

# Who trusts investment advisors and why?

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### Background and objectives

There is a lack of research on the field of household finance concerning the factors affecting the probability to trust in investment advisors. Therefore this study concentrates on asking the question who trusts investment advisors and why. The findings provide pioneering results on this area of study. Advisory is an important part of banks' operations as advisors serve as sales negotiators for the banks' products. Trusting on advisory has great applications whether banks should invest in advisory and to what extent can the banks be blamed for the investment decisions of their customers.

### Data and methodology

The data used in this study is from Eurobarometer 60.2 survey which is administered by the European Commission. The survey asks for example whether respondent usually trusts the advice given by financial institutions. The data includes numerous variables which are used to explain trust. The study is done by using logistic regression analysis. This study attempts to discover the most relevant factors determining the probability of trusting investment advisors and this is done by examining the effects first individually and then combining them into a final model. Also subsample analysis is provided.

### Findings

The largest effects this study finds to influence the probability to trust in investment advisors are protection of confidential information by financial institutions and given information clarity and understandability. Other factors affecting the probability to trust are for example gender, home country, perceived difficulty to compare information or change banks, sentiment towards thinking about finances and financial services, having made bank transactions over the Internet and aggressive marketing techniques by financial institutions. Subsample analysis reveals for example significant country differences in these effects.

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**Keywords** Investment Advisor, Trust, Marginal Effect, Eurobarometer 60,2, Logistic Regression Model, Financial Institutions

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### Tausta ja tavoitteet

Tekijöitä, jotka vaikuttavat siihen, kuinka todennäköisesti ihminen luottaa sijoitusneuvojaan, ei ole tutkittu aikaisemmin. Tästä syystä tutkielmani keskittyy tarkastelemaan kysymystä kuka luottaa sijoitusneuvojaan ja miksi. Tutkimus tarjoaa urauurtavia tuloksia tältä rahoituksen alueelta. Sijoitusneuvonta on tärkeä osa pankkien liiketoimintaa, sillä asiakaspalvelijat toimivat myyntineuvottelijoina pankkien omille tuotteille. Luottamuksella sijoitusneuvontaan on huomattavia vaikutuksia siihen, pitäisikö pankkien ylipäättään investoida neuvontapalveluihin ja kuinka suurelta osin pakkeja voidaan pitää vastuussa sijoittajien päätöksistä.

### Data ja metodologia

Tämän tutkimuksen aineisto tulee Eurobarometri 60,2 gallupin vastauksista. Aineistoa hallinnoi Euroopan komissio. Gallupi kysyy mm. luottaako vastaaja yleensä sijoitusneuvontaan, jota rahoituslaitokset tarjoavat. Aineisto sisältää lukuisia muuttujia, joilla selitetään luottamuksen todennäköisyyttä. Tutkimus on tehty käyttäen logistista regressiomallia. Tarkoituksena on löytää relevantit tekijät, jotka selittävät luottamuksen todennäköisyyttä. Tämä on tehty tutkien tekijöitä ensin pienissä ryhmissä, jonka jälkeen niistä on koottu yhteen viimeinen malli. Analyysiä on tehty myös osajoukoista.

### Data ja metodologia

Huomattavimmat tekijät, jotka tämä tutkimus löytää vaikuttavan luottamuksen todennäköisyyteen, ovat rahoituslaitosten luottamuksellisen informaation säilyttäminen sekä annetun informaation selkeys ja ymmärrettävyys. Muita luottamukseen vaikuttavia tekijöitä ovat mm. vastaajan sukupuoli, kotimaa, informaation vertailun tai pankin vaihtamisen mieltäminen vaikeaksi, tunne ajatellessa omia pankkiasioita sekä –palveluita, pankkitransaktioiden tekeminen Internetissä sekä rahoituslaitosten markkinoinnin mieltäminen aggressiiviseksi. Osajoukkoanalyysi paljastaa myös mm. suuria eroja tekijöissä maiden välillä.

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**Avainsanat** Sijoitusneuvoja, luottamus, marginaaliefekti, Eurobarometri 60,2, logistinen regressioanalyysi, rahoituslaitos

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## 1. Introduction

There is a lack of research concerning factors affecting trust in investment advisory. Campbell (2006) acknowledges the relative ignorance of this area of finance when studying the average household behavior and investing. However investment advisory is an important part of banks' operations since banks sell their funds and other investment products via advisors to households. The majority of the literature concerning financial advisory concentrates around the choices made under the influence of advisors and the outcome of these strategies (Hong, Scheinkman and Xiong, 2008; Kaustia, Alho and Puttonen 2008; Mullainathan, Nöth and Schoar, 2012, and others). There is a lack of knowledge about the factors having an effect on trusting of households using services of investment advisors.

To be able to determine the relevance of investment advisory we need to know whether people trust the advisors or not. This study concentrates around the question of trust and what influences that. I'm asking the question who trusts investment advisors and why. This research contributes to existing literature a pioneering whole new area of study. Who trusts investment advisors has great applications to whether banks should invest in advisory services and to which extent advisors can be blamed for the investment decisions of households.

Georgarakos and Inderst (2011) argue that trust in professional advice only affect the market participation of households when perceived own financial capability is low. They present evidence that the majority of households expect financial institutions to provide advice. Guiso, Sapienza and Zingales (2008) find that Dutch households' trust in others has statistically significant effect on stock market participation. They also suggest that education about the stock market can reduce this effect. Intuitively one could argue that the meaning of financial advice is to educate households and add to their level of financial literacy as it is in the best interest of the banks to have informed customers making rational decisions. Otherwise the bank can end up having law suits from customers who didn't understand the risks involved in products they bought. Merton and Bodie (2005) conclude that economic growth is promoted by well-functioning financial institutions. Selling investment products is a vital source of money for banks and therefore financial advisors who act as sales negotiators and close the deals are the core of a functioning institution.

Already Jensen (1968) found that professionally managed funds underperform passive investment strategies. Therefore Hortacsu and Syverson (2004) argue that there has to be other benefits investors are seeking hiring managers apart from portfolio returns. Gennaioli, Shleifer and Vishny (2015) offer explanation suggesting that investors utilizing advisory services are

too anxious to invest on their own and therefore are willing to pay high fees for the managers to assist in investment decisions. These investors have low level of financial literacy and money managers are able to provide them a peace of mind. This leads investors not to consider the fees as costs. The authors even argue that these investors earn higher expected returns by using financial advisory than they would investing on their own.

This research assumes that utilizing investment advisory costs the customer. These costs do not occur directly but in the form of fees on funds and other investment products advisors sell. As the banks have to cover their costs such as advisors salary, they have to charge fees from customers investing in funds and other products. Funds normally have an entry charge, an exit charge and an ongoing charge. Even if the investor would only buy stocks it usually costs more when the transaction is made by an advisor and not online. Also the book-entry account which holds the stocks costs the investor. Investment advisors recommend banks' own products to keep the money in the bank and to gain profits from the customer. Passive investment strategies are rarely available as they don't profit the bank. Therefore to invest passively as Jensen (1968) suggests investor has to have a high level of financial literacy to discover the possibilities himself.

Goldstein, Johnson and Sharpe (2008) discuss about the difficulty retail investors face while having to choose between different investment funds and products, the total amount invested and the allocation between the investments. In this light it seems natural that some investors turn to financial advisors for help. Kaustia, Lehtoranta and Puttonen (2015) find evidence that financial advisors' sophistication is linked to excessive optimism as an unconscious bias. They show that when the sophistication of an advisor decreases the expected stock market return increases. Bhattacharya et al. (2012) find that German retail customers are most unwilling to obtain financial advice when they most need it. They discover that even those who do obtain the advice are unlikely to follow it. Therefore they argue that financial advisory is needed and necessary but is unlikely to reach those who most need it.

This study relates to several areas of research. Already Knack and Keefer (1997) have studied the role of trust in the context of social capital. Guiso, Sapienza, and Zingales (2004) have pursued similar research in the field of finance finding the effect of trust on financial development and market participation. A recent finding by Gil-Bazo and Ruiz-Verdú (2009) suggest that managers performing worst are charging the highest fees. This could explain in one part why retail investors are suspicious about the advice given to them and not obtaining such advice even when they have a low level of financial literacy. This study relates to household finance which studies households' behavior. Campbell (2006) argues that the



behavior is difficult to measure adequately as textbook models can't capture the entity of constraints households face such as constraints on borrowing.

There has been discussion in the media lately about the most trusted professions. A Finnish newspaper Helsingin Sanomat (2014) reported results of Reader's Digest European Trusted Brands 2014 survey to list financial advisor as third most untrusted profession in Finland. In the light of these discussions and academic lack of research on this area my study brings groundbreaking knowledge about the facts concerning investors trust in financial advisors.

I find that men trust on average less likely in investment advisors than women and that there are significant country differences in probabilities of trusting. Southern Europeans trust less likely in investment advisory than North Europeans. A number of factors are identified to affect trust such as difficulties related to understanding information given and feeling depressed when thinking about finances and financial services. Some financial priorities affect the probability to trust. For example saving for retirement as a priority increases the likelihood of trusting advisory. People who have made bank transaction over the Internet are less likely to trust in investment advisors as are those willing to invest abroad. Banks' aggressive marketing is found to affect trustworthiness negatively. The feeling that bank transactions are secure and that personal information is kept adequately protected increases the likelihood of trusting investment advisory.

This paper is organized as follows: section 2 presents the previous literature concerning the topic and some background information. Section 3 introduces the research question and hypotheses of this research. Section 4 presents the data and methods and section 5 reveals the results of independent logistic regression models. Section 6 discusses the elimination of irrelevant factors and section 7 presents the final model explaining trust. Subsample analysis is provided in Section 8. Section 9 discusses implications and makes suggestion for further study. Section 10 concludes the study.

## **2. Previous literature and background**

This section discusses the most relevant previous literature covering financial advisory. As already stated there is no previous research discussing types of people trusting financial advisors or covering the factors possibly influencing this trust. However there are few papers closely related to this discussion and they are presented here. Also some background on investment advisors and legislation regulating their work is provided.

### *2.1. Discussion on previous literature*

Gennaioli, Shleifer and Vishny (2015) pursue different ways of modeling investor trust in money managers. They assume in their model that investor is unable to take risk on his own and any investment made would require a manager's help. Their argument is that investor's subjective perception of risk to investing decreases when trust to the manager increases. Their conclusion is that these trusted managers are able to charge higher fees from investors since these investors prefer to use services of those managers they trusts the most. The authors argue that investors are taking on more risk with the trusted managers and therefore gaining higher expected returns. The model of Gennaioli, Shleifer and Vishny assumes that these money managers have strong incentives to pander investors' beliefs in the hopes of extracting higher fees. Therefore their argument is that money managers are in this only to gain fees from customers which is rather narrow view in my opinion. If managers would only extract as high fees as possible wouldn't the investors eventually seek for more profitable opportunities? The model is merely theoretical since the authors lack empirical data of real investors and managers.

Georgarakos and Inderst (2011) are close to the subject of trust in financial advice but their viewpoint is rather different from this research. They are interested whether household actually utilize the advice they are given by financial institutions. They find that this is dependent on their own financial capability and trust in the advice. They state that trust in financial advice has statistically significant effect on stock market participation but only for households with low financial capability. Their research is discussing how trust affects households decisions to use financial advice while this study is concentrated around the notion of what drives trust in investment advisors. Hence the research of Georgarakos and Inderst has the closest relation to this paper and holds the most relevant findings.

A research from Guiso, Sapienza and Zingales (2008) studies the effect that a lack of trust has on stock market participation using Dutch and Italian micro data. However they define trust as individuals attribute to possibility of being cheated. This refers mostly to quality of investor protection which can be argued to play diminishing role in investing to developed economies such as Scandinavian market. Simulations of Guiso, Sapienza and Zingales suggest that lack of trust in stock market can explain why some wealthy people decide not to participate in the market in the United States. A related paper by Suleyman, and Cuoco (1998) studies a market where a fraction of population isn't investing due to frictions such as costs of information.

A research by Berk and Green (2004) study active portfolio management when managerial talent is a scarce resource. They find a strong correlation between past performance

and the flow of funds. Arguably it is easier for the investment advisors to recommend funds with superior past performance which would lead to cash flowing to these funds. Carlin (2009) shows that anomalies in pricing of financial products arise when firms add complexity to their pricing structures. He argues that consumers are prevented from becoming knowledgeable about prices in the market by adding complexity to pricing of the products. When the pricing is beyond understanding of customers one could argue that they become more careful in their decisions and need more time to consider choices. This would reflect to financial advisors since they are facing a challenge of closing a deal quickly. Kaustia, Laukkanen and Puttonen (2009) find that question framing has a significant impact on the advice financial professionals give. Depending on what the client asks the advice varies. Question about required returns results in different outcome than asking about expected returns. Kaustia, Laukkanen and Puttonen argue that these variations subject the advisors to behavioral biases leading to investment mistakes. Therefore advisors should strive towards giving consistent advice.

Interestingly Chevalier and Ellison (1999) find younger mutual fund managers to be more conventional in their portfolio choices and therefore hold less unsystematic risk. Financial advisors could profit from recommending these less risky portfolios to customers not willing to bear much risk and gaining their trust this way. French (2008) suggest that financial institutions deliberately fail to correct the misunderstanding of active versus passive investment strategy returns. He notes that illusion of active investing being easy and profitable is promoted also by the press.

## *2.2. Background*

In theory there is just one market portfolio holding all possible assets and an investor just chooses how much risk he is willing to bear or how much return he expects and moves on the capital market line by leveraging or deleveraging this portfolio (Markowitz, 1952; Sharpe, 1994). However as there is no market portfolio available and the risk-free rate varies between investors this kind of investing is not reality. In fact when an average retail investor enters a bank to visit a financial advisor he most certainly isn't advised to invest in one single portfolio of assets but there will be a number of funds and structured products available instead. As Gennaioli, Shleifer and Vishny (2015) suggest it is not in the interest of banks to advise people to invest in passive strategies.

When a new investor enters a bank to visit a financial advisor there is a strict protocol to follow. Since EU set the MiFID (Markets in Financial Instruments Directive) advisors are bound by law to fill out an investor profile which specifies at least financial situation,

investment horizon, risk preferences and activeness of the investor. This directive was set to eliminate poor advice which was brought up especially during the financial crisis of 2008. The idea was that when advisors hold knowledge about the entire financial situation of the clients and not just about the finances in one bank they would not advise already leveraged customers to take on more risk. Knowing more about the investor would improve the quality of advice and result in smaller losses. Financial advisors are bound by law to reassure that customer understands what he is buying, the risks and the costs related. All this regulation should result in more trustworthy advice and therefore more trust in financial advisors.

If the customer has a good financial situation, moderate risk preferences and he doesn't follow the market actively it is likely that the financial advisor recommends a fund of funds since they are considered to be easiest to manage for customers with low level of financial literacy and they are well diversified across industries and countries. Also they bring the best income for financial institutions. These are easy to understand and customers lacking knowledge are rarely interested about the precise contents of the fund. Fund of funds is a fund that invests in the banks own funds and therefore has maximal diversification and fees. Since fund of funds is often "managing itself" in the eyes of the customer it doesn't require reacting even if there is a crisis somewhere. The fund manager will take care of diversification and allocation of funds. Therefore these funds are popular despite of the costs. Also as Gennaioli, Shleifer and Vishny (2015) argue these sort of possibilities provide the investors a peace of mind.

### **3. Research question and hypotheses**

The purpose of this study is to examine factors that could affect the probability of people trusting investment advisors. This study aims to conclude a set of variables which have a statistically significant effect on the probability. Therefore the research questions of this study is defined as follows:

*What factors affect the probability of trusting investment advisors?*

Due to the amount of variables used in this study there are a large number of hypotheses. Therefore the hypotheses are presented in Table 1. I will only describe in more detail the rationale for the less intuitive hypotheses to avoid repetition and explaining the obvious. My hypothesis is that people trust in investment advisors in general but there could be differentiations between for example age groups. Intuitively I would argue that younger people trust advisory more likely than elderly since they are more insecure about their financial

knowledge and have no previous experience investing. Elderly people already have certain perception about markets and they have probably experienced losses as well. However previous studies don't support this intuition. Sutter and Kocher (2007) find that trust in experimental trust games increases from early childhood to early adulthood but after that stays constant. Therefore their study finds no support on trust differentiations between different adult age groups. Robinson and Jackson (2001) discover that trust in others is lowest among youngest Americans and increases until middle-age but then levels off. In the light of the previous studies my first hypothesis is that age doesn't have an effect on the probability of trusting investment advisors. This hypothesis is the first one in Table 1.

The second hypothesis in Table 1 is that men trust investment advisors less likely than women. This hypothesis is based on previous studies (Lundeberg, Fox and Puncochar, 1994; Prince, 1993; Barsky et al., 1997; Eckel and Grossman, 2008; Croson and Gneezy, 2009 etc.) which find men for example more overconfident and taking more risk than women. This results men feeling more competent making financial decisions by themselves and trusting their own opinions more than investment advisors'. Third hypothesis is that marital status shouldn't have an effect on the probability of trusting investment advisors. This is based on the assumption that marital status shouldn't have an effect on one's beliefs.

It is hard to argue which financial priorities would have an effect on the probability of trusting investment advisors. For example people saving for retirement probably should hear some advice on long term investments from advisors but on the other hand they are a large group of different kind of people with different backgrounds. Therefore these people are in different levels of financial literacy and probably therefore also trust financial advisors differently. There are conflicting arguments that financial priorities could have a positive or a negative effect on the probability of trusting investment advisors hence Table 1 concludes hypotheses of no effect for these variables.

Hypotheses 15 to 21 in Table 1 state that respondent's sentiment towards his own finances and financial services has a statistically significant effect on the likelihood of trusting investment advisors. The hypothesis is that positive feelings result in trusting more likely and negative feelings result in trusting less likely in advisors. This assumption is an extension from studies finding a connection between sentiment and stock returns (Baker and Wurgler, 2006 etc.). When sentiment is high investors rush to the market and the stock returns of particular stocks decrease. Investors "trust" the market as the sentiment is high and therefore I argue that this phenomenon is visible also in other context with investment advisors. For example people finding thinking about their finances and financial services interesting are more prone to

accepting advice from investment advisors as the sentiment generally is positive. People finding thinking about their finances depressing have probably encountered losses previously and their trust is shattered. Therefore it is hard for the investment advisor to convince that the next product wouldn't realize the risk. Those having negative feelings are more cautious taking the advice and therefore less likely to trust than those having positive feelings.

22<sup>nd</sup> hypothesis in Table 1 suggests that people who own stocks have higher level of financial literacy as they have monitored the market in hopes of returns on their stocks. I would expect people who find following the market enjoyable to use more their own judgment on making decisions and trust less likely in investment advisors than those who are ignorant about the market and not investing in stocks. Also I would argue that more educated people especially those with business education would trust less likely in investment advisors since they would know how limited is the educational background of advisors in general. They would also hold more knowledge about the theories supporting passive investing and the weakness of mutual funds. These people are therefore more likely to invest directly in stocks than buying expensive products from advisors. The same rationale goes for the 26. hypothesis in Table 1 assuming that people who could consider investing abroad trust less likely in investment advisors. Assumption is that these investors have a high level of financial literacy.

Table 1 indicates in the 23. hypothesis that people having a mortgage loan trust more likely in investment advisors than those not having one. This hypothesis is based on the notion that those having a mortgage loan are young adults with not yet enough money to pay off their debt. They are busy with their careers and families and therefore they have no time to follow the market. Hence they are more willing to accept the investment advisors easy solutions where they don't have to spend their time monitoring their investments or following market movements closely.

People who have used the Internet to make bank transactions are probably familiar with using the Internet services of banks and therefore able to obtain information from banks, their products and costs. Hence they have a greater access to information for comparing different options than those not using the Internet. Therefore these Internet users are more likely to be aware of the costs related to obtaining products investment advisors sell and also more cautious trusting their biased advice. Internet users are also able to gain more knowledge on finance theory over the Internet and thus gain higher level of financial literacy which would result in trusting less likely in investment advisors as Gennaioli, Shleifer and Vishny (2015) argue. Thus hypothesis 24 in Table 1 predicts that those who have used the Internet to make bank transactions trust less likely in investment advisors than those not familiar with this procedure.

**Table 1**

Variable description and the related hypotheses. All the variables are dummies taking value of 1 or 0 except age, which takes values from 15 to 99. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. Description of effects on trusting investment advisors: Negative: when the dummy equals one it has a negative effect on the probability to trust in investment advisors. Positive: variable has a positive effect on trust. – means the variable has no effect on trust.

