The Values and Beliefs of European Investors

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Introduction

How are the values and beliefs of investors linked to the perceived attractiveness of asset classes and investment strategies? How do self-confidence, financial sophistication, and trust in expert financial advisors influence investment strategy? Little is known about these important questions.

Yet, that it is beneficial 'to know your customers' no financial practitioner will deny. In order to grow and to protect the wealth of their clients, banks, mutual funds, pension funds, money management companies, and other financial institutions do well to understand the behavior of investors. Globalization has greatly added to the complexity of money management since capital moves easily across borders. Today, large financial institutions have clients that live all over the world.

Saving and investment behavior varies between people because of differing economic circumstances (e.g. investment objectives and available resources) and differing institutional, legal, and tax arrangements. However, culture is also a fundamental contributing factor—a factor that, I regret, has often been overlooked by financial economists.

What is culture? Geert Hofstede (1980) defines culture as 'the collective mental programming that distinguishes one group of people from another'. Certain opinions, values, and beliefs tend to go together in what I call cognitive schemas or *mental frames*.[1]

In *The Nature of Human Nature* (1937) Ellsworth Faris, an influential sociologist at the University of Chicago and a disciple of George Herbert Mead, said that with respect to the members of a group the cultural habits (i.e. the uniformities of thought, speech, and conduct) are preexisting 'so that the most important aspects of a given person are to be traced back to influences existing in the culture into which he comes'. Faris's conception of social psychology resembled what Peter Berger and Thomas Luckmann (1966) and others later called the social construction of reality. Faris considered the search for the irreducible elements of consciousness (e.g. instinct theory or the tabula rasa of behaviorism) to be futile because 'human nature is formed in social interaction'. Mind cannot be separated from culture. The interior life is a miniature of social life.[2]

How does culture influence behavior? Over the decades, this grand topic has been studied by nearly all the social sciences. The tradition goes back to the classic work of Max Weber in sociology, *The Protestant Ethic and the Spirit of Capitalism* (2002 [1904]). The topic has also been investigated in anthropology (Benedict 1959 [1934]), psychology (McClelland 1961; Smith and Harris Bond 1993), political science (Inglehart 1997; Harrison and Huntington 2000), economics (Landes 1998), and business (Hofstede 1980; Hampden-Turner and Trompenaars 1993).[3]

Cognitive schemas are connected to motivational strivings (D'Andrade and Strauss 1992). Jerome Bruner discusses how meaningful human action is situated in cultural settings and how it relies on folk psychology. '(P)eople are assumed to have world knowledge that takes the form of beliefs, and are assumed to use (it) in carrying out any program of desire or action' (1990: 40). For instance, an individual who sees himself as self-disciplined, who worries about the future, and who believes that the government ought to reduce the national debt, may prefer a low-risk portfolio heavily loaded with cash. Investors who tilt their portfolios towards equity may worry less about tomorrow, they may be more likely to see themselves as leaders, and they may believe more firmly that entrepreneurial values benefit society. Configurations of values and beliefs characterize groups of people.

The configurations are not random. Yet, it is impossible to derive them from axiomatic principles as suggested by rational choice theory. Mental frames are frugal. Most of the time they help decisionmakers. On occasion, though, they mislead. Mental frames can be very unsophisticated and yet resist change. Consider, for example, all the pseudoscience and superstition that envelop us on the benefits of herbal medicines. Hence, it is easy to see that financial literacy is at the core of investment decision making. What do people really know? When a financial problem presents itself, there may be no unitary model of truth even though there are degrees of knowledge. Many people use tacit models that are demonstrably false (Salter 1983). This should not surprise us. The logic of the mind is not Aristotelian or Cartesian. It is truly psychological and sociological.

The purpose of this study is to identify and to interpret relevant clusters of values and beliefs among semi-affluent and affluent European investors. Mental frames matter because they are correlated with decisions, for example, portfolio choice and asset allocation.

I rely on survey methods to investigate how people perceive themselves and their surroundings. Of course, much of what people know, they accept on faith. (What happened at Waterloo? Are milk and cheese rich in calcium? Is Ecuador a country in South America? Are stocks the best investment for the long run?) Every child that is born cannot possibly recreate from scratch all of our collective knowledge about the universe. Mental frames are socially shared. To a significant degree, they are fabricated by educators, opinion leaders, and men in advertising ('At Ford, quality is job one'). They are passed on from the old to the young. The study, therefore, examines the mind of the crowd, particularly as it relates to saving and investment.[4]

Evidently, my approach is very different from the standard economic perspective of modern finance. There, financial decision making is studied in deductive fashion. It is reduced to a mathematical optimization problem: What is the appropriate investment strategy for rational investors? Modern finance is based on the classical notion of *homo economicus*, that is, the normative axioms that underlie expected utility theory, risk aversion, rational expectations, and Bayesian updating. It assumes that individuals have considerable knowledge about the fundamental structure of the economy. Financial economics does not treat cognition as a scarce resource. Herbert Simon (1983) calls this approach the Olympic model. Within modern finance, there is little room for the study of cultural differences.[5]

The new field of behavioral finance takes a mostly inductive approach. It focuses on what people really do. Of course, what investors do may be very different from what, in principle, they should do. Richard Thaler and I (1994) present a survey of behavioral finance. In experiments, people often willingly violate the rational axioms that form the foundation of modern finance (Slovic 1972; Tversky and Kahneman 1986). Over the years, much empirical work has documented a wide gap between reality and the predictions of portfolio and asset pricing theory. In many instances, behavioral hypotheses led to the discovery of these anomalous facts. In past work (De Bondt 1998), I have listed four classes of anomalies in the behavior of individual investors. These anomalies relate to irregular perceptions of the dynamics of equity prices, perceptions of value, risk management, and trading practices. What is surprising is the failure of many people to infer basic investment principles from years of experience, for example, the benefits of diversification.

