefficient of financial literacy among women can related to the fact that formal educational attainment seems to matter more for women, once financial literacy is taken into account, than for men.

the difference in financial wealth between women and men, depending on the statistics, might be explained by differences in their financial literacy. Specifically, 34% of the explained component (0.41 out of 1.22 - column 1 Table 3), is due to differences in financial literacy at the mean, 32 – 33% in the lower half of the distribution (0.32 out of 0.99 and 0.23 out of 0.7 at the 25th and 50th quantiles respectively), and its role increases along the distribution, up to 38 – 40% in the upper half. The rest of the explained part might be attributed to differences in other characteristics included in the regression, such as differences in age, employment and marital status.

As to what matters the most among financial literacy questions, it is the knowledge about risk and portfolio diversification. In particular, differences in this domain account for 50 – 90% of the difference explained by financial knowledge as a whole, and their importance increases along the wealth distribution (it is 0.16 out of 0.32 at the 25th percentile and 0.14 out of 0.15 at the 90th percentile). Importantly, only differences in financial literacy *per se*, that is the explained part, and not the differences in the respective coefficients, seem to matter for explaining gender differences in financial wealth. On the contrary, unexplained components related to financial literacy do not play a role in explaining financial wealth differential. This is most probably the reflection of the fact that coefficients associated to financial literacy estimated with OLS and RIF-regressions are not statistically different between women and men (Table 2 and Figure 3).

[Insert Table 3 about here]

The role of financial literacy in explaining the differences in financial wealth between women and men across the financial wealth distribution is depicted on the Figure 4. In particular, it shows the contribution of the gender differences in financial literacy overall and by financial literacy question to the total difference in financial wealth and to the explained component.¹⁹ As can be seen, the total difference in financial wealth between households whose FKP is a woman and those whose FKP is a man, can be said to be slightly increasing along the financial wealth distribution, while the contribution of the differences in characteristics decreases. The fact that in the lower half of the distribution the magnitude of the explained component is

^{19.} The decomposition results are plotted starting from the 10th percentile and every 5 percentiles onwards, e.g. at 15th, 20th and so on.

greater than the overall difference suggests that the return to the characteristics, or in other words difference in coefficients, is negative, thus favoring women. As for the contribution of the overall financial knowledge (Panel A. Figure 4), it also slightly decreases along the financial wealth distribution, but at a slower rate than does the importance of the explained component, thus, its relative to other attributes contribution increases. Panels B through D of Figure 4 show the contribution of questions on interest rate numeracy, inflation and risk diversification. The plots confirm that what matters the most is the knowledge about portfolio diversification, domain in which differences in the knowledge between women and men are also the most striking. What matters the least, on the other hand, is the knowledge about inflation - the question on which over 90% respondents provided the right answer. Interestingly, at the top of the distribution, only differences in the understanding of risk diversification matter, while differences related to interest rates only matter at the mean and at the lower quarter of the distribution, and those related to the inflation matter up to 75th percentile.

[Insert Figure 4 about here]

Finally, I perform a simulation exercise to gain understanding on how women's and men's financial wealth distribution would have changed had they swapped their financial literacy. The results are shown on the Figure 5 and indicate that the effect of the decrease (for men) and increase (for women) in the financial literacy on their financial wealth is asymmetric between the genders. In particular, although women's financial wealth distribution slightly shifts to the right after men's financial literacy response rates are attributed to women, the negative effect for men is much larger than the positive effect for women. The intuition on what underlines the asymmetry of the responses can be gained from the Figure 3 which plots RIF-regression coefficients for women and men across the wealth distribution. With only few exceptions, the magnitude of the coefficients' point estimates is systematically higher for men than for women and this holds true for all the three questions. Although the difference in the coefficients between the genders is not statistically significant, the fact they are higher for men almost at each point of the distribution is enough to generate the big negative effect for men while changing women's distribution only slightly. Moreover, the fact that the women's coefficients are rather low in absolute terms explains why their distribution of

financial wealth does not improve much with better financial literacy. Thus, this exercise demonstrates that in order to eliminate the gender wealth gap it would not be enough to simply equip women with better financial knowledge, but it is also important to teach women how to use it as there seems to be a big difference in how women transform their financial literacy into wealth.

[Insert Figure 5 about here]

Therefore, the results confirm that women, on average, have both lower financial wealth and are less financially sophisticated. The results of the decomposition indicate that half of the total difference in financial wealth between women and men at the mean can be explained by the differences in their financial literacy, with this portion decreasing from 47% at the 25th quantile to 22% at the 90th quantile of wealth distribution. This result is in line with the intuition the knowledge about basic financial concepts matters less for higher levels of wealth. Although the role of differences in observed characteristics decreases throughout the distribution, which is also reflected by the decrease of the contribution of financial literacy to the overall difference in wealth, the relative importance of financial literacy to other attributes goes up. This is driven mainly by the question regarding the understanding of the risk diversification. Finally, increase in financial literacy of women to the level of men would not be sufficient to eliminate the financial wealth gap, since women seem to have lower returns on their financial knowledge.

Discussion

The literature studying different mechanisms through which financial literacy could affect financial wealth is rich. In this section I combine the findings of previous studies in a standard reduced model of wealth to illustrate through which channels financial literacy might affect its accumulation.

Assume, that each period a household decides how much to consume and how much to save by maximizing its utility subject to a standard intertemporal budget constraint. Thus, the wealth in the first period is household's income minus its consumption.²⁰

^{20.} This simple framework serves only to illustrate some channels through which financial literacy might affect wealth accumulation. Thus, for simplicity, I assume that borrowing is not possible and every investment yields a constant risk-free return. I also assume that wealth accumulated in the previous period is not consumed and is left to grow in the following period. In such a set up, it is more appropriate to think about wealth as of financial wealth, left, for example, on savings accounts or invested in bonds.

$$W_1^i = Y_1^i - C_1^i = S_1^i = S_1^i * Y_1^i$$
 (13)

where s_t^i is the saving rate S_t^i/Y_t^i .

In the second period, accumulated wealth has the value of the savings of the second period and those grown of the first by the return rate r net of the cost of the investment c, which is calculated as a percentage of the saved amount which is applied every period

$$W_2^i = (1 + r - c)s_1^i * Y_1^i + s_2^i * Y_2^i$$
(14)

Thus, in period N the value of household's worth is given by the sum of its savings over time:

$$W_N^i = \sum_{t=1}^N (1 + r - c)^{N-t} \, s_t^i * Y_t^i \tag{15}$$

Since both the return rate r and the cost c vary across households because of their ability to find better investment opportunities or due to their bargaining power, the value of accumulated wealth can be written as follows:

$$W_N^i = \sum_{t=1}^N (1 + r^i - c^i)^{N-t} s_t^i * Y_t^i$$
 (16)

The previous literature finds that more financially literate individuals are less likely to commit financial mistakes (Agarwal et al. 2009), pay lower investment fees, better understand its benefits (Hastings, Mitchell, and Chyn 2011; Hastings and Tejeda-Ashton 2008), and overall have higher returns on wealth (Lusardi et al., 2017; Jappelli and Padula 2013). Furthermore, it has been shown that financially literate individuals are more likely to be investing for retirement (Lusardi and Mitchell 2008), have higher propensity to save (Jappelli and Padula, 2015) and are better in budgeting and controlling their spending (Lusardi and Mitchell, 2011a). Altogether this means, that the return and saving rates are increasing functions of financial literacy²¹, whereas the cost of investment decreases in financial literacy scores. Thus, since $\frac{\partial r}{\partial (financial \ literacy)} > 0$, $\frac{\partial s}{\partial (financial \ literacy)} > 0$, and $\frac{\partial c}{\partial (financial \ literacy)} < 0$, then wealth is an increasing function of financial literacy.

^{21.} The positive relation between savings rate and financial literacy relies on the previous findings that more financially literate individuals are more likely to plan for retirement and invest in stocks (for detailed discussion and references, see Introduction). For the retirees, however, this channel should be expected to play a small to no role.

To summarize, if there were only two types of individuals, with high and low financial literacy such that $i \in H, L$, then those who have higher financial literacy would be able to accumulate more wealth over time: $W_N^H > W_N^L$. Related to the empirical results of the paper, this helps to explain the finding why, taking into account all other characteristics, men, who have higher financial literacy, have greater financial wealth than women, whose financial literacy is lower,

Robustness

The core analysis and the main results of the paper are obtained using a sample from the 2005 and 2010 waves of the DNB Household Survey and focus on the gender disparities in households' total gross financial wealth. To study this wealth gap, the gender, as well as other individual characteristics, are defined as those of a household's financially knowledgeable person.

Three main concerns might arise regarding the robustness of the results. First, whether the results would hold for alternative measures of wealth. Second, what is the role of "Don't know" answers in driving the results. Third, whether the results are robust to the definition of individual socio-demographic characteristics, including gender.

To address the first issue, I construct net (instead of gross) financial wealth, by subtracting all short-term liabilities, and net total wealth, by considering real assets net of outstanding mortgages. I also investigate whether the results hold if I consider the equivalized financial wealth. Finally, I study the role of financial literacy in the probability to be "poor" as measured by several poverty indicators.

The estimated densities of household -level financial wealth, both gross and net, are shown on the Figure 6. As can be seen, the gender gap in financial literacy persists throughout different definitions of wealth. The results of the decomposition are shown in the Table 4 Panel A and Figure 7 and indicate that differences in financial literacy play an important role in explaining differences in both gross and net financial wealth. Moreover, across all the specifications it is still the case that the concept that matters the most is the one related to the risk diversification.

[Insert Figure 6 about here]

[Insert Table 4 about here]

[Insert Figure 7 about here]

The results also hold if per capita measure of financial wealth is considered (Table 5), which in this paper is defined as equivalized financial wealth of a household using square root equivalence scale.²²

[Insert Table 5 about here]

To address the issue that household composition might affect wealth accumulation through differential incentives to invest in financial literacy, I repeat the analysis for the samples of singles and couples. As can be seen from Table 6, women have both lower financial wealth and financial literacy across all the marital statuses (except for those married under marriage settlement) and the results of the decomposition confirm that difference in financial literacy between the genders help to explain lower financial wealth of women (Table 7) both among couples and singles.

[Insert Table 6 about here]

[Insert Table 7 about here]

Next, I extend the analysis to a range of poverty indicators. While it is not trivial to define the optimal level of accumulated financial wealth because it might depend on, for example preferences for saving, it is rather safe to assume that it cannot be optimal to live in poverty. To perform this exercise I define four poverty indicators which assume unity if (1) total financial wealth of a household is less than three-months gross income; (2) total financial wealth of the household is less than 60% of the median financial wealth; (3) total gross income of the household is less than 60% of the median gross income; (4) and total households' net income is less the self-assessed sufficient level of income.

In accordance with previous findings, women are more likely than men to live below the poverty line as defined by all four indicators (Table 8). Moreover, while differences in financial literacy play a role in explaining the difference in the proportion of "poor" women and "poor" men when poverty indicators related to financial wealth are considered, they have no effect once measures of poverty are defined based on income. This finding further confirms the hypothesis that financial literacy plays an important role in the process of financial wealth accumulation.

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^{22.} For more details on equivalence scales see OECD note on Equivalence Scales available at http://www.oecd.org/eco/growth/OECD-Note-EquivalenceScales.pdf.

[Insert Table 8 about here]

Finally, I also study if the results generalize to the total net wealth, defined as a sum of real and financial assets net of short-term and mortgage debt. I find that, similarly to the previous results, differences in financial literacy between women and men play an important role in explaining the differences in accumulated total net wealth, and that the difference in the knowledge about risk diversification is the main driver of this result (Table 9).

[Insert Table 9 about here]

To acknowledge the importance of "do not know" answers and the fact that women are more likely than men to provide "do not know" answers to financial literacy questions, I repeat the main exercise (OLS and RIF-regressions and detailed Blinder-Oaxaca decomposition) using several alternative definitions of financial literacy (Table 10). Specifically, I first define financial literacy as a total number of correct answers to all three financial literacy questions (Table 11 Panel A); second, I define a dummy variable which takes value 1 if all financial literacy questions are answered correctly (Table 11 Panel B); third, I include indicators for a financial literacy question being answer correctly or if an answer "don't know" or "refused" has been given (Table 11 Panel C). In the last case, I pool together "don't know" and "refused to answer" since, as Table 10 shows, the proportion of refused answers is extremely low and does not vary between men and women. The main conclusions hold across all three specifications.

[Insert Table 10 about here]

[Insert Table 11 about here]

To study the sensitivity of the results to the gender definition, I, first, repeat all the analysis at individual level by using only the 2010 DNB Household Survey wave²³. In this case, I construct financial wealth and income also at individual level. Additionally, to address the difficulty of individualizing households' wealth further, I repeat the analysis for a sample of households who are not married under the common property regime. Second, I define socio-demographic characteristics, including gender, as those of a person who "has more influence" over financial matters in the household, rather than that of a FKP.

²³ Differently from the year 2005, where only FKP was asked to complete the financial literacy module, in 2010 financial literacy questions were asked at the individual level.

The results of the decomposition at individual level are reported in the Table 4 Panel B and C and Figure 7. They show that if both gross and net financial wealth as well as socio-demographic characteristics are defined at individual level, the main conclusions that financial literacy is of great importance in explaining differences in wealth and that the effect is driven by the risk diversification question still hold. Although the results estimated for the sample without individuals living under the common property regime are not precise because of the small number of observations, the overall conclusions are upheld.

Finally, I use alternative sample to perform the analysis. In particular, I now select individual characteristics not as those of the household FKP, or the person who is most involved with the financial administration, but as those who is more influential in the household over the financial matters. The results, shown in the Table 12, are robust to this sample specification.

[Insert Table 12 about here]

Thus, the result that the lack of financial literacy among women contributes to the explanation of their relatively disadvantageous wealth position is robust to a variety of alternative specifications.

CONCLUSION

This paper investigates the relation between the gender gap in financial wealth and the fact the women are, on average, less financially literate the men. The results confirm that women have less financial wealth throughout the distribution and that they score lower on all analyzed financial literacy questions, with this difference being particularly striking in the domain of risk diversification.

The results of the decomposition indicate that differences in financial literacy contribute greatly to the differences in women's and men's financial holdings and that what drives this result is knowledge about how to diversify risk and portfolio. The simulation results show, however, that the wealth gap does not disappear by simply increasing women's financial literacy to the level of men's and that more education might be needed in order to improve women's ability to use their knowledge and to transfer their skills into wealth accumulation.

Although the decomposition results clearly point to the direction that the lack of financial knowledge of women is strongly related to their relatively low wealth, the conclusions drawn upon the analysis are not causal. In fact, it has been shown that financial literacy suffers from a variety of endogeneity issues, such as reverse causality and omitted variable bias. However, if the causal relationship is confirmed, the conclusions of this study offer the first evidence that shows the necessity of creating solid educational agenda which would provide both women and men with knowledge about basic financial concepts at the early stage of their life-cycle. Moreover, as the results show that not only differences in the financial literacy *per se*, but also how this knowledge is used lead to the differential wealth accumulation between women and men, it is important to take measures to build up interest among women in taking basic finance courses at high school, during their college years or on the online platforms, as well as in gaining more information on financial opportunities available in the media or with financial advisor. Thus, more empirical evidence is needed to quantify the causal effect of financial literacy on differential wealth accumulation between women and men.

REFERENCES

Agarwal, Sumit, John C Driscoll, Xavier Gabaix, and David Laibson. 2009. The age of reason: Financial decisions over the life-cycle with implications for regulation. *Brookings Papers on Economic Activity*, 2009(2): 51-117.