Hypothesis number	Code	Variable description	Effect on Trusting Investment Advisors	Variable name
1.	v501	Age (only variable that isn't a dummy)	-	v501age
2.	v500	Gender = male	Negative	v500male
3.	v497	Respondent is married	-	v497married
4.	v187	It is hard to compare information from banks, about bank account features and charges	Negative	v187compareinfohard
5.	v190	It is hard to understand the information given by financial institutions about the way their mortgages work and the risks involved	Negative	v190understandingishard
6.	v193	It is hard to change banks	Negative	v193changinbanksishard
<i>What are your top 3 financial priorities?</i>				
7.	v93	Saving for retirement	-	v93saveforretirement
8.	v94	Paying off debt	-	v94payoffdebt
9.	v95	Buying a house/apartment	-	v95buyhouse
10.	v96	Passing on money to children/grand-children	-	v96inherit
11.	v97	Protecting my family in case I'm ill/unable to work	-	v97protection
12.	v98	Having some savings for emergencies	-	v98savingsforemergency
13.	v99	Living as well as I can on my current income	-	v99livingwell
14.	v100	Starting up a business	-	v100startbusiness
<i>I find thinking about my finances and financial services..?</i>				
15.	v103	enjoyable	Positive	v103enjoy
16.	v104	interesting	Positive	v104interest
17.	v105	comforting	Positive	v105comfort
18.	v106	intimidating	Negative	v106intimidating
19.	v107	complicated	Negative	v107complicated
20.	v108	dull	Negative	v108dull
21.	v109	depressing	Negative	v109depressing
22.	v119	I own stocks	Negative	v119stocks
23.	v122	I have a mortgage	Positive	v122mortgage
24.	v136	I have used the Internet to make bank transactions	Negative	v136banktransactions
25.	v137	I have used the Internet to make other transactions	-	v137othertransactions
26.	v145	I could consider obtaining stocks abroad	Negative	v145considerstocksabroad

Hypothesis number	Code	Variable description	Effect on Trusting Investment Advisors	Variable name
27.	v195	Having a bank account is expensive	Negative	v195expensive
28.	v199	The marketing techniques of financial institutions are aggressive	Negative	v199agressivemarketing
29.	v200	Information I get from financial institutions is clear and understandable	Positive	v200clearinfo
30.	v203	Financial transaction are generally secure	Positive	v203secure
31.	v204	Confidential information I give to banks or	Positive	v204confidentiality
32.	v208	When making a transaction on the Internet, it is harder to sort out any problems that may arise	Positive	v208internettransactions
		<i>What is your nationality?</i>		
	1	Belgium		Belgium
	2	Denmark		Denmark
	3	Germany		Germany
	4	Greece		Greece
	5	Italy		Italy
	6	Spain		Spain
	7	France		France
	8	Ireland		Ireland
	9	United Kingdom		United Kingdom
	10	Luxembourg		Luxembourg
	11	The Netherlands		The Netherlands
	12	Portugal		Portugal
	13	Finland		Finland
	14	Sweden		Sweden
	15	Austria		Austria

Respondents reporting to have made other transactions over the Internet are probably similarly capable of searching the Internet for options. However they might not be interested to do so or not even the target customers of banks. This questions is poorly defined as there is no definition on what kind of transactions are related. Therefore there is a large variation on what respondents might consider as other transactions. This study is more interested in the customers of banks who have made especially bank transactions. This variable doesn't directly relate to investment advisors or banks in general and thus the hypothesis 25 is that this variable consisting of people who have made other transactions over the Internet doesn't have an effect on the probability of trusting investment advisors.

Lastly in Table 1 hypothesis 32 argues that people who agree that when making a transaction on the Internet, it is harder to sort out any problems that may arise, trust more likely in investment advisors than those disagreeing with this statement. The hypothesis is based on the assumption that people agreeing with this statement rather make the transactions in a bank



with the investment advisor and hence trust the advice they get on investments. These people feel that problems are easier to deal with a human and therefore they trust the advisor more than making the transactions online.

Table 1 doesn't present hypotheses for country differences in probabilities of trusting investment advisors. My assumption is that on average Europeans trust in financial advisors. However I would assume that this varies between countries. Especially Southern Europe could be suffering from a lack of trust in financial advisory as the culture differs from northern Europe quite substantially. I would argue that these differentiations could be caused by the variations in investor protection as Guiso, Sapienza and Zingales (2008) suggested or at least the subjective experience of lacking protection. Therefore I would argue that the North Europeans trust more likely in investment advisors than South Europeans. Also the financial situation of the countries could have an effect on trustworthiness of banks in the eyes of the public.

#### **4. Data and Methods**

This research is based on the micro data from Eurobarometer 60.2 survey which is administered by the European Commission. The Eurobarometer is a series of public opinion surveys conducted regularly addressing topical issues. The survey is conducted in EU member states. Eurobarometer 60.2 covers households from 15 EU countries including Finland and consists of more than 16 000 respondents. The survey was done on November-December 2003. Unfortunately questions relevant to this study were only asked in this Eurobarometer and therefore no more recent data is available addressing this matter. Appendix 1 and Appendix 2 provide detailed descriptive statistics on the data and Table 1 reports the variable coding and descriptions. Table 2 provides brief summary of the descriptive statistics.

The study is conducted using logistic regression analysis. This type of model is more suitable than ordinary least squares method as logistic model is used to predict the outcome of a categorical dependent variable. In this research dependent variable is binary taking values of either zero or one determined by the respondents' answer whether he usually trusts investment advisors or not. Also all the explanatory variables are dummies with binary response possibility except respondent's age which can take values from 15 to 99. As the dependent variable is binary the results describe differences in probabilities of trusting investment advisors. The results are presented as marginal effects which describe the difference in probability of trusting investment advisors between two groups such as men and women. Section 8 provides also some

unrefined probabilities from descriptive statistics of Eurobarometer 60.2 survey to illustrate the overall likelihood of trusting investment advisors as it is reported in the survey.

**Table 2**

Summary of descriptive statistics. All the variables are dummies. Trust is a dummy variable that equals one when respondent agrees to usually trust in the advice given by financial institutions. v500male equals one when the respondent is male. v497married equals one when the respondent is married. v119stocks and v122mortgage equal one when the respondent owns stocks or has a mortgage. Country dummies indicate the home country of the respondent. Appendix 1 and Appendix 2 provide the descriptive statistics in detail.

<b>Variable name</b>	<b>N</b>	<b>%</b>
Trust	8138	50,7 %
v500male	7702	48,0 %
v497married	7946	49,5 %
v119stocks	2585	16,1 %
v122mortgage	3699	23,0 %
Belgium	1017	6,3 %
Denmark	1000	6,2 %
Germany	2045	12,7 %
Greece	1002	6,2 %
Italy	997	6,2 %
Spain	1000	6,2 %
France	1004	6,3 %
Ireland	1007	6,3 %
United Kingdom	1338	8,3 %
Luxembourg	600	3,7 %
The Netherlands	1016	6,3 %
Portugal	1000	6,2 %
Finland	1001	6,2 %
Sweden	1000	6,2 %
Austria	1032	6,4 %
Total	16059	

The data contains numerous variables but this research will focus on those relating to financial services and demographics. The survey contains information on financial priorities, holding stocks and having a mortgage, price sensitivity and expectations towards financial advisory just to name a few variables relevant to this study. The respondents are asked if they find the marketing of financial institutions aggressive and whether they find the information given clear and understandable. All these variables help to understand what drives trust in financial advisors and why certain people tend to put more trust in the advisory. Table 1 presents all the variables used in the logistic regression models and the questions they are related to.

## 5. Results on the effects of grouped variables

This section is divided into eight subsections to clarify the results of independent logistic regression models explaining the probability to trust in investment advisors. The models are provided in subsection 5.1 in Table 3 and in the end of subsection 5.4 in Table 4. The tables report the marginal effects of the variables in each independent model. The subsections introduce variables grouped by their question on Eurobarometer 60.2 survey and their effects on the probability to trust. The coding and questions that the variables are related are reported in Table 1. Variables are grouped by question to assess their explanatory power and conclude whether they are relevant factors and adding explanatory power to the final model. These logistic regressions are combined into a complete model explaining trust in Model 8 presented in Table 4 and the results are discussed in subsection 5.8. 50,7% of the respondents of the Eurobarometer 60,2 survey trusted in investment advisors. Descriptive statistics of the data are provided in Appendix 1 and Appendix 2. Table 3 and Table 4 report the results of each model discussed in the subsections.

### *5.1. Model 1: the effect of demographics*

This section covers results of a binary logistic regression model explaining the probability to trust in investment advisors with respondents' demographics. Table 3 reports the results under Model 1 as marginal effects. First explanatory variable in Model 1 is respondent's age which doesn't have a statistically significant effect on trusting investment advisors. This result supports the hypothesis and is in line with previous research (Robinson and Jackson, 2001; Sutter and Kocher, 2007 etc.). The second variable in Model 1 is gender which reports a statistically significant result at 5% significance level. The result indicates that men trust in investment advisors 2,7 percentage points less likely than women do on average. This result is not a surprise as many studies have found similar gender effects on trust in other fields of science (Croson and Bunchan, 1999, Charness and Gneezy 2012 etc). Third variable explaining trust in investment advisors is marital status which reports a positive statistically significant effect at 5% significance level. Married people trust 3,9 percentage points more likely in investment advisors on average than those who aren't married. This result conflicts with the hypothesis that marital status doesn't have an effect on trusting investment advisors. However as this model has only few control variables these results need further studying.

**Table 3**

Binary logistic regression models explaining trust in investment advisors. The data is from Eurobarometer 60.2 which is administered by the European Commission. Respondents' are asked whether they agree or disagree with the statement "I usually trust the advice given by financial institutions". When the answer is yes, this dependent variable equals one. The logistic regression models explain trust with variables listed in Table 1. Table 1 provides variable explanations and coding. The left column of each model presents the marginal effects and the right column presents z-statistics. \* and \*\* indicate statistical significance at the 5% and 1% level, respectively.

	Model 1		Model 2		Model 3		Model 4	
	dy/dx	z-stat	dy/dx	z-stat	dy/dx	z-stat	dy/dx	z-stat
v501age	0,000	(0,14)						
v500male	-0,027**	(-3,52)						
v497married	0,039**	(4,93)						
v187compareinfohard								
v190understandingishard								
v193changingbanksishard								
v93saveforretirement			0,07**	(6,34)				
v94payoffdebt			0,021*	(2,05)				
v95buyhouse			0,000	(-0,04)				
v96inherit			0,047**	(3,95)				
v97protection			0,047**	(4,82)				
v98savingsforemergency			0,03**	(3,43)				
v99livingwell			0,025**	(2,76)				
v100startbusiness			-0,033	(-1,45)				
v103enjoy					0,001	(0,07)		
v104interest					0,089**	(8,65)		
v105comfort					0,129**	(10,84)		
v106intimidating					-0,036**	(-3,29)		
v107complicated					0,012	(1,25)		
v108dull					-0,007	(-0,55)		
v109depressing					-0,075**	(-6,84)		
v119stocks							0,079**	(7,16)
v122mortgage							0,049**	(5,17)
v136banktransactions								
v137othertransactions								
v145considerstocksabroad								
v195expensive								
v199agressivemarketing								
v200clearinfo								
v203secure								
v204confidentiality								
v208internettransactions								
Denmark	0,149**	(7,07)						
Germany	-0,017	(-0,88)						
Greece	-0,371**	(18,63)						
Italy	-0,238**	(-11,07)						
Spain	-0,156**	(-7,11)						
France	-0,106**	(-4,79)						
Ireland	-0,048*	(-2,19)						
UnitedK	-0,09**	(-4,34)						
Luxembourg	-0,019	(-0,75)						
TheNether	-0,058**	(-2,62)						
Portugal	-0,16**	(-7,31)						
Finland	0,169**	(8,08)						
Sweden	-0,044*	(-1,97)						
Austria	0,086**	(4,01)						
pseudo R <sup>2</sup>		0,053		0,004		0,017		0,004
number of observations		16059		16059		16059		16059

Table 3 presents respondents' home countries as control variables with Belgium as the reference group. The results show that Finland has the highest probability of trusting investment advisors and Greece has the lowest. The marginal effects show these differences in reference to Belgium. For example Italians trust 23,8 percentage points less likely in investment advisors than Belgians. Three countries with the lowest probability of trusting are Greece, Italy and Portugal with the largest negative marginal effects. People trusting most likely in investment advisors seem to live in Finland, Denmark and Austria. Country differences are discussed further in detail in sections 7 and 8.

### *5.2. Model 2: the effect of financial priorities*

This section focuses on binary logistic regression model on respondents' financial priorities. Table 3 reports the results of this regression under Model 2. In this section respondents answered the question of their top three financial priorities. Table 1 reports all the variables with explanations in more detail.

Model 2 reports all but two independent variables' marginal effects as statistically significant at 5% significance level. Variables indicating saving to buy a house and saving to start own business do not significantly affect on trusting financial advisors. Other financial priorities seem to have a positive effect on the probability of trusting financial advisors. Saving for retirement as a financial priority has the largest marginal effect. People selecting this as their priority are 7,0 percentage points more likely to trust in investment advisors than those not prioritizing saving for retirement. The smallest marginal effect has variable indicating paying off debt. Pseudo  $R^2$  can't be interpreted similarly to  $R^2$  of OLS regression but it also tries to predict the model fit and its values range from zero to one. The pseudo  $R^2$  of Table 2 indicates rather low explanatory power for this model and therefore the results must be interpreted with caution.

### *5.3. Model 3: the effect of sentiment towards thinking about finances and financial services*

Eurobarometer survey 60.2 asks about people's sentiment towards thinking about their own finances and financial services. As discussed previously intuitively it would seem logical that people thinking positively about their finances would trust financial advisors more likely and those with negative feelings towards their own finances would be less likely to trust. This section presents binary logistic regression models results examining this effect. Model 3 reports the results of this regression in Table 3.

The results are somewhat conflicting. In general the hypothesis seems to hold and positive sentiment variables have positive effect on the probability of trusting investment advisors and negative sentiment variables have negative effect. However variable “enjoyable” doesn’t have a statistically significant marginal effect nor has variables “complicated” and “dull”. Therefore only two variables with positive sentiment and two variables with negative sentiment are left for closer examination as they have a statistically significant marginal effects at 5% significance level.

Model 3 in Table 3 reports that people who find thinking about their finances and financial services interesting are 8,9 percentage points more likely to trust in financial advisors than those who disagree with them. Those who find it comforting are 12,9 percentage points more likely to trust advisors than those not finding it comforting. This would support the hypotheses presented in Table 1. On the other hand those who find thinking about their finances intimidating are 3,6 percentage points less likely to trust advisors than those disagreeing with them and those finding it depressing are 7,5 percentage points less likely to trust than those not finding it depressing. At least this model with limited control variables would support the theory that sentiment toward people’s own finances affects the probability of trusting financial advisors. However this effect has to be investigated more in detail when adding explanatory variables to logistic regression model.

#### *5.4. Model 4: the effect of owning stocks or having a mortgage*

Does owning stocks or having a mortgage effect on the probability of trusting investment advisors? This is the question this section attempts to answer with binary logistic regression model. Model 4 in Table 3 reports the results of the logistic regression.

Both variables have a statistically significant coefficient at 5% significance level. This relatively small logistic regression model suggests that people owning stocks trust 7,9 percentage points more likely in investment advisors than those who don’t own stocks. This result doesn’t support the hypothesis that people owning stocks would have higher level of financial literacy and therefore would exercise more caution towards advice. On the contrary this result would suggest that stock owners were more willing to trust the advice than those not owning stocks. Model 4 reports that people having a mortgage loan trust almost five percentage points more likely in investment advisors than those who don’t have a mortgage supporting the 23. hypothesis presented Table 1. However these effects definitely require closer examination when adding control variables as the pseudo  $R^2$  of the model is relatively low indicating low explanatory power.

**Table 4**

Binary logistic regression models explaining trust in investment advisors. The data is from Eurobarometer 60.2 which is administered by the European Commission. Respondents' are asked whether they agree or disagree with the statement "I usually trust the advice given by financial institutions". When the answer is yes, this dependent variable takes the value of 1. The logistic regression model explains trust with variables listed in Table 1. Table 1 provides variable explanations and coding. The left column of each model presents the marginal effects of each variable and the right column presents z-statistics. \* and \*\* indicate statistical significance at the 5% and 1% level, respectively.

	Model 5		Model 6		Model 7		Model 8	
	dy/dx	z-stat	dy/dx	z-stat	dy/dx	z-stat	dy/dx	z-stat
v501 age							0,000	(1,61)
v500 male							-0,040**	(-5,35)
v497 married							0,013	(1,58)
v187 compare info hard			-0,049**	(-5,64)			-0,023**	(-2,80)
v190 understanding is hard			-0,047**	(-5,49)			-0,001	(-0,13)
v193 changing banks is hard			-0,051**	(-4,88)			-0,021*	(-2,10)
v93 save for retirement							0,024*	(2,33)
v94 payoff debt							0,018	(1,79)
v95 buy house							-0,002	(-0,13)
v96 inherit							0,021	(1,87)
v97 protection							0,025**	(2,63)
v98 savings for emergency							0,03**	(3,64)
v99 living well							0,005	(0,59)
v100 start business							0,007	(0,31)
v103 enjoy							-0,009	(-0,70)
v104 interest							0,027**	(2,66)
v105 comfort							0,029*	(2,50)
v106 intimidating							-0,006	(-0,53)
v107 complicated							0,012	(1,34)
v108 dull							-0,007	(-0,65)
v109 depressing							-0,060**	(-5,75)
v119 stocks							0,008	(0,70)
v122 mortgage							0,003*	(0,29)
v136 bank transactions	0,081**	(5,94)					-0,028	(-2,11)
v137 other transactions	0,015	(0,92)					0,012**	(0,78)
v145 consider stocks abroad	-0,033	(-1,04)					-0,077	(-2,63)
v195 expensive					0,004	(0,47)	-0,000*	(-0,02)
v199 aggressive marketing					-0,016*	(-2,05)	-0,017**	(-2,19)
v200 clear info					0,151**	(19,18)	0,135**	(16,74)
v203 secure					0,115**	(14,10)	0,096**	(11,53)
v204 confidentiality					0,163**	(21,91)	0,132**	(16,95)
v208 internet transactions					0,026**	(3,24)	0,016*	(2,01)
Denmark							0,119	(5,37)
Germany							0,040	(2,15)
Greece							-0,269	(-12,46)
Italy							-154	(-7,17)
Spain							-0,130	(-6,11)
France							-0,034	(-1,58)
Ireland							-0,020	(-0,94)
UnitedK							-0,052	(-2,56)
Luxembourg							-0,047	(-1,91)
TheNether							-0,044	(-2,04)
Portugal							-0,097	(-4,46)
Finland							0,128	(5,81)
Sweden							-0,044	(-1,99)
Austria							0,120	(5,75)
pseudo R <sup>2</sup>		0,004		0,007		0,078		0,119
number of observations		16059		16059		16059		16059

### *5.5. Model 5: the effect of Internet usage and obtaining stocks abroad*

This section presents the results of a binary logistic regression model with three explanatory variables. First two answer the question whether one has ever used the Internet to make either bank transactions or other transactions. Intuitively those who are more familiar with technology could have higher level of financial literacy as the Internet offers information about different choices and therefore these people could also be more cautious to trust in investment advisors. Those familiar with using the Internet can also obtain information about the costs related to products investment advisors are selling compared to passive investing. The third variable asks if the respondent could consider obtaining stocks abroad. People investing globally could be considered to have at least satisfactory knowledge on finance and therefore could be expected to trust less likely in financial advisors as they would know the costs related to their products. Model 5 in Table 4 reports the results of this logistic regression.

The intuition seems to fail in this case as Model 5 reports that people who have made bank transactions over the Internet are eight percentage points more likely to trust in investment advisors than those who haven't. This is the only statistically significant result at 5% significance level from this logistic regression model. Considering that pseudo  $R^2$  is relatively low which indicates that the model has little explanatory power I would argue that this matter requires more examination over a larger logistic regression model with increased amount of control variables.

### *5.6. Model 6: the effect of difficulties related to financial services*

If people think understanding information given by financial institutions is hard it could be assumed that they are less willing to trust this information. This section covers difficulties related to financial services and how they affect the probability of trusting in financial advisors. The first explanatory variable consists of people finding it hard to compare information from banks, about bank account features and charges. The second variable includes those respondents who find it hard to understand the information given by financial institutions about the way their mortgages work and the risks involved. The third variable consists of those who find it hard to change banks.

All of these variables are of negative character and therefore the hypothesis is that they all have a negative effect on the probability of trusting investment advisors. Model 6 in Table 4 reports the results of this binary logistic regression model.



The results of Model 6 in Table 4 support the hypotheses. All the variables have a negative statistically significant coefficient at 5% significance level. Those finding it hard to compare information from banks, about bank account features and charges trust 4,9 percentage points less likely in investment advisors than those finding it easy. Respondents not understanding the information given by financial institutions about the way their mortgages work and the risks involved trust 4,7 percentage points less likely in financial advisors than those not having problems understanding. Also those who find it hard to change banks trust 5,1 percentage points less likely in advisory.

These results support intuition. For example people finding it hard to compare information in this case also probably find it hard to compare the information given by investment advisors. As the understanding of the issue is limited it would be irrational to trust the advice. People finding it hard to change banks are stuck with their current service provider and therefore if they don't agree with the advice given to them, their probability to trust is bound to drop.

#### *5.7. Model 7: the effect of financial services and banks' actions*

This section covers variables related to financial services and banks' actions. A binary logistic regression model is used to model the effect these variables have on the probability of trusting in financial advisors. The first control variable in the model covers people who think that having a bank account is expensive. Second variable consists of those who think that the marketing techniques of financial institutions are aggressive. The hypothesis is that both of these variables have a negative effect on the probability of trusting investment advisors as reported in Table 1. Third variable asks whether the respondent finds the information he gets from financial institutions clear and understandable. Fourth variable consists of those who find financial transaction generally secure. Fifth variable covers people who think that the confidential information they give to banks or insurance companies is adequately protected. These variables are positive by character and as presented in Table 1 hypothesis is that they all have a positive effect on the probability of trusting investment advisors. The last variable in this logistic regression model consists of those who think that when making a transaction on the Internet, it is harder to sort out any problems that may arise. Model 7 in Table 4 reports the results.

The only variable that doesn't have a statistically significant marginal effect at 5% significance level in this binary logistic regression is the one representing cost sensitiveness and hence it has no effect on the probability of trusting investment advisors. All the other

variables have statistically significant results. Respondents finding the marketing techniques of banks aggressive trust 1,6 percentage points less likely in investment advisors than those who disagree with this statement. Respondents who think that the information given by financial institutions is clear and understandable trust 15,1 percentage points more likely in investment advisory than those not finding it clear. This result is no surprise as if one finds information from advisors hard to understand it would be irrational to trust it. Those finding that bank transactions are generally secure trust investment advisors 11,5 percentage points more likely than those believing them to be unsecure. These results support the hypotheses presented in Table 1.

People who think that the confidential information they give to banks or insurance companies is adequately protected trust 16,3 percentage points more likely in investment advisors than those finding confidentiality violated. Lastly Model 7 in Table 4 reports respondents believing that when making a transaction on the Internet, it is harder to sort out any problems that may arise, trusting 2,6 percentage points more likely in investment advisors than those disagreeing with this statement. The result would suggest that people who are less familiar with using the Internet would rather visit face-to-face an investment advisor and therefore prefer their advice over consultation over the Internet.