At this point in time, there is only limited prior research that takes a specific cultural/lifestyle/demographic point of view. Some early research was done by US financial planners and advisors, for example, Marilyn Barnewall (1987), Ronald Kaiser (1987), William Danko, and Thomas Stanley (Stanley and Danko 1996; Stanley 2000). With few exceptions

(e.g. Warren et al. 1990; MacGregor et al. 1999), this work tends toward non-quantitative reports based on the writers' experiences with clients. A related line of work develops risk-assessment tools that help advisors determine what investment products are most suitable in view of their clients' risk tolerance (e.g. see Opdyke 2000).

Hereafter, I put forward a non-technical overview of the study. Limitations of space preclude a full statistical analysis.

The Survey

As stated before, I use standard questionnaire methods. The survey—the largest ever conducted on this topic in Europe—was carried out in March/April 2001 in cooperation with the surveying network TNS (Dimarso in Belgium, Sofrès in France, Emnid in Germany, Abacus in Italy, Demoscopia in Spain, and Taylor-Nelson in the United Kingdom). It was administered to households that were known to invest funds into stocks, bonds, or mutual funds. I received 3,125 valid responses, approximately 500 in each of the following countries: Belgium, Britain, France, Germany, Italy, and Spain.

The survey was written in English and translated into Dutch, French, German, Spanish, and Italian. My coworkers and I spent great effort making sure that the translations exactly matched the original English text. A limited number of questions were previously studied in the United States. In a pretest of the survey in March 2001, a focus group of Belgian investors responded to the questionnaire. They discussed every question at length.

Each survey contained 237 questions relating to (1) demographics and lifestyle, (2) income and wealth, (3) financial expertise, (4) personal values and beliefs, (5) values and beliefs about the world, (6) values and beliefs that guide investment strategy, and (7) the relative merit of different asset classes. Investors' values and beliefs are difficult to capture. For this reason, I asked multiple questions probing for the same underlying behavioral dimension, for example, whether people view themselves as being happy, as leaders, etc. The analysis is based on a total of more than 900,000 responses.

The European Investor

I start with a brief statistical portrait of the respondents. Tables 8.1–8.4 show a selection of data organized by country. The text below often describes the average European respondent.

Judging from the demographic, economic and lifestyle data, it is unmistakable that I sampled semi-affluent, upper middle-class European investors. For a majority of respondents (56%), the investible wealth is between 100,000 and 1 million Euro (2% invest more than 1 million Euro), 40% are employed

full-time while 34% are retired. These people are strong savers: 53% of the sample save more than 5% of their annual income; 59% receive interest income; 45% receive dividends; 17% receive real estate investment income. A large majority of respondents own a home (84%) and about 20% own a second home; 71% have no mortgage debt.

Most respondents (87%) are married; 56% are male; 44% have children who are financially dependent; less than 10% have parents who are financial dependent; 67% plan to leave a bequest.

Of the respondents, 74% are generally in good health, 57% are under the age of 55. They are educated (e.g. 43% are multilingual) and culturally sophistic-ated. For instance, a majority go to the theater and read books—54% read five or more books a year, assuming that the purchase of a book implies that it is read; 70% regularly use credit cards, 44% subscribe to a daily newspaper, and 43% use a personal computer regularly. The sample respondents' travel data: 54% have left the European continent; 21% have visited the United States.[6]

Because we want to learn about the links between culture and investment decision making, it is interesting to examine how the respondents perceive their own identity, for example, nationality and religious affiliation, 15% think of themselves as 'citizens of the world' (the highest percentage is observed for residents of Spain), 20% as 'citizens of Europe' (the highest score is for Italy), and 52% as citizens of the country where they reside (the highest score, 75%, is for Britain). Finally, 12% see themselves as citizens of a particular region within a country (the highest score is for Belgium). Four countries in the sample are overwhelmingly Catholic (Belgium, France, Italy, and Spain). The majority of British respondents are Anglican or Protestant. In Germany, 45% of the respondents are Protestant; 38% catholic. On average, 29% regularly

TABLE 8.1. Demographic Descriptors

	Belgium	Britain	France	Germany	Italy	Spain
Number of respondents	515	492	502	550	560	506
% Male	49	41	53	61	80	45
% Married	88	85	84	87	93	94
% No dependent children	57	67	70	60	41	35
% No dependent parents	97	94	96	93	94	86
Age < 35	16	6	13	17	7	18
Age < 55	66	43	47	54	63	70

Note: Listed in the table are the number of survey respondents with their main residence in Belgium, Britain, France, Germany, Italy, and Spain; and the fraction of respondents who are male, married, without dependent children, without dependent parents, and aged below 35 or below 55.

TABLE 8.2. Employment, Income, Wealth, and Saving

	Belgium	Britain	France	Germany	Italy	Spain
Employed full-time	48	36	42	42	63	52
Self-employed	5	5	3	6	12	6
Homemaker	9	7	3	7	4	22
Retired	28	43	45	35	30	17
Income > 50,000 Euro	13	14	11	16	10	30
Income > 100,000 Euro	1	3	1	2	1	5
No dividend income	61	22	62	45	61	51
No interest income	35	16	59	23	43	47
No real estate income	82	95	76	80	63	83
Wealth > 300,000 Euro	11	21	12	21	15	8
Owns second home	9	4	20	15	27	34
Saving < 5% of income	40	41	39	38	46	40
C-debt < 5,000 Euro	88	87	87	91	90	90
M-debt < 20,000 Euro	64	74	80	40	89	81

Note: Listed in the table are the percentage of respondents in each country who are employed, self-employed, retired, or who are homemakers. Also listed are statistics relating to income, savings, wealth, and home ownership, for example, the percentage of respondents with annual income above 50,000 Euro, with annual income above 100,000 Euro, and the percentage of respondents without dividend, interest, or real estate income, C-debt denotes consumer debt, M-debt, mortgage debt.

