

# A PSYCHOLOGICAL PORTRAIT OF THE INDIVIDUAL INVESTOR IN EUROPE

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That it is beneficial "to know your customers", is perhaps the greatest all-time insight of marketing as an area of management studies. This insight also applies in the financial sector. In order to grow and to protect the wealth of their clients, banks, mutual funds, pension funds, insurance firms, money management companies, and other financial institutions do well to understand the values, beliefs, and behavior of investors. Globalization and European integration have 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 nations and groups of people because of differing economic circumstances and differing institutional, legal, and tax arrangements. However, a more fundamental factor may be culture and national character. How does culture influence behavior? Over the decades, this grand topic has been studied in 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* (1904). The topic has also been investigated in 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).

What is culture? Certain opinions, values and beliefs tend to go together in so-called *mental frames*. For instance, an individual who

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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 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 clusters of people and cultures.

The configurations are not random. Yet, it is hard to derive them from axiomatic principles. Mental frames are generally helpful in decision-making but, in many instances, they are misleading. They can be very unsophisticated, yet resist change. Consider, for example, all the pseudo-science, myth and superstition that envelop us on the benefits of herbal medicines. It is easy to see, therefore, that financial literacy (What do people really know?) is at the core of investment decision-making. 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 false (see, *e.g.*, Salter, 1983). In other words, ideas that are wrong and that do not fit the "objective" underlying facts may still guide their behavior. This should not surprise us. The logic of the mind is not Aristotelian or Cartesian. It is truly psycho-logical.

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The purpose of this study is to identify and, to a lesser degree, to understand relevant clusters of values and beliefs among semi-affluent European investors. Mental frames matter because they are correlated with decisions, *e.g.*, with portfolio choice and asset allocation.

Our study relies on standard 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. Our study, therefore, examines the mind of the crowd, particularly as it relates to saving and investment.

Evidently, our approach is very different from the standard perspective of modern finance. There, the theory and practice of financial decision-making are studied in mostly deductive fashion. Decision-making is reduced to an optimization problem: What is an appropriate investment strategy for rational investors? Modern finance is based on the classical notion of *homo economicus*, *i.e.*, 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<sup>1</sup>.

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. Werner De Bondt and Richard Thaler (1995) present a survey a 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. De Bondt (1998) lists 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, *e.g.*, 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 U.S. financial planners and advisors, *e.g.*, Marilyn Barnewall (1987), Ronald Kaiser (1987) and Thomas 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 (see, *e.g.*, Opdyke, 2000).

Hereafter, we present a non-technical overview of our study of European investors. A detailed statistical analysis of the data can be found in a technical report that is currently in preparation (De Bondt, 2001).

### DATA AND METHODS

As stated before, we use standard questionnaire methods. Our survey, the largest ever conducted on this topic in Europe, was carried out in March/April 2001 in co-operation with the surveying network TNS (Dimarso in Belgium, Sofrès in France, Emmid in Germany, Abacus in Italy, Demoscopia in Spain and Taylor-Nelson in the UK). It was administered to households that were known to invest funds into

stocks, bonds, or mutual funds. We received more than 3,100 valid responses, at least 500 in each of the following countries: Belgium, France, Germany, Italy, Spain, and the United Kingdom.

The survey was first written in English and subsequently translated. A limited number of questions were previously studied in the United States. In a pre-test of the survey in March 2001, a focus group of Belgian investors responded to the questionnaire and subsequently discussed the questions at length with one of the authors.

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, (7) the relative merit of investment products. Investors' values and beliefs are difficult to capture. For this reason, we asked multiple questions probing for the same underlying behavioral dimension, *e.g.*, whether people perceive themselves as being "happy", whether they are "leaders", and so on. Our analysis is based on a total of more than 900,000 responses.

### THE EUROPEAN INVESTOR

We start with a brief portrait of the average respondent. We studied semi-affluent, upper middle-class European investors: 77% of the respondents are married; 56% are male; 57% are under the age of 55; 44% have children that are financially dependent; 40% are employed full-time; 34% are retired; 29% regularly attend church services.

For a majority of respondents (56%), the investible wealth is between 100,000 and 1 million euros. (2% invest more than 1 million euros.) They 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. 67% plan to leave a bequest.