#### *5.8. Model 8: combined model explaining trust in investment advisors*

After constructing separate logistic regressions of grouped variables adding these variables into one single model explaining trust in investment advisors gives a larger perspective on the actual effect what each of these variables have. Therefore this section presents the results of a binary logistic regression model which combines all the variables explained more in detail in the upper subsections. Model 8 in Table 4 reports the results.

The first three explanatory variables of Model 8 in Table 4 are demographics and they have similar results to those presented in subsection 5.1. Age doesn't have a statistically significant effect on the probability of trusting investment advisors. Appendix 3 plots the likelihood of trusting in advisory by age group and reports almost horizontal line. This result supports the earlier studies that conclude similar results (Robinson and Jackson, 2001; Sutter and Kocher, 2007). Model 8 in Table 4 reports that men trust in investment advisors four percentage points less likely than women. This result is found already in Model 1 but adding the amount of explanatory variables in the model increases the effect. Therefore it is save to argue that gender does have a statistically significant effect on the probability of trusting investment advisors at 5% significance level. Adding explanatory variables diminishes the

effect of marital status and Model 8 shows no statistically significant effect for this variable even though it was found in the smaller logistic regression in Model 1 discussed in section 5.1.

The next three variables in the logistic regression model are related to difficulties with financial services. The first of these variables consists of those finding it hard to compare information from banks, about bank account features and charges. Model 8 in Table 4 reports that these respondents trust 2,3 percentage points less likely in investment advisors than those finding it easy to compare information. This result is almost double the effect compared to the results of Model 6 discussed in section 5.6 and supports the hypothesis presented in Table 1. The next variable from this group includes respondents not understanding the information given by financial institutions about the way their mortgages work and the risks involved. As in Model 6 the coefficient of this variable is negative but in Model 8 the result is not statistically significant. Therefore arguing that people understanding poorly the information given would trust less likely in investment advisors is not supported by this study. The last variable from this group consists of respondents agreeing that it is hard to change banks. Model 8 shows that these respondents trust investment advisors 2,1 percentage points less likely than those disagreeing with this statement. The result is statistically significant at 5% significance level and supports the hypothesis.

The next group of variables addresses respondents' top three financial priorities. These variables are first introduced in section 5.2 and the hypothesis is that none of these variables have a statistically significant effect on the probability of trusting advisors. However Model 8 in Table 4 reports three priorities with statistically significant coefficients at 5% significance level. People saving for retirement, people saving for emergencies and people protecting their family in case of inability to work are all more likely to trust in investment advisors than those, who didn't prioritize these. All of these marginal effects are between 2,4 and 3,0 percentage points. Other financial priorities show no significant effect on the probability of trusting investment advisors. Model 2 discussed in section 5.2 reports similar although somewhat larger effects. Adding explanatory variables to the logistic regression model diminishes the effects and leaves most of the financial priorities without significant results. However this result can be expected as the pseudo  $R^2$  of the logistic regression model number 2 reported in Table 3 is relatively low and indicates that financial priorities don't have much explanatory power on trusting investment advisors.

Next set of variables answer the question how people find thinking about their finances and financial services. This question is examined in more detail in section 5.3. Model 8 reports statistically significant coefficients for three sentiment related variables. People finding their

finances enjoyable trust investment advisors 2,6 percentage points less likely on average than those disagreeing with them. This result is statistically significant at 5% significance level. Interesting is that this effect is significantly larger than Model 3 presented in Table 3. Increasing the number of control variables in the binary logistic regression model increases also the effect that this variable has on the probability of trusting investment advisors. The result validates the use of a larger model to truly examine the effects of each variable in a larger perspective. Without adding control variables it would be difficult to establish reliable and convincing results. This finding invalidates the hypothesis that people having positive feelings towards thinking about their finances would trust more likely in investment advisors than those having negative feelings.

The next statistically significant result is that people who find thinking about their finances and financial services comforting trust on average 2,9 percentage points more likely in investment advisors than those answering to disagree with this statement. This result supports the evidence presented in section 5.3 although the effect decreases when adding control variables to the model. Model 8 indicates that people who find thinking about their finances and financial services depressing trust on average 6,0 percentage points less likely in investment advisors than those not finding it depressing. This is statistically significant result at 5% significance level and supports the findings stated in section 5.3. The other sentiment related variables don't have statistically significant marginal effects at 5% significance level and therefore can't be argued to have an effect on the probability of trusting investment advisors.

The logistic regression model number 8 presented in Table 4 suggests that either owning stocks or having a mortgage doesn't have a statistically significant effect on the probability of trusting investment advisors. Therefore these results find no support for the 22. and 23. hypotheses presented in Table 1. People who have made transactions over the Internet are 2,8 percentage points less likely to trust in investment advisors than those who haven't. This result is statistically significant 5% significance level and disagrees with Model 5 reporting a positive effect. However adding control variables reveals the negative effect and this result supports the hypothesis that people familiar with the Internet have a greater possibility to access information related to choices and costs of financial products. This logistic regression model results that making other transactions over the Internet doesn't have a statistically significant effect on the probability of trusting investment advisors as predicted in Table 1. People who could consider buying stocks abroad trust 7,7 percentage points less likely on average in investment advisors than those not willing to buy. This result supports the hypothesis that people investing globally have higher level of financial literacy and therefore also a better understanding of costs related

to products investment advisors try to sell. Result is conflicting to the evidence of Model 5 concluding that adding control variables into the model discovers the true effect of willingness to invest abroad.

Model 8 doesn't find a statistically significant connection between probability of trusting investment advisors and finding a bank account expensive. However those thinking that the marketing techniques of financial institutions are aggressive trust 1,7 percentage points less likely on average in investment advisors than those not finding marketing aggressive. This supports intuition and is consistent with the result presented Model 7 and further discussed in section 5.7. Respondents finding the information they get from financial institutions clear and understandable trust 13,5 percentage points more likely in investment advisors than those finding the information unclear. Those finding financial transaction generally secure trust 9,6 percentage points more likely in investment advisors than those not believing them to be secure. People agreeing that the confidential information they give to banks or insurance companies is adequately protected trust 13,2 percentage points more likely in investment advisors than those disagreeing. All of these results are statistically significant at 5% significance level and supporting the earlier results from a smaller logistic regression model number 7 presented in Table 4. They are also supporting the hypotheses presented in Table 1. This logistic regression model suggests that people agreeing that when making a transaction on the Internet, it is harder to sort out any problems that may arise, trust 1,6 percentage points more likely in investment advisors than those disagreeing with them. This result validates the hypothesis that people finding it hard to sort out problems this way rather do business face-to-face with an advisor and therefore are more willing to trust their advice.

The last variables of Model 8 present country dummies indicating respondents' home country. The reference group for the dummies is Belgium and therefore the marginal effects reported in Table 4 are in relation to this reference group. Therefore it isn't possible to argue anything about the statistical significance of these variables as the p-values only represent whether the variable differs significantly from the values of Belgium. However the marginal effects remain the same in relation to each other no matter the reference group. Therefore it is possible to compare the difference of the effects.

Model 8 shows that Greece has the lowest likelihood of trusting investment advisors comparing to other EU countries. The highest probability of trust in investment advisory is reported from Finland. Right at the second place ranking the countries for their probability of trusting investment advisory is Austria and at third is Denmark. Supporting the initial hypothesis trust is the lowest in the most southern parts of Europe. The second lowest trusting

country before Greece is Italy and at third is Spain. Section 7 presents the probability of trusting investment advisory by country in Graph 1. Here the country dummies serve as control variables.

This rather large binary logistic regression model clarifies the big picture of variables affecting the probability of trusting investment advisory. However to discover the true influence of relevant factors removing the insignificant irrelevant factors improves the model by eliminating possible collinearity. Therefore the final model explaining trust in investment advisors doesn't include all the variables presented in this larger logistic regression.

## **6. Eliminating irrelevant factors**

Having as many variables as possible in a binary logistic regression model doesn't necessarily improve the model or its predictability power. On the contrary having irrelevant variables included in the model might even distort the outcome. Therefore it is important to acknowledge the most relevant factors influencing the probability of trusting investment advisors to conduct a credible logistic regression model predicting as accurate results as possible.

Binary regression model presented in Table 4 under Model 8 and discussed in section 5.8 included 46 variables in total. This constitutes as a rather large model and it is reasonable to critically evaluate which of these variables truly influence people's probability to trust in investment advisors. The decision which variables to include in the final model is made based on both the hypotheses and the results from the logistic regression models presented in the earlier sections. This section presents the rationale behind eliminating certain variables and on the other hand including others in the final model explaining probability of trusting investment advisors.

The first group of variables include respondents' demographics. As discussed previously neither respondents' age nor their marital status shows statistically significant effect on the probability of trusting investment advisors. Both arguments in favor of elderly people trusting less likely in investment advisors and arguments against it can be rationalized as discussed in section 3. Appendix 3 plots the trust percentage by age group from Eurobarometer 60,2 and presents almost horizontal line. As the evidence shows no effect and the rationale for the effect is contradictory variable indicating respondents' age is eliminated from the model. The evidence supports the hypothesis that marital status has no statistically significant effect on trusting investment advisors. This justifies the elimination of marital status as a variable from

the final model. Other demographics are included in the model as the evidence shows significant gender effect on trust and differentiations between countries as well.

Section 5.6 introduces variables related to difficulties respondents' face with their financial services. All of these variables have a strong rationale why they should have an effect on the probability of trusting investment advisors. Even though Model 8 reports no statistically significant coefficient for variable consisting of those who find it hard to understand the information given by financial institutions about the way their mortgages work and the risks involved it would be irrational to eliminate just one of the variables related to this group. Hypothesis is that this variable should have a negative effect on the probability to trust and therefore the final model contains also this variable. Removing all variables not having a statistically significant effect on the probability to trust in investment advisors wouldn't serve the purpose of this study as it is relevant to acknowledge also those variables not affecting the probability to trust. The reason for eliminating variables from the larger model is not to exclude all statistically insignificant variables but to remove those not relevant for this study.

The next set of variables is related to respondents' financial priorities and hypotheses 7-14 in Table 1. As already discussed in section 5.2 the explanatory power of these variables alone is low. However three of the priorities have a statistically significant coefficient in the larger logistic regression model reported in Table 4. Therefore further investigation is needed on the effect that persons' financial priorities have on the probability of trusting in financial advisors. The initial hypotheses is that people with different financial priorities don't trust differently in investment advisors. Therefore it is clear that these variables should be included in the final model as they have a valid rationale to be included.

The extensive logistic regression model in Table 4 reports next the variables related to sentiment that respondents' have towards thinking about their finances and financial services. As expressed in the previous section three of these sentiment variables have a statistically significant effect on the probability of trusting investment advisors. To investigate more the hypothesis that negative feelings result in decrease in the probability to trust and positive sentiment results in trusting more likely, the variables related to this question have a valid rationale to be included in the final model. Even though not every variable from this category has a statistically significant effect on the probability of trusting it wouldn't be sensible to drop them out when others are included. To gain a full understanding about the effect respondents' sentiment towards thinking about their finances and financial services have on the probability to trust all of the variables associated with this question should be included.

Evidence shows that there is no connection between the probability to trust in investment advisors and owning stocks or having a mortgage. Therefore the hypothesis that people owning stocks would trust less likely in investment advisors has to be rejected. Also the hypothesis suggesting that people having a mortgage would trust more likely in investment advisors than those not having a mortgage loan is rejected based on the results of Model 8 presented in section 5.8. Additionally the explanatory power of these variables seems to be low and therefore they are not included in the final model explaining probability of trusting.

Respondents who have made transactions over the Internet are more likely to trust in investment advisory than those not familiar with the procedure. This result is statistically significant at 5% significance level in both Model 5 and Model 8. As there is no question about the connection of this variable to the probability of trusting it is also included in the final model. Evidence shows that there is no connection between probability to trust and those who have made other transactions over the Internet. As previously discussed in section 3 this variable is poorly defined and therefore it is eliminated from the final model explaining trust in investment advisors. No evidence is found supporting the hypothesis that respondents who could consider obtaining stocks abroad would trust less likely in investment advisors than those not willing to consider. However there is a strong rationale why there should be a connection and therefore this variable is included in the final model to investigate further this matter.

Variables related to hypotheses 27-32 in Table 1 and further discussed in section 5.7 all need to be taken into consideration in the final binary logistic regression model explaining trust. These variables are related to financial services as a whole and intuitively have an effect on trusting investment advisors. For example people finding the marketing techniques of financial institutions aggressive are probably less likely to trust in investment advisors. The variables from this group all have a clear rationale how they should effect on the probability of trusting investment advisors presented in Table 1 and therefore there is no reason to exclude them. Also most of them are statistically significant at 5% significance level in the large logistic regression model reported in Table 4.

## **7. The final model explaining trust in investment advisors and interpretations**

This section covers the most important discoveries of this research. Here I present the final binary logistic regression model explaining probability of trusting investment advisors. This model combines all the relevant factors discovered and discussed in the previous sections.



Table 5 reports final results of this binary logistic regression model. This section also offers detailed discussion and interpretations for these results.

The final model reveals similar results compared to the larger logistic regression model presented in Table 4. Men are 3,9 percentage points less likely to trust in investment advisors than women. This result comes as no surprise as there are many articles studying the gender effect in other contexts (Croson and Bunchan, 1999, Charness and Gneezy 2012 etc.). Men are generally more overconfident than women (Lundeberg, Fox and Puncochar, 1994) and therefore it makes sense that men find their own knowledge sufficient enough to make financial decisions without the help of investment advisors. Prince (1993) states that men feel more competent in financial matters than women do. Men might be even threatened by the advisors and their knowledge as they might feel they should be able to make financial decisions on their own. Financial industry is also mostly male-dominated hence men experience more overconfidence making financial decisions than women. Women also score lower in financial literacy tests (Chen and Volpe, 2002; Lusardi and Mitchell, 2008). There are a number of previous studies arguing that the difference in confidence is the greatest for tasks perceived as masculine (Deaux and Emswiller, 1974, Lenney 1977, Beyer and Bowden, 1997). Investment decisions can be viewed as a traditional masculine task and therefore it can be argued that women feel themselves more insecure making these decisions than men. Consequently women seek more willingly help for these decisions from investment advisors and are more willing to accept this advice and trust on it than men. As Gennaioli, Shleifer and Vishny (2015) argued those trusting advisory are too anxious to invest by themselves and the advisors are able to provide them a piece of mind.

There are also other factors that could explain the result of men trusting less likely in investment advisors. On average women take less risk as their participation in the stock market is lower than men (Sundén and Surette, 1998; Barber and Odean, 2001; Dwyer, Gilkeson, and List, 2002; Agnew, Balduzzi, and Sundén, 2003). Previous research finds women more risk averse than men (Barsky et al., 1997; Eckel and Grossman, 2008; Croson and Gneezy, 2009 etc). Halko, Kaustia and Alanko (2012) show that this risk aversion extends to finance professionals and wealthy private banking customers as well. Therefore lower financial literacy can't fully explain the risk aversion women experience. These results could partly explain why women trust more likely in investment advisors than men. If women are more risk averse they probably need more evidence to support their financial decisions and wish to discuss different possibilities with a professional. This professional is able to provide them with reassurance and increase their confidence in their decisions.

**Table 5**

The final binary logistic regression model explaining trust in investment advisors. The data is from Eurobarometer 60.2 which is administered by the European Commission. Respondents' are asked whether they agree or disagree with the statement "I usually trust the advice given by financial institutions". When the answer is yes, this dependent variable takes the value of 1. The logistic regression model explains trust with selected variables of those listed in Table 1. Table 1 provides variable explanations and coding. The left column of the model presents the marginal effects of each variable and the right column presents z-statistics. \* and \*\* indicate statistical significance at the 5% and 1% level, respectively.

	Model 9	
	dy/dx	z-stat
v500male	-0,039**	(-5,28)
v187compareinfohard	-0,022**	(-2,65)
v190understandingishard	-0,001	(-0,17)
v193changingbanksishard	-0,020*	(-2,02)
v93saveforretirement	0,028**	(2,67)
v94payoffdebt	0,0178	(1,81)
v95buyhouse	-0,006	(-0,54)
v96inherit	0,027*	(2,43)
v97protection	0,028**	(3,13)
v98savingsforemergency	0,031**	(3,82)
v99livingwell	0,006	(0,67)
v100startbusiness	0,000	(0,01)
v103enjoy	-0,008	(-0,65)
v104interest	0,028**	(2,79)
v105comfort	0,031**	(2,67)
v106intimidating	-0,006	(-0,54)
v107complicated	0,012	(1,29)
v108dull	-0,008	(-0,72)
v109depressing	-0,062**	(-5,99)
v136banktransactions	-0,022*	(-2,24)
v145considerstocksabroad	-0,070*	(-2,43)
v195expensive	0,001	(0,16)
v199agressivemarketing	-0,016*	(-2,01)
v200clearinfo	0,135**	(16,78)
v203secure	0,097**	(11,61)
v204confidentiality	0,132**	(16,96)
v208internettransactions	0,014	(1,81)
Denmark	0,121**	(5,49)
Germany	0,040*	(2,14)
Greece	-0,267**	(-12,38)
Italy	-0,153**	(-7,12)
Spain	-0,128**	(-6,04)
France	-0,034	(-1,58)
Ireland	-0,019	(-0,89)
UnitedK	-0,048*	(-2,36)
Luxembourg	-0,046	(-1,84)
TheNether	-0,041	(-1,89)
Portugal	-0,096**	(-4,41)
Finland	0,130**	(5,93)
Sweden	-0,039	(-1,79)
Austria	0,120**	(5,76)
pseudo R <sup>2</sup>		0,118
number of observations		16059

Model 9 in Table 5 reports that respondents finding it hard to compare information from banks, about bank account features and charges trust 2,2 percentage points less likely in investment advisors than those finding it easy. The result is statistically significant at 5% significance level. People finding information from bank account features and charges hard to compare probably believe that investment advisors are cheaters who only think about their own interest and try to charge as high fees as possible. Even if this wasn't the case comparing information is a vital building block of trust as when the other party of the negotiation doesn't understand his options, it is impossible for the advisor to argue his case. After all deal closure only occurs when the customer trusts the advice and understands what he is buying. If the customer feels that it is impossible to compare charges and banks it would be rational to think that there is no option but to choose one of the equally bad choices. This kind of thinking doesn't help to build trust and only serves the bank poorly as it is in their interest to build trusting relationship and sell their products. A trusting customer comes back and profits the bank. Following the argumentation of Gennaioli, Shleifer and Vishny (2015) the bank is able to charge higher fees from customers who trust the advice given to them. Therefore this result leads to the conclusion that educating customers about the information related to bank account features and charges would actually benefit banks as the likelihood to trust in investment advisory would increase. As Gennaioli, Shleifer and Vishny suggest investors don't consider the fees as costs when the advisor is able to provide them a piece of mind.

Goldstein, Johnson and Sharpe (2008) argue that retail investors face difficult decisions with all the information and financial products available for them. The sheer amount of products and possibilities could overwhelm the investor and therefore he could begin to doubt the advice given by a single financial institution. These investors face the problem of trying to compare all the information available to make an investment decision and the limited time available for that. This could partly explain why those feeling that it is hard to compare information given to them are less likely to trust in investment advisors. When there is a tremendous amount of information available for them to compare it becomes harder to process. Trusting just one source of information begins to feel unsecure and therefore investors can't trust the information given to them by an advisor of one bank.

Similar rationale could explain the result that those respondents who find it hard to understand the information given by financial institutions about the way their mortgages work and the risks involved trust less likely in investment advisors than those finding it easy. However Table 5 reports no statistically significant marginal effect for this variable and therefore it can't be concluded that there actually is a connection between this variable and the

probability to trust. As discussed in the previous section having a mortgage doesn't effect on the probability of trusting investment advisors. This result supports that conclusion. I would argue that with a different kind of a question layout asking whether respondent finds it hard to understand the information given by financial institutions, it would result in different outcome leaving the specification on mortgage out. After all avoiding investment mistakes is one of the key reasons behind utilizing financial advisory (Fischer, Jansen, and Hackethal, 2008). If the customer doesn't understand the advice he is unable to utilize it and subject to mistakes.

The findings of Georgarakos and Inderst (2011) state that trust in professional advice affects the market participation when perceived own financial capability is low. Extending this statement it could be argued that people finding it hard to understand information given by financial institutions perceive that their own financial capability is low. Therefore if they're unable to trust the investment advisors they will not participate in the market. Hence it would be crucial for the banks to gain their trust to even be able to sell them the products profiting the bank. This leads to the conclusion that banks should invest time and money to clarify their message to understandable form for all customers in order to gain their trust and make profits on them.

People thinking that changing banks is hard are 2,0 percentage points less likely to trust in investment advisory than those finding it easy. This result is statistically significant at 5% significance level and supports the hypothesis. Those finding it hard to change banks are prone to believing they are stuck with their relationship with the current bank. Therefore the bank in question probably can charge any rate of fees from these customers which eventually drives the customer to not trusting their advice. As Gennaioli, Shleifer and Vishny (2015) argue the more trusted the professional giving the advice is the more the bank can charge fees from the customer. Another consequence from feeling hard to change banks is that the customer is trapped with the same advice given from the bank on how to invest. If this advice doesn't fit the customer the trust in the advice is bound to drop. Also it is possible that people finding it hard to change banks are skeptical about acquiring information on their own about different possibilities. These people are likely to be skeptical towards the advice they're given by financial institutions as they believe that changing banks and reaching for different options would only result in high amount of time-consuming bureaucracy. Blaming the banks of these difficulties and bureaucracy results in negative feelings towards advice.