Agnew, Julie R., Lisa R. Anderson, Jefrey R. Gerlach, and Lisa R. Szykman. 2008. Who chooses annuities? An experimental investigation of the role of gender, framing and defaults. *American Economic Review*, 98(2):418--422.

Alessie, Rob, Maarten Van Rooij, and Annamaria Lusardi. 2011. Financial literacy and retirement preparation in the Netherlands. *Journal of Pension Economics and Finance*, 10(04):527--545.

Almenberg, Johan, and Anna Dreber. 2015. Gender, stock market participation and financial literacy. *Economics Letters*, 137:140-142.

Arrondel, Luc, Majdi Debbich, and Frederique Savignac. 2015. Stockholding in France: the role of financial literacy and information. *Applied Economics Letters*, 22(16):1315--1319.

Atkinson, Adele, and Flore-Anne Messy. 2012. Measuring financial literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15.

Beckmann, Elisabeth. 2013. Financial literacy and household savings in Romania. Numeracy, 6(2):9.

Behrman, Jere R., Olivia S. Mitchell, Cindy K. Soo, and David Bravo. 2012. The effects of financial education and financial literacy. How financial literacy affects household wealth accumulation. *American Economic Review*, 102(3):300--304.

Blinder, Alan. 1973. Wage discrimination: reduced form and structural estimates. The Journal of human resources, 8(4):436--455.

Bucher-Koenen, Tabea, and Annamaria Lusardi. 2011. Financial literacy and retirement planning in Germany. *Journal of Pension Economics and Finance*, 10(04):565--584.

Bucher-Koenen, Tabea, Annamaria Lusardi, Rob Alessie, and Maarten Van Rooij. 2017. How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2): 255-283.

Bucher-Koenen, Tabea, and Michael Ziegelmeyer. 2014. Once burned, twice shy? Financial literacy and wealth losses during the financial crisis. *Review of Finance*, 18(6):2215--2246.

Burbidge, John B., Lonnie Magee, and A. Leslie Robb. 1988. Alternative transformations to handle extreme values of the dependent variable. *Journal of the American Statistical Association*, 83(401):123-127.

Carroll, Christopher D., Karen E. Dynan, and Spencer D. Krane. 2003. Unemployment risk and precautionary wealth: Evidence from households' balance sheets. *Review of Economics and Statistics*, 85(3):586--604.

Chen, Haiyang, and Ronald P Volpe. 2002. Gender differences in personal financial literacy among college students. *Financial services review*, 11(3):289--307.

Chi, Wei, and Bo Li. 2008. Glass ceiling or sticky floor? Examining the gender earnings differential across the earnings distribution in urban China, 1987-2004. *Journal of Comparative Economics*, 36(2):243--263.

Christelis, Dimitris, Michael Ehrmann, and Dimitris Georgarakos. 2015. Exploring Differences in Household Debt across Euro Area Countries and the United States. *Bank of Canada Working Paper*, 2015-16.

Christelis, Dimitris, Dimitris Georgarakos, and Michael Haliassos. 2013. Differences in portfolios across countries: Economic environment versus household characteristics. *The Review of Economics and Statistics*, 95(1):220--236.

Doorley, Karina, and Eva Sierminska. 2015. Myth or fact? The beauty premium across the wage distribution in Germany. *Economics Letters*, 129:29--34.

Deuflhard, Florian and Georgarakos, Dimitris and Inderst, Roman. 2015. Financial Literacy and Savings Account Returns. *ECB Working Paper No. 1852.*

Firpo, Sergio, Nicole Fortin, and Thomas Lemieux. 2007. Decomposing wage distributions using recentered influence function regressions. University of British Columbia.

Firpo, Sergio, Nicole M Fortin, and Thomas Lemieux. 2009. Unconditional quantile regressions. Econometrica, 77(3):953--973.

Fonseca, Raquel, Kathleen J Mullen, Gema Zamarro, and Julie Zissimopoulos. 2012. What explains the gender gap in financial literacy? The role of household decision making. *Journal of Consumer Affairs*, 46(1):90-- 106.

Fortin, Nicole, Thomas Lemieux, and Sergio Firpo. 2011. Decomposition methods in economics. *Handbook of labor economics*, 4(1-102).

Gerardi, Kristopher, Lorenz Goette, and Stephan Meier. 2010. Financial literacy and subprime mortgage delinquency: Evidence from a survey matched to administrative data. *Federal Reserve Bank of Atlanta Working Paper Series*, 2010-10.

Guiso, Luigi, and Tullio Jappelli. 2008. Financial literacy and portfolio diversification. European University Institute Working Papers ECO 2008/31.

Haliassos, Michael, and Carol C. Bertaut. 1995. Why do so few hold stocks? The Economic Journal, 105(432):1110--1129.

Haliassos, Michael, Thomas Jansson, and Yigitcan Karabulut. 2015. Incompatible European Partners? Cultural Predispositions and Household Financial Behavior. Working paper.

Hastings, Justine S, Olivia S Mitchell, and Eric T Chyn. 2011. Fees, framing, and financial literacy in the choice of pension manager. In *Financial literacy: Implications for retirement security and the financial marketplace*, edited by Olivia S. Mitchell and Annamaria Lusardi (101—115). Oxford: Oxford University Press.

Hastings, Justine S, and Lydia Tejeda-Ashton. 2008 .Financial Literacy, Information, and Demand Elasticity: Survey and Experimental Evidence from Mexico. NBER Working Paper no. 14538.

Jappelli, Tullio, and Mario Padula. 2013. Investment in financial literacy and saving decisions. *Journal of Banking & Finance*, 37(8):2779--2792.

Jappelli, Tullio, and Mario Padula. 2015. Investment in financial literacy, social security, and portfolio choice. *Journal of Pension Economics and Finance*, 14(4), 369-41.

Jorgensen, Bryce L, and Jyoti Savla. 2010. Financial literacy of young adults: The importance of parental socialization. *Family Relations*, 59(4):465--478.

Klapper, Leora, and Georgios A Panos. 2011. Financial literacy and retirement planning: the Russian case. *Journal of Pension Economics and Finance*, 10(04):599--618.

Longhi, Simonetta, Cheti Nicoletti, and Lucinda Platt. 2013. Explained and unexplained wage gaps across the main ethno-religious groups in Great Britain. *Oxford Economic Papers*, 65(2):471--493.

Lusardi, Annamaria. 2008. Household saving behavior: The role of financial literacy, information, and financial education programs. NBER Working Paper no. 13824.

Lusardi, Annamaria, Pierre-Carl Michaud, and Olivia S Mitchell. 2017. Optimal financial knowledge and wealth inequality. *Journal of Political Economy*, 125(2): 431--477.

Lusardi, Annamaria, and Olivia S Mitchell. 2007a. Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, 54(1):205--244.

Lusardi, Annamaria, and Olivia S Mitchell. 2007b. Financial literacy and retirement planning: New evidence from the Rand American Life Panel. *Michigan Retirement Research Center Research Paper No. WP*, 157.

Lusardi, Annamaria, and Olivia S Mitchell. 2008. Planning and financial literacy: How do women fare? *American Economic Review*, 98(2):413--417.

Lusardi, Annamaria, and Olivia S Mitchell. 2009. How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. NBER Working Paper no. 15350.

Lusardi, Annamaria, and Olivia S Mitchell. 2011a. Financial literacy and planning: Implications for retirement wellbeing. In *Financial literacy: Implications for retirement security and the financial marketplace*, edited by Olivia S. Mitchell and Annamaria Lusardi, 17-39.0xford: Oxford University Press.

Lusardi, Annamaria, and Olivia S. Mitchell. 2011b. Financial Literacy and Retirement Planning in the United States. *Journal of Pension Economics and Finance*, 10(4):509--525.

Lusardi, Annamaria, and Olivia S. Mitchell. 2011c. Financial literacy around the world: An overview. *Journal of Pension Economics and Finance*, 10(4):497--508.

Lusardi, Annamaria, and Olivia S Mitchell. 2014. The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1):5--44.

Lusardi, Annamaria, Olivia S Mitchell, and Vilsa Curto. 2010. Financial literacy among the young. *Journal of Consumer Affairs*, 44(2):358--380.

Lusardi, Annamaria, and Peter Tufano. 2009. Teach workers about the perils of debt. Harvard Business Review, 87(11):22--24.

Lusardi, Annamaria, and Peter Tufano. 2015. Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics and Finance*, 14(4):332--388.

Monticone, Chiara. 2010. How much does wealth matter in the acquisition of financial literacy? *Journal of Consumer Affairs*, 44(2):403--422.

Mottola, Gary R. 2013. In our best interest: Women, financial literacy, and credit card behavior. Numeracy, 6(2):1--15.

Nandi, Alita, and Cheti Nicoletti. 2014. Explaining personality pay gaps in the UK. Applied Economics, 46(26):3131--3150.

Neelakantan, Urvi, and Yunhee Chang. 2010. Gender differences in wealth at retirement. *The American Economic Review*, 100(2):362-367.

Oaxaca, Ronald. 1973. Male-female wage differentials in urban labor markets. International Economic Review, 14(3):693--709.

Pence, Karen M. 2006. The role of wealth transformations: An application to estimating the effect of tax incentives on saving. *The BE Journal of Economic Analysis & Policy*, 5(1).

Sierminska, Eva, Joachim R Frick, and Markus M Grabka. 2010. Examining the gender wealth gap. *Oxford Economic Papers*, 62(4):669-690.

Smith, James P. 1995. Racial and ethnic differences in wealth in the Health and Retirement Study. *Journal of Human Resources*: S158-S183.

van Rooij, Maarten, Annamaria Lusardi, and Rob Alessie. 2011. Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2):449--472.

van Rooij, Maarten C.J., Annamaria Lusardi, and Rob J.M. Alessie. 2012. Financial literacy, retirement planning and household wealth. *Economic Journal, Royal Economic Society*, 122(560):448-478.

Xu, Lisa, and Bilal Zia. 2012. Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. World Bank Policy Research Working Paper n. 6107.

Yoong, Joanne. 2011. Financial illiteracy and stock market participation: Evidence from the RAND American Life Panel. In *Financial literacy: Implications for retirement security and the financial marketplace*, edited by Olivia S. Mitchell and Annamaria Lusardi, 76--97. Oxford: Oxford University Press.

Zissimopoulos, Julie M., Benjamin R. Karney, and Amy J. Rauer. 2015. Marriage and economic well being at older ages. *Review of Economics of the Household*, 13(1): 1-35.

TABLES AND FIGURES

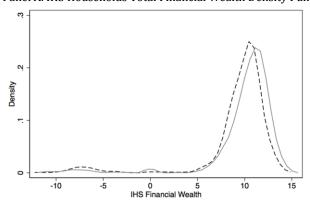
TABLE 1
Descriptive Statistics by Gender from DNB Household Survey, Panels 2005 and 2010

	Men	Women	Difference Men vs Women	<i>p</i> -value
Financial wealth (€)	63,248.37	33,283.63	29,964.74***	0.000
	(3,796.66)	(2,610.60)	(4,607.59)	
Net financial wealth (€)	59,740.68	30,809.66	28,931.02***	0.000
	(3,951.07)	(2,702.98)	(4,787.18)	
Income (€)	44,344.78	32,391.96	11,952.82***	0.000
	(1,027.61)	(1,123.85)	(1,522.83)	
Financial literacy, % answered correctly		-	-	
Interest rate	0.95	0.90	0.04***	0.001
	(0.01)	(0.01)	(0.01)	
Inflation	0.90	0.80	0.10***	0.000
	(0.01)	(0.01)	(0.02)	
Risk diversification	0.69	0.43	0.26***	0.000
	(0.01)	(0.02)	(0.02)	
Socio-demographic attributes				
Age	55.84	50.17	5.67***	0.000
	(0.45)	(0.56)	(0.72)	
Household size	2.35	2.23	0.11*	0.057
	(0.04)	(0.05)	(0.06)	
Single (%)	0.16	0.19	-0.03	0.101
	(0.01)	(0.01)	(0.02)	
Widowed (%)	0.04	0.08	-0.04***	0.000
	(0.01)	(0.01)	(0.01)	
Divorced (%)	0.05	0.12	-0.07***	0.000
	(0.01)	(0.01)	(0.01)	
High education (%)	0.44	0.33	0.11***	0.000
	(0.02)	(0.02)	(0.02)	
Medium education (%)	0.52	0.62	-0.10***	0.000
	(0.02)	(0.02)	(0.02)	
Other education (%)	0.01	0.01	-0.00	0.830
	(0.00)	(0.00)	(0.00)	
Self-employed (%)	0.05	0.03	0.02*	0.095
	(0.01)	(0.01)	(0.01)	
Unemployed (%)	0.02	0.03	-0.00	0.586
	(0.00)	(0.01)	(0.01)	
Retired (%)	0.18	0.07	0.11***	0.000
	(0.01)	(0.01)	(0.02)	
Observations	1012	706		

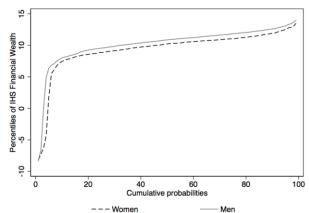
Note: The table reports descriptive statistics for the selected DNB Household Survey sample for waves 2005 and 2010. Wealth and income measures are defined at household level as a sum of wealth and income of all members of a household. Financial literacy indicators and socio-demographic characteristics are those of a household's financially knowledgeable person (FKP). Standard errors are in parenthesis. Men's and women's averages are not tested against zero.

^{***} p<.01, ** p<.05, * p<.1

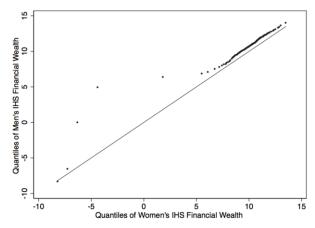
FIGURE 1
Distribution of IHS Households Total Financial Wealth of Women and Men
Panel A. IHS Households Total Financial Wealth Density Functions



Panel B. IHS Households Total Financial Wealth Percentiles



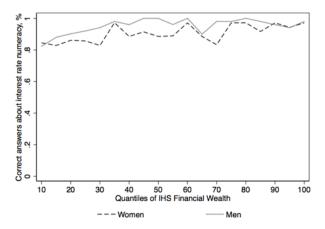
Panel C. IHS Households Total Financial Wealth Quantiles of Women's Distribution vs. Quantiles of Men's Distribution



Note: Panel A. shows kernel density estimates of IHS households total financial wealth for women and men (bandwidth 0.50). Panel B. shows women's and men's percentiles of IHS households total financial wealth. Panel C. plots women's vs. men's quantiles of IHS households total financial wealth. Households total financial wealth is defined as a sum of gross financial wealth of all households members. Gender is based on the gender of the FKP. Data from panels 2005 and 2010 of DNB Household Survey.

FIGURE 2 Financial Literacy by Gender across Households Total Financial Wealth Distribution

Panel A. Correct Answers about Interest Rate, %



Panel B. Correct Answers about Inflation, %



Panel C. Correct answers about risk diversification, %



Note: These graphs show the distribution of the proportion of correct answers in different domains of financial literacy by gender across financial wealth distribution. The rates of correct answers are estimated for the first 10 percentiles at the bottom of the distribution and every 5 percentiles onwards. Households total financial wealth is defined as a sum of gross financial wealth of all household members. Gender is based on the gender of the FKP. Data from panels 2005 and 2010 of DNB Household Survey.