TABLE 8.3. Lifestyle

	Belgium	Britain	France	Germany	Italy	Spain
Citizen of country of birth/residence	48	75	64	52	34	42
EU/world citizen	39	15	25	34	54	40
Roman Catholic	92	10	87	38	98	94
Protestant/Anglican	1	73	2	45	0	0
Practicing	23	24	18	21	49	39
Travel outside Europe	56	70	63	60	42	33
Travel to US	23	44	23	29	17	8
Speak > 1 language	67	23	31	64	36	44
Higher education	70	46	47	61	72	43
Buys > 5 books/year	44	57	55	65	49	55
Computer literate	71	72	63	75	63	69

Note: Listed in the table are the percentage of respondents in each country who describe themselves as 'citizens of their country of birth or residence', and as 'citizens of Europe' or 'citizens of the world'. Lifestyle variables related to religion, travel, and education are also listed.

attend church services. This percentage is significantly higher in Italy (49%) and Spain (39%), and it is significantly lower in France (18%). How do European investors manage their portfolios? Most go about the job themselves (77%), some do it with the help of family and friends (18%), press stories

(37%), and money newsletters (11%); 22% rely on professional advisors, and 44% count on guidance from bank employees. Surprisingly, 62% say that they spend more than 30 minutes a day 'reading financial magazines and watching financial news'.

Compared to investors in the United States, the average European investor looks conservative. The investments that are most favored are bank savings accounts and various fixed-income instruments. Relatively few investors trade stock options (6%), trade securities on-line (5%), or invest in assets outside Western Europe (12%). However, 38% of Europeans say that they invest in shares of large companies; 39% say that they invest in mutual funds. Five years ago, the corresponding figures were 29% and 28%, respectively. The respondents estimate that, for their own parents, the figures are, respectively, 13% and 12%. As seen in Table 8.4, these statistics differ quite strongly by country.

Of the survey participants, 63% believe that the average annual returns on their portfolios during the last five years were between 3% and 12%. Of the sample, 74% expect to earn a similar annual rate of return in the future, and 5% expect to earn more than 12% per year. The subjective estimates of GDP growth, unemployment, and inflation rates, also listed in Table 8.4, are remarkably sensible and more accurate than may have been expected based on opinion polls and other research in the United States.

TABLE 8.4. Financial Sophistication

	Belgium	Britain	France	Germany	Italy	Spain
Blue chips, now	26	65	33	36	30	41
Five years ago	18	58	27	26	14	36
Parents	13	24	16	2	8	17
Equity > 20% wealth	12	12	6	10	15	6
Fixed > 20% wealth	30	26	14	15	25	12
Traded options	9	5	3	11	1	7
Invested outside Europe	13	14	4	13	17	6
Expected rate of return	5.7	5.2	5.1	6.6	5.2	4.9
Past rate of return	4.3	5.3	4.9	3.8	3.8	3.9
GNP growth rate	2.3	1.5	2.6	1.9	1.9	2.3
Unemployment rate	10.3	9.3	11.1	11.8	10.4	12.1
Inflation rate	3.6	4.0	3.2	4.3	4.9	4.1

Note: Listed in the table are the percentage of sample respondents who invest in blue chip companies, now, five years ago, and whose parents did; the percentage of respondents with more than 20% of their reported financial wealth in equity or fixed income; the percentage of respondents who have traded options, at least once in their lifetimes; and the percentage of respondents who invest outside Western Europe. I also report the average respondent estimates of (i) the future expected annual rate of return on the investment portfolio; (ii) the average annual rate of return over the last five years; (iii) the expected annual GNP growth rate; (iv) the current 'true' unemployment rate; and (v) the current 'true' annual inflation rate.

Values and Beliefs

In order to capture the values and beliefs of investors, I was forced to make many judicious a priori choices about which opinions may be most pertinent in an investment context. I relied on the prior literature in financial psychology (e.g. De Bondt and Thaler 1995; De Bondt 1998; Warneryd 2001), the feedback from the focus group, as well as my own conjectures.

The respondents were asked to agree or disagree with thirty-nine statements listed in Table 8.5. I tried to capture (1) the sample respondents' personal values and beliefs (seventeen statements); (2) their values and beliefs about the world (nine statements); and (3) their values and beliefs that guide investment strategy (thirteen statements). However, the participants were not confronted with these exact statements. Instead, every statement was assessed with 2–5 questions. The questions about values and beliefs were presented in random order.[7]

Multiple questions allow me to cross-check the answers and to obtain reliable measures. Strong disagreement is coded as -1.0; weak disagreement as -0.5; a neutral position as 0.0; weak agreement as 0.5; strong agreement as 1.0. For every statement and for every respondent, I find the mean score.

For example, the statement 'I enjoy luxury' (A4) is scored based on the following three questions:

> I save in order to buy luxury items.
> I like a simple natural lifestyle. (-)
> I like to dress with a touch of class. In a social setting, it is important how you look.

Since the enjoyment of a simple natural lifestyle is at odds with delight in luxury, I change the sign of the scores for question 2 (marked with (-)). As is seen in Table 8.5, the average European firmly denies that he or she enjoys luxury. The average score is -0.40 and the standard deviation across all survey participants is 0.49. The lowest average score is found in France.