Our respondents are generally in good health (74%). A large majority of respondents own their home (84%) and about 20% own a second home. 71% have no mortgage debt. They are educated (*e.g.*, 43% are multilingual) and culturally sophisticated. 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. 44% subscribe to a daily newspaper. 43% use a personal computer regularly. They travel: 54% have left the European continent; 21% have visited the United States<sup>2</sup> 70% regularly use credit cards.

Because we want to learn about the links between nationality, culture, and investment decision-making, it is interesting to examine how the respondents perceive their own national identity. 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 is for the UK). Finally, 12% see themselves as citizens of a particular region within a country (the highest score is for Belgium).

### *THE INVESTOR AND HIS PORTFOLIO*

How do European investors manage their portfolios? Most do it themselves (77%), with the help of family and friends (18%), press stories (37%), and money newsletters (11%). 22% rely on professional advisors, and 44% count on the guidance of bank employees. Surprisingly, 62% say that, on average, they spend more than thirty minutes a day "reading financial magazines and watching financial news."

Compared to U.S. investors, the average European still looks fairly conservative, but is becoming less so. The investments that are most favored continue to be bank savings accounts and various fixed income instruments. However, 38% now say that they invest in shares of large companies; 39%, in stock mutual funds. Five years ago, the corresponding figures were 29% and 28%. The respondents estimate that, for their own parents, the figures are, respectively, 13% and 12%. Relatively few investors trade stock options (6%), trade securities on-line (5%), or invest in assets outside Western Europe (12%).

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63% of the sample believe that the average annual returns on their portfolios during the last five years were between 3% and 12%. 74% of the sample expect to earn a similar annual rate of return in the future. 5% of the sample expect to earn more than 12% per year.

### *VALUES, BELIEFS, AND NATIONAL IDENTITY*

In order to capture the values and beliefs of investors, we had to make a judicious choice, *a priori*, which opinions may be most relevant in an economic context. We relied on our own insights into investor behavior, the prior literature in financial psychology (*e.g.*, De Bondt, 1998; Warneryd, 2001), as well as the responses of the focus group. We tried to capture (1) the sample respondents' personal values and beliefs; (2) their values and beliefs about the world; and (3) their values and beliefs that guide investment strategy. We studied the degree to which the respondents agreed or disagreed with various statements listed in table 1. To obtain reliable measures for each individual in the sample, every statement was checked with two to five questions. There were 39 statements in total. Strong disagreement was 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. Table 1 lists the scores, sorted by statement and averaged across questions and respondents for all countries.

**Table 1**  
**Values and beliefs**

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. Below, we list (i) the values and beliefs that the sample respondents are asked to evaluate and (ii) the arithmetic average score across questions and respondents.

**A. Personal values and beliefs**

|  |       |
|--|-------|
| 1. I am happy.                                     | 0.78  |
| 2. I like to work.                                 | 0.65  |
| 3. I like my family.                               | 0.88  |
| 4. I enjoy luxury.                                 | -0.40 |
| 5. I seek balance in life.                         | 0.39  |
| 6. I am responsible for my own success or failure. | 0.50  |
| 7. I am a leader.                                  | 0.36  |
| 8. I like to fit in socially.                      | -0.47 |
| 9. I am a thinking, serious-minded person.         | 0.30  |
| 10. I take a long-term view.                       | 0.60  |
| 11. I worry about the future.                      | -0.29 |
| 12. I hate failure.                                | -0.17 |
| 13. I like self-discipline.                        | 0.42  |
| 14. I make decisions quickly.                      | -0.03 |
| 15. I trust people and social institutions.        | -0.05 |
| 16. I respect tradition.                           | 0.61  |
| 17. I feel compassion for the needy.               | 0.33  |

**B. Values and beliefs about the world**

|  |       |
|--|-------|
| 1. Our society needs change.                           | 0.49  |
| 2. Globalization benefits society.                     | -0.17 |
| 3. The European Union benefits society.                | 0.02  |
| 4. Regulation benefits society.                        | 0.15  |
| 5. Entrepreneurial values and freedom benefit society. | 0.58  |
| 6. Competence breeds success.                          | 0.10  |
| 7. Many people are selfish and can't be trusted.       | 0.71  |
| 8. Government services often fail.                     | 0.16  |
| 9. Politicians often fail.                             | 0.17  |