TABLE 2
OLS and Unconditional Quantile (RIF) Regressions of IHS Households Total Financial Wealth by Gender

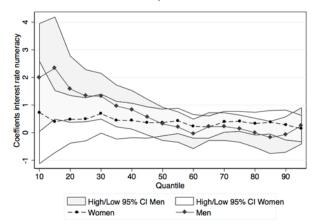
			Men					Women		
•	Mean	25th	Median	75th	90th	Mean	25th	Median	75th	90th
Financial literacy										
Interest rate	1.54**	1.33***	0.32	0.15	-0.06	0.55	0.49	0.37	0.41**	0.28
	(0.76)	(0.48)	(0.30)	(0.25)	(0.32)	(0.61)	(0.40)	(0.25)	(0.18)	(0.28)
Inflation	1.06*	1.02***	0.65***	0.36**	0.14	0.60	0.50*	0.12	-0.03	-0.04
	(0.54)	(0.38)	(0.23)	(0.18)	(0.23)	(0.43)	(0.30)	(0.19)	(0.15)	(0.22)
Risk diversification	0.92***	0.62***	0.57***	0.48***	0.54***	0.24	0.33*	0.27*	0.25*	0.41**
	(0.25)	(0.20)	(0.15)	(0.12)	(0.13)	(0.31)	(0.20)	(0.15)	(0.13)	(0.19)
Age										
Age	0.10*	0.10**	0.13***	0.08***	0.05	0.12	0.12**	0.14***	0.04	0.03
	(0.06)	(0.05)	(0.03)	(0.03)	(0.03)	(80.0)	(0.05)	(0.03)	(0.03)	(0.05)
Age squared	-0.00	-0.00*	-0.00***	-0.00*	-0.00	-0.00	-0.00	-0.00***	-0.00	0.00
0 1	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Household size	-0.18	-0.03	-0.11	-0.05	-0.01	-0.03	-0.00	-0.06	0.06	0.01
Trousenoia size	(0.14)	(0.10)	(0.08)	(0.07)	(0.08)	(0.18)	(0.12)	(0.09)	(80.0)	(0.10)
Education	(0.2.1)	(0.20)	(0.00)	(0.07)	(0.00)	(0.10)	(0.12)	(0.07)	(0.00)	(0.10)
Middle	-0.11	0.66	0.26	-0.17	-0.31	2.05	0.32	0.49	0.34	0.15
muuic	(0.45)	(0.50)	(0.37)	(0.35)	(0.43)	(1.27)	(0.61)	(0.37)	(0.26)	(0.45)
High	0.16	1.02**	0.56	0.26	0.02	2.89**	1.03	1.12***	0.98***	0.77
Iligii	(0.47)	(0.51)	(0.38)	(0.36)	(0.45)	(1.29)	(0.64)	(0.40)	(0.29)	(0.50)
Othon	1.38*	1.01	1.21*			3.30**	0.94	2.09**	1.61**	
Other				0.48	0.73					-0.18
	(0.79)	(1.05)	(0.72)	(0.66)	(1.00)	(1.56)	(1.20)	(0.82)	(0.80)	(0.50)
Employment status	4.40	0.60	0.04	0.40	0.00	0.05	0.40	0.00	0.00	
Self - employed	-1.13	-0.62	0.04	0.13	0.33	-0.27	-0.10	-0.08	0.33	1.11
	(0.90)	(0.48)	(0.33)	(0.26)	(0.33)	(0.91)	(0.52)	(0.41)	(0.43)	(0.82)
Unemployed	-0.26	-0.25	-0.13	0.58	0.63	-1.27	-0.51	-0.53	0.13	0.53
	(0.99)	(0.62)	(0.44)	(0.41)	(0.55)	(1.23)	(0.67)	(0.45)	(0.41)	(0.69)
Retired	-0.39	0.24	-0.06	-0.23	-0.13	-0.39	-0.02	0.34	0.21	0.03
	(0.39)	(0.30)	(0.24)	(0.23)	(0.27)	(0.60)	(0.35)	(0.32)	(0.34)	(0.56)
Other	-1.15**	-0.85**	-0.39	0.03	-0.20	-1.06***	-0.66***	-0.29	-0.22	-0.22
	(0.57)	(0.39)	(0.25)	(0.21)	(0.20)	(0.37)	(0.25)	(0.18)	(0.14)	(0.20)
IHS income	0.12	0.09	0.04	0.05	0.00	0.07	0.02	0.06**	0.03	0.06*
	(0.09)	(0.06)	(0.04)	(0.03)	(0.04)	(0.07)	(0.05)	(0.03)	(0.03)	(0.03)
Marital status										
Single	-0.52	-0.70**	-0.52**	-0.34	-0.06	-1.06**	-0.86**	-0.99***	-0.45**	-0.49
	(0.38)	(0.33)	(0.25)	(0.21)	(0.25)	(0.51)	(0.34)	(0.26)	(0.22)	(0.31)
Widowed	-1.05	-0.53	-0.75**	-0.06	0.14	-1.12*	-0.75*	-1.02***	-0.55*	-0.28
	(0.74)	(0.45)	(0.36)	(0.34)	(0.45)	(0.61)	(0.41)	(0.32)	(0.30)	(0.50)
Divorced	-1.67**	-1.86***	-0.69**	-0.40	-0.27	-1.27**	-1.33***	-0.93***	-0.27	-0.29
	(0.72)	(0.48)	(0.33)	(0.29)	(0.30)	(0.51)	(0.35)	(0.23)	(0.21)	(0.31)
Year 2010	0.19	0.00	0.19	0.25*	0.20	0.25	0.19	0.03	-0.02	-0.19
10a1 2010	(0.29)	(0.21)	(0.16)	(0.14)	(0.16)	(0.29)	(0.21)	(0.16)	(0.14)	(0.21)
Constant	2.52	2.26	4.87***	7.79***	10.27***	1.78	3.84***	4.59***	8.04***	9.09***
Constant	(2.08)	(1.55)	(1.06)	(0.89)	(1.04)	(2.12)	(1.43)	(0.96)	(0.81)	(1.16)
Observations	1012	1012	1012	1012	1012	706	706	706	706	706
	0.12	0.13	0.13	0.10	0.05		0.14	0.19	0.14	0.08
R-squared	0.12	0.13	0.13	0.10	0.05	0.11	0.14	0.19	0.14	0.08
D	10 10***	0 5 6 ***	10.06***	11.05***	12 (0***	0.20***	0.00***	10 24***	11 06***	11 02***
Dependent variable :		9.56***	10.86***	11.85***	12.60***	9.28***	8.88***	10.24***	11.06***	11.93***
IHS financial wealth	(0.11)	(0.09)	(0.07)	(0.06)	(0.07)	(0.15)	(0.10)	(0.08)	(0.07)	(0.10)

Note: The table reports the results of the OLS and RIF, or unconditional quantile, regressions of IHS transformation of total households financial wealth by gender using the selected DNB Household Survey sample waves 2005 and 2010. Financial wealth is calculated as a sum of household's financial assets. All the individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. Omitted group for education is low educational attainment, for employment - employee, and for marital status- married FKPs. Income is an IHS transformation of gross household's income, which is defined as a sum of incomes of all households members. Robust standard errors are in parenthesis.

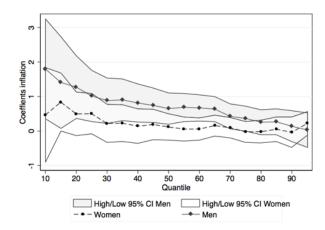
*** p<.01, ** p<.05, * p<.1.

FIGURE 3 Rif-regression Coefficients of Financial Literacy by Gender

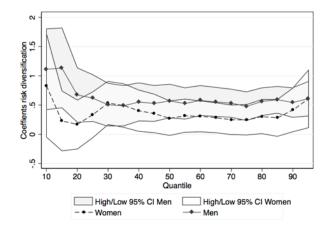
Panel A. Interest rate numeracy



Panel B. Inflation



Panel C. Risk Diversification



Note: The graphs show the coefficients of the RIF-regressions across distribution of IHS households total financial wealth by gender, controlling for socio-demographic and economic characteristics. Coefficients on financial literacy are reported as follows: Panel A. depicts coefficients on interest rate question; Panel B. on inflation question; Panel C. on risk diversification question. The regressions are estimated every 5 percentiles starting from the 10th onwards. Data from panels 2005 and 2010 of DNB Household Survey.

TABLE 3
Decomposition of IHS Transformation of Households' Total Financial Wealth

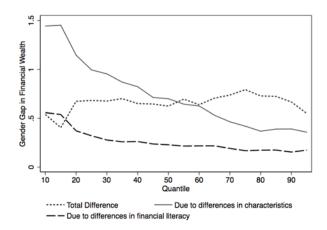
	IHS Financial Wealth									
_	Mean		25th Percentile		Median		75th Percentile		90th Percentile	
Men	10.10***		9.56***		10.86***		11.85***		12.60***	
	(0.11)		(0.09)		(0.07)		(0.06)		(0.07)	
Women	9.28***		8.88***		10.24***		11.06***		11.93***	
	(0.15)		(0.10)		(0.08)		(0.07)		(0.10)	
Total difference	0.82*** (0.19)		0.68***		0.62***		0.79***		0.67***	
_			(0.14)		(0.10)		(0.09)		(0.12)	
_			Decomposition							
	Е	U	Е	U	E	U	Е	U	Е	U
Overall due to:	1.22***	-0.40	0.99***	-0.31	0.70***	-0.08	0.42***	0.37***	0.39***	0.28**
	(0.21)	(0.29)	(0.14)	(0.19)	(0.09)	(0.13)	(0.08)	(0.10)	(0.08)	(0.12)
Financial literacy	0.41***	1.55*	0.32***	1.30**	0.23***	0.51	0.17***	0.18	0.15***	-0.12
	(0.09)	(0.94)	(0.07)	(0.54)	(0.04)	(0.34)	(0.03)	(0.27)	(0.03)	(0.33)
Among which:		. ,	` '	•		•		•		•
Interest rate	0.07*	0.90	0.06**	0.76	0.01	-0.05	0.01	-0.24	-0.00	-0.31
	(0.04)	(88.0)	(0.03)	(0.56)	(0.01)	(0.35)	(0.01)	(0.28)	(0.01)	(0.38)
Inflation	0.10*	0.36	0.10**	0.42	0.06**	0.43*	0.04*	0.31	0.01	0.14
	(0.06)	(0.56)	(0.04)	(0.39)	(0.03)	(0.24)	(0.02)	(0.19)	(0.02)	(0.26)
Risk diversification	0.24***	0.29*	0.16***	0.12	0.15***	0.13	0.13***	0.10	0.14***	0.06
	(0.07)	(0.17)	(0.06)	(0.12)	(0.04)	(0.09)	(0.03)	(0.08)	(0.04)	(0.10)
Other attributes	0.80***	-2.66	0.67***	0.05	0.47***	-0.93	0.24***	0.34	0.23***	-0.94
	(0.18)	(2.90)	(0.13)	(2.06)	(0.09)	(1.42)	(0.07)	(1.20)	(0.07)	(1.59)
Among which:										
Age	0.26***	-0.63	0.14***	-0.72	0.21***	-0.37	0.17***	0.86	0.14***	0.08
	(0.07)	(2.46)	(0.05)	(1.69)	(0.04)	(1.16)	(0.03)	(0.98)	(0.03)	(1.38)
Household size	-0.02	-0.35	-0.00	-0.07	-0.01	-0.10	-0.01	-0.25	-0.00	-0.04
	(0.02)	(0.50)	(0.01)	(0.34)	(0.01)	(0.26)	(0.01)	(0.23)	(0.01)	(0.28)
Education	0.03	-2.26*	0.05**	0.21	0.03**	-0.34	0.04***	-0.57	0.03*	-0.53
	(0.03)	(1.29)	(0.02)	(0.75)	(0.02)	(0.50)	(0.02)	(0.41)	(0.02)	(0.60)
Employment status	0.27*	-0.03	0.26**	-0.06	0.11	-0.05	-0.03	0.06	0.04	-0.03
	(0.16)	(0.27)	(0.11)	(0.18)	(0.07)	(0.13)	(0.06)	(0.11)	(0.06)	(0.12)
IHS income	0.07	0.55	0.05	0.70	0.03	-0.20	0.03	0.20	0.00	-0.55
	(0.05)	(1.16)	(0.04)	(0.80)	(0.02)	(0.51)	(0.02)	(0.44)	(0.03)	(0.55)
Marital status	0.19***	0.06	0.18***	-0.02	0.10***	0.14	0.04	0.04	0.02	0.12
	(0.07)	(0.20)	(0.05)	(0.15)	(0.04)	(0.11)	(0.03)	(0.10)	(0.03)	(0.13)
Year fixed effect	Yes		Yes		Yes		Yes		Yes	
Observations		1718		1718		1718		1718		1718

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of financial wealth at means and across wealth distribution by gender using the selected DNB Household Survey sample waves 2005 and 2010. Total household financial wealth is calculated as a sum of total gross financial wealth of each family member. All the individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns (coefficients) between the two groups. The variables are aggregated as follows. Age group comprises age and age squared. Household size - number of household members. Education - indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment). Employment status group includes indicators for self-employment, unemployment and retirement and other occupation (omitted group is employees). Income is an IHS transformation of gross income of all household's members. Marital status includes indicators for single, widowed and divorced. The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. Robust standard errors are in parenthesis.

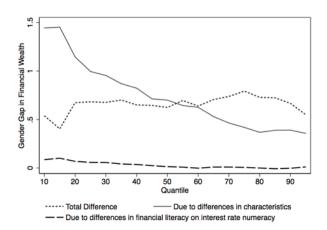
**** p<.01, *** p<.05, * p<.1.

FIGURE 4
Differential in IHS Financial Wealth between Women and Men across Distribution and Its Determinants

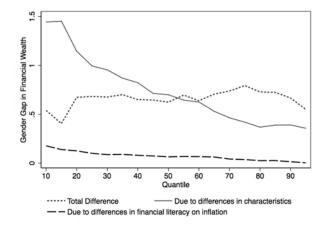
Panel A. Financial literacy overall



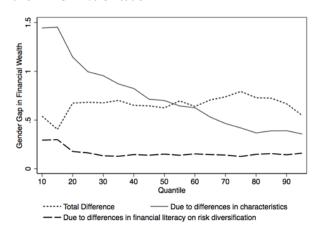
Panel B. Interest rate numeracy



Panel C. Inflation



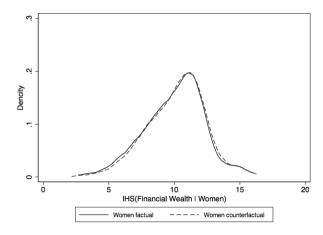
Panel D. Risk Diversification



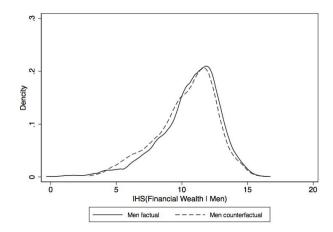
Note: The graphs show the results of the Blinder-Oaxaca decomposition of differences in financial wealth between women and men across the distribution: the total gender differential in IHS financial wealth, the explained part of the difference, i.e. the one that can be attributed to the differences in the observed characteristics, and the contribution of differences in financial knowledge overall (Panel A) and in different areas: interest rate question (Panel B.); inflation question (Panel C.); risk diversification question (Panel D.). Gender and financial literacy are defined as that of a household's financially knowledgeable person. The RIF-regressions and the decomposition results are obtained for quantiles starting from the 10th percentile and each 5th percentile onwards. Data from panels 2005 and 2010 of DNB Household Survey.