Certain financial priorities can be concluded to have an effect on trusting financial advisors. Table 5 reports statistically significant results at 5% significance level for four financial priorities. People saving for retirement trust 2,8 percentage points more likely in

investment advisors than those not prioritizing retirement. This could be explained by the fact that planning for retirement is a long term project and requires regular saving. Therefore people could be more prone to turning to investment advisor for help designing an investment plan. It could be that people are not willing to jeopardize their retirement savings by investing themselves as retirement plans often carry significant amounts of money. Similar explanations could account for the result that people prioritizing passing on money to their children and grand-children trust 2,7 percentage points more likely in investment advisors than those not prioritizing this. In addition to knowledge on investment possibilities passing on money requires also knowledge on legal matters. There are several laws regulating passing on money and therefore acquiring a professional's advice is sensible especially when considering giving large amounts of money. These sort of plans are often for the long term and therefore it could be that people are more prone to turning to advisors to reduce the anxiety of investing.

Supporting the evidence of Model 8 people prioritizing saving for protecting their family in case of illness or inability to work trust 2,8 percentage points more likely in investment advisory than those not prioritizing this. Similarly people saving for emergencies trust 3,1 percentage points more likely in investment advisory than those not preparing for emergencies. It can be argued that everyone should save for emergencies and the data shows that 48,6% of the respondents prioritized this (Appendix 1). However those especially needing to save for emergencies are disadvantaged people. For example people with low wage could be in trouble in case of a surprising expense such as interest rates increase. When the wage isn't enough to cover these surprising expenses there should be a savings plan which assists in times of trouble. These people have often low level of financial literacy and therefore they are more willing to trust investment advisors (Gennaioli, Shleifer and Vishny, 2015). Table 5 doesn't report statistically significant results for the effects of other financial priorities. However these results lead to rejecting the hypotheses in Table 1 assuming that no financial priority effects the probability of trusting investment advisors.

Table 5 reports that respondents finding thinking about their finances and financial services as interesting trust 2,8 percentage points more likely in investment advisors than those disagreeing with them. If the respondent feels comfortable thinking about his own finances, he is 4,6 percentage points more likely to trust in advisors on average. The results are statistically significant at 5% significance level. Another statistically significant result is that respondents finding thinking about their finances and financial services depressing trust investment advisors 6,2 percentage points less likely than those disagreeing with them. These are the only statistically significant results from variables measuring sentiment towards thinking about

financial services and respondents' own finances. Therefore it isn't possible to state clearly whether negative sentiment results in trusting less likely in investment advisory and positive sentiment results in trusting more likely. Hence if believing the statement of Georgarakos and Inderst (2011) that people who don't trust the advice given by financial institutions don't either utilize it, it would lead to the conclusion that people who find thinking about their finances depressing actually utilize less likely the advice. Thus they would be subject to repeating their investment mistakes and feeling even more depressed thinking about their finances. This would result in a circle of negative feelings and decreasing probability of trusting in financial advice.

Those feeling comfortable or interested when thinking about their own finances and financial services are probably in a good financial situation and feel confident thinking about the future. These people are easier for the advisors to deal with as there is no negative feelings involved. A positive baseline for the discussion leads to more trusting environment and therefore the mutual trust increases. Thinking about finances and financial services depressing leads to a negative baseline confronting an investment advisor and makes it difficult for the advisor to turn the sentiment around. Feeling depressed about one's own finances could be due to previous losses or just poorly handled finances and disappointments. This type of a customer has a strong opinion already coming to the negotiation. With a limited time frame and plenty to discuss it gives the investment advisor little room to convince the customer and build trust in a hostile environment. This results to customer not trusting the investment advisor and just feeling even more depressed thinking about the next encounter. Turning this type of a cycle around would require a strong intervention from the investment advisor in question. However as investment advisors have tight performance targets, investing much of their time for just one customer isn't possible. Therefore the cycle of feeling depressed about thinking one's own finances and financial services is hard to break.

The finding of Bhattacharya et al. (2012) of people being most unwilling to obtain financial advice when they most need it supports the result of depressed feelings leading to lower probability to trust. Those who have encountered losses previously and feeling depressed thinking about their finances are in the greatest need of the advice as they have the biggest risk of irrational investing in the hopes of superior profits. Fischer, Jansen, and Hackethal (2008) conclude that one of the key reasons to utilize advisory is to avoid investment mistakes. Those feeling depressed thinking about their finances are prone to mistakes and therefore should consult a professional when making investment decisions. Feeling depressed is a result of wrong kind of an investment strategy. For example too risky investment strategy can lead to panicking when the market drops. When the investor panics he makes rash decisions and

probably cashes his investments. Therefore he encounters unnecessary losses. If he discussed with an investment advisor at the time of the market drop he could even have the confidence in investing more in that product. This strategy would lower his average buying price and therefore he would gain profits on the investment sooner when the market recovers. Hence it is an important part of the discussion to agree on the appropriate risk level for the investment strategy. This ensures the customer knows the risks involved and approves them. This kind of discussion with an investment advisor could be a solution to avoiding depressed feelings towards one's own finances.

The binary logistic regression model presented in Table 5 reveals that people who have used the Internet to make bank transactions are 2,2 percentage points less likely to trust in investment advisors than those not familiar with this possibility. The result is statistically significant at 5% significance level and confirms the hypothesis that the users of Internet utilize the information available there or at least critically evaluate the advice they're given. The reference group here is the respondents not utilizing the Internet to make bank transactions. These people are on average elderly people with less knowledge on information technology. Therefore they have less information available and fewer possibilities to compare different options such as the products they're offered by investment advisors. These people could also have had a long relationship with their bank and the investment advisor and therefore the mutual trust has been built over the years.

As Hortacsu and Syverson (2004) reasoned there has to be other benefits apart from pure returns that investors are seeking from advisors. Taking the explanation of Gennaioli, Shleifer and Vishny (2015) that investors are too anxious to invest on their own and therefore seeking the advice of financial institutions would fit the result arguing that those using the Internet are less likely to trust in investment advisors. People not comfortable using the Internet as a tool are therefore more willing to pay fees for financial institutions' advice. They can't reach the same information online or are unwilling to make the final investment decisions on their own. Therefore they turn to investment advisors and are willing to pay higher fees for their products compared to passive investing strategies not offered by traditional banks.

On average people who could consider obtaining stocks abroad trust 7,0 percentage points less likely in investment advisors than those who wouldn't consider. As a statistically significant result this leads to the conclusion that those considering stocks abroad have a higher level of financial literacy as international investors and are prone to questioning the advice investment advisors give. These people are more likely to make the decision on their own as they already have experience investing. This group of respondents are not afraid of the

challenges related to investing abroad such as currency risk or they are willing to hedge those risks. This would suggest that they are probably suffering from overconfidence as well. Gennaioli, Shleifer and Vishny (2015) argue that investors utilizing advisory services are too anxious to invest on their own since they have low level of financial literacy. Advisors are able to ease their mind and therefore investors don't care about the costs occurring. This support my findings as investors with international portfolios and high level of financial literacy trust less likely in investment advisors than those not willing to invest abroad. Investors not willing to even consider investing abroad are clearly suffering from home bias. Fama and French (2007) suggest that investors could have tastes for assets which would explain for example home bias.

The final model explaining trust in investment advisors finds that thinking that having a bank account is expensive doesn't have a statistically significant effect on the probability to trust. Therefore cost sensitiveness can't explain differences in the probability of trusting investment advisors. However the model finds that people who think that the marketing techniques of financial institutions are aggressive trust 1,6 percentage points less likely in investment advisors than those not finding them aggressive. The result is statistically significant at 5% significance level. Supporting the hypothesis the result shows that too aggressive marketing from banks doesn't increase sales but might even result in loss of customers when their trust decreases. When customers can't trust that the advice they're given is genuine and not a result of an aggressive marketing campaign or a sales competition they're bound to be resentful towards the products advisors try to sell. As Georgarakos and Inderst (2011) argue in their paper, customers don't utilize the advice they're given if they don't trust it. Trust issues between advisors and customers are a serious problem for a bank as investment advisors are the voice of the bank and in direct relationship with the customers. Investment advisors are an important part of banks' salesforce. When customer doesn't trust in investment advisor it is likely that he can't trust the bank either as the advisor is the representative of the bank. Therefore banks have to balance between no visibility in the media (which could lead to customer loss) and too aggressive marketing (which can also result to customers leaving the bank after loss of trust).

As the competition becomes more intense the banks are forced to take a proactive manner of approach towards customers. Advisors don't have enough customers if they don't proactively invite them for meetings. However this approach has a down side of customers perceiving the marketing too aggressive which leads to loss of trust. When the competition increases banks are forced to market their products and services. However as the banks are perceived as objective institutions aggressive marketing compromises this image. Therefore banks are in a



difficult position. We're on the verge of a new era of banking where new practices have to be implemented to survive the global competition and increasing share of online banking.

Respondents finding the information they get from financial institutions clear and understandable are 13,5 percentage points more likely to trust in investment advisors than those not finding it clear. This statistically significant result shows how important it is for the banks and for the advisors to deliver clearly their message and marketing. When customer receives inadequate or confusing information he can't make an investment decision and the work of the advisor gets harder. It's vital for the advisor to deliver the message considering the background and level of financial literacy of the customer. When talking to a kindergarten teacher and her husband the plumber it isn't relevant to use any finance jargon since they're not able to understand the meaning of the terms and only get confused. When the audience of the advisor is of lower financial literacy he should be able to explain all the relevant factors in an easily understandable manner and cut the unnecessary jargon. The advisor has to be able to relate to the customer and talk in similar language to gain the trust.

Carlin (2009) argues that banks add complexity to their pricing structures to prevent the customers from understanding them. However my findings don't support the rationale to increase complexity as if the information isn't clear the customers lose their trust. This would result in losing the customers. According to French (2008) financial institutions deliberately fail to correct some assumptions. Hence it could be argued that even though a customer would get clear and understandable information from financial institutions it isn't necessarily correct information or it is likely to be biased to serve the purposes of the bank.

People who find financial transactions generally secure are 9,7 percentage points more likely to trust in investment advisor than those believing transactions to be insecure. The result is statistically significant at 5% significance level and comes as no surprise. This result is truly intuitive. If a person doesn't trust the bank transactions to be secure it would be irrational to trust in the investment advisor who makes the transactions. Doubting the bank as a whole reflects on the relationship towards investment advisors as this result reveals. People trusting the bank transactions to be secure also trust the bank as a mediator and therefore share the quality of trusting more likely in investment advisors on average.

People who think that the confidential information they give to banks or insurance companies is adequately protected trust 13,2 percentage points more likely in investment advisors than those disagreeing them. As a statistically significant result this confirms the observation that people trusting the bank as a whole trust more likely also in investment advisors. Those doubting the actions of the bank are more prone to believing that the investment

advisors are neither worth the trust. If a customer feels that the information he gives confidentially to the investment advisor leaks to his colleagues or other parties he can't trust the advisor. Especially if he feels that the bank can't keep his information protected why would he trust the investment advisor to differ? Confidentiality is a key question to banks as it is defined by law. Leaking customer information is considered severe offence against the law and banking practice. Therefore protecting the information of customers is an important part of banking institution.

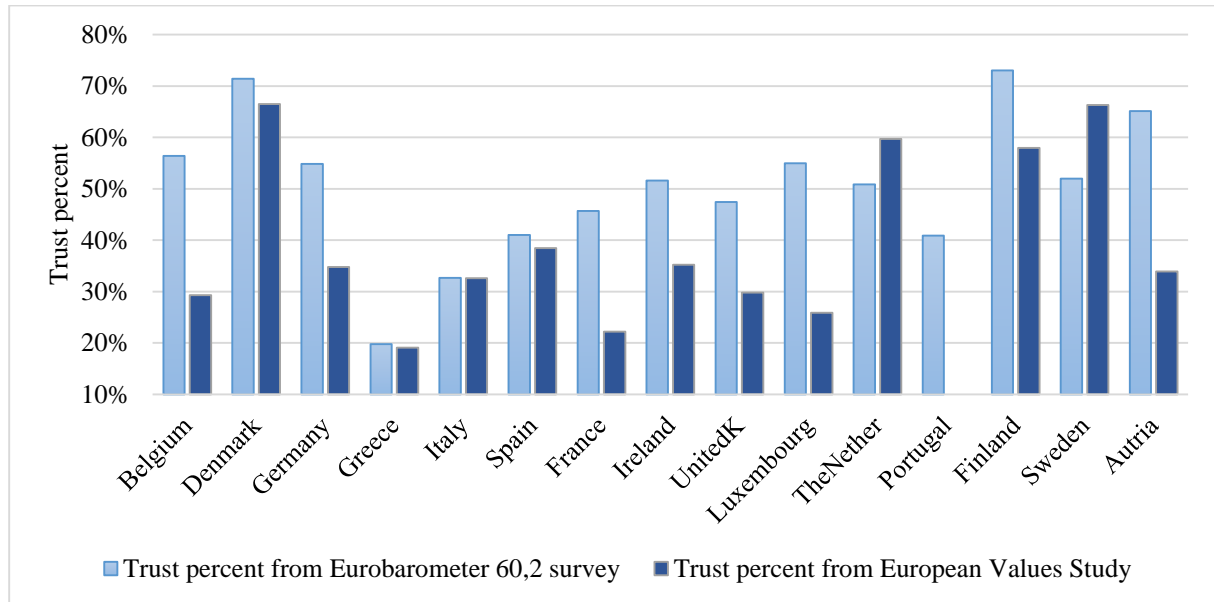
The binary logistic regression model presented in Table 5 doesn't find a statistically significant connection between trusting investment advisors and those thinking that when making a transaction on the Internet, it is harder to sort out any problems that may arise. Therefore there is no evidence to support the hypothesis that people agreeing with this statement would rather discuss the issues with an investment advisor face-to-face and therefore trust advisors more than those disagreeing with the statement. However it could be that people finding it harder to sort out problems when the transaction is made online do business rather with an investment advisor. This study just concludes that those people don't trust statistically significantly more in advisors than people not finding the problems harder to sort out when transactions are made online.

The last variables of Model 9 represent the country dummies in reference to Belgium. These dummies serve as control variables. Therefore to illustrate the actual variation in the probability of trusting investment advisors between countries Graph 1 presents the results as a histogram. Graph 1 reports the probability of trusting investment advisors by country from Eurobarometer 60.2 and interpersonal trust in others by European Values Study 2002. Eurobarometer 60.2 reports that people in Greece are clearly the least likely to trust in investment advisors followed by Italians and Portuguese. Only 19,8% of respondents from Greece reported that they trust in investment advisors. Graph 1 reports that Finns trust the most in investment advisors. 73% of respondents in Finland reported that they trust in investment advisory. Close second are the Danish with 71,4% trusting investment advisors. They are followed by Austria where 65,1% of respondents trust in advisors. If not looking at the "outliers" meaning the countries with the highest and the lowest probability to trust, Graph 1 reports quite solid 50% probability of trusting investment advisors across EU.

Graph 1

## Trust by country

The graph presents the percentage of respondents who report trusting investment advisors in Eurobarometer 60.2 and those reporting that most people can be trusted in European Values Study. Presented are the unrefined statistics from the Eurobarometer 60.2 survey reported in descriptive statistics in Appendix 1. The data is from Eurobarometer 60.2 survey and from European Values Study 2002.



These results reporting the probability of trusting by country can be argued to be effected by the general level of trust in others in each country. Therefore Graph 1 presents trust index from European Values Study 2002 to demonstrate the level of trust in others by country. Unfortunately this study lacks data from Portugal. These values of trust are not directly comparable to each other as the respondents from European Value Study are asked whether most people can be trusted combined with question of should one always be careful to trust. However Graph 1 presents the trends of trusting in others from European Values Study which serves the purpose of this research.

Graph 1 reports the highest trust index for Denmark followed by Sweden. Close are also the Netherlands and Finland. Lowest level of trust in others is reported from Greece. Clear differences in the level of trust are revealed from Belgium, Germany, France, Luxembourg and Austria which all report above 20 percentage point difference in the level of trust between these studies. However as the studies are not directly comparable interpreting these differences must be done with caution. The trends of trust are similar in both studies showing low level of trust in South Europe and high level of trust in North Europe. Zak and Knack (2001) study a growth model where heterogeneous agents transact and face a moral hazard problem. They argue that cheating is more likely by brokers and therefore trust is lower among investors when formal

institutions are weak, social sanctions from cheating are ineffective and the investors' wage is low. These factors could explain the low trust in Southern Europe. In Southern Europe the society is emphasizing different priorities than in Northern Europe such as the meaning of family. It can be argued that the formal institutions do not play as significant role in there as they do in Northern Europe. The culture is different in terms of social sanctions from cheating or lying. Also the wages are lower in Southern Europe than in the North. Transparency International ranks countries by the level of corruption. Finland, Sweden and Denmark are all in top four least corrupted countries in the world. Greece, Italy and Spain rank below 35. Hence level of corruption can be argued to have an effect on the probability of trusting investment advisors. Also the financial situation of the countries can have an effect on the general level of trust towards the financial institutions.

Graph 1 shows that South Europeans' trust in investment advisors is depressingly low. If believing the findings of Guiso, Sapienza and Zingales (2008) that households' trust in others has a statistically significant effect on stock market participation this result would suggest that market participation in the Southern Europe is lower than in for example in Scandinavia. And if combined with the conclusion by Merton and Bodie (2005) that economic growth is promoted by well-functioning financial institutions I would argue that this is one issue Southern Europe should address when striving towards growth. When people don't trust the investment advisors the financial institutions can't work properly because of lack of funding. If people don't buy the products investment advisors sell, the banks won't have money to lend out. This prevents the whole economy from functioning. Trust is a vital part of economy working the way it should since there is a real threat of the economy freezing and stagnating when there is a lack of trust. Addressing this issue would help in boosting the economy in Southern Europe.

## **8. Subsample analysis**

This section presents subsample analysis based on the results discussed previously. Here are discussed the most interesting effects found in previous models explaining trust in investment advisors which differ in subsamples. This section reveals remarkable country differences as the final model averages the results to EU level. However as this section shows there are a number of effects that differ quite substantially between countries. Therefore a deeper analysis is needed to understand these effects. Appendix 4 reports the subsample logistic regression models done by country. Subsample analysis is done for all the statistically significant effects reported in the final model presented in Table 5 and few other interesting

variables. Appendices 4, 5 and 6 report the results in detail and this section discusses the most relevant findings.

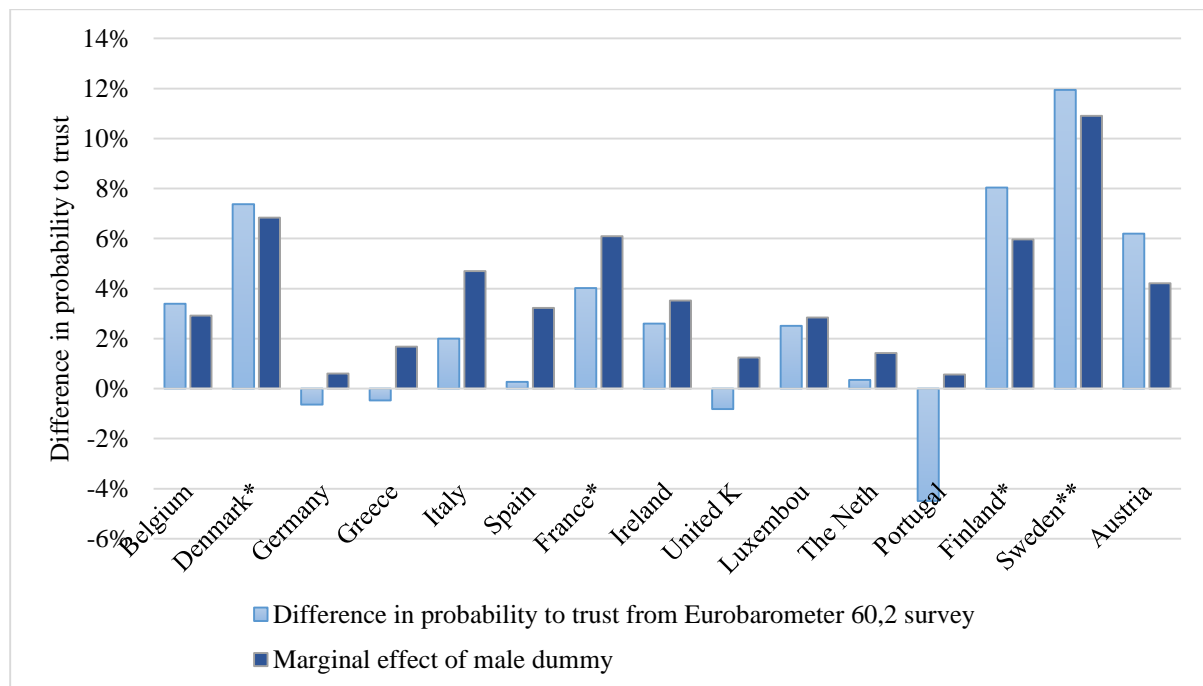
### 8.1. Subsample analysis by country

Graph 2 presents gender differences in probabilities of trusting investment advisors by country. As discussed previously men tend to trust less likely in investment advisors and Graph 2 reports the percentage point differences between men's and women's probabilities to trust by country. Both results are reported, the unrefined percentage point differences from Eurobarometer 60.2 survey and the differences found in country specific logistic regression models. The graph reports positive values when men trust less likely in investment advisors. This is to avoid most values falling below the axis.