A second example is the statement 'Globalization benefits society' (B2). In this case, I use four questions:

1. Globalization and free trade hurt the interests of workers. (-)
2. American culture is changing Europe for the better.
3. Cross-border corporate mergers and acquisitions are a big plus for consumers.
4. Our cities have become unsafe because of immigration. (-)

Here again, the scores for questions 1 and 4 are reversed. On average, Europeans oppose the statement but, compared to the other nations in the sample, Spaniards do so the least.

TABLE 8.5. Values and Beliefs

	Average	Standard deviation	High	Low
Personal values and beliefs				
A1. I am happy	0.78	0.52	B	E
A2. I like to work	0.65	0.48	E	F
A3. I like my family	0.88	0.32	I	B
A4. I enjoy luxury	−0.40	0.49	UK	F
A5. I seek balance in life	0.39	0.56	D	F
A6. I am responsible for my own success or failure	0.50	0.49	D	I
A7. I am a leader	0.36	0.50	D	E
A8. I like to fit in socially	−0.47	0.44	UK	I
A9. I am a thinking, serious-minded person	0.30	0.47	I	UK
A10. I take a long-term view	0.60	0.42	I	E
A11. I worry about the future	−0.29	0.53	I	B
A12. I hate failure	−0.17	0.53	UK	F
A13. I like self-discipline	0.42	0.37	I	D
A14. I make decisions quickly	−0.03	0.63	D	UK
A15. I trust people and social institutions	−0.05	0.41	E	F
A16. I respect tradition	0.61	0.41	I	D
A17. I feel compassion for the needy	0.33	0.51	E	D
Values and beliefs about the world				
B1. Our society needs change	0.49	0.48	I	D
B2. Globalization benefits society	−0.17	0.42	E	B
B3. The European Union benefits society	0.02	0.62	I	UK
B4. Regulation benefits society	0.15	0.41	B	I
B5. Entrepreneurial values and freedom benefit society	0.58	0.38	D	B
B6. Competence breeds success	0.10	0.51	F	E
B7. Many people are selfish and can't be trusted	0.71	0.33	F	D
B8. Government services often fail	0.16	0.47	F	UK
B9. Politicians often fail	0.17	0.49	F	E
Values and beliefs that guide investment strategy				
C1. I like to invest	0.02	0.75	D	F
C2. I save	0.71	0.54	I	UK
C3. I need to save	0.30	0.82	UK	I
C4. It is difficult to save	0.16	0.89	E	UK
C5. I am competent to make financial decisions	−0.07	*	*	*
C6. I love risk	−0.17	*	*	*
C7. I take calculated risks	0.29	0.41	D	F
C8. I worry about inflation	0.63	0.44	I	B
C9. I worry about the volatility of the stock market	0.14	0.50	UK	D

TABLE 8.5. (*Continued*)

	Average	Standard deviation	High	Low
C10. Successful investing requires effort	0.52	0.32	D	I
C11. Successful investing requires patience	0.71	0.43	UK	B
C12. Investing has an ethical dimension	0.34	0.52	F	D
C13. Bankers deserve our trust	0.43	0.42	D	F

Note: Each value and belief statement is judged with two to five questions. Strong disagreement is coded as -1.0; disagreement as -0.5; neutral as 0.0; agreement as 0.5, strong agreement as 1.0. The various columms represent: (i) the values and beliefs that the sample respondents are asked to judge, (ii) the arithmetic average score (and standard deviation) across questions and respondents, and (iii) the countries with the highest or the lowest average scores. The country symbols are B for Belgium, UK for Britain, F for France, D for Germany, I for Italy, and E for Spain. * refers to missing data.

A final example is the statement 'I take calculated risks' (C7). Now, the average European agrees. The questions are:

I am less concerned about losing money if there is a real chance that the risks that I take are worthwhile.
You will never achieve much unless you act boldly.
Investors have to take calculated risks. There is no other way.
People should only invest in risky ventures if they are wealthy.

On average, the Germans obtain the highest score; the French obtain the lowest score.

In general, this study analyzes three types of information: (i) demographic information; (ii) financial information (e.g. income, investable financial wealth, home ownership, etc.); and (iii) psychographic information about values and beliefs. In addition, the nationality of the respondents is known. Tables 8.5 through 8.9 report average scores for selected groups of respondents. Table 8.5 lists the mean score for each statement, averaged across questions and across all respondents. Subsequent tables list average scores by gender, age, health, education, religion, as well as a range of financial variables.

Ideally, any investigation of how values and beliefs (say, related to the perception of self) differ for separate groups of investors will control for demographic factors. Similarly, any study of how values and beliefs (say, about investment strategy) differ for distinct demographic groups will control for financial variables. Below, I start from the values and beliefs of the respondents and present simple comparisons of means—usually for two groups of respondents. The purpose is less to estimate the precise differences between groups (which requires a set of control variables) than to illustrate large gaps between groups that often survive a multivariate analysis. In addition, to keep Tables 8.6–8.9 easily readable, I only list group averages for which the hypothesis of equality is statistically rejected ($p < .01$).[8]

Personal Values and Beliefs

I find that the representative European in the sample very much loves his or her family (average score is 0.88), feels happy (0.78), likes to work (0.65), respects tradition (0.61), takes a long-term view of life (0.60), and feels responsible for his/her own success or failure (0.50). The average European does not aim to fit in socially (−0.47), does not worry about the future (−0.29) and, as already mentioned, does not admit to enjoying luxury (−0.40).