FIGURE 5
Factual and Counterfactual Densities of IHS Transformation of Financial Wealth Using RIF-regressions

Panel A. Women's Financial Wealth



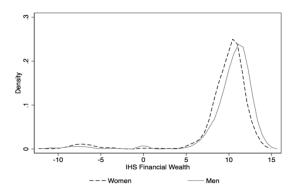
Panel B. Men's Financial Wealth



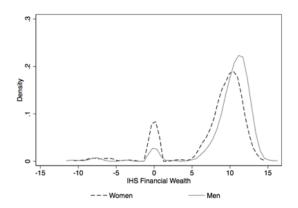
Note: The graphs show kernel density estimates of women's and men's factual and counterfactual IHS financial wealth (bandwidth 0.50). The values of counterfactual financial wealth are obtained by fitting the RIF-regressions at each 5th percentile starting from the 10th by gender and by assigning to women (men) the response rates of men(women) in their corresponding interval of financial wealth distribution defined for groups of 5 percentiles starting from the 10th onwards and keeping the factual coefficients of RIF-regressions. The factual financial wealth is constructed from the fitted values from RIF-regressions. Data from panels 2005 and 2010 of DNB Household Survey.

FIGURE 6
Distribution of IHS Total and Net Financial Wealth of Women and Men

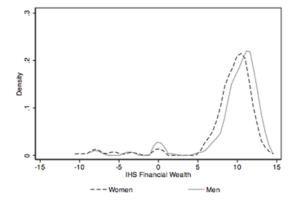
Panel A. Household Total Financial Wealth



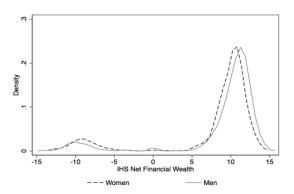
Panel C. Individual Total Financial Wealth



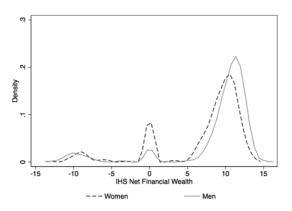
Panel E. Individual Total Financial Wealth (Common Property Regime Excluded)



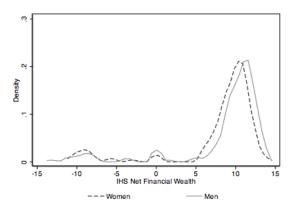
Panel B. Household Net Financial Wealth



Panel D. Individual Net Financial Wealth



Panel F. Individual Net Financial Wealth (Common Property Regime Excluded)



Note: The graphs show kernel density estimates of household and individual IHS total and net financial wealth for women and men (bandwidth 0.50). The gender is defined as a gender of a household FKP (Panels A and B) or as a gender of a respondent (Panels C through F). Data from panels 2005 and 2010 of DNB Household Survey.

Decomposition of IHS Transformation of Financial Wealth
Panel A. Decomposition of IHS Transformation of Total and Net Financial Wealth at Household Level

TABLE 4

-	IHS Total Financial Wealth									
-	Mea		25th Per	centile	Medi	an	75th Per		90th Per	
Men	10.10	***	9.56*		10.86	***	11.85)***)	12.60°	
	(0.11)		(0.09		(0.07)		(0.0)		(0.07	
Women	9.28*	**	8.88*	**	10.24	***	11.06)***)	11.93	***
	(0.15)		(0.10			(0.08)		7)	(0.10	
Total difference	0.82*	**	0.68*		0.62***		0.79***		0.67*	**
	(0.19)	9)	(0.14	ł)	(0.10))	(0.0)	9)	(0.12)	2)
_					Decompo	sition				
<u>-</u>	E	U	E	U	E	U	Е	U	Е	U
Overall due to:	1.22***	-0.40	0.99***	-0.31	0.70***	-0.08	0.42***	0.37***	0.39***	0.28**
	(0.21)	(0.29)	(0.14)	(0.19)	(0.09)	(0.13)	(0.08)	(0.10)	(0.08)	(0.12)
Financial literacy:	,	,	,	,	,	,	,	,	,	,
Interest rate	0.07*	0.90	0.06**	0.76	0.01	-0.05	0.01	-0.24	-0.00	-0.31
interest rate	(0.04)	(0.88)	(0.03)	(0.56)	(0.01)	(0.35)	(0.01)	(0.28)	(0.01)	(0.38)
Inflation	0.10*	0.36	0.10**	0.42	0.06**	0.43*	0.04*	0.31	0.01	0.14
iiiiatioii	(0.06)	(0.56)	(0.04)	(0.39)	(0.03)	(0.24)	(0.02)	(0.19)	(0.02)	(0.26)
Risk diversification	0.24***	0.29*	0.16***	0.12	0.15***	0.13	0.13***	0.10	0.14***	0.06
Nisk diversification	(0.07)	(0.17)	(0.06)	(0.12)	(0.04)	(0.09)	(0.03)	(0.08)	(0.04)	(0.10)
	(0.07)	(0.17)	(0.00)		Net Finan			(0.00)	(0.01)	(0.10)
-	Mea	n	25th Pero				75th Per	centile	90th Per	centile
- Men	Mea 9.00*		25th Pero 9.40*	centile		an			90th Pero 12.59	
Men	9.00*	**	9.40*	centile **	Medi 10.83	an ***	75th Per 11.82)***	12.59	***
Men Women		9)		centile **	Medi	an *** 7)	75th Per	2*** 6)		*** 7)
	9.00* (0.19	*** 9) ***	9.40* (0.11	centile ** l) ***	Medi 10.83 (0.07	an *** 7) ***	75th Per 11.82 (0.0	6) 6***	12.59 ³ (0.07 11.93	*** 7) ***
	9.00* (0.19 7.86*	** 9) *** 1)	9.40* (0.11 8.60*	centile ** 1) **	Medi 10.83 (0.07 10.12	an *** 7) ***	75th Per 11.82 (0.0 11.05	2*** 6) 5*** 7)	12.59 ⁻ (0.07	*** 7) *** 9)
Women	9.00* (0.19 7.86* (0.24	** 9) ** 1) **	9.40* (0.11 8.60* (0.14	centile ** 1) ** 4) **	Medi 10.83 (0.07 10.12 (0.09	an *** 7) *** 9)	75th Per 11.82 (0.0 11.05 (0.0	2*** 6) 5*** 7) ***	12.59 (0.07 11.93 (0.09	*** 7) *** 9)
Women	9.00* (0.19 7.86* (0.24 1.13*	** 9) ** 1) **	9.40* (0.11 8.60* (0.14 0.80*	centile ** 1) ** 4) **	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.11	an *** 7) *** 9) **	75th Per 11.82 (0.0 11.05 (0.0 0.78	2*** 6) 5*** 7) ***	12.59 (0.07 11.93 (0.09 0.66*	*** 7) *** 9) **
Women	9.00* (0.19 7.86* (0.24 1.13*	** 9) ** 1) **	9.40* (0.11 8.60* (0.14 0.80*	centile ** 1) ** 4) **	Medi 10.83 (0.07 10.12 (0.09 0.71*	an *** 7) *** 9) **	75th Per 11.82 (0.0 11.05 (0.0 0.78	2*** 6) 5*** 7) ***	12.59 (0.07 11.93 (0.09 0.66*	*** 7) *** 9) **
Women Total difference -	9.00* (0.19 7.86* (0.24 1.13* (0.33	*** 9) *** 4) *** 1)	9.40* (0.11 8.60* (0.14 0.80* (0.18	centile *** 1) *** 1) *** 2) U	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.11 Decompo	an *** 7) *** 9) *** 1) osition	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0	0*** 6) *** 7) *** 9)	12.59 (0.07 11.93 (0.09 0.66* (0.12	*** 7) *** 9) *** 2) U
Women	9.00* (0.19 7.86* (0.24 1.13* (0.32) E	0) 0) 0) 0) 0) 0) 0 0.52	9.40* (0.11 8.60* (0.14 0.80* (0.18 E	centile *** 1) *** 3) U -0.42*	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12 Decompo E	an **** 7) **** 9) *** 1) ssition U	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E	0:*** 6) *** 7) *** 9) U 0.33***	12.59 (0.07 11.93 (0.09 0.66* (0.12 E	*** 7) *** 9) *** 2) U 0.25**
Women Total difference -	9.00* (0.19 7.86* (0.24 1.13* (0.33	*** 9) *** 4) *** 1)	9.40* (0.11 8.60* (0.14 0.80* (0.18	centile *** 1) *** 1) *** 2) U	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.11 Decompo	an *** 7) *** 9) *** 1) osition	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0	0*** 6) *** 7) *** 9)	12.59 (0.07 11.93 (0.09 0.66* (0.12	*** 7) *** 9) *** 2) U
Women Total difference Overall due to:	9.00* (0.19 7.86* (0.24 1.13* (0.32) E	0) 0) 0) 0) 0) 0) 0 0.52	9.40* (0.11 8.60* (0.14 0.80* (0.18 E	centile *** 1) *** 3) U -0.42*	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12 Decompo E	an **** 7) **** 9) *** 1) ssition U	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E	0:*** 6) *** 7) *** 9) U 0.33***	12.59 (0.07 11.93 (0.09 0.66* (0.12 E	*** 7) *** 9) *** 2) U 0.25**
Women Total difference Overall due to: Financial literacy:	9.00* (0.19) 7.86* (0.24) 1.13* (0.32) E	0) 0) 0) 0) 0) 0.52 0.44)	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17)	ventile ** 1) ** 4) ** 3) U -0.42* (0.25)	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12 Decompo E 0.73*** (0.10)	an *** 7) *** 9) *** U -0.02 (0.13)	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08)	0.33*** (0.11)	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09)	*** 7) *** 9) *** 2) U 0.25** (0.12)
Women Total difference Overall due to: Financial literacy:	9.00* (0.19 7.86* (0.24 1.13* (0.32) E 1.66*** (0.29)	0) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17) 0.06*	ventile ** 1) ** 4) ** 3) U -0.42* (0.25) 1.03	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12) Decompo E 0.73*** (0.10)	an *** 7) **** 9) *** 1) psition U -0.02 (0.13) 0.03	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08)	0.33*** (0.11) -0.31	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09)	*** 7) *** 9) *** 2) U 0.25** (0.12) -0.38
Women Total difference Overall due to: Financial literacy: Interest rate	9.00* (0.19 7.86* (0.24 1.13* (0.32) E 1.66*** (0.29) 0.04 (0.05)	-0.52 (0.44) 0.16 (1.33)	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17) 0.06* (0.03)	Centile ** 1) ** 4) ** 3) U -0.42* (0.25) 1.03 (0.74)	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12) Decompo E 0.73*** (0.10) 0.02 (0.01)	an *** 7) **** 9) *** 1) osition U -0.02 (0.13) 0.03 (0.38)	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08)	0.33*** 0.33*** 0.31 0.29	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09) -0.01 (0.01)	*** 7) *** 9) *** 2) U 0.25** (0.12) -0.38 (0.39)
Women Total difference Overall due to: Financial literacy: Interest rate	9.00* (0.19' 7.86* (0.24' 1.13* (0.32) E 1.66*** (0.29) 0.04 (0.05) 0.17*	*** *** *** *** 1) -0.52 (0.44) 0.16 (1.33) 0.48	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17) 0.06* (0.03) 0.12**	Centile ** 1) ** 3) U -0.42* (0.25) 1.03 (0.74) 0.40	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.11) Decompo E 0.73*** (0.10) 0.02 (0.01) 0.07***	an *** 7) *** 8) *** 1) ** ** ** ** ** ** **	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08) 0.01 (0.01) 0.04*	0.33*** 0.33*** 0.11) 0.34*	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09) -0.01 (0.01) 0.02	*** 7) *** 9) *** 2) U 0.25** (0.12) -0.38 (0.39) 0.22
Women Total difference Overall due to: Financial literacy: Interest rate Inflation	9.00* (0.19' 7.86* (0.24' 1.13* (0.32' E 1.66*** (0.29) 0.04 (0.05) 0.17* (0.09)	*** *** *** *** ** ** ** ** **	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17) 0.06* (0.03) 0.12** (0.05)	Centile ** 1) ** 3) U -0.42* (0.25) 1.03 (0.74) 0.40 (0.50)	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.12 Decompo E 0.73*** (0.10) 0.02 (0.01) 0.07*** (0.03)	an *** 7) *** 8) *** 1) osition U -0.02 (0.13) 0.03 (0.38) 0.44* (0.26)	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08) 0.01 (0.01) 0.04* (0.02)	0.33*** 0.33*** 0.11) 0.34* 0.29) 0.34* 0.20)	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09) -0.01 (0.01) 0.02 (0.02)	*** 7) *** 9) *** 2) 0.25** (0.12) -0.38 (0.39) 0.22 (0.25)
Women Total difference Overall due to: Financial literacy: Interest rate Inflation	9.00* (0.19 7.86* (0.24 1.13* (0.3) E 1.66*** (0.29) 0.04 (0.05) 0.17* (0.09) 0.28**	*** 9) *** 1) -0.52 (0.44) 0.16 (1.33) 0.48 (0.91) 0.55* (0.28)	9.40* (0.11 8.60* (0.14 0.80* (0.18 E 1.22*** (0.17) 0.06* (0.03) 0.12** (0.05) 0.17**	Centile ** 1) ** 4) ** 3) U -0.42* (0.25) 1.03 (0.74) 0.40 (0.50) 0.25 (0.16)	Medi 10.83 (0.07 10.12 (0.09 0.71* (0.11) Decompo E 0.73*** (0.10) 0.02 (0.01) 0.07*** (0.03) 0.15***	an *** 7) *** 8) 9) *** 1) osition U -0.02 (0.13) 0.03 (0.38) 0.44* (0.26) 0.11 (0.10)	75th Per 11.82 (0.0 11.05 (0.0 0.78 (0.0 E 0.44*** (0.08) 0.01 (0.01) 0.04* (0.02) 0.15***	0.33*** (0.11) -0.31 (0.29) 0.34* (0.20) 0.12 (0.08)	12.59 (0.07 11.93 (0.09 0.66* (0.12 E 0.41*** (0.09) -0.01 (0.01) 0.02 (0.02) 0.14***	*** 7) *** 9) *** 2) U 0.25** (0.12) -0.38 (0.39) 0.22 (0.25) 0.06 (0.10)

Panel B. Decomposition of IHS Transformation of Total and Net Financial Wealth at Individual Level