Graph 2

Differences in probabilities of trusting investment advisors between women and men

The graph presents the percentage point differences between women's and men's probability of trusting investment advisors. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of male dummy reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when men trust less likely in investment advisors than women. The differences are converted this way to positive to avoid most values falling below the axis. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



Graph 2 shows remarkable variations between countries in the gender differences in probabilities of trusting investment advisors. The largest difference in likelihood of trusting is

reported from Sweden. A statistically significant result at 5% significance level from subsample logistic regression model is that in Sweden women trust 10,9 percentage points more likely in investment advisors than men. A large statistically significant positive difference in probabilities for the benefit of women occurs also in Denmark, France and Finland. However these differences between men's and women's likelihood of trusting investment advisors indicate women trusting more likely as previously discussed. On the other hand Graph 2 reveals that in Portugal men actually trust more likely in investment advisors than women with 4,5 percentage points difference. However this difference is not statistically significant and similar results are not found with a logistic regression model. Also Germany, Greece and United Kingdom report men trusting more likely in advisory than women but the differences are less than a percentage point and not statistically significant in logistic regressions. Graph 2 suggests that countries with high probability of trusting investment advisors in general (as reported in Graph 1) also carry high differences in probabilities between genders. Extending the argument by Lundeberg, Fox and Puncochar (1994) that men are more overconfident than women, these results could indicate more overconfident men in countries having high probability of trusting in general. Finland and Denmark are the two countries with highest probability of trusting investment advisors as reported in Graph 1 and they have high trust index values in European Values Study for trusting other people. These graphs report that the difference in probabilities of men's and women's trust in investment advisors is emphasized when the likelihood of trusting in general is high. When people's likelihood of trusting is low the difference diminishes or even reverses.

If believing Guiso, Sapienza and Zingales (2008) that trust is effected by the possibility of being cheated, it could be that as women are more risk averse than men (Barsky et al., 1997; Eckel and Grossman, 2008; Croson and Gneezy, 2009) their probability of trusting is therefore lower in countries with higher probability of being cheated. In countries where the investor protection is high women are more willing to trust in financial institutions and investment advisors. This effect could explain the reverse difference in probabilities of trusting between genders. When the investor protection is in place other factors begin to effect the difference between men's and women's probability of trusting such as overconfidence.

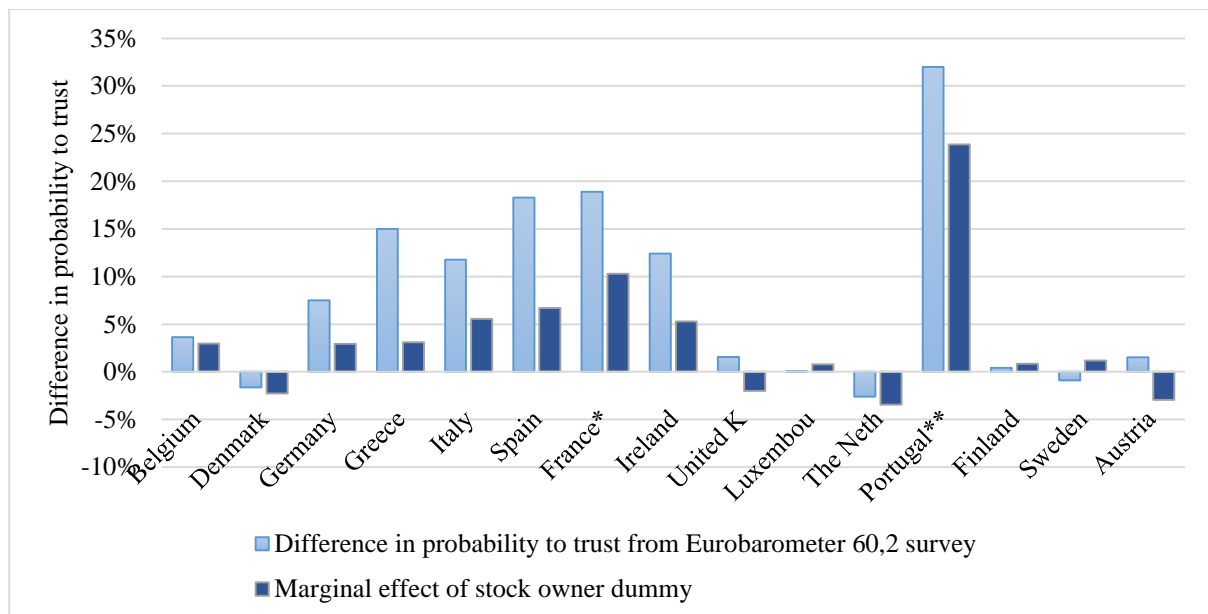
An interesting finding presented in Graph 3 is that even though at EU level there is no difference between probabilities of people owning stocks and those not owning stocks in trusting investment advisors, there are significant differences found in some countries. Graph 3 presents the percentage point difference in likelihood of trusting investment advisors between people owning stocks and those who don't own stocks. Positive values indicate stock owners

trusting more likely in investment advisors than those not owning stocks. The graph is plotted this way to avoid most observations lining below the axis. Graph 3 reports the differences in probability of trusting as unrefined descriptive statistics and the results of subsample logistic regression models presented in Appendix 4.

Graph 3

Differences in probabilities of trusting investment advisors between stock owners and those not owning stocks

The graph presents the percentage point differences in probabilities of trusting investment advisors between stock owners and those not owning stocks. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of stock owner dummy reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when stock owners trust more likely in investment advisors than those not owning stocks. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



The largest difference in probability is reported from Portugal where stock owners trust 32,0 percentage points more likely in investment advisors than those not owning stocks. A subsample logistic regression model indicates that the statistically significant difference in the probability is 23,9 percentage points. A remarkable finding is that 71,9% of stock owners reported to trust in investment advisors in Portugal. More than 10 percentage point difference in likelihood of trusting is reported also from Greece, Italy, Spain, France and Ireland. Therefore the hypothesis that stock owners would trust less likely on average in investment advisors in every country is not supported by these findings. However logistic regression models on country subsamples reveal that only France and Portugal have a statistically significant difference in likelihood of trusting at 5% significance level between the two groups. Both of

these differences are interestingly positive and therefore conflicting with the hypothesis that people owning stocks would have high level of financial literacy and therefore exercise more critique against investment advisors.

However similarly to the final model explaining trust in investment advisors presented in section 7, Graph 3 finds no significant differences in probability of trusting between people owning or not owning stocks for most of the countries. However these findings suggest that this effect is not uniform across EU. There are many possible explanations for these findings. France and Portugal reporting a significant difference in probabilities both have low trust in general (Graph 1). In Southern Europe the culture is different and could have its own effect on trusting financial institutions and the population who believes them to be trustworthy. It could be that the minority holding stocks have bought them in consequence of advisory or they are working themselves in a bank. The findings could be explained by the fact that there are a minority of stocks owners in these countries and therefore only limited amount of observations (Appendix 1). Hence this effect would require further studying with larger dataset from these countries.

Another remarkable finding is that especially in Southern Europe people who reported to have made bank transactions over the Internet actually trusted more likely in investment advisors than those who had not made similar transactions. Graph 4 presents both figures: the unrefined differences in probabilities of trusting investment advisors by country between those who have made bank transactions over the Internet and those who haven't and the results of subsample logistic regression models.

Graph 4 reports a statistically significant positive 20,8 percentage point difference in the likelihood of trusting investment advisors in Greece between people making bank transactions over the Internet and those not making. The graph reports that in Greece those who have made bank transactions over the Internet trust more likely in investment advisors than those who have not made such transactions. The data shows that in Greece 58,3% of those who have made bank transactions over the Internet trust in investment advisors. Thus this is a substantial share of the group of people who trust in investment advisors in Greece. Other countries report smaller differences in probabilities of trusting and none of them are statistically significant. The three other countries reporting above 10 percentage point difference in likelihood of trusting are Italy, Spain and Portugal. These are also the countries which hold the smallest probability of trusting investment advisors in general (Graph 1). These findings suggest that the population trusting investment advisors in Greece is familiar with using the Internet which could be considered as a proxy for financial literacy at least in the beginning of 2000's. Findings represented in Graph

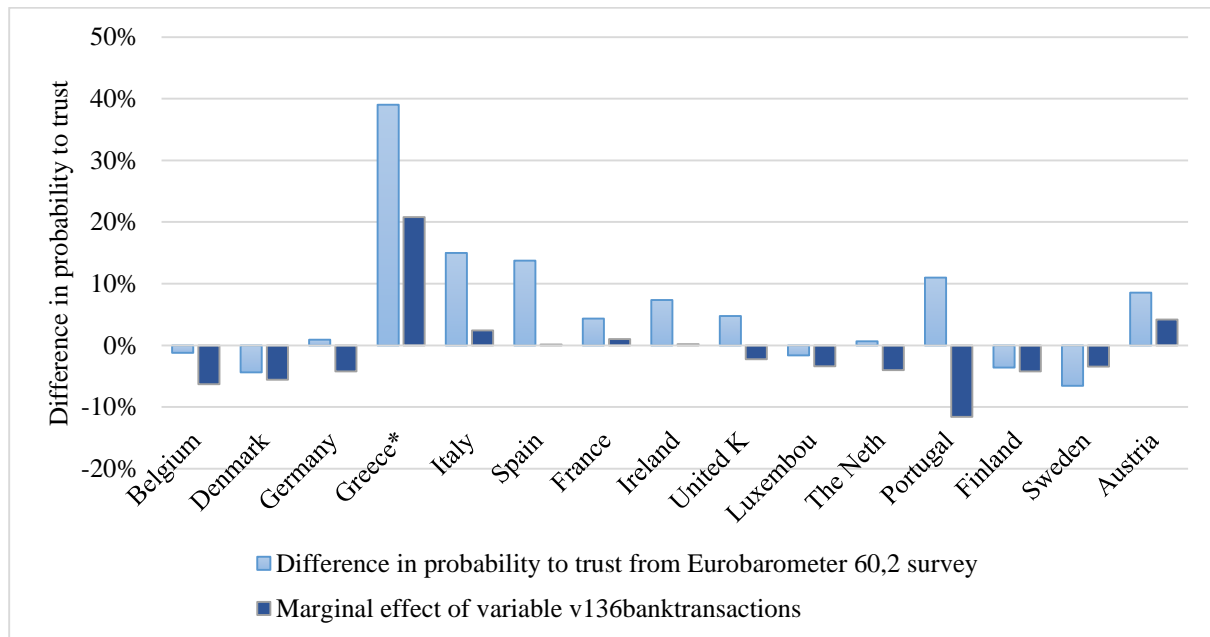


3 and Graph 4 both indicate that people with high level of financial literacy actually trust more likely in investment advisors in southern parts of the Europe. However these results must be interpreted with caution as most of the differences are not statistically significant at 5% significance level.

Graph 4

Differences in probabilities of trusting investment advisors between those who have made bank transaction over the Internet and those who have not

The graph presents the percentage point differences in probabilities of trusting investment advisors between those who have made bank transactions over the Internet and those who have not. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of variable v136banktransactions reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. When the values are positive those who have made bank transactions over the Internet trust more likely in investment advisors than those who have not made such transactions. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



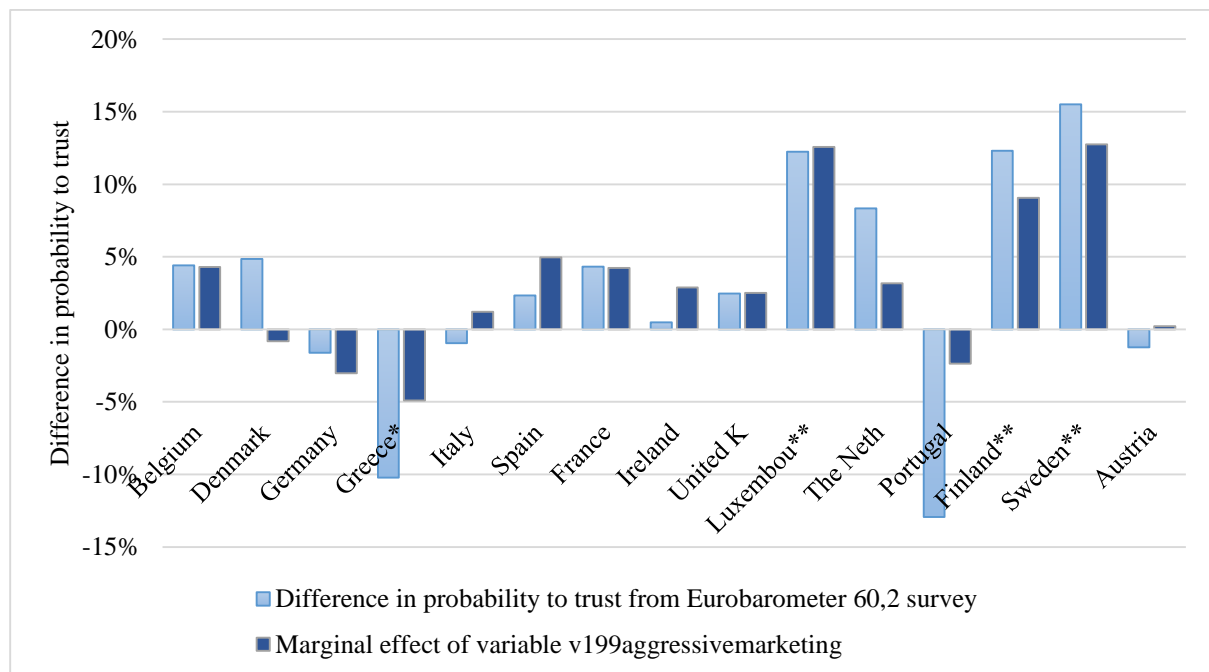
People who think the marketing techniques of financial institutions are aggressive trust less likely in investment advisors as discussed previously. However studying this effect closer Graph 5 reveals that the effect is conflicting in Greece and in Portugal. There people finding the marketing of financial institutions aggressive trust more likely in investment advisors than those not finding the marketing aggressive. Statistically significant at 5% significance level the negative difference is in Greece. These results support the previous findings that in Southern Europe the factors affecting trusting investment advisors are different or at least somewhat conflicting to other parts of Europe. This could be caused by differentiations in culture and possibility of being cheated (Guiso, Sapienza and Zingales, 2008). In Southern Europe it could

be considered as a character of a well-known and trusted bank that it markets its products widely and somewhat aggressively. Aggressive marketing can be therefore seen as a positive quality of a bank. Hence banks not marketing their products are seen as suspicious trying to hide something. These differences are also cultural. In Northern Europe banks are seen as reliable and somewhat objective institutions and hence aggressive marketing is seen as a negative outcome which decreases their trustworthiness.

Graph 5

Differences in probabilities of trusting investment advisors between those finding the marketing techniques of financial institutions aggressive and those not finding them aggressive

The graph presents the percentage point differences in probability of trusting investment advisors between those who think that the marketing techniques of financial institutions are aggressive and those not finding them aggressive. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of variable v199aggressivemarketing reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when those who think that the marketing techniques are aggressive trust less likely in investment advisors. The differences are converted this way to positive to avoid most values falling below the axis. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



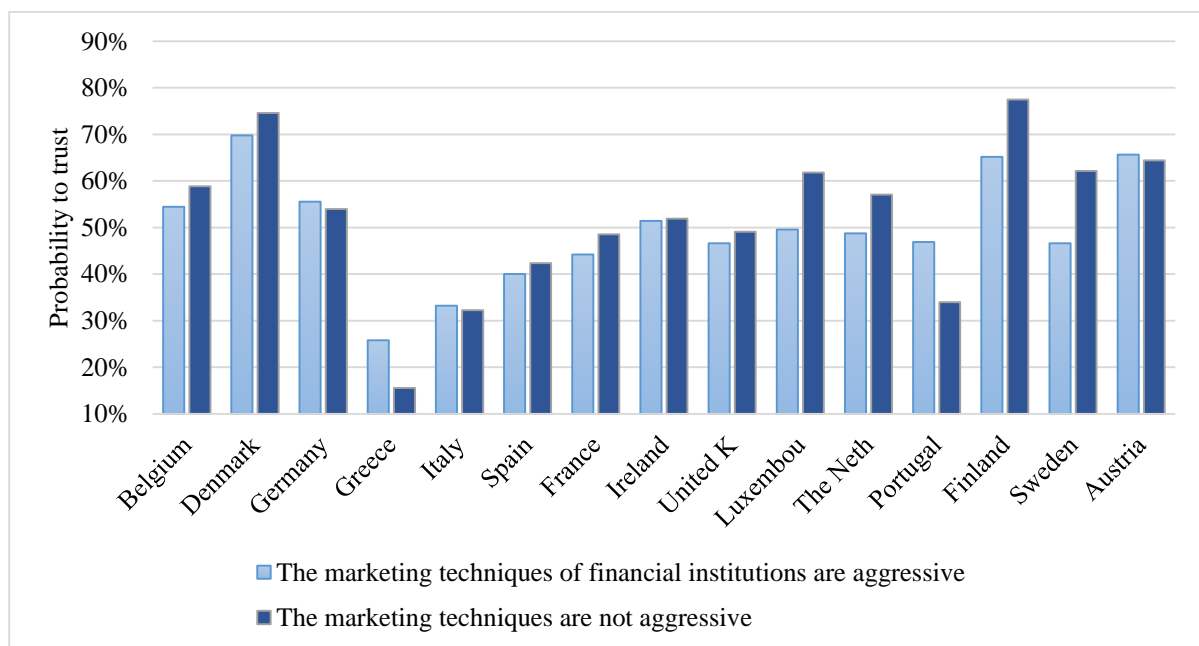
The largest positive differences in the likelihood of trusting investment advisors Graph 5 reports from Sweden, Finland and Luxembourg, between those agreeing that the marketing techniques of financial institutions are aggressive and those disagreeing them. These differences in the likelihood of trusting are statistically significant at 5% significance level. However the differences in probabilities between the two groups do not tell about the

probability of trusting investment advisors. Therefore to clarify this Graph 6 presents the probabilities of trusting by country for both groups.

Graph 6

The probability to trust in investment advisors among those finding the marketing techniques of financial institutions aggressive and those not finding them aggressive

The graph presents the percentage of respondents who report trusting investment advisors of those who think that the marketing techniques of financial institutions are aggressive and those not finding them aggressive. Presented are the unrefined probabilities to trust from the Eurobarometer 60.2 survey. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The light column presents the respondents trusting investment advisors as a percentage of those respondents who reported to agree that the marketing techniques of financial institutions are aggressive. The dark column presents the probability to trust among respondents who disagreed with the statement.



Graph 6 shows that even though there is a statistically significant 9,1 percentage point difference in Finland in the likelihood of trusting investment advisors between people finding the marketing aggressive and those disagreeing with them, the probability of trusting is high overall. 65,2% of those who believe that the marketing techniques of financial institutions are aggressive report however trusting investment advisory in Finland. In Sweden there is a 12,8 percentage points statistically significant difference in probabilities of trusting between the two groups and 12,6 percentage points difference in Luxembourg. However in both of these countries still almost 50% of people finding the marketing aggressive report trusting in investment advisors. In comparison in Italy about 32% of both groups trusted investment advisors in Eurobarometer 60.2 survey as the level of trust in general is low.

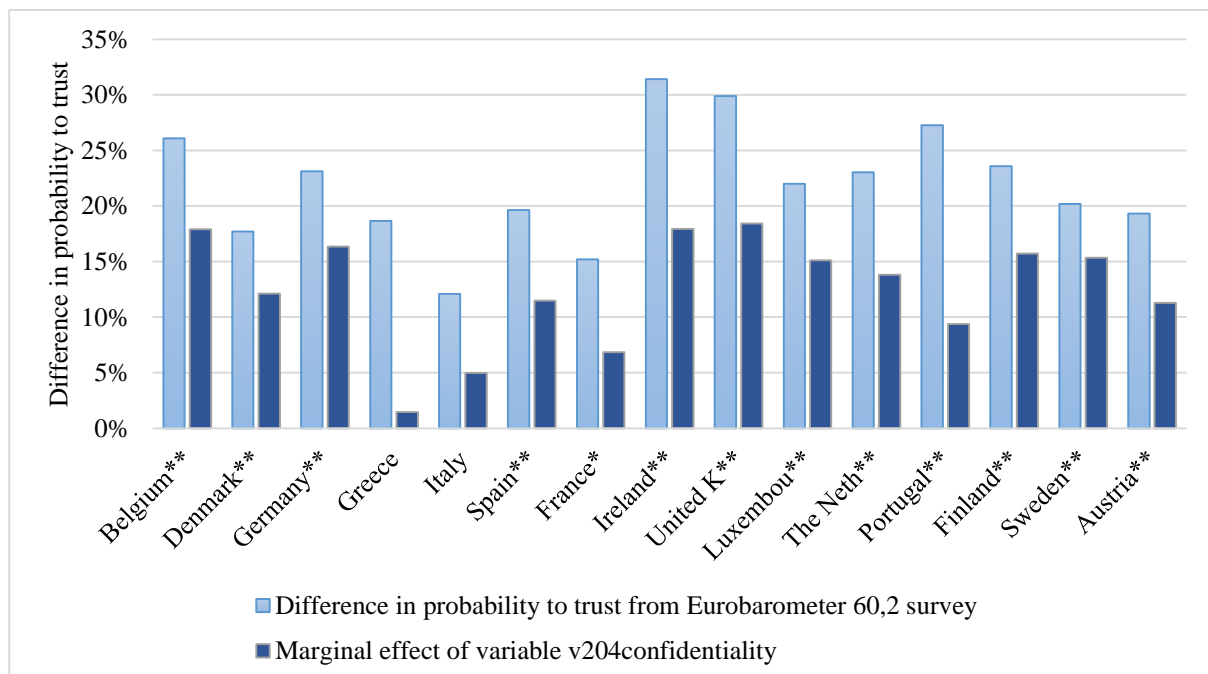
Graph 7 presents the differences in probabilities of trusting investment advisors by country between respondents who agreed that the confidential information they give to banks

and insurance companies is adequately protected and those who disagreed. The graph presents both the unrefined differences in probabilities of trusting from Eurobarometer 60.2 and the results of subsample logistic regression models. The results show the large effect reported already previously in Table 5 of confidentiality playing a large role in trusting investment advisors. All countries except Greece and Italy have statistically significant positive differences at 5% significance level between those finding their information adequately protected and those disagreeing with them. In most countries the differences are statistically significant even at 1% significance level which stresses the effect.