Of course, there are important differences in the responses of male vs. female participants, young vs. old, high-income vs. low-income, and so on. Table 8.5 illustrates some of the differences between nationalities. National identity may be a valuable proxy variable for persistent clusters of values and beliefs that people associate with national character. This assumption is usefully discussed by, among others, David Potter (1954) and Ake Daun (1996 [1989]).[9]

For example, more than any other nation in the sample, Frenchmen agree that 'money buys happiness'. Yet, the French (−0.67) and Italians (−0.50) score lower than other countries on questions relating to their enjoyment of luxury products. For Britain, the score is statistically indistinguishable from zero. Germans perceive themselves as natural leaders, 'taking responsibility in difficult circumstances'. On average, Europeans deny that they hate failure. The French, in particular, disagree (−0.42) that a hypothetical 10% drop in their total wealth would make them feel miserable.

Table 8.6 shows some interesting differences in values and beliefs by gender, age, health status, and religious affiliation. More than women, men like to work. They believe that they are responsible for their own success and they like self-discipline. More than the young, the old (>age 55) respect tradition and distrust people. Perhaps not surprisingly, the means by age group often resemble the means by health status. More than Catholics, Protestants see themselves as leaders. Religion is an astoundingly powerful predictor of values and beliefs. In contrast, education is a weak predictor (I only find statistically significant differences for three of seventeen statements). These results are repeated in later tables and in analyses not reported here.

Tables 8.7 and 8.9 allow the reader to characterize the thinking of wealthy investors, low and high savers, and so on. There is little doubt that savings and investment behavior are correlated with people's values and beliefs. In some instances, the opinion gaps are very large. Consider, for example, the answers to statements A14 ('I make decisions quickly'), B4 ('Regulation benefits society'), or C5 ('I am competent to make financial decisions').

Values and Beliefs about the World

Europeans mostly agree that many people cannot be trusted (0.71), that entrepreneurial values benefit society (0.58), and that society needs change (0.49).

TABLE 8.6. Personal Values and Beliefs by Gender, Age, Health Status, Education, and Religion

	Gender		Age		Health		Education		Religion	
	Male	Female	<55	>55	Healthy	Sick	High-school	>High-school	Catholic	Protestant
A1. I am happy	0.68	0.60	0.67	0.61	0.83	0.63			0.66	0.60
A2. I like to work					0.68	0.58				
A3. I like my family					0.90	0.84				
A4. I enjoy luxury	−0.45	−0.35	−0.39	−0.44	−0.38	−0.51			−0.49	−0.21
A5. I seek balance in life										
A6. I am responsible for my own success	0.56	0.42							0.46	0.62
A7. I am a leader	0.40	0.31	0.39	0.31	0.38	0.32			0.34	0.41
A8. I like to fit in socially	−0.49	−0.44				−0.48		−0.42		
A9. I am a thinking, serious-minded person	0.38	0.21			0.29	0.34			0.32	0.27
A10. I take a long-term view	0.63	0.56	0.55	0.70			0.58	0.62		
A11. I worry about the future			−0.25	−0.37	−0.32		−0.19	−0.21	−0.12	
A12. I hate failure							−0.12	−0.21		
A13. I like self-discipline	0.45	0.38							0.44	0.36
A14. I make decisions quickly	−0.01	−0.07	0.00	−0.09	−0.01	−0.09			−0.02	−0.08
A15. I trust people and social institutions	−0.08	−0.03	−0.01	−0.13	−0.03	−0.12			−0.04	−0.09
A16. I respect tradition	0.65	0.55	0.55	0.70	0.59	0.65			0.63	0.55
A17. I feel compassion for the needy	0.29	0.38	0.38	0.37					0.39	0.18

Note: The table lists the values and beliefs that the respondents are asked to evaluate. The arithmetic average scores are presented across questions and respondents who (i) are male or female, (ii) of age below 55 or above 55, (iii) healthy or sick, (iv) with a high-school education or university education, and across (v) Catholic or Protestant. When there is no table entry, the difference in means is statistically insignificant. The scores shown in the table vary between −1 and +1. Positive scores indicate agreement; negative scores, disagreement.

TABLE 8.7. Personal Values and Beliefs by Wealth, Saving, and Asset Allocation

	Wealth		Saving		Savings accounts		Stocks/fixed income		Real estate	
	<300K	>300K	Low	High	Low	High	FI>S	S>FI	Low	High
A1. I am happy	0.77	0.83	0.80	0.74						
A2. I like to work	0.64	0.70	0.67	0.58						
A3. I like my family			0.89	0.85						
A4. I enjoy luxury	−0.43	−0.34					−0.42	−0.35		
A5. I seek balance in life										
A6. I am responsible for my own success			0.42	0.32	0.41	0.36			0.52	0.48
A7. I am a leader	0.34	0.45	0.39	0.26	0.38	0.32	0.34	0.47		
A8. I like to fit in socially										
A9. I am a thinking, serious-minded person	0.30	0.36							0.33	0.28
A10. I take a long-term view	0.59	0.68	0.61	0.57						
A11. I worry about the future	−0.15	−0.28	−0.32	−0.23			−0.28	−0.38	−0.32	−0.27
A12. I hate failure					−0.19	−0.14	−0.16	−0.26		
A13. I like self-discipline			0.43	0.37						
A14. I make decisions quickly	−0.05	0.05			0.01	−0.11	−0.07	0.16		
A15. I trust people and social institutions	−0.05	−0.10					−0.07	0.00		
A16. I respect tradition							0.62	0.55		
A17. I feel compassion for the needy	0.35	0.23					0.34	0.26		

Note: The table lists the values and beliefs that the respondents are asked to evaluate. The arithmetic average scores are presented across questions and across respondents who (i) have investable wealth above or below 300,000 Euro, (ii) are low savers or high savers (as a percentage of income), (iii) keep a small or a large percentage of their investable wealth in savings accounts, (iv) invest a larger percentage of their wealth in fixed income than in stocks, or the reverse, and (v) invest little or much in real estate. When there is no table entry, the difference in means is statistically insignificant. The scores shown in the table vary between −1 and +1. Positive scores indicate agreement; negative scores, disagreement.