				IHS T	otal Finar	ıcial Wea	ılth			
_	Mea	n	25th Pero		Medi		75th Per	centile	90th Per	
Men	9.82*		9.31		10.81		11.81		12.59	
	(0.16)		(0.1-	-	(0.10		(0.09)		(0.0)	
Women	7.99*	**	7.51	***	9.46*	***	10.77	***	11.68	}** *
	(0.22)		(0.2)		(0.14)		(0.12)		(0.12)	
Total difference	1.82*	**	1.79°	***	1.35***		1.04***		0.91	***
_	(0.28	3)	(0.32)		(0.17	7)	(0.15	5)	(0.1	5)
_					Decompo					
_	Е	U	Е	U	Е	U	Е	U	Е	U
Overall due to:	1.56***	0.27	1.27***	0.52	0.74***	0.61**	0.52***	0.51**	0.20	0.71***
	(0.39)	(0.49)	(0.30)	(0.44)	(0.19)	(0.24)	(0.17)	(0.21)	(0.21)	(0.24)
Financial literacy:										
Interest rate	0.03	-0.39	-0.01	-1.37	0.02	0.52	0.01	0.06	-0.01	-0.11
	(0.04)	(1.06)	(0.04)	(1.06)	(0.02)	(0.56)	(0.02)	(0.38)	(0.02)	(0.44)
Inflation	0.18*	1.30	0.25***	2.31***	0.09**	0.46	0.06**	0.43	0.01	0.06
	(0.10)	(0.82)	(80.0)	(0.78)	(0.04)	(0.39)	(0.03)	(0.28)	(0.03)	(0.30)
Risk diversification	0.33***	0.47*	0.25***	0.36	0.19***	-0.08	0.17***	0.07	0.14***	0.05
	(0.10)	(0.27)	(80.0)	(0.29)	(0.05)	(0.16)	(0.04)	(0.13)	(0.04)	(0.13)
	IHS Net Financial Wealth									<u>.</u>
				1113	Net Fillall	ciai w cai	CII			
<u>-</u>	Mea		25th Pero	centile	Medi	an	75th Per		90th Per	centile
Men -	8.85*	**	25th Pero 9.14*	centile	Medi 10.75	an ***	75th Pero 11.80	***	12.59)***
	8.85* (0.25	** 5)	9.14 [°] (0.1	centile *** 7)	Medi 10.75 (0.10	an ***	75th Pero 11.80 (0.09	*** 9)	12.59 (0.0)*** 9)
Men Women	8.85* (0.25 7.31*	5) ***	9.14° (0.1° 7.06°	centile *** 7) ***	Medi 10.75	an ***	75th Per 11.80 (0.09 10.77	*** 9) ***	12.59 (0.0 11.67)*** 9) _{7***}
Women	8.85* (0.25 7.31* (0.27	** 5) *** 7)	9.14 ³ (0.1 ³ 7.06 ³ (0.3 ³	centile *** 7) *** 7)	Medi 10.75 (0.10 9.38* (0.16	an *** ()) **	75th Per 11.80 (0.09 10.77 (0.12	*** 9) *** 2)	12.59 (0.0 11.67 (0.1	9) 7*** 2)
	8.85* (0.25 7.31* (0.27 1.54*	** 5) ** 7) **	9.14 [*] (0.1 7.06 [*] (0.3 2.08 [*]	centile *** 7) *** 7) ***	Medi 10.75 (0.10 9.38* (0.16 1.37*	an *** 0) *** 6)	75th Perc 11.80 (0.09 10.77 (0.12 1.03*	*** 9) *** 2) **	12.59 (0.0 11.67 (0.1 0.92	9) 7*** 2) ***
Women	8.85* (0.25 7.31* (0.27	** 5) ** 7) **	9.14 ³ (0.1 ³ 7.06 ³ (0.3 ³	centile *** 7) *** 7) ***	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19	an **** 0) *** 6) ***	75th Per 11.80 (0.09 10.77 (0.12	*** 9) *** 2) **	12.59 (0.0 11.67 (0.1	9) 7*** 2) ***
Women	8.85* (0.25 7.31* (0.27 1.54* (0.37	** 5) ** 7) ** 7)	9.14° (0.1° 7.06° (0.3° 2.08° (0.4°	centile *** 7) *** 7) ***	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19	an **** 0) *** 6) *** 9)	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15	*** 9) *** 2) ** 5)	12.59 (0.0 11.67 (0.1 0.92 (0.1)*** 9) 7*** 2) *** 5)
Women	8.85* (0.25 7.31* (0.27 1.54*	** 5) ** 7) **	9.14 [*] (0.1 7.06 [*] (0.3 2.08 [*]	centile *** 7) *** 7) ***	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19	an **** 0) *** 6) ***	75th Perc 11.80 (0.09 10.77 (0.12 1.03*	*** 9) *** 2) **	12.59 (0.0 11.67 (0.1 0.92	9) 7*** 2) ***
Women	8.85* (0.25 7.31* (0.27 1.54* (0.37	** 5) ** 7) ** 7)	9.14° (0.1° 7.06° (0.3° 2.08° (0.4°	centile *** 7) *** 7) ***	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19	an **** 0) *** 6) *** 9)	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15	*** 9) *** 2) ** 5)	12.59 (0.0 11.67 (0.1 0.92 (0.1)*** 9) 7*** 2) *** 5)
Women Total difference -	8.85* (0.25 7.31* (0.27 1.54* (0.37	** 5) ** 7) ** 7)	9.14° (0.1 7.06° (0.3° 2.08° (0.4°	centile *** 7) *** 7) *** 1)	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo	an *** 0) *** 6) ** 9) osition	75th Per 11.80 (0.09 10.77 (0.12 1.03* (0.15	*** 9) *** 2) ** 5)	12.59 (0.0 11.67 (0.1 0.92 (0.1	*** 9) **** 2) *** 5)
Women Total difference -	8.85* (0.25 7.31* (0.27 1.54* (0.37 E	** 5) ** 7) ** 7) U	9.14° (0.1 7.06° (0.3 2.08° (0.4 E	rentile *** 7) *** 7) *** 1) U 0.34	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E	an *** 0) *** 6) *** 9) osition U	75th Per 11.80 (0.09 10.77 (0.12 1.03* (0.15 E	*** 9) **** 2) ** 5) U	12.59 (0.0 11.67 (0.1 0.92 (0.1 E	*** 9) **** 2) *** 5) U
Women Total difference Overall due to:	8.85* (0.25 7.31* (0.27 1.54* (0.37 E	** 5) ** 7) ** 7) U	9.14° (0.1 7.06° (0.3 2.08° (0.4 E	rentile *** 7) *** 7) *** 1) U 0.34	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E	an *** 0) *** 6) *** 9) osition U	75th Per 11.80 (0.09 10.77 (0.12 1.03* (0.15 E	*** 9) **** 2) ** 5) U	12.59 (0.0 11.67 (0.1 0.92 (0.1 E	*** 9) **** 2) *** 5) U
Women Total difference Overall due to: Financial literacy:	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57)	** 5) ** 7) ** 7) U -0.63 (0.70)	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38)	Centile *** 7) **** 1) U 0.34 (0.55)	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20)	an *** 5) 6) *** 9) Disition U 0.56** (0.26)	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15 E	*** 2) *** 5) U 0.49** (0.21)	12.59 (0.0 11.67 (0.1 0.92 (0.1 E	*** 9) '*** 2) *** 5) 0.71*** (0.25)
Women Total difference Overall due to: Financial literacy:	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57)	*** 5) *** 7) U -0.63 (0.70) -0.70	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38)	Centile *** 7) *** 7) *** 1) U 0.34 (0.55) -0.42	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20)	an *** 5) *** 6) *** 9) ** 0.56** (0.26) 0.58	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15 E 0.54*** (0.18)	*** 2) *** 5) U 0.49** (0.21)	12.59 (0.0 11.67 (0.1 0.92 (0.1 E 0.20 (0.22)	*** 9) *** 2) *** 5)
Women Total difference Overall due to: Financial literacy: Interest rate	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57) 0.03 (0.08)	*** 5) *** 7) U -0.63 (0.70) -0.70 (1.61)	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38) 0.02 (0.05) 0.26*** (0.09)	Centile *** 7) **** 1) U 0.34 (0.55) -0.42 (1.43)	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20) 0.02 (0.03) 0.09** (0.04)	an *** 5) *** 6) *** 9) Disition U 0.56** (0.26) 0.58 (0.60)	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15 E 0.54*** (0.18)	*** 2) *** 5) U 0.49** (0.21) 0.05 (0.40)	12.59 (0.0 11.67 (0.1 0.92 (0.1 E 0.20 (0.22) -0.01 (0.02) 0.01 (0.03)	*** 9) *** 2) *** 5) 0.71*** (0.25) -0.11 (0.45) 0.04 (0.31)
Women Total difference Overall due to: Financial literacy: Interest rate	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57) 0.03 (0.08) 0.20	*** 5) *** 7) U -0.63 (0.70) -0.70 (1.61) 1.15	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38) 0.02 (0.05) 0.26***	Centile *** 7) **** 1) U 0.34 (0.55) -0.42 (1.43) 1.67	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20) 0.02 (0.03) 0.09**	an *** 5) *** 6) *** 9) Disition U 0.56** (0.26) 0.58 (0.60) 0.38	75th Per 11.80 (0.09 10.77 (0.12 1.03* (0.15 E 0.54*** (0.18) 0.01 (0.02) 0.06**	*** 2) *** 5) U 0.49** (0.21) 0.05 (0.40) 0.42	12.59 (0.0 11.67 (0.1 0.92 (0.1 E 0.20 (0.22) -0.01 (0.02) 0.01	*** 9) *** 2) *** 5)
Women Total difference Overall due to: Financial literacy: Interest rate Inflation	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57) 0.03 (0.08) 0.20 (0.14)	*** 5) *** 7) U -0.63 (0.70) -0.70 (1.61) 1.15 (1.13)	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38) 0.02 (0.05) 0.26*** (0.09)	Centile *** 7) **** 1) U 0.34 (0.55) -0.42 (1.43) 1.67 (1.01)	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20) 0.02 (0.03) 0.09** (0.04)	an *** 6) *** 6) *** 9) osition U 0.56** (0.26) 0.58 (0.60) 0.38 (0.42)	75th Perc 11.80 (0.09 10.77 (0.12 1.03* (0.15 E 0.54*** (0.18) 0.01 (0.02) 0.06** (0.03)	*** 9) *** 2) ** 5) U 0.49** (0.21) 0.05 (0.40) 0.42 (0.29)	12.59 (0.0 11.67 (0.1 0.92 (0.1 E 0.20 (0.22) -0.01 (0.02) 0.01 (0.03)	*** 9) *** 2) *** 5) 0.71*** (0.25) -0.11 (0.45) 0.04 (0.31)
Women Total difference Overall due to: Financial literacy: Interest rate Inflation	8.85* (0.25 7.31* (0.27 1.54* (0.37 E 2.17*** (0.57) 0.03 (0.08) 0.20 (0.14) 0.43***	*** 5) *** 7) U -0.63 (0.70) -0.70 (1.61) 1.15 (1.13) 0.66* (0.37)	9.14° (0.1 7.06° (0.3 2.08° (0.4 E 1.74*** (0.38) 0.02 (0.05) 0.26*** (0.09) 0.25***	Centile *** 7) **** 1) U 0.34 (0.55) -0.42 (1.43) 1.67 (1.01) 0.37 (0.37)	Medi 10.75 (0.10 9.38* (0.16 1.37* (0.19 Decompo E 0.81*** (0.20) 0.02 (0.03) 0.09** (0.04) 0.18***	an *** 6) 0) 0:** 6) 0:** 0.56** (0.26) 0.58 (0.60) 0.38 (0.42) -0.10 (0.17)	75th Per 11.80 (0.09 10.77 (0.12 1.03* (0.15 E 0.54*** (0.18) 0.01 (0.02) 0.06** (0.03) 0.18***	*** 9) *** 2) *** 5) U 0.49** (0.21) 0.05 (0.40) 0.42 (0.29) 0.08 (0.14)	12.59 (0.0 11.67 (0.1 0.92 (0.1 E 0.20 (0.22) -0.01 (0.02) 0.01 (0.03) 0.14***	*** 9) *** 2) *** 5) U 0.71*** (0.25) -0.11 (0.45) 0.04 (0.31) 0.09 (0.13)

Panel C. Decomposition of IHS Transformation of Total and Net Financial Wealth at Individual Level (Common Property Excluded)

ercentile 12.51*** (0.16) 11.81*** (0.17) 0.70*** (0.23)
(0.16) 11.81*** (0.17) 0.70*** (0.23)
11.81*** (0.17) 0.70*** (0.23)
(0.17) 0.70*** (0.23)
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U
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, ,
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) (0.80)
7 0.68
) (0.54)
1 -0.04
) (0.25)
, (0.23)
ercentile
12.51***
(0.16)
11.81***
(0.17)
0.70***
(0.24)
U
4 0.36
) (0.29)
,
2 -0.54
(0.81)
0.75
(0.55)
1 -0.03
) (0.25)

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of total and net financial wealth at means and across wealth distribution by gender. Total household financial wealth is calculated as a sum of financial assets of all family members (Panel A) and as a sum of financial assets of each respondent (Panels B and C). Net financial wealth is obtained similarly by subtracting short-term debts. The individual characteristics as well as gender and financial literacy indices are defined for household's financially knowledgeable person (Panel A) and for each individual respondent (Panels B and C). Panel A is estimated at a household level on the selected DNB Household Survey waves 2005 and 2010. Panel B and C are estimated at individual level using the selected sample of the wave 2010 for all family types and omitting those who are married under the common property regime respectively. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns (coefficients) between the two groups. Other characteristics included in the decomposition contributing to the explained differences and not shown in the table are the following. Age: age and age squared; household size: number of household members; education: indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment); employment status: indicators for self-employment, unemployment and retirement and other occupation (omitted group is employees); income: IHS transformation of gross income of all household's members (Panel A) and of individual gross income (Panels B and C); marital status: indicators for single, widowed and divorced. Panel A includes year fixed effect. Robust standard errors are in parenthesis and in Panels B and C standard errors are clustered at household level. *** p<.01, ** p<.05, * p<.1.

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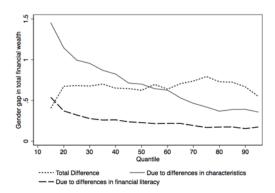
384

Observations

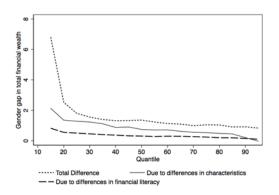
384

FIGURE 7
RIF-decomposition Results of IHS Transformations of Total and Net Financial Wealth by Gender

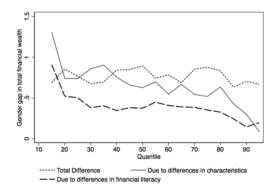
Panel A. Household Total Financial Wealth



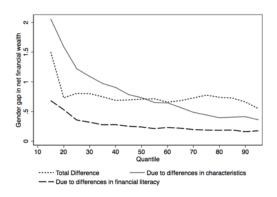
Panel C. Individual Total Financial Wealth



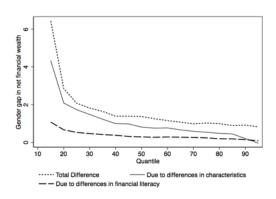
Panel E. Individual Total Financial Wealth (Common Property Regime Excluded)



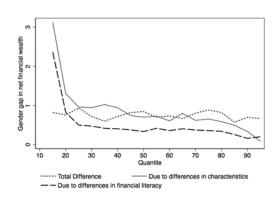
Panel B. Household Net Financial Wealth



Panel D. Individual Net Financial Wealth



Panel F. Individual Net Financial Wealth (Common Property Regime Excluded)



Note: The graphs show the results of the Blinder-Oaxaca decomposition of differences in household and individual gross and net financial wealth between women and men across the distribution: the total gender differential in wealth, the explained part of the difference, i.e. the one that can be attributed to the differences in observed characteristics, and the contribution of differences in financial knowledge overall. Gender and financial literacy are defined as that of a household's financially knowledgeable person (Panels A and B) and for individual respondents (Panels C through F). The RIF-regressions and the decomposition results are obtained for quantiles starting from the 10th percentile and each 5th percentile onwards. Data from panels 2005 and 2010 of DNB Household Survey.