Graph 7

Differences in probabilities of trusting investment advisors between those thinking that the confidential information they give to financial institutions is adequately protected and those finding the confidentiality violated

The graph presents the percentage point differences in probability of trusting investment advisors between those thinking that the confidential information they give to financial institutions is adequately protected and those finding the confidentiality violated. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of variable v204confidentiality reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when those who think that the confidential information is adequately protected trust more likely in investment advisors. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



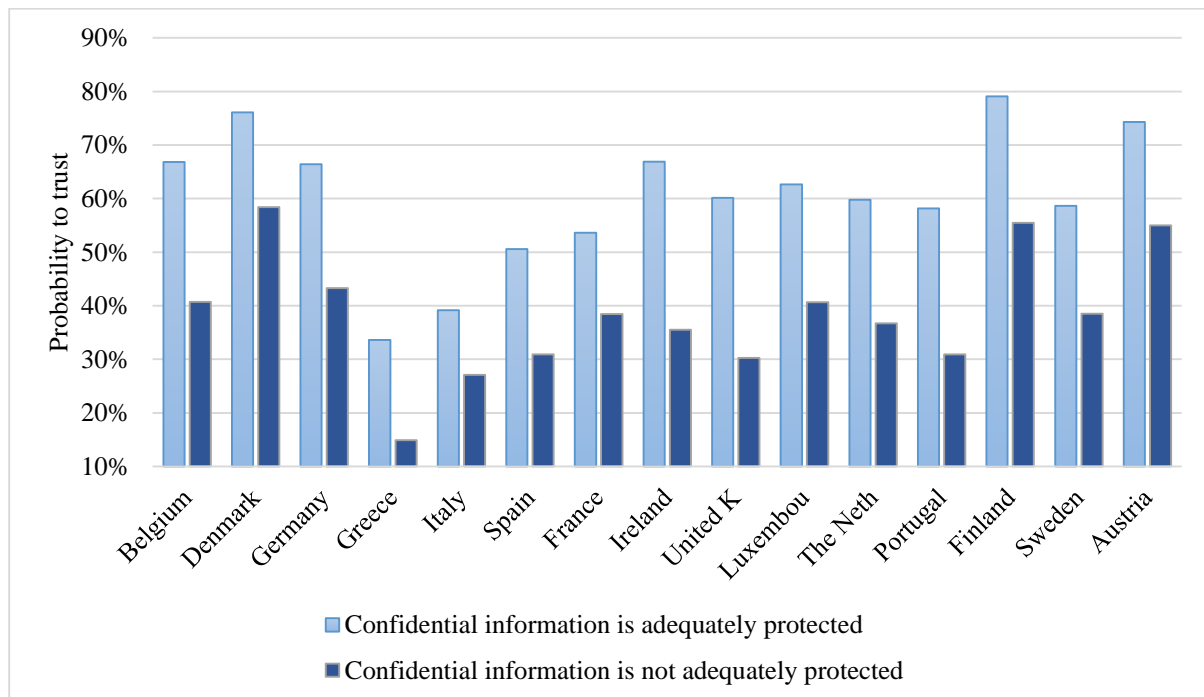
However to compare these results to the overall probability of trusting investment advisors reported from each country Graph 8 presents probability of trusting by country for stock owners and those not owning stocks. In Finland and in Denmark more than 75% of people

believing that the information given to banks is adequately protected report trusting investment advisors. On the other hand in Greece only 14,9% of people not believing the banks to protect adequately the information given trust in advisors. These results stress the importance of banks protecting the information of their customers and holding bank secrecy. The results reveal the inevitable connection between trusting a bank as a whole and trusting their investment advisors.

Graph 8

The probability to trust in investment advisors among those thinking that the confidential information they give to financial institutions is adequately protected and those finding the confidentiality violated

The graph presents the percentage of respondents who report trusting investment advisors of those who think that the information they give to financial institutions is adequately protected and those disagreeing them. Presented are the unrefined probabilities to trust from the Eurobarometer 60.2 survey. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The light column presents the respondents trusting investment advisors as a percentage of those respondents who reported to agree that the confidential information is adequately protected. The dark column presents the percentage of those trusting among respondents who disagreed with the statement.



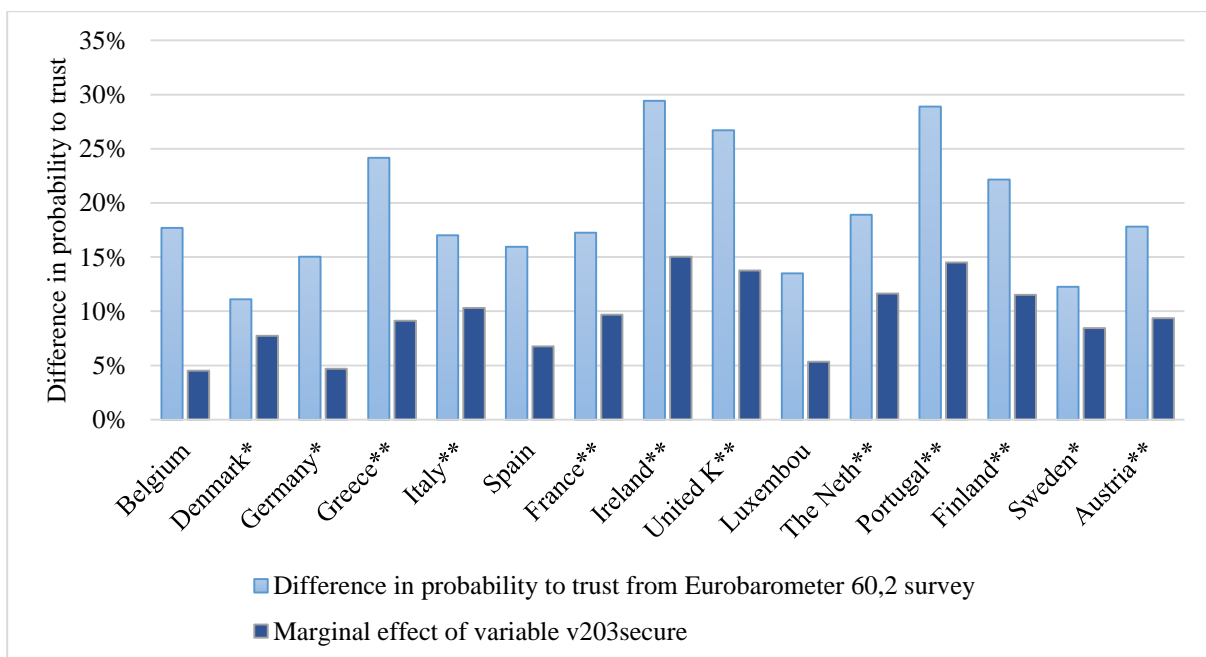
Next graph deepens the analysis of the feeling of security affecting trusting investment advisors. Graph 9 presents the differences in likelihood of trusting investment advisors by country between those who agree that financial transactions are generally secure and for those disagreeing. The graph reports both the unrefined differences in probabilities from descriptive statistics reported in Appendix 1 and Appendix 2 and results of subsample logistic regression models reported in Appendix 4. All countries except Spain and Luxembourg report statistically significant differences in likelihood of trust. The graph reveals the large differences in probabilities of trusting between the two groups of respondents. In Ireland those finding bank

transactions generally secure trust 15,3 percentage points more likely in investment advisors than those finding transactions unsecure. Portugal reports the second largest difference of 14,5 percentage points in probabilities of trusting between the two groups. Comparing these results to the overall probabilities of trusting advisors between the two groups helps to understand the perspective. Hence Graph 10 presents both groups' likelihood of trusting investment advisors by country.

Graph 9

Differences in probabilities of trusting investment advisors between those agreeing that financial transactions are generally secure and those disagreeing with them

The graph presents the percentage point differences in probability of trusting investment advisors between those who agree that financial transactions are generally secure and those disagreeing with them. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects on variable v203secure reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when those who agree that the transactions are secure trust more likely in investment advisors. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



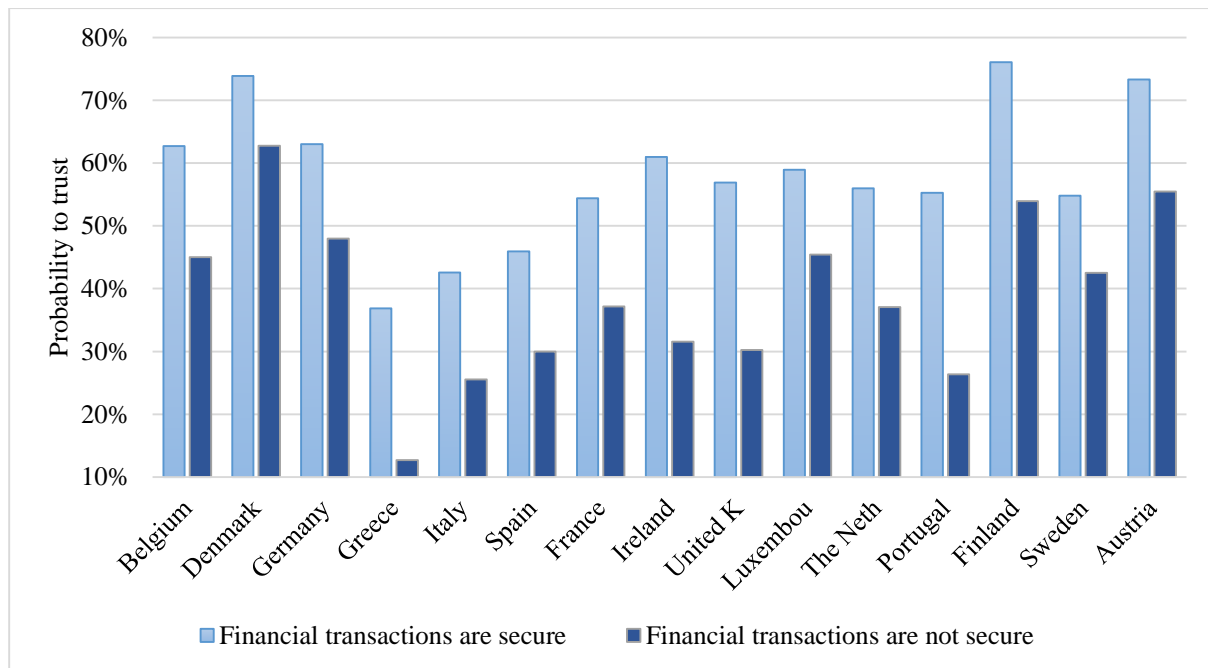
Graph 10 shows that in Greece 36,9% of respondents agreeing that financial transactions are secure in general trust in investment advisors. This enlightens partly what effects the low level of trust in Greece as if the entire population was convinced that financial transactions were secure in nature, the level of trust in investment advisors would rise. Notable is that above 50% of respondents finding bank transactions generally unsecure in Denmark, Finland and Austria still report trusting investment advisors. Graph 10 supports the argument that finding bank transactions secure and accounting the possibility of being cheated low contributes to trusting

investment advisors. This strengthens the message for banks to operate reliably and keeping to bank secrecy.

Graph 10

The probability to trust in investment advisors among those agreeing that financial transactions are generally secure and those disagreeing with them

The graph presents the percentage of respondents who report trusting investment advisors of those who agree that the financial transactions are generally secure and those disagreeing them. Presented are the unrefined probabilities to trust from the Eurobarometer 60.2 survey. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The light column presents the respondents trusting investment advisors as a percentage of those respondents who reported to agree that the transactions are secure by nature. The dark column presents the percentage of those trusting among respondents who disagreed with the statement.



Another remarkable finding of subsample logistic regression models is that even though the general difference in probability of trusting investment advisors between those finding changing banks easy and those finding it hard is only about two percentage points there are significantly larger differences in some countries. Hence Graph 11 presents these differences by country as unrefined differences in probabilities from descriptive statistics and results from the subsample logistic regression models. Graph 11 reports positive values when those thinking that changing banks is hard trust less likely in investment advisors. The values are converted to positive to avoid most values falling below the axis.

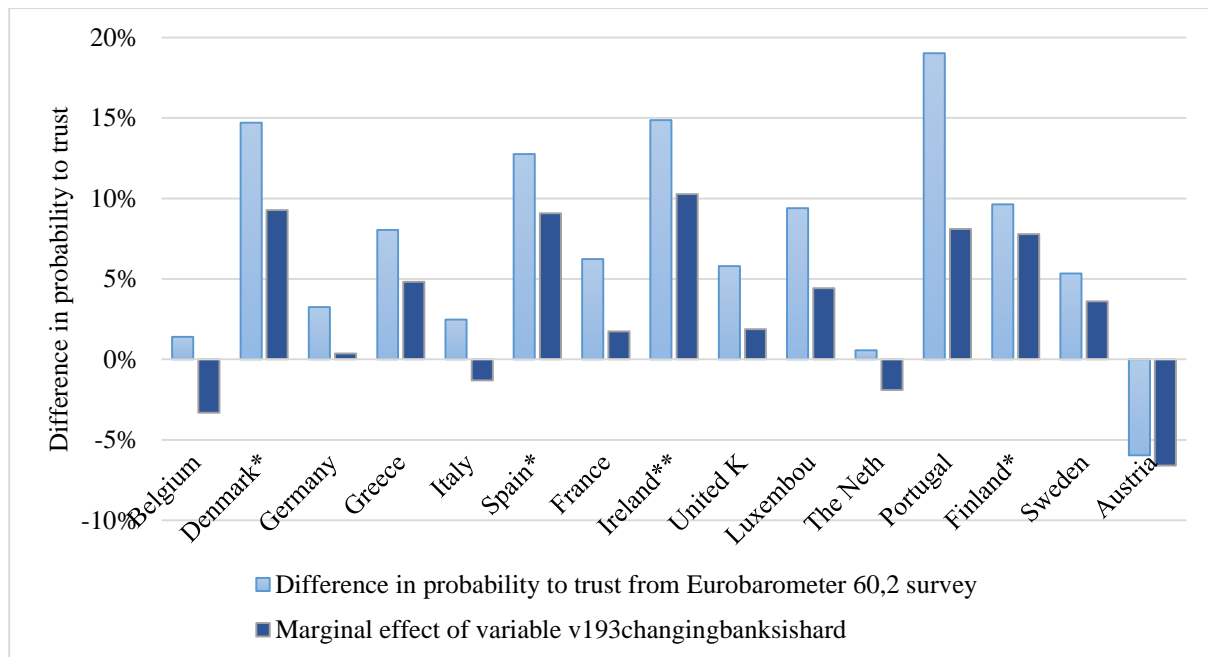
Four countries report statistically significant results at 5% significance level in subsample logistic regression models. These countries are Denmark, Spain, Ireland and Finland and all of them have above 7,5 percentage points differences in probabilities of trusting investment advisors between the two groups. The largest difference is reported from Ireland where those

finding changing banks hard trust 10,27 percentage points less likely in investment advisors than those finding it easy. Therefore even though at EU level the difference in probabilities of trusting between these two groups is low, there are some deviating countries found.

Graph 11

Differences in probabilities of trusting investment advisors between those agreeing that changing banks is hard and those who disagree with them

The graph presents the percentage point differences in probability of trusting investment advisors between those who think that changing banks is hard and those who disagree with them. Two results are reported: the first column states the unrefined percentage point differences from the Eurobarometer 60.2 survey and the second column presents subsample logistic regression models' marginal effects of variable v193changingbanksishard reported in detail in Appendix 4. The data is from Eurobarometer 60.2 survey which is administered by the European Commission. The values are positive when those who think that changing is hard trust less likely in investment advisors than those who find it easy. The differences are converted this way to positive to avoid most values falling below the axis. A star marking following country name signifies that the result from subsample logistic regression model is statistically significant at 5% significance level. Two stars signify statistically significant result at 1% significance level.



Subsample analysis by country reveals a few other notable statistically significant differences in probabilities of trusting investment advisors between countries. People prioritizing saving for retirement trust above 10 percentage points more likely in investment advisors than those not prioritizing this in Spain and in France. However conflicting result is that in Ireland people saving for retirement trust 9,9 percentage points less likely in investment advisors than those not prioritizing retirement. Another conflicting pair of results is that people finding thinking about their finances and financial services enjoyable trust 13,6 percentage points more likely in investment advisors in Portugal than those not finding it enjoyable. On the other hand in France this difference is -12,9 percentage points indicating those enjoying



their finances trusting less likely in advisory than those not finding thinking about finances enjoyable. These sort of conflicting differences in likelihood of trust lead to averaging of the EU level differences and therefore some statistically insignificant results at EU level can be statistically significant at country level. Appendix 4 reports in detail the subsample logistic regression models by country.

## *8.2. Subsample analysis on other factors*

Subsample analysis by country results in the most interesting findings as presented above. However few noteworthy findings are revealed from other subsample logistic regression analyses as well. Appendix 5 and Appendix 6 provide the entire results of these subsample logistic regression analyses and this section covers the most essential discoveries.

When taking a subsample of men and excluding women from a logistic regression model explaining trust in investment advisors, this reveals that men who find thinking about their finances and financial services enjoyable trust 4,2 percentage points less likely in advisors than those not finding their finances enjoyable. This statistically significant result at 5% significance level conflicts with the idea that positive sentiment would result in increased probability to trust as discussed previously. It seems that men who find their finances enjoyable are less likely to trust in advisory which could be caused for example by overconfidence. As discussed in section 7 men are more overconfident on average (Lundeberg, Fox and Puncochar, 1994). Therefore those finding their finances enjoyable could be suffering from excessive overconfidence thinking that as they are in good terms with their finances they don't need any advice.

A logistic regression analysis on a subsample of those thinking that the information they get from financial institutions is clear and understandable finds that inside this subsample those who could consider obtaining stocks abroad trust a remarkable 14,1 percentage points less likely in investment advisors than those not willing to consider investing abroad. The result is statistically significant even at 1% significance level. Also two other subsample logistic regression models result in clearly larger difference in probability to trust in investment advisors between those who could consider obtaining stocks abroad and those who couldn't than presented in Table 5. These subsamples consist of those who have not made bank transactions over the Internet (13,3 percentage points difference) and those who think that comparing the information from banks, about bank account features and charges isn't hard (10,2 percentage points difference in probability). These subsamples present strong differences in probabilities to trust for this explanatory variable which could be explained by arguing that these people have high level of financial literacy and therefore they find information clear and easy to compare.

These people have also made bank transactions and know finance theory. Hence they're willing to invest globally. The difference in probability to trust in investment advisors is emphasized in these groups because these subsamples include more people with high level of financial literacy.

Interesting deviations from the final model explaining trust in investment advisors presented in Table 5 are found taking a subsample of those who could consider obtaining stocks abroad. Logistic regression model explaining trust in this subsample results that people finding thinking about their finances and financial services intimidating trust 23,8 percentage points less likely in investment advisors than those not finding it intimidating. This statistically significant result at 5% significance level strengthens the idea that negative sentiments towards one's finances result in decreased probability to trust advisors. Another notable finding from this subsample is that those having a mortgage trust 16,7 percentage points more likely in investment advisors than those not having a mortgage. This result is statistically significant and it could be explained by these people being young adults who are open to global possibilities in their investing strategies but have little previous experience investing and therefore trust more likely in professionals' advice. As Gennaioli, Shleifer and Vishny (2015) argue insecure investors need reassurance to provide them with a peace of mind. A logistic regression analysis on this subsample of people willing to consider global investing results in two conflicting effects. People who have made bank transactions over the Internet trust 27,2 percentage points more likely in advisory than people who have not made such transactions. This alone is conflicting result to previously discussed and reported in Table 5. Also this logistic regression model reveals that people who have made other transactions trust 20,3 percentage points less likely in investment advisors than those who have not made other transactions. Both of these results are statistically significant at 5% significance level and conflict the previous discussion. However interpreting these results must be done with caution as this subsample covers only 1,6% of respondents in Eurobarometer 60.2. Therefore to generalize these results a larger dataset would be required.

Similar conflicting results are found from a subsample logistic regression model covering people who find thinking about their finances and financial services depressing. However this model concludes that people who have made bank transactions over the Internet trust 7,6 percentage points less likely in investment advisors than those who have not made such transactions. This effect is significantly larger than presented in the final model in Table 5. The conflicting part is that this model suggests that people who have made other transactions over the Internet trust 9,1 percentage points more likely in advisory than those who have not made

other transactions. The effect is statistically significant at 5% significance level but interpreting is difficult as “other transactions” is not well defined.

Making a subsample of those who have made bank transactions over the Internet reveals a couple of interesting effects. Inside this subsample men trust 6,3 percentage points less likely in investment advisors than women. This result is statistically significant and reports clearly larger effect than found in Model 9 in Table 5. Another clearly larger effect found in this subsample is that people finding thinking about their finances and financial services comforting trust 6,4 percentage points more likely in advisory than those not finding it comforting. On the other hand people finding it enjoyable trust 7,9 percentage points less likely in investment advisors than those disagreeing with them. Also people finding the marketing techniques of financial institutions aggressive trust 6,7 percentage points less likely in advisory than those not finding them aggressive. This statistically significant effect is remarkably larger than reported in Table 5. However this is rather small subsample and therefore these results would require further testing with a larger dataset.

Subsample logistic regression analysis reveals that not all of the effects reported in the final model explaining trust in section 7 are uniform. To conduct a detailed subsample study on these conflicting effects would however require a significantly larger amount of data. These findings shows that the factors affecting the probability of trusting investment advisors are many and even this European wide dataset doesn't cover all the factors that could have an effect on trust. Thus next section presents implications of the results and topics for further study.

## **9. Implications and suggestions for further study**

After the financial crisis in 2008 there has been vivid discussion on who should be blamed for the investors' decisions especially during times of risk materializing. The crisis provoked the revision of MiFID (Markets in Financial Instruments Directive) to strengthen the protection of investors and to make financial markets more transparent. The regulation of financial institutions has increased significantly during the 2000's which has affected the work of investment advisors. Banks are more cautious giving advice to customers and even refusing to give advice on certain issues. When estimating outcomes emphasize is put on the uncertainty of predicting. This produces both positive and negative effects.