TABLE 8.8. Values and Beliefs about the World and about Investment Strategy by Gender, Age, Health Status, Education, and Religion

	Gender		Age		Health		Education		Religion	
	Male	Female	<55	>55	Healthy	Sick	High-school	>High-school	Catholic	Protestant
B1. Our society needs change									0.51	0.42
B2. Globalization benefits society	0.11	−0.07	−0.14	−0.22	−0.15	−0.23	−0.14	−0.19	0.09	−0.11
B3. The EU benefits society					0.05	−0.03			0.16	0.09
B4. Regulation benefits society										
B5. Entrepreneurship and freedom benefit society	0.62	0.54	0.56	0.63					0.57	0.64
B6. Competence breeds success			0.08	0.16						
B7. Many people are selfish and cannot be trusted	0.72	0.69	0.70	0.73	0.70	0.74			0.72	0.68
B8. Government services often fail			0.12	0.22	0.13	0.25			0.19	0.08
B9. Politicians often fail			0.12	0.25	0.15	0.25			0.16	0.21
C1. I like to invest			0.05	−0.04	0.05	−0.08			−0.03	0.15
C2. I save			0.78	0.61	0.75	0.61			0.69	0.78
C3. I need to save			0.39	0.14	0.32	0.22	0.75	0.69	0.37	0.12
C4. It is difficult to save			0.12	0.21	0.11	0.30			0.22	−0.01

C5. I am competent to make financial decisions	0.35	0.08			0.26	0.16			0.20	0.33
C6. I love risk	−0.58	−0.70								
C7. I take calculated risks	0.33	0.23								
C8. I worry about inflation			0.57	0.76	0.61	0.70				
C9. I worry about stock market volatility	0.10	0.18	0.09	0.20	0.10	0.22	0.10		0.16	0.07
C10. Successful investing requires effort	0.54	0.51							0.51	0.57
C11. Successful investing requires patience			0.68	0.79	0.71	0.75			0.70	0.75
C12. Investing has an ethical dimension	0.30	0.39	0.30	0.41	0.31	0.40	0.36	0.31	0.37	0.26
C13. Bankers deserve our trust	0.38	0.52	0.42	0.47					0.41	0.48

Note: The table lists the values and beliefs that the respondents are asked to evaluate. The arithmetic average scores are presented across questions and respondents who (i) are male or female, (ii) of age below 55 or above 55, (iii) healthy or sick, (iv) with a high-school education or university education, and (v) Catholic or Protestant. When there is no table entry, the difference in means is statistically insignificant. The scores shown in the table vary between −1 and +1. Positive scores indicate agreement; negative scores, disagreement.

TABLE 8.9. Values and Beliefs about the World and about Investment Strategy by Wealth, Saving, and Asset Allocation

	Wealth		Saving		Savings accounts		Stocks/fixed income		Real estate	
	<300K	>300K	Low	High	Low	High	FI>S	S>FI	Low	High
B1. Our society needs change	0.50	0.40				0.50	0.50	0.43	0.47	0.51
B2. Globalization benefits society										
B3. The EU benefits society	0.01	0.15			0.06	-0.03			0.06	0.00
B4. Regulation benefits society	0.17	0.02	0.13	0.21	0.13	0.18	0.17	0.03		
B5. Entrepreneurship and freedom benefit society	0.57	0.69	0.60	0.54	0.61	0.55	0.58	0.64	0.60	0.57
B6. Competence breeds success	0.09	0.20			0.70	0.74				
B7. Many people are selfish and cannot be trusted										
B8. Government services often fail			0.15	0.21						
B9. Politicians often fail										
C1. I like to invest	-0.02	0.21	0.07	-0.09	0.15	0.21	-0.05		0.05	
C2. I save	0.70	0.82			0.73	0.68	-0.05	0.70	0.37	0.80
C3. I need to save	0.32	0.18	0.33	0.19						
C4. It is difficult to save	0.23	-0.20	0.09	0.35			0.18	0.01		
C5. I am competent to make financial decisions	0.20	0.46	0.28	0.09	0.29	0.14	0.19	0.47		
C6. I love risk			-0.66	-0.54			-0.66	-0.48		-0.02

Statement										
C7. I take calculated risks	0.27	0.38		0.31		0.25	0.27		0.39	
C8. I worry about inflation	0.65	0.59	0.62	0.68		0.65	0.58			
C9. I worry about stock market volatility	0.17	−0.04	0.11	0.21	0.09	0.21	0.18	−0.15	0.09	0.18
C10. Successful investing requires effort	0.52	0.58	0.54	0.49	0.55	0.49	0.51	0.62	0.55	0.50
C11. Successful investing requires patience			0.73	0.68				0.74		0.70
C12. Investing has an ethical dimension	0.35	0.28	0.33	0.38	0.32	0.37	0.36	0.23	0.35	
C13. Bankers deserve our trust	0.42	0.46	0.41	0.46	0.44		0.45		0.40	

Note: The table lists the values and beliefs that the respondents are asked to evaluate. The arithmetic average scores are presented across questions and across respondents who (i) have investable wealth above or below 300,000 Euro, (ii) are low savers or high savers (as a percentage of income), (iii) keep a small or a large percentage of their investable wealth in savings accounts, (iv) invest a larger percentage of their wealth in fixed income than in stocks, or the reverse, and (v) invest little or much in real estate. When there is no table entry, the difference in means is statistically insignificant. The scores shown in the table vary between −1 and +1. Positive scores indicate agreement; negative scores, disagreement.