TABLE 5
Decomposition of IHS Transformation of Households Equivalized Total Financial Wealth

	IHS Financial Wealth									
=	Mean		25th Perc	entile	Median	1	75th Per		90th Perc	
Men _	9.76*	**	9.21*	* *	10.51	***	11.52)** *	12.27	***
	(0.11	,	(0.08	,	(0.07	,	(0.0)	,	(0.07)	7)
Women	8.98*		8.54*		9.84*		10.76		11.74	
	(0.15)	(0.11)	(0.08)		(0.07)		(0.13	1)
Total difference	0.78*	**	0.68***		0.68*	**	0.76°	***	0.53*	**
	(0.18	3)	(0.14)	(0.11	.)	(0.0)	9)	(0.13	3)
=					Decompo	sition				
-	Е	U	Е	U	Е	U	Е	U	Е	U
Overall due to:	1.15***	-0.37	0.89***	-0.21	0.64***	0.04	0.37***	0.39***	0.34***	0.19
	(0.20)	(0.28)	(0.13)	(0.18)	(0.10)	(0.13)	(80.0)	(0.11)	(0.09)	(0.13)
Financial literacy	0.41***	1.59*	0.28***	1.18**	0.23***	0.73**	0.18***	0.18	0.18***	-0.13
	(0.09)	(0.91)	(0.06)	(0.53)	(0.04)	(0.36)	(0.04)	(0.28)	(0.04)	(0.34)
Among which:										
Interest rate	0.07*	0.90	0.05*	0.65	0.01	0.10	0.01	-0.27	-0.00	-0.21
	(0.04)	(0.84)	(0.02)	(0.56)	(0.01)	(0.37)	(0.01)	(0.30)	(0.01)	(0.40)
Inflation	0.10*	0.41	0.10**	0.46	0.07***	0.51**	0.03	0.32	0.02	-0.02
	(0.05)	(0.54)	(0.04)	(0.38)	(0.03)	(0.25)	(0.02)	(0.20)	(0.02)	(0.25)
Risk diversification	0.24***	0.28*	0.13**	0.07	0.15***	0.12	0.14***	0.13	0.16***	0.10
	(0.07)	(0.17)	(0.05)	(0.12)	(0.04)	(0.09)	(0.04)	(0.08)	(0.04)	(0.11)
Other attributes	0.73***	-2.67	0.61***	-2.38	0.40***	-0.72	0.18**	1.04	0.16*	-1.12
	(0.18)	(2.79)	(0.12)	(2.02)	(0.09)	(1.47)	(0.08)	(1.23)	(0.08)	(1.68)
Among which:										
Age	0.26***	-0.63	0.14***	-2.47	0.21***	0.01	0.16***	1.04	0.15***	0.24
	(0.07)	(2.36)	(0.05)	(1.66)	(0.04)	(1.19)	(0.03)	(1.01)	(0.04)	(1.50)
Household size	-0.04	-0.32	-0.03	0.05	-0.03*	-0.14	-0.02	0.06	-0.01	-0.16
	(0.02)	(0.48)	(0.02)	(0.36)	(0.02)	(0.27)	(0.01)	(0.22)	(0.01)	(0.27)
Education	0.03	-2.21*	0.04*	0.05	0.05**	-0.44	0.05***	-0.66	0.04**	-0.91
	(0.03)	(1.26)	(0.02)	(0.74)	(0.02)	(0.50)	(0.02)	(0.43)	(0.02)	(0.65)
Employment status	0.26*	-0.03	0.31***	-0.12	0.09	-0.01	-0.04	0.08	0.02	-0.01
	(0.16)	(0.26)	(0.11)	(0.18)	(0.08)	(0.13)	(0.07)	(0.11)	(0.07)	(0.13)
IHS income	0.07	0.45	0.04	-0.03	0.02	-0.29	0.04*	0.33	0.00	-0.39
	(0.05)	(1.12)	(0.04)	(0.79)	(0.02)	(0.53)	(0.02)	(0.44)	(0.03)	(0.57)
Marital status	0.16**	0.07	0.11**	0.15	0.07*	0.16	-0.00	0.18*	-0.04	0.11
	(0.07)	(0.20)	(0.05)	(0.14)	(0.03)	(0.11)	(0.03)	(0.10)	(0.04)	(0.14)
Year fixed effect	Yes		Yes		Yes		Yes		Yes	
Observations	1718	3	1718	3	1718	3	171	.8	171	8

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of equivalized total financial wealth of a household at means and across wealth distribution by gender using the selected DNB Household Survey sample waves 2005 and 2010. Total household financial wealth is calculated as a sum of total gross financial wealth of each family member. It is equivalized using the square root equivalence scale. All the individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns, i.e. coefficients, between the two groups. The variables are aggregated as follows. Age group comprises age and age squared. Household size - number of household members. Education - indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment). Employment status group includes indicators for self-employment, unemployment, retirement, and other occupation (omitted group is employees). Income is an IHS transformation of gross income of all household's members. Marital status includes indicators for single, widowed and divorced. The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. Robust standard errors are in parenthesis.

^{***} p<.01, ** p<.05, * p<.1.

TABLE 6
Descriptive Statistics by Gender and Marital Status from DNB Household Survey, Panels 2005 and 2010

Panel A. Household Financial Wealth, Income and Financial Literacy of Couples and Singles

	In Part	nership	Sin	igle
	Men	Women	Men	Women
Financial wealth (€)	67,181.34	37,644.52	50,869.18	26,448.92
Net financial wealth (€)	63,722.09	34,124.52	47,209.02	25,614.37
Income (€)	46,358.56	35,142.68	38,006.32	28,080.83
Financial literacy, % answered correctly				
Interest rate	0.95	0.91	0.95	0.89
Inflation	0.90	0.81	0.92	0.80
Risk diversification	0.70	0.45	0.65	0.40
Observations	768	431	244	275

Panel B. Household Financial Wealth, Income and Financial Literacy of Couples by Marital Status

		with Common erty Regime		rried with ge Settlement	Living with a Partne (Not Married)		
-	Men	Women	Men	Women	Men	Women	
Financial wealth (€)	69,355.96	33,319.70	80,293.08	91,238.38	36,448.74	18,263.89	
Net financial wealth (€)	66,845.60	29,663.10	68,736.82	89,115.35	34,779.53	14,375.68	
Income (€)	45,620.89	32,836.39	54,980.04	51,847.23	42,407.49	34,599.58	
Financial literacy, % answered correctly							
Interest rate	0.95	0.91	0.94	0.94	0.94	0.91	
Inflation	0.89	0.80	0.95	0.87	0.91	0.81	
Risk diversification	0.70	0.42	0.73	0.57	0.69	0.47	
Observations	600	327	88	47	80	57	

Panel C. Household Financial Wealth, Income and Financial Literacy of Singles by Marital Status

		Divorced	ı	Vidowed	Neve	r Married
	Men	Women	Men	Women	Men	Women
Financial wealth (€)	42,320.61	26,686.14	92,491.71	31,749.44	43,746.20	24,083.31
Net financial wealth (€)	35,929.35	25,456.43	92,283.06	31,745.60	40,073.15	23,152.25
Income (€)	38,237.04	26,340.11	35,276.97	24,918.98	38,567.65	30,506.39
Financial literacy, % answered correctly						
Interest rate	0.87	0.89	0.95	0.86	0.97	0.90
Inflation	0.96	0.79	0.86	0.79	0.93	0.81
Risk diversification	0.54	0.38	0.68	0.41	0.68	0.41
Observations	46	85	37	56	161	134

Note: The table reports descriptive statistics by marital status for the selected DNB Household Survey sample for waves 2005 and 2010. Gross and net financial wealth and income are defined at the household level. Financial literacy is that of the household's financially knowledgeable person (FKP).

TABLE 7
Decomposition of Households' Total Financial Wealth by Marital Status

Panel A. Decomposition of IHS Transformation of Total Financial Wealth at Household Level for Couples

				I	HS Financia	l Wealth				
	Mear		25th Perc		Mediar		75th Per		90th Perc	
Men	10.28		9.78*		10.98		11.90	***	12.63	
	(0.13		(0.09		(0.07	')	(0.0)	7)	(0.07	')
Women	9.50*	**	9.19*		10.36*		11.16		12.05	
	(0.19)	(0.14	ł)	(0.09)	(0.0)	8)	(0.13	5)
Total difference	0.78*	**	0.58***		0.62*	**	0.75	* **	0.57*	**
	(0.23	3)	(0.16	5)	(0.12	2)	(0.1	1)	(0.15	5)
_		Decomposition				sition				
	Е	U	Е	U	Е	U	Е	U	Е	U
Overall due to:	1.37***	-0.59	0.98***	-0.39*	0.75***	-0.12	0.45***	0.30**	0.50***	0.07
	(0.29)	(0.39)	(0.17)	(0.23)	(0.13)	(0.16)	(0.11)	(0.13)	(0.10)	(0.15)
Financial literacy	0.36***	0.39	0.24***	0.58	0.18***	0.69*	0.13***	0.13	0.15***	-0.05
	(0.09)	(1.25)	(0.07)	(0.65)	(0.05)	(0.39)	(0.04)	(0.34)	(0.04)	(0.42)
Among which:										
Interest rate	0.04	0.01	0.03	0.15	0.01	0.25	0.00	-0.25	-0.01	-0.29
	(0.04)	(1.12)	(0.02)	(0.65)	(0.01)	(0.40)	(0.01)	(0.35)	(0.01)	(0.46)
Inflation	0.09	-0.12	0.09**	0.41	0.06**	0.32	0.02	0.31	0.00	0.18
	(0.06)	(0.67)	(0.04)	(0.44)	(0.03)	(0.26)	(0.02)	(0.23)	(0.02)	(0.32)
Risk diversification	0.22***	0.49**	0.12**	0.01	0.12***	0.12	0.11***	0.08	0.15***	0.07
	(0.08)	(0.22)	(0.06)	(0.15)	(0.04)	(0.11)	(0.04)	(0.10)	(0.04)	(0.13)
Other attributes	1.00***	-2.24	0.73***	-4.80*	0.55***	-0.27	0.30***	2.13	0.33***	0.28
	(0.27)	(3.94)	(0.16)	(2.52)	(0.12)	(1.70)	(0.10)	(1.56)	(0.09)	(2.28)
Among which:										
Age	0.28***	-0.91	0.21**	-5.34**	0.27***	0.30	0.20***	2.28*	0.16***	1.47
	(0.11)	(3.52)	(0.08)	(2.12)	(0.07)	(1.40)	(0.05)	(1.27)	(0.05)	(2.04)
Household size	0.03	-0.34	0.00	0.38	0.02	-0.28	0.01	-0.42	0.00	-0.11
	(0.03)	(0.76)	(0.01)	(0.52)	(0.01)	(0.36)	(0.01)	(0.33)	(0.01)	(0.48)
Education	0.01	-1.91	0.04	0.28	0.06**	-0.27	0.08***	-0.40	0.06**	-0.74
	(0.04)	(1.53)	(0.03)	(0.90)	(0.03)	(0.54)	(0.03)	(0.45)	(0.03)	(0.73)
Employment status	0.50**	-0.25	0.38***	-0.28	0.14	-0.13	-0.06	0.17	0.07	-0.15
	(0.24)	(0.38)	(0.15)	(0.24)	(0.10)	(0.16)	(0.09)	(0.15)	(0.08)	(0.18)
IHS income	0.17*	1.14	0.09	0.22	0.05	0.09	0.06*	0.46	0.04	-0.12
	(0.10)	(1.29)	(0.06)	(0.83)	(0.04)	(0.52)	(0.04)	(0.46)	(0.04)	(0.56)
Marital status	0.00	0.04	0.00	-0.06	0.01	0.01	0.00	0.05	0.00	-0.07
	(0.01)	(0.16)	(0.01)	(0.10)	(0.01)	(0.07)	(0.01)	(0.06)	(0.01)	(0.10)
Year fixed effect	Yes	1	Yes	S	Yes		Yes		Yes	
Observations	1199	9	1199	9	1199	9	119	9	1199	

Panel B. Decomposition of IHS Transformation of Total Financial Wealth at Household Level for Singles

	IHS Financial Wealth									
•	Me	an	25th Pei	rcentile	Media	n	75th Per	centile	90th Per	centile
Men	9.53	***	8.83**	**	10.50	***	11.59*	**	12.45*	**
	(0.2		(0.24	ł)	(0.1	,	(0.15)	5)	(0.16)	
Women	8.92	***	8.57**	*	9.81	***	10.85*	**	11.84*	* *
	(0.2		(0.16)		(0.1		(0.13		(0.16)	
Total difference	0.6		0.26		0.70		0.73**	**	0.61*	
	(0.3	36)	(0.29))	(0.2	23)	(0.20	0)	(0.23	3)
•					Decompo					
	Е	U	Е	U	Е	U	Е	U	Е	U
Overall due to:	0.75*	-0.15	0.70**	-0.45	0.32	0.38	0.32*	0.41*	0.25	0.36
	(0.40)	(0.54)	(0.34)	(0.43)	(0.21)	(0.29)	(0.16)	(0.21)	(0.18)	(0.24)
Financial literacy	0.56**	3.70**	0.43**	2.40**	0.37***	1.48**	0.34***	0.66	0.21**	0.03
	(0.24)	(1.62)	(0.18)	(1.18)	(0.12)	(0.71)	(0.09)	(0.43)	(0.08)	(0.47)
Among which:										
Interest rate	0.12	2.33	0.11	1.93	0.08*	0.93	0.03	-0.18	0.01	-0.23
	(0.10)	(1.58)	(0.08)	(1.23)	(0.05)	(0.72)	(0.02)	(0.42)	(0.02)	(0.48)
Inflation	0.18	1.35	0.09	0.30	0.02	0.37	0.10**	0.57*	0.05	0.14
	(0.17)	(1.22)	(0.13)	(0.92)	(0.08)	(0.62)	(0.05)	(0.34)	(0.06)	(0.44)
Risk diversification	0.26*	0.03	0.24*	0.18	0.26***	0.18	0.21***	0.26*	0.16*	0.13
	(0.15)	(0.29)	(0.15)	(0.26)	(0.10)	(0.19)	(0.08)	(0.15)	(0.08)	(0.17)
Other attributes	0.24	-7.78	0.30	1.51	-0.04	-2.45	-0.01	-4.55*	0.04	-2.83
	(0.33)	(6.27)	(0.28)	(4.82)	(0.17)	(3.80)	(0.13)	(2.72)	(0.14)	(2.74)
Among which:										
Age	0.01	1.47	0.05	4.70	0.04	0.42	0.01	-0.28	-0.01	-1.80
	(0.11)	(4.39)	(0.05)	(3.71)	(0.04)	(2.46)	(0.06)	(2.01)	(80.0)	(2.45)
Household size	-0.04	0.57	0.02	-0.23	-0.05	0.51	-0.04	0.42	-0.05	0.52
	(0.07)	(0.89)	(0.08)	(0.78)	(0.05)	(0.51)	(0.05)	(0.49)	(0.07)	(0.68)
Education	-0.02	-4.31**	-0.01	-0.47	0.02	-1.54*	-0.02	-1.32	0.07	1.19
	(0.05)	(2.01)	(0.06)	(1.47)	(0.05)	(0.93)	(0.04)	(1.23)	(0.05)	(1.11)
Employment status	0.06	0.03	0.22	-0.11	-0.02	0.11	0.04	-0.14	-0.02	-0.10
	(0.24)	(0.45)	(0.22)	(0.37)	(0.12)	(0.24)	(0.09)	(0.19)	(0.09)	(0.21)
IHS income	0.00	-4.62	-0.00	-2.27	-0.00	-2.00	-0.00	-3.14*	0.00	-2.61
	(0.00)	(4.39)	(0.00)	(2.99)	(0.00)	(3.11)	(0.00)	(1.85)	(0.02)	(1.78)
Marital status	0.23	-0.91	0.02	-0.10	-0.03	0.05	-0.00	-0.08	0.04	-0.03
V C 1 CC .	(0.17)	(0.61)	(0.12)	(0.43)	(0.09)	(0.34)	(0.08)	(0.29)	(0.07)	(0.33)
Year fixed effect		es .		es	Yes		Yes		Yes	
Observations	5	19	5	19	519		519)	519	

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of total financial wealth of a household at means and across wealth distribution for couples and singles by gender using the selected DNB Household Survey sample waves 2005 and 2010. Total household financial wealth is calculated as a sum of total gross financial wealth of each family member. All the individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns, i.e. coefficients, between the two groups. The variables are aggregated as follows. Age group comprises age and age squared. Household size - number of household members. Education - indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment). Employment status group includes indicators for self-employment, unemployment and retirement and other occupation (omitted group is employees). Income is an IHS transformation of gross income of all household's members. Marital status includes: Panel A: indicators for married under marriage settlement or not married living with a partner (omitted group married under common property regime); and Panel B: indicators for widowed and divorced (omitted group never married). The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. Robust standard errors are in parenthesis. *** p<.01, ** p<.05, * p<.1.