From investment advisors perspective it is harder to give advice as the regulation limits the daily work. The bureaucracy limits the time he has for convincing a customer and deal closure. Having to fill out an investor profile and interviewing customer about various concerns

consumes valuable time and investors' nerves. Processing the paperwork takes time and there is less time available for advisors to meet customers. Therefore banks have to employ more advisors and their costs increase which increases the customers' fees. From the customers perspective increasing regulation provides investor protection. Advisors have to inform the investor about the costs and risks involved in products under discussion. Before selling anything advisors have to be convinced that the customer understands what he is buying and accepts the risks. However as the advisor has to emphasize the risks misleading can occur especially when the investor is already cautious. When emphasizing the risks they might seem unbearable for the investor even though the possibility of a risk materializing would be minimal. This leads to for example elderly people saving to a bank account and missing the benefits of long term investing. This is a negative outcome for both the investor missing potential profits and the bank missing fees. Negative outcome can provoke decrease in trusting investment advisors.

It would of interest to compare trusting investment advisors before the MiFID and afterwards as the intention of the regulation was to increase investor protection. This study doesn't conclude whether people actually began to feel more secure and perceive the possibility of being cheated lower after the directive. If the regulation has not effected trusting investment advisors it should be critically evaluated whether increasing bureaucracy then profited anyone.

Georgarakos and Inderst (2011) argue that people don't utilize advice given to them if they don't trust it. Concluding that 50,7% of citizens of EU trust in investment advisors can the banks really be blamed for the investors' poor decisions? If almost half of the people don't trust the advice given to them following the argument of Georgarakos and Inderst they also don't utilize it. This would lead to the conclusion that in about 50% of cases investors make their investment decisions without the advice of financial institutions. It could be that banks and their advisors are to blame for some part of financial crisis in 2008 and giving irresponsible advice. These results however show that banks can't be blamed for every poor investment. I would argue that heavy regulation is not the answer especially in personal banking where customers are households and bureaucracy only complicates matters.

Global competition and low interest rates in EU have led to banks marketing their products and services more aggressively. Due to the low interest rates banks are forced to device other ways to earn profits than lending out at higher rate than paying for the deposits. These actions are harmful for the customers' trust. Online banking is spreading to advisory services as well with online meetings offered to customers at more convenient times of day than before. Further studying is needed to conclude whether trusting investment advisors is effected by the channel of meeting. It could be that trust towards the advice is lower when the meeting is held

online and advisor not met by person. This channel makes the advice less personal and easier to ignore. When the documents are sent online it is easier for the customer to back out and deal closure becomes more difficult for the advisors. When profits are low banks are forced to close offices especially in areas of dispersed settlement. This affects the sentiment towards banks and can have an effect on trusting advice. When the nearest office with investment advisors is two hundred kilometers away it is no surprise that one can begin to feel depressed when thinking about financial services.

Unfortunately Eurobarometer 60.2 lacks data of several interesting factors that could have an effect on the probability of trusting investment advisors. For example the data doesn't make a difference between traditional banks and brokerages. I would argue that there is a difference in the probability of trusting investment advice of large well established bank and a brokerage offering investment products at huge margins. At least people should be more careful to trust in the advice of a brokerage since their advisors are paid by provision and the products are significantly more expensive than in a traditional bank. When advisors are paid by the results they make they have an incentive to sell products with high fees even if the product wouldn't fit the customer profile. These brokerages also market their services aggressively which is concluded to lower the likelihood of trusting investment advisory. Thus for example in Finland I would assume that people are more likely to trust in the investment advisors of Nordea Bank, a well-established traditional bank than Aleksandria, the brokerage. Similarly it could be that the banks' size effects the likelihood of trusting their advice. A well-known large bank could benefit at smaller banks' detriment since they are able to provide a feeling of security and professionalism.

Another factor that could have an effect on the probability of trusting investment advisors is income level of the customer. Income level can be considered as a proxy for financial literacy and thus higher income level should lead to lower likelihood of trusting advisory. Similarly respondents' education could indicate the level of financial literacy. These matters are left for further studying.

It would be interesting to study the probabilities of trusting investment advisors through time but unfortunately Eurobarometer doesn't offer this possibility as the question of trusting in financial advice has not been asked again. Therefore studying people's trusting patterns and how they have evolved over time would require making of a European wide survey and gathering the data. Also country comparisons around the world would be of interest. Probably for example Americans tend to trust less likely in investment advisors than Europeans as the general level of trusting in others is lower. Another improvement in studying trust in investment

advisors would be to examine data describing the level of trust. The trust variable in this study is binary with no possibility to examine individuals' level of trust. Hence acquiring data with a possibility to answer for example on a scale from one to five how much one trusts in investment advisors would add to the findings of this study.

Some of the variables from Eurobarometer 60.2 survey suffered from collinearity and therefore they were excluded from this study. For example variable consisting of those expecting financial institutions to give advice suffered collinearity to those trusting investment advisors. To avoid biased results this study excludes all variables suffering collinearity. Eurobarometer 60.2 survey covers more than 16 000 respondents' information and therefore is a comprehensive dataset. However some of the questions could have social desirability bias. For example reporting that it is hard to compare information from banks, about bank account features and charges might be resentful for some and they rather report that it's fairly easy. However as the questionnaire is comprehensive and has a variety of other topics included I would argue this survey holds little social desirability bias. Respondents are not effected by their answers and therefore gain nothing answering against their true habits.

The characteristics of the investment advisor probably also effect whether the customer trusts the advice or not. This shouldn't distort the results of this study as the question is framed "I usually trust the advice given by financial institutions". However some banks have personal advisors targeted for each customer hence the customer only gets advice from this one person. I would argue that advisor's professionalism, assertiveness and charisma have an effect on whether the customer believes and trusts the advice. The ability to convince the customer is key to gaining trustworthiness.

Also other personal characteristics of the customers not investigated in this study could effect on the probability of trusting investment advisors. These characteristics can be determined for example by culture. For example Finns are proud by nature and not used to asking for advice from others. The mentality is more striving to survive without help rather than admitting to not coping and understanding everything. When in southern parts of Europe the mentality is quite the opposite. These characteristics could have an effect on especially men's likelihood of trusting investment advisors as men tend to be more overconfident (Lundeberg, Fox and Puncochar, 1994). Culture has an effect on the general level of trust in others which impacts trusting advisors. When people are raised to be cautious to trust anyone this is bound to influence the likelihood of trusting advisors.

Another factor possibly affecting the probability of trusting is the history of profits gained in consequence of advisory. Gennaioli, Shleifer and Vishny (2015) argue that investors are

taking on more risk as the trust increases and therefore are gaining higher expected returns. If indeed the customer is able to gain higher profits he is probably more likely to return for the advice and trust it even more. However if the advice leads to poor returns the customer can begin to feel depressed when thinking about he's finances and as concluded this would result in decreasing probability to trust. Hence I disagree with Gennaioli, Shleifer and Vishny on their argument that banks offer advisory only to gain fees on customers. If banks would only extract fees customers would eventually seek for more profitable options on investing. Therefore it is in banks' best interest to offer good customer service to keep the clients and retain a trustworthy image.

How could a bank then influence the likelihood of customers trusting their advice? A key takeaway is that educating customers to comparing information about banks, bank account features and charges would increase the likelihood of trusting in their advice. When the customer feels that the advisor is giving genuine advice on which options would benefit him and educating him about the options, he is more willing to trust the advisor. Aggressive marketing doesn't work in favor of trusting investment advice except in Greece and possibly in Portugal. Banks should invest time and money to giving clear and understandable information for all customers. Emphasizing confidentiality and security of transactions would increase the likelihood of trusting investment advisors. Also agreeing on the appropriate level of risk for the investment strategy is vital to avoid panicking with volatile products. If the volatility of the strategy is too high investor is likely to cash out when the value of the investment is decreasing which leads to negative feelings towards advisory.

## **10. Conclusion**

Previous literature has lacked results of studying what factors affect trusting investment advisors. Therefore this research asks the question who trusts investment advisors and why. This constitutes a whole new area of study and novel results on understanding investment advisory. I find that men trust on average 3,9 percentage points less likely in investment advisors than women and that there are significant country differences in the probability to trust. South Europeans trust less likely in advisory than North Europeans and the factors affecting the trust are differing between countries. Those finding it hard to compare information or change banks trust less likely in investment advisors than respondents finding those easy. People finding thinking about their finances and financial services comforting are 3,1 percentage points more likely to trust in advisory than those not feeling the same way. Depressed feelings result

decreased likelihood of trusting. The results support the notion of Gennaioli, Shleifer and Vishny (2015) that financial literacy affects trusting advice. Those who have made bank transactions over the Internet are more likely to trust in investment advisors than those not familiar with the procedure. Similarly investors who would be willing to consider obtaining stocks abroad are less likely to trust in advisory than those only investing in their home countries. Aggressive marketing by the financial institutions decrease the likelihood of trusting in their advice. Giving clear and understandable information and keeping confidential information adequately protected increases the probability of trusting. Overall 50,7% of Europeans trust in investment advisors.

The largest effects this study finds influencing people's trust in investment advisors are whether one finds the information given by financial institutions clear and understandable and whether the respondent feels his confidential information adequately protected. Hence the main issues banks can act on to influence the probability of trusting in their advice is to stress the importance of confidentiality and clarity of information. Bank secrecy is essential part of banking practice and therefore probably every bank strives towards keeping their customer information highly protected. This study reveals the concrete remarkable effects of violating this confidentiality.

Trust issues between advisors and customers should be taken seriously by the banks as the advisors are the representatives of the banks. Advisors are the channel for selling banks' products to customers and when the products are no selling, the bank is not making earnings. This relationship has become increasingly important as the interest rates are historically low in Euro countries. Banks are not therefore able to profit as previously from mortgage loans and fees on investment products have begun to play an increasing role in banks' earnings. Hence the importance of investment advisors has increased. To gain customers' trust the advisor should be able to give clear and understandable information no matter the level of financial literacy of the customer. Therefore cutting the unnecessary jargon and relating to the customer is crucial. Educating customer about options benefitting him, makes the customer feel the advisor is giving genuine advice.

According to Gennaioli, Shleifer and Vishny (2015) investors don't consider the fees related to products bought from advisors as costs since the professional is able to provide them a peace of mind in investing. Therefore investors venture taking more risk and earn higher expected returns than they would investing on their own. The results of this study support these arguments as more than half of the respondents are willing to trust the advice given by financial institutions ignoring Jensen's (1968) arguments promoting passive investment strategies. The



willingness to obtain advice could be the result of difficulties retail investors face with large product selection and allocation choices (Goldstein, Johnson and Sharpe, 2008). French (2008) suggests that banks and the press promote the illusion of active investing being easy and profitable. Hence investors could be trapped believing to gain superior profits with active investing strategies.

Even though finance theory and evidence supports passive investing the fact is that it's not easily accessible to average households. Gennaioli, Shleifer and Vishny (2015) note that it's not in the interests of banks to advise people to invest in passive strategies. Therefore to keep profiting from customers, banks advise retail customers to invest in their products. Even though this seems unmoral practice I agree with Gennaioli, Shleifer and Vishny that retail customers earn higher expected returns investing with the help of a professional. As investing in passive strategies would require high level of financial literacy I suspect that an average retail investor is better off trusting financial advisors. Although the products are more expensive at least the investor is participating in the market and not missing out entirely the potential profits by keeping his money on an account. The reality is that not all retail investors possess the time and energy to use their free time learning finance theory. Since comprehensive schools have disturbingly little financial education and not all go to business schools, most people have rather low level of financial literacy and understanding of finance theory. Hence investing on their own they probably experience unnecessary losses. Even finding information on passive investing requires time and knowledge on where to look. Therefore I conclude that trusting investment advisors would be rational for most retail investors.

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## Appendix 1

Descriptive statistics

	Belgium	Denmark	Germany	Greece	Italy	Spain	France	Ireland	United K	Luxembourg	The Neth	Portugal	Finland	Sweden	Austria	Total
Amount of respondents	1017	1000	2045	1002	997	1000	1004	1007	1338	600	1016	1000	1001	1000	1032	16059
% of total respondents	6.3 %	6.2 %	12.7 %	6.2 %	6.2 %	6.2 %	6.3 %	6.3 %	8.3 %	3.7 %	6.3 %	6.2 %	6.2 %	6.2 %	6.4 %	
Respondents answering yes	574	714	1122	198	326	410	459	520	636	330	517	409	731	520	672	8138
"I trust in general in the advice given by financial institutions"	56.4 %	71.4 %	54.9 %	19.8 %	32.7 %	41.0 %	45.7 %	51.6 %	47.5 %	55.0 %	50.9 %	40.9 %	73.0 %	52.0 %	65.1 %	50.7 %
v500male	499	495	971	490	477	487	477	491	617	285	495	469	478	492	479	7702
	49.1 %	49.5 %	47.5 %	48.9 %	47.8 %	48.7 %	47.5 %	48.8 %	46.1 %	47.5 %	48.7 %	46.9 %	47.8 %	49.2 %	46.4 %	48.0 %
v497married	486	489	1005	611	476	516	434	491	634	348	539	586	382	457	492	7946
	47.8 %	48.9 %	49.1 %	61.0 %	47.7 %	51.6 %	43.2 %	48.8 %	47.4 %	58.0 %	53.1 %	58.6 %	38.2 %	45.7 %	47.7 %	49.5 %
v187comparainfohard	549	541	948	471	609	462	636	423	518	266	384	493	440	533	491	7764
	54.0 %	54.1 %	46.4 %	47.0 %	61.1 %	46.2 %	63.3 %	42.0 %	38.7 %	44.3 %	37.8 %	49.3 %	44.0 %	53.3 %	47.6 %	48.3 %
v190understandingshare	530	443	1318	571	619	621	696	473	667	273	484	508	488	539	582	8812
	52.1 %	44.3 %	64.4 %	57.0 %	62.1 %	62.1 %	69.3 %	47.0 %	49.9 %	45.5 %	47.6 %	50.8 %	48.8 %	53.9 %	56.4 %	54.9 %
v193changinbanksishard	242	93	309	133	221	174	265	236	338	79	226	164	136	87	177	2880
	23.8 %	9.3 %	15.1 %	13.3 %	22.2 %	17.4 %	26.4 %	23.4 %	25.3 %	13.2 %	22.2 %	16.4 %	13.6 %	8.7 %	17.2 %	17.9 %
v93saveforretirement	197	268	530	70	174	167	156	161	218	71	206	141	43	168	263	2833
	19.4 %	26.8 %	25.9 %	7.0 %	17.5 %	16.7 %	15.5 %	16.0 %	16.3 %	11.8 %	20.3 %	14.1 %	4.3 %	16.8 %	25.5 %	17.6 %
v94payoffdebt	162	265	380	287	142	255	210	285	363	185	118	203	342	367	206	3770
	15.9 %	26.5 %	18.6 %	28.6 %	14.2 %	25.5 %	20.9 %	28.3 %	27.1 %	30.8 %	11.6 %	20.3 %	34.2 %	36.7 %	20.0 %	23.5 %
v95buyhouse	133	80	193	95	213	202	112	157	303	83	119	108	73	89	142	2102
	13.1 %	8.0 %	9.4 %	9.5 %	21.4 %	20.2 %	11.2 %	15.6 %	22.6 %	13.8 %	11.7 %	10.8 %	7.3 %	8.9 %	13.8 %	13.1 %
v96inherit	161	137	370	158	117	129	139	95	170	133	179	119	99	109	167	2282
	15.8 %	13.7 %	18.1 %	15.8 %	11.7 %	12.9 %	13.8 %	9.4 %	12.7 %	22.2 %	17.6 %	11.9 %	9.9 %	10.9 %	16.2 %	14.2 %
v97protection	289	285	588	231	260	291	250	160	224	188	140	268	233	336	290	4033
	28.4 %	28.5 %	28.8 %	23.1 %	26.1 %	29.1 %	24.9 %	15.9 %	16.7 %	31.3 %	13.8 %	26.8 %	23.3 %	33.6 %	28.1 %	25.1 %
v98saveinforemergency	532	326	1116	553	605	513	499	463	565	296	639	431	305	495	474	7812
	52.3 %	32.6 %	54.6 %	55.2 %	60.7 %	51.3 %	49.7 %	46.0 %	42.2 %	49.3 %	62.9 %	43.1 %	30.5 %	49.5 %	45.9 %	48.6 %
v99livingwell	514	513	907	456	456	363	547	588	760	238	591	471	607	461	437	7909
	50.5 %	51.3 %	44.4 %	45.5 %	45.7 %	36.3 %	54.5 %	58.4 %	56.8 %	39.7 %	58.2 %	47.1 %	60.6 %	46.1 %	42.3 %	49.2 %
v100startbusiness	23	21	52	45	81	47	30	28	50	11	27	40	11	24	21	511
	2.3 %	2.1 %	2.5 %	4.5 %	8.1 %	4.7 %	3.0 %	2.8 %	3.7 %	1.8 %	2.7 %	4.0 %	1.1 %	2.4 %	2.0 %	3.2 %

## Appendix 2

Descriptive statistics

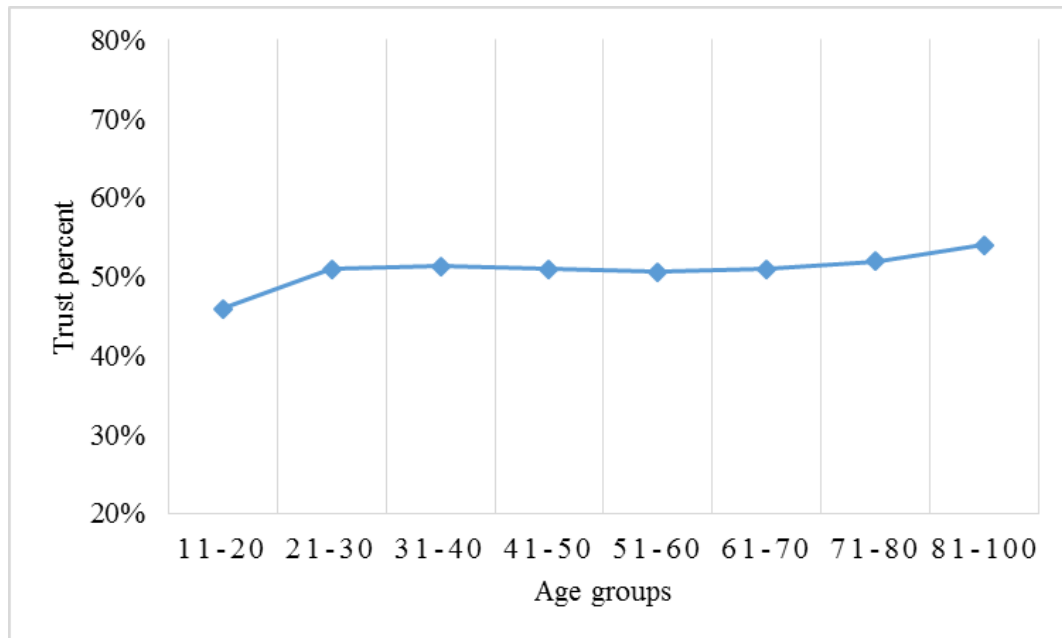
	Belgium	Denmark	Germany	Greece	Italy	Spain	France	Ireland	United K	Luxembo	The Neth	Portugal	Finland	Sweden	Austria	Total
v103enjoy	91	78	98	49	101	108	66	63	77	90	231	105	62	250	109	1578
	8.9%	7.8%	4.8%	4.9%	10.1%	10.8%	6.6%	6.3%	5.8%	15.0%	22.7%	10.5%	6.2%	25.0%	10.6%	9.8%
v104interest	263	311	170	142	184	161	171	168	278	118	331	102	418	511	187	3515
	25.9%	31.1%	8.3%	14.2%	18.5%	16.1%	17.0%	16.7%	20.8%	19.7%	32.6%	10.2%	41.8%	51.1%	18.1%	21.9%
v105comfort	135	532	521	30	114	77	93	100	178	206	38	72	88	40	315	2539
	13.3%	53.2%	25.5%	3.0%	11.4%	7.7%	9.3%	9.9%	13.3%	34.3%	3.7%	7.2%	8.8%	4.0%	30.5%	15.8%
v106inminding	216	25	657	405	199	207	259	72	146	97	91	67	93	106	153	2793
	21.2%	2.5%	32.1%	40.4%	20.0%	20.7%	25.8%	7.1%	10.9%	16.2%	9.0%	6.7%	9.3%	10.6%	14.8%	17.4%
v107complicated	203	199	388	194	296	283	237	191	291	73	177	451	308	261	125	3677
	20.0%	19.9%	19.0%	19.4%	29.7%	28.3%	23.6%	19.0%	21.7%	12.2%	17.4%	45.1%	30.8%	26.1%	12.1%	22.9%
v108dull	179	143	83	255	119	126	272	256	266	28	139	75	166	174	60	2341
	17.6%	14.3%	4.1%	25.4%	11.9%	12.6%	27.1%	25.4%	19.9%	4.7%	13.7%	7.5%	16.6%	17.4%	5.8%	14.6%
v109depressing	110	69	350	202	164	119	252	308	413	59	183	124	173	115	124	2765
	10.8%	6.9%	17.1%	20.2%	16.4%	11.9%	25.1%	30.6%	30.9%	9.8%	18.0%	12.4%	17.3%	11.5%	12.0%	17.2%
v119stocks	119	337	193	56	177	76	132	133	252	109	211	32	240	381	137	2585
	11.7%	33.7%	9.4%	5.6%	17.8%	7.6%	13.1%	13.2%	18.8%	18.2%	20.8%	3.2%	24.0%	38.1%	13.3%	16.1%
v122mortgage	225	437	174	85	97	250	154	274	466	237	412	144	211	432	101	3699
	22.1%	43.7%	8.5%	8.5%	9.7%	25.0%	15.3%	27.2%	34.8%	39.5%	40.6%	14.4%	21.1%	43.2%	9.8%	23.0%
v136banktransactions	157	414	282	12	73	84	117	117	247	158	341	33	373	470	190	3068
	15.4%	41.4%	13.8%	1.2%	7.3%	8.4%	11.7%	11.6%	18.5%	26.3%	33.6%	3.3%	37.3%	47.0%	18.4%	19.1%
v137othertransactions	92	237	115	10	40	55	48	93	215	89	232	26	177	327	123	1879
	9.0%	23.7%	5.6%	1.0%	4.0%	5.5%	4.8%	9.2%	16.1%	14.8%	22.8%	2.6%	17.7%	32.7%	11.9%	11.7%
v145considerstocksbroad	12	22	42	1	6	5	8	23	18	22	10	0	10	44	29	252
	1.2%	2.2%	2.1%	0.1%	0.6%	0.5%	0.8%	2.3%	1.3%	3.7%	1.0%	0.0%	1.0%	4.4%	2.8%	1.6%
v195expensive	608	351	976	247	798	393	473	649	331	289	201	491	367	244	555	6973
	59.8%	35.1%	47.7%	24.7%	80.0%	39.3%	47.1%	64.4%	24.7%	48.2%	19.8%	49.1%	36.7%	24.4%	53.8%	43.4%
v199aggressivemarketing	560	665	1148	411	479	570	658	618	843	333	755	535	365	654	568	9162
	55.1%	66.5%	56.1%	41.0%	48.0%	57.0%	65.5%	61.4%	63.0%	55.5%	74.3%	53.5%	36.5%	65.4%	55.0%	57.1%
v200clearinfo	452	373	574	236	179	338	303	445	420	301	340	391	463	253	337	5405
	44.4%	37.3%	28.1%	23.6%	18.0%	33.8%	30.2%	44.2%	50.2%	33.5%	39.1%	46.3%	25.3%	32.7%	33.7%	33.7%
v203secure	657	777	938	293	418	690	498	687	868	424	741	503	862	772	558	9686
	64.6%	77.7%	45.9%	29.2%	41.9%	69.0%	49.6%	68.2%	70.7%	72.9%	50.3%	86.1%	77.2%	54.1%	60.3%	60.3%
v204confidentiality	612	733	1024	259	462	512	481	517	773	391	624	366	745	670	541	8710
	60.2%	73.3%	50.1%	25.8%	46.3%	51.2%	47.9%	51.3%	57.8%	65.2%	61.4%	36.6%	74.4%	67.0%	52.4%	54.2%
v208internetransactions	294	329	588	309	270	261	330	368	414	203	367	163	516	435	411	5258
	28.9%	32.9%	28.8%	30.8%	27.1%	26.1%	32.9%	36.5%	30.9%	33.8%	36.1%	16.3%	51.5%	43.5%	39.8%	32.7%



## Appendix 3

### The percentages of respondents reporting to trust in investment advisors among age groups

The graph presents the percentages of respondents who report trusting in investment advisors among their age group. Presented are the unrefined statistics from the Eurobarometer 60.2 survey. The data is from Eurobarometer 60.2 survey which is administered by the European Commission.