There is considerable skepticism with respect to globalization, the European Union, and the role of government, however. Only 8% of Europeans agree that 'American culture is changing Europe for the better'. The French, in particular, believe that globalization hurts workers. On balance, Europeans believe that regulation benefits society. However, many also say that the state bureaucracies and social services are failing—58% of Europeans think that private health care has become a necessity, 91% of the French agree. Interestingly, only 37% of the British do.

Values and Beliefs about Investment Strategy

The respondents to our questionnaire are strong savers (0.71). In their minds, successful investing takes both patience (0.71) and effort (0.52). They take calculated risks (0.29) but they do not love risk per se (−0.17). The representative European worries more about consumer price inflation than about stock market volatility. Bankers are trusted advisors (0.43).

Fully 40% of the Spaniards in our sample admit that they lack self-confidence in financial matters. The equivalent number for Germany is merely 9%. Of the German investors, 60% further believe in their own good fortune, while only 33% of Spaniards do. Of the French, 64% state that, in investing money, one should consider the social and ethical consequences for other people in society; 42% of Germans disagree with this point of view and 15% agree (the remainder is neutral).

As before, there are notable cultural differences between countries, between age groups, and between religions. Table 8.8 confirms that education is a weak predictor of values and beliefs. What is more, the little that is found is unforeseen. If we accept the results at face value, university-educated Europeans are less enthusiastic about globalization than other Europeans (B2); they do not like as much to invest (C1) and they worry more about stock market volatility (C9). In contrast, age and religion are correlated with most statements listed in Table 8.8. Possibly because Anglicanism and Protestantism are strong in Britain and Germany, the results sometimes mirror the sorting of respondents by nationality. Since Britain and Germany have large Catholic minorities, the best way to study the effect of religious affiliation is to examine the data within these countries.

Many Europeans believe that, in the long run, stocks are the best investment (0.20). On average, they favor value over momentum investing. When the stock price of a company has dropped, it is seen as a buying opportunity (0.40) (with 62% agreement, this opinion is most firmly held in France) and, when the price has risen a great deal, the participants in our survey deny that it is a good time to buy (−0.19).

Asset Allocation

I asked the respondents in each country to judge and rank four asset classes, relative to each other, in terms of ten characteristics. The asset classes were (i) bank savings accounts and certificates of deposit (SA), (ii) stocks of publicly traded companies and stock mutual funds (EQ), (iii) government bonds and bond mutual funds (BO), (iv) and real estate (RE). The characteristics were (i) the potential for long-term performance, (ii) the required effort and attention, (iii) the overall risk, (iv) the level of protection against consumer price inflation, (v) the degree of easy access in case of financial emergency, (vi) the total costs of managing the investment, (vii) the level of worry, (viii) the favorable or unfavorable tax treatment, (ix) the overall tradeoff between risk and return, and (x) the overall comfort level with the investment.

The top panel of Table 8.10 presents selected results. I report the fraction of all European respondents who judge an asset class as either the best or the worst in terms of five of the characteristics mentioned above. Table 8.10 also shows statistics by country. (In this case, the rankings may be different from the European average.) It is widely believed that stocks have the best long-term performance potential, and that savings accounts have the worst. Equity investments are thought to be vulnerable to inflation, however. Savings accounts are preferred in terms of risk and tax treatment. Real estate is seen as the best hedge against inflation and is preferred based on its overall risk-return tradeoff. There are some striking differences between countries. In Britain, for instance, the risk-return tradeoff for savings accounts is judged somewhat better than the tradeoff for real estate.

Table 8.10 also lists the findings of a second thought experiment: 'If you had 1 million Euro to invest today, what percent would you invest, respectively, in bank savings accounts, stocks, bonds, and real estate?' I present the average 'perfect portfolio' in Europe and in individual countries, as well as the percent of respondents who invest zero in a particular asset class. Broadly speaking, the average perfect portfolio contains real estate for two-fifths, and stocks, bonds, and savings accounts for one-fifth each. In Belgium and Britain, the real estate portions are smaller. One of the practical uses of research in behavioural finance is that it documents statistical relationships between values, beliefs, investment strategy, and asset allocation. Hereafter, I present for illustrative purposes the profile of a semi-affluent European investor who puts a larger percentage of his portfolio in stocks than in fixed income (i.e. bank savings accounts, government bonds, and cash) and I also present the profile of a more typical European who puts more funds into fixed income than in stocks. The analysis is based on 2,258 responses: 356 investors that are primarily 'equity investors' and 1,902 'fixed-income investors'.[10]

Compared to other respondents, 'equity investors' believe more that they are leaders, and that they make decisions quickly. They admire entrepreneurship.