TABLE 8
Decomposition of Poverty Indicators by Gender

				Poverty N	leasures				
			financial we				to income:		
		al wealth < 3 gross income		wealth < 60% nancial wealth		ome < 60% ross income	Subjectivis less th	ve: net income an sufficient	
Men		.29***		0.34***		.5***).35***	
	(0.01)		(0.01)	(0.01)			(0.02)	
Women		.34***		0.46*** 0.31***			0.41***		
	(0.02)		(0.02)	(0	.02)	(0.02)		
Total difference	-().05**	-	-0.12***	-0.1	16***	-(0.07***	
	(0.02)		(0.02)	(0	.02)		(0.02)	
		•		Decomp	osition	•			
	Е	U	Е	U	Е	U	Е	U	
Overall due to:	-0.12***	0.07**	-0.16***	0.04	-0.10***	-0.06**	-0.01	-0.05	
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	
Financial literacy	-0.05***	-0.13	-0.05***	-0.23***	-0.02**	-0.10	-0.00	-0.06	
·	(0.01)	(80.0)	(0.01)	(80.0)	(0.01)	(80.0)	(0.01)	(0.09)	
Among which:	,	,		,	,	,	,	,	
Interest rate	-0.00	-0.02	-0.01**	-0.12	-0.01*	-0.09	-0.00	-0.06	
	(0.00)	(0.08)	(0.00)	(0.09)	(0.00)	(80.0)	(0.00)	(0.09)	
Inflation	-0.02***	-0.10*	-0.01**	-0.10*	-0.00	-0.01	0.00	-0.03	
	(0.01)	(0.06)	(0.01)	(0.06)	(0.00)	(0.05)	(0.01)	(0.06)	
Risk diversification	-0.02***	-0.01	-0.02***	-0.00	-0.01	0.01	-0.00	0.02	
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	
Other attributes	-0.08***	-0.11	-0.11***	0.35	-0.09***	-0.03	-0.02	0.22	
	(0.02)	(0.33)	(0.02)	(0.34)	(0.02)	(0.27)	(0.02)	(0.34)	
Among which:									
Age		-0.14	-0.04***	0.22	0.01	0.20	0.02**	0.08	
	(0.01)	(0.28)	(0.01)	(0.28)	(0.01)	(0.24)	(0.01)	(0.30)	
Household size	0.00	0.03	0.00	0.05	0.00	-0.01	0.00	0.11*	
	(0.00)	(0.06)	(0.00)	(0.06)	(0.00)	(0.05)	(0.00)	(0.06)	
Education	-0.01	0.04	-0.01***	0.04	-0.01***	-0.23**	0.00	-0.09	
	(0.00)	(0.12)	(0.00)	(0.12)	(0.00)	(0.12)	(0.00)	(0.12)	
Employment status	-0.04**	0.02	-0.04**	0.01	-0.08***	0.03	-0.05***	0.05	
	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	
IHS income		-0.03	-0.00	0.05					
	(0.00)	(0.07)	(0.01)	(0.13)					
Marital status	-0.02**	-0.03	-0.02***	-0.02	-0.00	-0.01	0.01	0.07***	
V C 1 CC .	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)	(0.02)	(0.01)	(0.03)	
Year fixed effect		Yes		Yes		Yes		Yes	
Observations	-	1718		1718	1'	718		1625	

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of poverty measures at means by gender using the selected DNB Household Survey sample waves 2005 and 2010. Household total financial wealth is calculated as a sum of total gross financial wealth of each family member. Total households' gross income is a sum of all income components of all household's members. The poverty indicators are binary variables taking value 1 if: total financial wealth of a household is less than three-months gross income; total financial wealth of the household is less than 60% of the median financial wealth; total gross income of the household is less than 60% of the median gross income; total households' net income is less the self-assessed sufficient level of income. The medians are defined over all population for each specific year. All individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns (coefficients) between the two groups. The variables are aggregated as follows. Age group comprises age and age squared. Household size number of household members. Education - indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment). Employment status group includes indicators for self-employment, unemployment, retirement, and other occupation (omitted group is employees). Income is an IHS transformation of gross income of all household's members. Income is omitted from the set of covariates of poverty measures related to income. Marital status includes indicators for single, widowed and divorced. The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. The difference in the number of observations is due to missing values for the subjective level of sufficient income. Robust standard errors are in parenthesis. *** p<.01, ** p<.05, * p<.1.

TABLE 9
Analysis of differences in Total Net Wealth (Including Real Estate Wealth Net of Mortgages) by Gender

Panel A. OLS and Unconditional Quantile (RIF) Regressions of IHS Households Total Net Wealth by Gender

			Men					Women	l	
	Mean	25th	Median	75th	90th	Mean	25th	Median	75th	90th
Financial literacy:										
Interest Rate	1.06	0.62	0.07	0.20	-0.04	-0.39	-1.08	0.37	0.40	0.29
	(0.82)	(0.77)	(0.26)	(0.17)	(0.18)	(0.82)	(0.82)	(0.37)	(0.30)	(0.20)
Inflation	0.13	1.21**	0.10	0.05	0.03	1.09*	1.41**	0.03	0.06	0.13
	(0.56)	(0.58)	(0.19)	(0.13)	(0.13)	(0.64)	(0.67)	(0.27)	(0.23)	(0.17)
Risk Diversification	0.94**	1.39***	0.41***	0.32***	0.33***	0.11	0.12	0.65***	0.58***	0.28
	(0.37)	(0.31)	(0.11)	(80.0)	(0.07)	(0.45)	(0.47)	(0.22)	(0.20)	(0.18)
Other control:	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1075	1075	1075	1075	1075	764	764	764	764	764
R-squared	0.17	0.21	0.22	0.19	0.11	0.12	0.10	0.17	0.21	0.11
Dependent variable:	10.93***	11.06***	12.63***	13.31***	13.77***	8.50***	8.58***	10.55***	12.21***	13.14***
IHS total net wealth (including real wealth net of mortgages):	(0.16)	(0.14)	(0.05)	(0.04)	(0.04)	(0.22)	(0.24)	(0.11)	(0.11)	(0.09)

Panel B. Decomposition of IHS Households Total Net Wealth at Household Level

Tuner B. Decomposition		IHS total net wealth (including real wealth net of mortgages)									
	Mea	an	25th pe	rcentile	Med	ian	75th pe	rcentile	90th pe	rcentile	
Men	10.93	3***	11.0	6***	12.63	3***	13.3	1***	13.7	7***	
	(0.1	.6)	(0.14)		(0.05)		(0.	(0.04)		04)	
Women	8.50	***	8.58	3***	10.5	5***	12.2	1***	13.1	4***	
	(0.2	:2)	(0.2	24)	(0.1	.1)	(0.	11)	(0.	09)	
Total difference	2.43	***	2.48	3***	2.08	***	1.09	9***	0.6	3***	
_	(0.2	:7)	(0.2	28)	(0.1	.2)	(0.	11)	(0.	10)	
_					Dece	omposition	1				
_	E	U	E	U	E	U	E	U	E	U	
Overall due to:	1.64***	0.79**	1.87***	0.61*	0.66***	1.42***	0.44***	0.65***	0.29***	0.33***	
	(0.25)	(0.39)	(0.21)	(0.34)	(0.07)	(0.13)	(0.05)	(0.11)	(0.05)	(0.10)	
Financial literacy	0.31***	0.90	0.52***	1.92**	0.12***	-0.31	0.10***	-0.30	0.09***	-0.36	
	(0.10)	(0.99)	(0.10)	(0.98)	(0.03)	(0.40)	(0.02)	(0.32)	(0.02)	(0.26)	
Among which:											
Interest rate	0.05	1.31	0.03	1.54	0.00	-0.26	0.01	-0.19	-0.00	-0.30	
	(0.04)	(1.05)	(0.03)	(1.02)	(0.01)	(0.40)	(0.01)	(0.31)	(0.01)	(0.24)	
Inflation	0.01	-0.77	0.13**	-0.16	0.01	0.05	0.01	-0.01	0.00	-0.08	
	(0.06)	(0.68)	(0.06)	(0.71)	(0.02)	(0.27)	(0.01)	(0.21)	(0.01)	(0.17)	
Risk diversification	0.25**	0.36	0.36***	0.54**	0.11***	-0.10	0.08***	-0.11	0.09***	0.02	
	(0.10)	(0.25)	(0.09)	(0.24)	(0.03)	(0.10)	(0.02)	(0.09)	(0.02)	(80.0)	
Other attributes	1.34***	3.77	1.35***	7.51*	0.54***	-1.34	0.34***	-4.72***	0.20***	-2.41**	
	(0.24)	(4.35)	(0.19)	(4.06)	(0.07)	(1.53)	(0.05)	(1.38)	(0.05)	(1.18)	
Year fixed effect	Ye		Ye		Ye			es	Yes		
Observations	183	39	18	39	183	39	18	39	18	39	

Note: Panel A reports the results of the OLS and RIF, or unconditional quantile, regressions of IHS transformation of households' total net wealth (including real estate wealth net of mortgages) by gender using the selected DNB Household Survey sample waves 2005 and 2010. Panel B reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of households' total net wealth at means and across wealth distribution by gender using the same sample. Household total net wealth is calculated as a sum of total net wealth of each family member. The total net wealth is a sum of net financial wealth and net real wealth. Net financial wealth is calculated as a sum of financial assets net of short term-debts. Similarly, net real wealth is defined as a sum of real assets net of outstanding mortgages. All the individual characteristics as well as financial literacy indices are defined for household's financially knowledgeable person. Other control (or attributes) in Panel A (or B) include: age and age squared; household size (number of household members); indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment); indicators for self-employment, unemployment and retirement and other occupation (omitted group is employees); income, defined as an IHS transformation of gross income; indicators for single, widowed and divorced. The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. Robust standard errors are in parenthesis. In Panel B, E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns, i.e. coefficients, between the two groups. Robust standard errors are in parenthes

TABLE 10 Distribution of answers on financial literacy questions

Panel A. Distribution by gender and across DNB Household Survey Panels 2005 and 2010

	Overall acros	s 2005 and 2010	Pan	el 2005	Pan	el 2010
	Men	Women	Men	Women	Men	Women
Interest rate:						
Correct	0.95	0.90	0.95	0.92	0.93	0.87
Incorrect	0.03	0.05	0.03	0.05	0.02	0.05
Refused to answer	0	0	0	0	0	0.01
Don't know	0.02	0.05	0.01	0.03	0.04	0.07
Inflation:						
Correct	0.90	0.80	0.91	0.82	0.89	0.78
Incorrect	0.06	0.09	0.05	0.09	0.06	0.10
Refused to answer	0	0	0.01	0	0	0.01
Don't know	0.04	0.10	0.03	0.08	0.05	0.12
Risk diversification:						
Correct	0.69	0.43	0.67	0.39	0.72	0.48
Incorrect	0.15	0.21	0.2	0.27	0.09	0.12
Refused to answer	0.01	0.01	0.01	0	0	0.01
Don't know	0.15	0.36	0.12	0.34	0.19	0.38
Overall:						
Interest rate and inflation correct	0.88	0.77	0.89	0.78	0.88	0.74
All answers correct	0.65	0.36	0.63	0.32	0.67	0.4
At least one refused to answer	0.01	0.01	0.01	0	0.01	0.01
At least one don't know	0.16	0.39	0.14	0.37	0.2	0.41
Number of observations	1012	706	567	416	445	290

Panel B. Distribution by gender and across financial wealth distribution

• •	< 25th	≥25th & < 50th	≥50th & <75th	≥75th & > 90th	≥90th
			Men		
Interest rate:					
Correct	0.87	0.98	0.96	0.98	0.96
Incorrect	0.06	0	0.02	0.01	0.03
Don't know or refused to answer	0.07	0.02	0.02	0.01	0.01
Inflation:					
Correct	0.80	0.91	0.94	0.97	0.95
Incorrect	0.12	0.04	0.04	0.01	0.04
Don't know or refused to answer	80.0	0.04	0.03	0.02	0.01
Risk diversification:					
Correct	0.55	0.68	0.73	0.78	0.87
Incorrect	0.16	0.16	0.16	0.16	0.08
Don't know or refused to answer	0.29	0.17	0.11	0.06	0.05
Overall:					
Interest rate and inflation correct	0.76	0.91	0.92	0.96	0.92
All answers correct	0.47	0.65	0.69	0.76	0.81
At least one don't know or refused to answer	0.31	0.17	0.13	0.07	0.05
			Women		
Interest rate:					
Correct	0.85	0.90	0.91	0.95	0.96
Incorrect	0.07	0.06	0.05	0.01	0.01
Don't know or refused to answer	0.08	0.04	0.05	0.04	0.03
Inflation:					
Correct	0.71	0.82	0.84	0.85	0.87
Incorrect	0.12	0.09	0.08	0.1	0.07
Don't know or refused to answer	0.18	0.1	0.08	0.05	0.06
Risk diversification:					
Correct	0.31	0.40	0.46	0.49	0.61
Incorrect	0.26	0.22	0.16	0.23	0.14
Don't know or refused to answer	0.43	0.38	0.38	0.28	0.24
Overall:					
Interest rate and inflation correct	0.65	0.78	0.8	0.84	0.84
All answers correct	0.22	0.34	0.39	0.42	0.57
At least one don't know or refused to answer	0.48	0.4	0.4	0.31	0.24
Note: Panels A and B report distribution of answ					

Note: Panels A and B report distribution of answers about financial literacy given by FKPs in the selected DNB Household Survey sample waves 2005 and 2010.