## Appendix 4

Subsample logistic regression models' marginal effects. Subsamples are respondents' home countries.

Logistic regressions explain trust in investment advisors. Data is from Eurobarometer 60.2 survey. Trust defined as "I usually trust the advice given by financial institutions". Variable explanations and coding are reported in Table 1.

	Belgium	Denmark	Germany	Greece	Italy	Spain	France	Ireland	United K	Luxembourg	The Neth	Portugal	Finland	Sweden	Austria
v501age	0,000	-0,001	0,001	-0,001	<b>0,002</b>	<b>0,002</b>	0,001	0,001	0,000	0,000	0,000	0,000	0,001	<b>0,002</b>	0,000
v500male	-0,029	<b>-0,068</b>	-0,006	-0,017	-0,047	-0,032	<b>-0,061</b>	-0,035	-0,012	-0,028	-0,014	-0,006	<b>-0,060</b>	<b>-0,109</b>	-0,042
v497married	0,041	-0,035	<b>0,057</b>	0,027	0,011	0,035	0,017	<b>0,092</b>	-0,025	0,015	<b>-0,070</b>	-0,014	0,028	-0,059	0,048
v187compareinford	<b>-0,068</b>	0,015	-0,026	-0,016	-0,060	-0,007	0,011	0,040	-0,015	-0,049	-0,021	-0,058	<b>-0,061</b>	-0,013	0,044
v190understandingshard	0,059	-0,031	0,005	<b>-0,054</b>	0,016	-0,012	-0,015	-0,012	0,052	0,014	-0,035	-0,007	-0,027	0,040	-0,039
v193changingshard	0,033	<b>-0,093</b>	-0,004	-0,048	0,013	<b>-0,091</b>	-0,017	<b>-0,103</b>	-0,019	-0,044	0,019	-0,081	<b>-0,078</b>	-0,056	0,066
v93saveforretirement	0,078	0,059	0,010	0,050	0,029	<b>0,105</b>	<b>0,142</b>	<b>-0,099</b>	-0,060	-0,070	-0,021	-0,015	-0,016	0,067	0,053
v94payoffdebt	0,045	<b>0,087</b>	0,016	0,038	0,002	0,005	0,006	-0,020	-0,005	0,055	<b>-0,120</b>	-0,001	0,006	0,062	0,046
v95buyhouse	-0,066	0,052	-0,023	-0,031	0,021	0,052	0,033	0,003	0,048	<b>-0,131</b>	-0,061	-0,060	0,038	0,006	-0,063
v96inherit	-0,036	-0,051	0,037	0,047	0,064	-0,006	0,084	<b>0,144</b>	0,060	-0,084	-0,039	-0,015	-0,060	0,051	0,072
v97protection	0,070	0,007	-0,004	0,075	<b>0,075</b>	<b>0,074</b>	<b>0,085</b>	<b>0,144</b>	0,053	0,085	-0,036	0,003	-0,050	<b>0,085</b>	-0,025
v98savingsforemergency	0,039	-0,006	<b>0,046</b>	0,039	0,051	<b>0,074</b>	<b>0,073</b>	-0,032	0,023	0,007	-0,041	0,013	-0,006	0,001	0,058
v99livingwell	-0,010	0,037	0,030	0,044	0,029	0,009	-0,004	0,014	0,023	-0,025	-0,004	0,013	-0,006	-0,037	0,055
v100startbusiness	-0,263	0,215	0,039	-0,065	0,025	0,123	0,053	0,038	0,027	-0,090	-0,022	0,053	-0,068	-0,114	-0,142
v103enjoy	0,039	-0,073	-0,035	-0,047	-0,052	0,031	<b>-0,129</b>	0,112	0,072	0,119	-0,004	0,095	-0,027	-0,049	-0,032
v104interest	0,032	-0,064	-0,016	0,046	<b>0,118</b>	0,080	0,003	<b>0,095</b>	0,030	0,027	0,027	0,095	0,034	0,015	0,008
v105comfort	0,036	0,062	0,013	-0,057	-0,022	0,108	0,093	-0,028	-0,019	0,035	0,133	0,003	0,049	-0,015	-0,033
v106intimidating	-0,055	-0,010	-0,046	0,015	0,018	<b>0,084</b>	0,022	-0,019	0,051	0,040	-0,077	0,011	-0,047	<b>-0,113</b>	0,049
v107complicated	0,020	0,011	0,037	0,026	-0,013	<b>0,098</b>	-0,020	0,013	-0,019	0,010	<b>0,082</b>	0,013	0,021	0,027	-0,008
v108dull	0,013	-0,056	0,005	-0,005	<b>0,107</b>	<b>0,096</b>	-0,028	0,053	0,015	-0,118	-0,028	-0,040	-0,035	-0,010	<b>-0,249</b>
v109depressing	<b>-0,099</b>	0,019	<b>-0,083</b>	<b>-0,075</b>	-0,062	-0,026	-0,037	-0,003	<b>-0,061</b>	<b>-0,139</b>	-0,048	-0,001	-0,045	-0,039	-0,079
v119stocks	0,030	-0,023	0,029	0,031	0,056	0,067	<b>0,103</b>	0,053	-0,020	0,008	-0,034	0,005	0,008	0,012	-0,030
v122mortgage	0,060	-0,011	-0,005	0,027	0,006	-0,002	0,024	-0,053	0,046	-0,020	0,005	0,063	0,016	-0,012	-0,044
v136banktransactions	-0,063	-0,056	-0,042	<b>0,208</b>	0,024	0,001	0,010	0,002	-0,022	-0,034	-0,040	-0,116	-0,042	-0,034	0,042
v137othertransactions	0,001	-0,051	0,060	0,064	0,072	0,095	-0,029	0,061	0,011	-0,015	0,056	-0,010	-0,019	0,009	0,006
v145considerstocksabroad	-0,288	0,053	-0,126	omit	omit	0,272	0,020	-0,127	0,103	-0,126	0,129	omit	-0,211	-0,066	-0,042
v195expensive	0,004	-0,037	0,003	<b>-0,082</b>	0,060	-0,040	0,000	0,025	-0,006	-0,006	-0,012	0,050	0,040	0,020	-0,030
v199aggressivemarketing	-0,043	0,008	0,030	<b>0,049</b>	-0,012	-0,050	-0,042	-0,029	-0,025	<b>-0,126</b>	-0,032	0,024	<b>-0,091</b>	<b>-0,127</b>	-0,002
v200cleaninfo	<b>0,134</b>	<b>0,146</b>	<b>0,153</b>	<b>0,138</b>	<b>0,168</b>	<b>0,070</b>	<b>0,087</b>	<b>0,139</b>	<b>0,1371</b>	<b>0,126</b>	<b>0,178</b>	<b>0,139</b>	<b>0,063</b>	<b>0,129</b>	<b>0,127</b>
v203secure	0,045	<b>0,077</b>	<b>0,047</b>	<b>0,091</b>	<b>0,103</b>	0,068	<b>0,097</b>	<b>0,150</b>	<b>0,1376</b>	0,054	<b>0,116</b>	<b>0,145</b>	<b>0,115</b>	<b>0,084</b>	<b>0,094</b>
v204confidentiality	<b>0,179</b>	<b>0,121</b>	<b>0,164</b>	0,014	0,050	<b>0,115</b>	<b>0,068</b>	<b>0,179</b>	<b>0,1843</b>	<b>0,151</b>	<b>0,138</b>	<b>0,094</b>	<b>0,157</b>	<b>0,153</b>	<b>0,113</b>
v208internettransactions	<b>0,087</b>	-0,054	-0,040	0,007	<b>0,078</b>	0,062	<b>-0,086</b>	-0,044	-0,0195	0,029	-0,005	<b>0,115</b>	<b>0,069</b>	0,006	<b>0,069</b>

\*Some observations from v145considerstocksabroad are omitted because there are too few respondents agreeing that they would consider obtaining stocks abroad.

\*Bolded numbers are statistically significant at 5% significance level and underlined are significant at 1% significance level.

## Appendix 5

Subsample logistic regression models' marginal effects. Logistic regressions explain trust in investment advisors in a subsample. Horizontal axis reports the subsamples and vertical axis the control variables.

	Men	Women	v200clearinfo = 1	v200clearinfo = 0	v203secure = 1	v203secure = 0	v204confidentiality = 1	v204confidentiality = 0	v109depressing = 1	v145considerstocksbroad = 1
v501age	0,000	0,000	0,001	0,000	0,001	0,000	0,001	0,000	0,000	0,002
v500male			<b>-0,033</b>	<b>-0,043</b>	<b>-0,036</b>	<b>-0,043</b>	<b>-0,036</b>	<b>-0,043</b>	<b>-0,055</b>	-0,051
v497married	0,023	0,006	0,012	0,013	0,003	0,026	0,000	0,027	0,035	0,010
v187compaireinfohard	<b>-0,035</b>	-0,011	-0,022	<b>-0,024</b>	<b>-0,038</b>	-0,001	<b>-0,044</b>	0,001	<b>-0,034</b>	0,015
v190understandingshard	-0,001	-0,003	-0,011	0,003	0,004	-0,016	0,007	-0,014	-0,019	0,103
v193changinbanksishard	-0,015	-0,025	-0,032	-0,018	<b>-0,031</b>	-0,009	<b>-0,028</b>	-0,015	-0,028	-0,109
v93saveforretirement	0,020	0,028	-0,010	<b>0,040</b>	0,017	0,032	0,016	0,029	-0,011	-0,137
v94payoffdebt	<b>0,037</b>	-0,001	-0,001	<b>0,027</b>	0,019	0,015	0,004	<b>0,030</b>	0,029	0,109
v95buyhouse	0,021	-0,027	-0,028	0,011	-0,014	0,015	-0,019	0,011	-0,003	0,151
v96inherit	0,019	0,022	0,001	<b>0,030</b>	0,012	0,029	0,003	<b>0,038</b>	-0,007	0,120
v97protection	<b>0,039</b>	0,008	0,017	<b>0,027</b>	<b>0,034</b>	0,005	0,021	0,024	0,033	0,154
v98savingsforemergency	<b>0,041</b>	0,020	0,006	<b>0,040</b>	0,017	<b>0,045</b>	0,008	<b>0,050</b>	0,023	0,024
v99livewell	0,007	0,003	-0,023	0,018	0,005	0,002	-0,013	0,023	0,011	0,070
v100startbusiness	-0,012	0,037	0,002	0,001	-0,033	<b>0,064</b>	-0,041	<b>0,066</b>	-0,013	-0,171
v103enjoy	<b>-0,042</b>	0,030	-0,015	-0,005	-0,018	0,012	-0,027	0,023	-0,007	-0,007
v104interest	<b>0,036</b>	0,018	0,015	<b>0,032</b>	0,024	0,033	<b>0,033</b>	0,016	0,052	0,006
v105comfort	<b>0,041</b>	0,017	0,025	<b>0,031</b>	<b>0,041</b>	0,009	0,013	<b>0,050</b>	-0,007	-0,007
v106inundating	-0,008	-0,003	0,003	-0,011	-0,020	0,003	-0,013	0,000	0,008	<b>-0,238</b>
v107complicated	0,006	0,019	-0,003	0,018	0,001	<b>0,029</b>	0,013	0,006	0,005	0,090
v108dull	-0,018	0,003	-0,001	-0,014	-0,004	-0,015	0,003	-0,022	0,007	0,138
v109depressing	<b>-0,072</b>	<b>-0,049</b>	<b>-0,067</b>	<b>-0,057</b>	<b>-0,052</b>	<b>-0,067</b>	<b>-0,064</b>	<b>-0,054</b>	0,031	-0,100
v119stocks	0,008	0,008	0,016	0,004	0,005	0,021	-0,003	0,030	0,012	-0,058
v122mortgage	-0,020	0,025	-0,014	0,012	-0,007	0,025	-0,010	0,024	-0,012	<b>0,167</b>
v136banktransactions	-0,026	-0,031	-0,015	<b>-0,033</b>	-0,028	-0,016	-0,017	<b>-0,045</b>	<b>-0,076</b>	<b>0,272</b>
v137othertransactions	-0,005	0,035	0,001	0,018	0,008	0,036	-0,008	0,051	<b>0,091</b>	<b>-0,203</b>
v145considerstocksbroad	<b>-0,090</b>	-0,044	<b>-0,141</b>	-0,036	-0,084	-0,033	<b>-0,089</b>	-0,063	-0,029	-0,038
v195expensive	0,003	-0,002	0,021	-0,010	0,007	-0,008	0,007	-0,011	0,003	-0,032
v199aggressivemarketing	-0,008	<b>-0,025</b>	-0,008	<b>-0,024</b>	<b>-0,033</b>	-0,002	<b>-0,028</b>	-0,007	-0,032	0,047
v200clearinfo	<b>0,132</b>	<b>0,136</b>	<b>0,132</b>	<b>0,107</b>	<b>0,118</b>	<b>0,152</b>	<b>0,127</b>	<b>0,141</b>	<b>0,121</b>	0,078
v203secure	<b>0,106</b>	<b>0,089</b>	<b>0,066</b>	<b>0,107</b>	<b>0,118</b>	<b>0,135</b>	<b>0,075</b>	<b>0,110</b>	<b>0,120</b>	0,043
v204confidentiality	<b>0,134</b>	<b>0,128</b>	<b>0,133</b>	<b>0,132</b>	<b>0,127</b>	<b>0,135</b>	<b>0,128</b>	<b>0,128</b>	<b>0,128</b>	0,040
v208innettransactions	0,012	0,018	0,017	0,015	0,015	0,011	<b>0,025</b>	0,003	0,011	-0,032

\*Cells with no values indicate that the variable is omitted because there aren't enough observations in that subgroup.

\*Bolted marginal effects are statistically significant at 5% significance level and underlined are significant at 1% significance level.

## Appendix 6

Subsample logistic regression models' marginal effects. Logistic regressions explain trust in investment advisors in a subsample. Horizontal axis reports the subsamples and vertical axis the control variables.

	v136banktransactions = 1	v136banktransactions = 0	v187compainfohard = 1	v187compainfohard = 0	v193changanbankshard = 1	v193changanbankshard = 0	v199stocks = 1	v104interest = 1	v105comfort = 1
v501age	<b>-0.002</b>	<b>0.001</b>	0.000	<b>-0.051</b>	0.000	0.000	0.001	<b>0.001</b>	<b>0.001</b>
v500male	<b>-0.063</b>	<b>-0.034</b>	<b>-0.029</b>	<b>-0.029</b>	<b>-0.041</b>	<b>-0.041</b>	<b>-0.056</b>	<b>-0.026</b>	<b>-0.021</b>
v497married	0.000	<b>0.018</b>	<b>0.018</b>	0.010	0.004	0.004	<b>0.049</b>	0.012	<b>-0.002</b>
v187compainfohard	-0.014	<b>-0.022</b>	<b>-0.022</b>	0.013	-0.008	-0.002	<b>-0.028</b>	<b>-0.036</b>	<b>-0.028</b>
v190understaninbankshard	-0.010	-0.001	-0.001	0.013	0.011	0.011	0.034	0.013	0.010
v193changanbankshard	0.008	<b>-0.027</b>	<b>-0.027</b>	-0.022	-0.014	-0.002	-0.004	-0.013	-0.004
v93savetoreirement	<b>0.062</b>	0.015	0.015	0.015	<b>0.034</b>	0.012	<b>0.027</b>	<b>0.070</b>	0.013
v94payoffdebt	0.043	0.012	0.012	0.015	0.017	0.008	0.021	0.016	0.033
v95buyhouse	0.040	-0.018	-0.018	0.016	-0.018	0.033	-0.008	-0.005	0.039
v96inheri	0.017	0.019	0.019	0.015	0.027	0.037	0.017	0.013	-0.003
v97protection	0.039	<b>0.024</b>	<b>0.024</b>	0.018	<b>0.030</b>	-0.015	<b>0.033</b>	0.020	0.007
v98savingsforemergency	0.031	<b>0.030</b>	<b>0.030</b>	0.021	<b>0.035</b>	0.036	<b>0.027</b>	0.022	0.011
v99livingwell	0.017	0.002	0.002	-0.010	0.018	0.003	0.005	-0.001	0.011
v100starbusiness	-0.041	0.026	0.026	-0.026	0.033	0.072	-0.004	-0.005	0.109
v103enjoy	<b>-0.072</b>	0.014	0.014	-0.027	0.006	-0.027	-0.005	-0.034	0.015
v104interest	-0.016	<b>0.041</b>	<b>0.041</b>	0.023	<b>0.032</b>	0.035	<b>0.026</b>	0.021	-0.013
v105comfort	<b>0.064</b>	0.017	0.017	0.016	<b>0.042</b>	0.041	<b>0.027</b>	0.046	0.003
v106inmindating	-0.016	-0.003	-0.003	-0.014	0.005	0.001	-0.007	-0.018	-0.046
v107complicated	-0.017	0.018	0.018	0.008	0.017	0.032	0.007	0.037	-0.019
v108dull	-0.046	0.001	0.001	-0.014	-0.001	-0.032	0.001	-0.024	0.013
v109depressing	<b>-0.080</b>	<b>-0.055</b>	<b>-0.055</b>	<b>-0.080</b>	<b>-0.039</b>	<b>-0.060</b>	<b>-0.059</b>	-0.043	0.002
v119stocks	-0.020	0.026	0.026	0.017	0.001	0.043	0.003	-0.002	0.003
v122mortgage	0.011	0.004	0.004	0.009	-0.003	0.006	0.002	-0.005	-0.008
v136banktransactions	0.015	0.031	0.031	-0.023	-0.029	-0.005	-0.033	-0.032	-0.016
v137otherttransactions	-0.004	<b>-0.133</b>	<b>-0.133</b>	-0.044	<b>-0.102</b>	-0.053	<b>-0.077</b>	-0.067	-0.093
v145considerstocksbroad	0.004	-0.002	-0.002	-0.008	0.006	-0.034	0.007	0.002	-0.012
v195expensive	<b>-0.067</b>	-0.006	-0.006	<b>-0.025</b>	-0.011	-0.019	<b>-0.018</b>	<b>-0.050</b>	-0.018
v199aggressivemarketing	<b>0.122</b>	<b>0.136</b>	<b>0.136</b>	<b>0.140</b>	<b>0.125</b>	<b>0.147</b>	<b>0.134</b>	<b>0.141</b>	<b>-0.047</b>
v200clearinto	<b>0.070</b>	<b>0.099</b>	<b>0.099</b>	<b>0.090</b>	<b>0.102</b>	<b>0.090</b>	<b>0.098</b>	<b>0.105</b>	<b>0.085</b>
v203secure	<b>0.137</b>	<b>0.129</b>	<b>0.129</b>	<b>0.116</b>	<b>0.148</b>	<b>0.124</b>	<b>0.135</b>	<b>0.106</b>	<b>0.153</b>
v204confidentiality	-0.007	0.017	0.017	-0.005	<b>0.056</b>	-0.032	<b>0.026</b>	0.001	-0.001
v208internettransactions									

\* Cells with no values indicate that the variable is omitted because there aren't enough observations in that subgroup.

\* Bolded marginal effects are statistically significant at 5% significance level and underlined are significant at 1% significance level.