TABLE 8.10. Perceptions of Asset Classes and Preferred Asset Allocations

	Europe	Belgium	Britain	France	Germany	Italy	Spain
% of respondents who judge a particular asset class best and worst							
Long-term performance							
EQ (best)	41	43	33	53	50	43	24
SA (worst)	9	9	8	9	9	9	8
Risk							
SA (best)	62	69	70	69	67	47	55
EQ (worst)	3	1	4	2	4	5	1
Hedge against inflation							
RE (best)	50	51	38	42	64	59	48
EQ (worst)	13	17	14	14	10	13	8
Tax treatment							
SA (best)	52	57	55	75	51	47	24
EQ (worst)	10	20	6	5	10	11	12
Overall risk-return tradeoff							
RE (best)	36	26	29	35	29	45	46
SA (worst)	20	21	32	23	17	9	21
Preferred asset allocation							
SA	20	22	22	22	17	16	23
EQ	22	23	25	22	24	20	18
BO	22	25	23	17	22	25	19
RE	36	30	30	39	37	39	40
% of respondents who do not invest in a particular asset class							
SA	10	7	8	7	17	10	11
EQ	12	12	8	11	13	10	17
BO	11	8	11	15	14	4	16
RE	10	11	19	8	10	4	7

Note: Four asset classes namely, savings accounts (SA), investments in the stock market (EQ), in bonds (BO), and in real estate (RE) are represented. The table reports (i) the percentage of sample respondents in Europe who judge a particular asset class either best or worst in terms of performance, risk, inflation-protection, tax treatment, and overall risk-return tradeoff. It also shows statistics by country. (Note that, in this case, the rankings may be different from the European average.) Finally, (ii) the average preferred asset allocations in Europe and in individual countries, and (iii) the percentage of respondents who invest zero in a particular asset class are reported.

They feel that investment is fun. They 'love risk' and they claim to take calculated risks. They believe that successful investing requires effort. In their view, stocks are the best long run investments, small companies earn higher stock returns than large companies, and modern technology has made investing easier.

In contrast, 'fixed-income investors' worry more about the future than equity investors do and they fear failure. They agree more strongly that 'regulation benefits society', that 'working for government is a noble task', that 'social security will provide retirement income'. Fixed-income investors lack confidence to make money decisions, they say. Stock market volatility is

something to worry about, and investing has an ethical dimension. More than other respondents, fixed-income investors believe that savings accounts and gold are attractive investment vehicles.

Conclusion

I have sketched a psychological and sociological portrait of the semi-affluent investor in Western Europe. Little is known about how mental frames are linked to demographic variables and to investment strategy and portfolio choice. This study finds that identifiable clusters of values and beliefs, often correlated with national character, gender, age, and religion, predict portfolio choice. Culture matters. The results are preliminary but they have potentially valuable implications for financial marketing, product design, and other aspects of the money management industry.

One question that is often raised is the degree to which the statistical relations that are observed in survey data can be expected to be stable over time. Is it possible to make reliable out-of-sample predictions? Are the results vulnerable to dramatic worldwide events like the 9/11 terrorist attacks in New York or the bear market that started in the Spring of 2000? For instance, did 9/11 and the bursting of the stock market bubble cause many people to reassess their lives and, by implication, their investment strategies? The question is fundamental. For instance, Ronald Inglehart (1997) believes that there is a gradual postmodern shift in the value systems of advanced industrial societies and that people put less emphasis on economic achievement and more emphasis on the quality of life. On the other hand, in her survey studies of French values in 1981 and 1990, Hélène Riffault (1994) reports remarkable stability in the answers to at least half of the questions that were asked. Nevertheless, there are significant changes in specified domains, for example, the economy and employment.

Many more questions remain. I end, therefore, with the ritual cry for further research.

Notes

1. Or to quote the anthropologist Clifford Geertz (1973: 49), 'there is no such thing as human nature independent of culture'.
2. It is an interesting intellectual question whether the idea of culture, a foundation stone of twentieth century social science, has lived up to its academic promise. Adam Kuper (1999) thinks that cultures are to be described and to be interpreted but that the idea of culture as a source of explanation has failed.
3. The wording 'mental frame' is open to debate. The term originates in cognitive psychology but psychologists restrict its meaning more than I intend. My definition here includes a broad range of mental representations, for example, how

people experience and understand what happens to them in daily life (say, political beliefs; ideological and religious myths); how people see themselves; beliefs about instruments and practices (say, cooking recipes); and recollections in memory. I emphasize the social foundations of values and beliefs. All common sense knowledge is knowledge from a specific point of view (Shweder 1991). The problem is contained in Blaise Pascal's famous statement that 'there are thruths on this side of the Pyrénées which are falsehoods on the other'.

4. Some authors like Richard Dawkins (1982) or Dan Sperber (1996) are calling for a new epidemiology of mental representations. Ideas are contagious. Culture, Dawkins claims, is made up of 'memes' which in Darwinian fashion undergo replication and selection. (The notion of cultural contagion goes back to Gabriel Tarde and Gustave LeBon.) Whether Dawkins' approach will be fertile remains to be seen.

5. Rational choice theory does allow for differences in taste parameters but the differences are exogenous. They are not explained. In general, economists do not appreciate the role of cultural traditions and beliefs in human motivation. Many see cultural institutions either as (ultimately) neutral mutations that economic agents may have an incentive to circumvent, or as functionally optimal adjustments to human needs and desires. Because it suggests, contrary to the mainstream view, that cultural values and beliefs can promote or resist economic progress, the work of Landes (1999) and Harrison and Huntington (2000) that I referred to earlier is contentious.

6. Of the residents of Britain, 43% have visited the United States.

7. Remember, however, that the questionnaire was administered in six languages. The order of the questions was the same in every version.

8. Further steps are (i) to use factor analysis to identify the driving forces underlying the respondents' stated values and beliefs, and to relate the factors to demographic and financial variables; and (ii) to relate the factors to the seminal work of Hofstede (1980). I do not report this work for lack of space.

9. The discussion that follows regularly refers to specific survey questions, not to the thirty-nine statements listed in Table 8.5.

10. I built the profiles with the thirty-nine statements listed in Table 8.5 and with additional questions. All the t-statistics for tests of differences in means between 'equity' and 'fixed-income investors' exceed 3.0. Some of the evidence is found in Tables 8.7 and 8.9.

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