TABLE 11
OLS and Unconditional Quantile (RIF) Regressions and Decomposition of IHS Households Total Financial Wealth by Gender Using Alternative Measures of Financial Literacy

Panel A. Financial literacy measured by total number of correct answers to three financial literacy questions *OLS and Unconditional Quantile (RIF) Regressions*

			Men					Women		
	Mean	25th	Median	75th	90th	Mean	25th	Median	75th	90th
Total number of correct answers	1.08***	0.87***	0.54***	0.38***	0.31***	0.43*	0.42***	0.24***	0.19**	0.23**
	(0.22)	(0.13)	(0.09)	(0.07)	(0.07)	(0.22)	(0.13)	(0.09)	(0.07)	(0.11)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1012	1012	1012	1012	1012	706	706	706	706	706
R-squared	0.12	0.13	0.13	0.10	0.05	0.11	0.14	0.19	0.13	0.08
DV:	10.10***	9.56***	10.86***	11.85***	12.60***	9.28***	8.88***	10.24***	11.06***	11.93***
IHS Financial Wealth	(0.11)	(0.09)	(0.07)	(0.06)	(0.07)	(0.15)	(0.10)	(0.08)	(0.07)	(0.10)

Detailed	Rlinder-	Oaxaca	decomr	nosition

					IHS Fir	ancial Wea	lth			
	Me	an	25th per	rcentile	Med	lian	75th per	centile	90t	h percentile
Men	10.1	0***	9.56	9.56***		10.86***		5***	12.60***	
	(0.3	(0.11)		19)	(0.0)7)	(0.0	06)		(0.07)
Women	9.28	3***	8.88	***	10.2	4***	11.0	5***		11.93***
	(0.3	15)	(0.1	10)	(0.0)8)	(0.0	17)		(0.10)
Total difference	0.82	2***	0.68	***	0.62	***	0.79	***		0.67***
	(0.3	19)	(0.1	14)	(0.3	10)	(0.0	19)		(0.12)
			-		Dec	omposition	1			
	E	U	Е	U	Е	U	Е	U	Е	U
Overall due to:	1.24***	-0.42	1.03***	-0.35*	0.69***	-0.07	0.40***	0.39***	0.36***	0.31**
	(0.21)	(0.30)	(0.14)	(0.19)	(0.09)	(0.12)	(0.08)	(0.10)	(80.0)	(0.12)
Financial literacy:	0.44***	1.38**	0.35***	0.95**	0.22***	0.65**	0.15***	0.42*	0.13***	0.17
Total number of	(0.10)	(0.66)	(0.06)	(0.39)	(0.04)	(0.27)	(0.03)	(0.22)	(0.03)	(0.28)
correct answers										
Other attributes	0.80***	-2.59	0.68***	0.08	0.46***	-0.92	0.24***	0.35	0.23***	-1.00
	(0.19)	(2.90)	(0.13)	(2.06)	(0.09)	(1.42)	(0.07)	(1.20)	(0.07)	(1.59)
Observations	17	18	17	18	17	18	17	18		1718

Panel B. Financial literacy measured by the indicator if all three given answers are correct *OLS and Unconditional Quantile (RIF) Regressions*

			Men			Women					
-	Mean	25th	Median	75th	90th	Mean	25th	Median	75th	90th	
All answers are correct (=1)	1.21***	1.07***	0.75***	0.57***	0.49***	0.54*	0.53***	0.36**	0.29**	0.53**	
	(0.26)	(0.19)	(0.14)	(0.12)	(0.13)	(0.32)	(0.20)	(0.16)	(0.14)	(0.21)	
Other controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Constant	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Observations	1012	1012	1012	1012	1012	706	706	706	706	706	
R-squared	0.12	0.13	0.13	0.10	0.05	0.11	0.14	0.19	0.13	0.08	
DV:	10.10***	9.56***	10.86***	11.85***	12.60***	9.28***	8.88***	10.24***	11.06***	11.93***	
IHS Financial Wealth	(0.11)	(0.09)	(0.07)	(0.06)	(0.07)	(0.15)	(0.10)	(0.08)	(0.07)	(0.10)	

Detailed Blinder-Oaxaca decomposition

					IHS Fir	ancial Wea	lth				
	Me	Mean 25th percentile				Median 75th per			centile 90th percentile		
Men	10.1	0***	9.56	***	10.86***		11.85***		12.60***		
	(0.3	11)	(0.0)	19)	(0.0	07)	(0.0)6)	(0.07)		
Women	9.28	3***	8.88	***	10.2	4***	11.0	6***	1	l1.93***	
	(0.3	15)	(0.1	10)	(0.0	08)	(0.0)7)		(0.10)	
Total difference	0.82	***	0.68	***	0.62)***	0.79	***		0.67***	
	(0.19)		(0.1	14)	(0.10)		(0.0	(0.09)		(0.12)	
					Dec	omposition	1		•		
	Е	U	E	U	Е	U	Е	U	E	U	
Overall due to:	1.18***	-0.36	1.01***	-0.32*	0.70***	-0.07	0.42***	0.37***	0.38***	0.29**	
	(0.21)	(0.30)	(0.14)	(0.20)	(0.09)	(0.13)	(0.08)	(0.10)	(0.09)	(0.12)	
Financial literacy:	0.35***	0.24	0.31***	0.19*	0.22***	0.14*	0.17***	0.10	0.14***	-0.01	
All answers are	(0.08)	(0.15)	(0.06)	(0.10)	(0.04)	(0.07)	(0.04)	(0.07)	(0.04)	(0.09)	
correct (=1)											
Other attributes	0.83***	-2.37	0.31***	0.19*	0.22***	0.14*	0.17***	0.10	0.14***	-0.01	
	(0.19)	(2.90)	(0.06)	(0.10)	(0.04)	(0.07)	(0.04)	(0.07)	(0.04)	(0.09)	
Observations	17	18	171	18	17	18	17	18		1718	

Panel C. Financial literacy: controlling for don't know or refused answers *OLS and Unconditional Quantile (RIF) Regressions*

·			Men		·		Women	1		
	Mean	25th	Median	75th	90th	Mean	25th	Median	75th	90th
Financial literacy: corr	ect answers									
Interest Rate	2.64**	1.82***	0.47	0.28	-0.10	0.93	0.57	0.67**	0.68***	0.53
	(1.09)	(0.55)	(0.39)	(0.34)	(0.47)	(0.82)	(0.49)	(0.29)	(0.20)	(0.32)
Inflation	1.81**	1.41***	0.73***	0.44**	0.07	0.13	0.35	0.07	-0.07	0.08
	(0.76)	(0.43)	(0.26)	(0.20)	(0.27)	(0.48)	(0.37)	(0.25)	(0.22)	(0.29)
Risk Diversification	0.45	0.10	0.20	0.23	0.47***	0.31	0.39	0.32	0.09	0.45*
	(0.30)	(0.24)	(0.19)	(0.17)	(0.17)	(0.42)	(0.28)	(0.20)	(0.18)	(0.24)
Financial literacy: don'	t know or ref	used to answ	/er							
Interest Rate	1.06	0.17	0.07	0.09	0.03	1.47	0.37	0.76	0.70**	0.42
	(1.32)	(0.89)	(0.55)	(0.47)	(0.49)	(1.32)	(0.78)	(0.47)	(0.33)	(0.54)
Inflation	2.69***	1.91***	0.73*	0.54	-0.14	-1.42	-0.44	-0.29	-0.21	0.18
	(0.81)	(0.72)	(0.43)	(0.35)	(0.27)	(0.99)	(0.56)	(0.35)	(0.27)	(0.43)
Risk Diversification	-1.17**	-1.20***	-0.82***	-0.56***	-0.14	0.16	0.10	0.06	-0.25	0.02
	(0.49)	(0.35)	(0.24)	(0.19)	(0.18)	(0.43)	(0.30)	(0.20)	(0.17)	(0.23)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Constant	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1012	1012	1012	1012	1012	706	706	706	706	706
R-squared	0.14	0.15	0.14	0.10	0.06	0.12	0.14	0.19	0.14	0.08
DV: IHS Financial	10.10***	9.56***	10.86***	11.85***	12.60***	9.28***	8.88***	10.24***	11.06***	11.93***
Wealth										
	(0.11)	(0.09)	(0.07)	(0.06)	(0.07)	(0.15)	(0.10)	(0.08)	(0.07)	(0.10)

Detailed Blinder-Oaxaca decomposition

Detailed Blinder-Vaxaca decompo:	51011				IHS Financi	al Wealth				
•	Mea		25th pe	rcentile	Med	lian	75th pei	centile	90th per	centile
Men	10.10)***	9.50	6***	10.8	6***	11.8	5***	12.60)***
	(0.1	.1)	(0.	09)	(0.	07)	(0.0	06)	(0.0)	7)
Women	9.28	***	8.88	8***	10.2	4***	11.0	5***	11.93	3***
	(0.1		(0.		(80.0)		(0.07)		(0.1	.0)
Total difference	0.82	***	*** 0.68***			2***	0.79		0.67	
	(0.1	.9)	(0.	14)	(0.	10)	(0.0	19)	(0.1	.2)
_					Decomp	osition				
	E	U	E	U	E	U	E	U	E	U
Overall due to:	1.24***	-0.42	1.03***	-0.34*	0.73***	-0.11	0.44***	0.35***	0.40***	0.26**
	(0.21)	(0.29)	(0.14)	(0.19)	(0.09)	(0.13)	(0.08)	(0.10)	(0.08)	(0.12)
Financial literacy	0.47***	2.86*	0.38***	1.61*	0.27***	0.06	0.20***	0.04	0.16***	-0.68
	(0.10)	(1.71)	(0.07)	(0.87)	(0.05)	(0.58)	(0.04)	(0.46)	(0.03)	(0.64)
Correct answers	0.41***	2.95*	0.24***	1.86**	0.15**	0.31	0.12**	0.11	0.13**	-0.57
	(0.15)	(1.56)	(0.09)	(0.77)	(0.06)	(0.51)	(0.05)	(0.40)	(0.05)	(0.57)
Among which:										
Interest rate	0.11*	1.54	0.08**	1.13*	0.02	-0.18	0.01	-0.36	-0.00	-0.57
	(0.06)	(1.23)	(0.03)	(0.67)	(0.02)	(0.44)	(0.02)	(0.36)	(0.02)	(0.51)
Inflation	0.18**	1.35*	0.14***	0.86*	0.07**	0.54*	0.04**	0.41*	0.01	-0.01
	(0.08)	(0.72)	(0.05)	(0.46)	(0.03)	(0.29)	(0.02)	(0.24)	(0.03)	(0.32)
Risk diversification	0.12	0.06	0.03	-0.12	0.05	-0.05	0.06	0.06	0.12***	0.01
	(0.08)	(0.22)	(0.06)	(0.16)	(0.05)	(0.12)	(0.04)	(0.10)	(0.05)	(0.13)
Don't know or refused to answer	0.06	-0.09	0.13	-0.25	0.12**	-0.25**	0.08*	-0.07	0.04	-0.11
	(0.13)	(0.27)	(0.08)	(0.18)	(0.05)	(0.12)	(0.04)	(0.10)	(0.04)	(0.11)
Among which:										
Interest rate	-0.02	-0.02	-0.00	-0.01	-0.00	-0.04	-0.00	-0.03	-0.00	-0.02
	(0.03)	(0.10)	(0.02)	(0.06)	(0.01)	(0.04)	(0.01)	(0.03)	(0.01)	(0.04)
Inflation	-0.16***	0.41***	-0.11**	0.24**	-0.04	0.10*	-0.03	0.08*	0.01	-0.03
	(0.06)	(0.14)	(0.05)	(0.10)	(0.03)	(0.06)	(0.02)	(0.05)	(0.02)	(0.05)
Risk diversification	0.24**	-0.49**	0.25***	-0.47***	0.17***	-0.32***	0.12***	-0.11	0.03	-0.06
	(0.10)	(0.24)	(0.08)	(0.17)	(0.05)	(0.11)	(0.04)	(0.09)	(0.04)	(0.11)
Other attributes	0.76***	-2.57	0.65***	-0.02	0.46***	-0.85	0.24***	0.45	0.23***	-0.87
	(0.18)	(2.90)	(0.13)	(2.05)	(0.09)	(1.42)	(0.07)	(1.20)	(0.07)	(1.61)
Observations	173	18	17	18	17	18	173	18	171	18

Note: The tables report the results of the OLS and unconditional quantile(RIF) regressions and of the detailed decomposition (at means and across wealth distribution) of IHS transformation of household's total financial wealth by gender using the selected DNB Household Survey sample waves 2005 and 2010 using alternative measures of financial literacy. Household total financial wealth is calculated as a sum of total gross financial wealth of each family member. Gross financial wealth of each family member is computed as a sum of her financial assets. Financial literacy (as well as other individual characteristics) are defined for household's financially knowledgeable person. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns (coefficients) between the two groups. Other controls (attributes) include: age and age squared; household size; education (indicators for high educational attainment, low educational attainment and other types of education, omitted group is low educational attainment); employment status (indicators for self-employment, unemployment and retirement and other occupation, omitted group is employees); HIS transformation of gross income of all household's members; marital status (indicators for single, widowed and divorced); year fixed effect and a constant. Robust standard errors are in parenthesis. *** p<.01, *** p<.05, ** p<.1.

TABLE 12
Decomposition of IHS Transformation of Households' Total Financial Wealth

					IHS Finan	cial Wealth					
_	Mea	an	25th per	centile	Me	dian	75th pe	ercentile	90th p	ercentile	
Men	10.32	2***	9.93	9.93***		11.00***		11.90***		12.64***	
	(0.1	3)	(0.0)	9)	(0	.07)	(0	.07)	(0	.07)	
Women	9.60	***	9.14	***	10.3	36***	11.2	23***	12.	09***	
	(0.1	8)	(0.1	4)	(0	.10)	(0	.09)	(0	.13)	
Total difference	0.72	***	0.79	***	0.6	4***	0.6	7***	0.5	4***	
	(0.2	2)	(0.1	6)	(0	.12)	(0	.11)	(0	.15)	
_					Decom	position					
	E	U	E	U	E	U	E	U	E	U	
Overall due to:	1.31***	-0.59	0.86***	-0.07	0.63***	0.01	0.38***	0.29*	0.55***	-0.01	
	(0.36)	(0.44)	(0.18)	(0.24)	(0.14)	(0.17)	(0.13)	(0.16)	(0.12)	(0.16)	
Financial literacy	0.34***	-0.19	0.21***	-0.15	0.15***	-0.10	0.14***	0.14	0.16***	-0.02	
	(0.10)	(1.31)	(0.06)	(0.71)	(0.04)	(0.43)	(0.04)	(0.36)	(0.04)	(0.42)	
Among which:											
Interest rate	0.07	-0.01	0.04	0.12	0.01	-0.18	0.02	0.06	0.02	0.34	
	(0.06)	(1.20)	(0.03)	(0.71)	(0.02)	(0.44)	(0.02)	(0.35)	(0.02)	(0.44)	
Inflation	0.06	-0.34	0.06*	-0.05	0.04*	0.07	0.01	0.11	-0.01	-0.35	
	(0.06)	(0.71)	(0.04)	(0.47)	(0.02)	(0.29)	(0.02)	(0.24)	(0.02)	(0.29)	
Risk diversification	0.21**	0.16	0.11**	-0.22	0.10**	0.02	0.11***	-0.03	0.15***	-0.02	
	(0.08)	(0.23)	(0.05)	(0.16)	(0.04)	(0.12)	(0.04)	(0.11)	(0.04)	(0.14)	
Other attributes	0.98***	-1.33	0.64***	-3.07	0.48***	0.94	0.23*	2.68*	0.38***	0.41	
	(0.32)	(3.75)	(0.18)	(2.51)	(0.13)	(1.79)	(0.12)	(1.62)	(0.11)	(2.36)	
Year fixed effect	Ye	S	Ye	S		'es		'es		l'es	
Observations	1141		1141		1141		1141		1141		

Note: The table reports the results of the detailed Blinder-Oaxaca decomposition of IHS transformation of financial wealth at means and across wealth distribution by gender using the selected DNB Household Survey sample waves 2005 and 2010. Total household financial wealth is calculated as a sum of total gross financial wealth of each family member. All the individual characteristics as well as financial literacy indices are defined for the person in the household who is decided over the financial matters in the household. E means explained differences, i.e. differences in covariates between the genders. U means unexplained differences, i.e. differences in returns (coefficients) between the two groups. The variables are aggregated as follows. Age group comprises age and age squared. Household size - number of household members. Education - indicators for high educational attainment, low educational attainment and other types of education (omitted group is low educational attainment). Employment status group includes indicators for self-employment, unemployment and retirement and other occupation (omitted group is employees). Income is an IHS transformation of gross income of all household's members. Marital status includes indicators for single, widowed and divorced. The contribution of the year is omitted from the table, thus explained part does not sum up to the total explained difference. The differences in constants are omitted from the table, which is why contributions of reported unexplained components do not sum up to the overall difference due to differences in coefficients. Robust standard errors are in parenthesis. *** p<.01, ** p<.05, * p<.1.