**C. Values and beliefs that guide investment strategy**

|  |       |
|--|-------|
| 1. I like to invest.                                 | 0.02  |
| 2. I save.   | 0.71  |
| 3. I need to save.                                   | 0.30  |
| 4. It is difficult to save.                          | 0.16  |
| 5. I am competent to make financial decisions.       | -0.07 |
| 6. I love risk.                                      | -0.17 |
| 7. I take calculated risks.                          | 0.29  |
| 8. I worry about inflation.                          | 0.63  |
| 9. I worry about the volatility of the stock market. | 0.14  |
| 10. Successful investing requires effort.            | 0.52  |
| 11. Successful investing requires patience.          | 0.71  |
| 12. Investing has an ethical dimension.              | 0.34  |
| 13. Bankers deserve our trust.                       | 0.43  |



### *Personal values and beliefs*

Our findings indicate that the representative European in our sample very much loves his/her family (average score is .88), feels happy (.78), likes to work (.65), respects tradition (.61), takes a long-term view of life (.60), and feels responsible for his/her own success or failure (.50). The average European does not aim to fit in socially (-.47), does not admit to enjoying luxury (-.40), and does not worry about the future (-.29).

Of course, there are important differences in the responses of male *vs.* female participants, young *vs.* old, high- *vs.* low-income, and so on. Here, we briefly illustrate the differences between nationalities. As mentioned earlier, national identity may be a useful proxy variable for persistent clusters of values and beliefs<sup>3</sup>.

For example, more than any other nation, Frenchmen agree that "money buys happiness." Yet, the French (-.67) and Italians (-.50) in our sample 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 (-.42) that a hypothetical 10% drop in their total wealth would make them feel miserable.

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### *Values and beliefs about the world*

Europeans mostly agree that many people cannot be trusted (.71), that entrepreneurial values benefit society (.58), and that society needs change (.49). 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 (.71). In their minds, successful investing takes both patience (.71) and effort (.52). They take calculated risks (.29) but they do not love risk *per se* (-.17). The representative European worries more about consumer price inflation than about stock market volatility. Bankers are trusted advisors (.43).

There are notable cultural differences between countries. 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%. 60% of German investors further believe in their own good fortune, while only 33% of Spaniards do. 64% of the French 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).

Many Europeans believe that, in the long run, stocks are the best investment (.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 (.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 (-.19).

### *THE PERFECT PORTFOLIO*

We 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 trade-off between risk and return, and (x) the overall comfort level with the investment.

The top panel of table 2 presents a few selected results. We report the fraction of all Europeans respondents who judge an asset class as either the best or the worst in terms of five of the characteristics mentioned above. Table 2 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 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 trade-off. There are some striking differences between countries. In Britain, for instance, the risk-return trade-off for savings accounts is judged somewhat better than the trade-off for real estate.



**Table 2**  
**Asset classes and portfolio choice**

We study four asset classes: Savings accounts (SA), investments in the stock market (EQ), in bonds (BO), and in real estate (RE). We report (i) the percent 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. We also show statistics by country. (Note that, in this case, the rankings may be different from the European average.) We also list (ii) the average preferred asset allocations in Europe and in individual countries, and (iii) the percent of respondents who invest zero in a particular asset class.

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

Table 2 also lists the findings of a second thought experiment: "If you had 1 million euros to invest today, what percent would you invest, respectively, in bank savings accounts, stocks, bonds, and real estate?" We 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 2/5's, and stocks, bonds, and savings accounts for 1/5 each. In Belgium and Britain, the real estate portions are smaller.

*VALUES, BELIEFS, AND PORTFOLIO CHOICE*

One of the practical uses of our research in behavioral finance is that it documents reliable statistical relationships between values, beliefs, investment strategy, and asset allocation. The insights that we gain have obvious implications for the marketing and design of investment products. Hereafter, we present, for illustrative purposes, the profile of a semi-affluent European investor who puts a larger percent of his portfolio in stocks than in fixed income (*i.e.*, bank savings accounts, government bonds, and cash) and we also present the profile of a more typical European who puts more funds into fixed income than in stocks. The asset allocation decision is for a hypothetical 1 million euros. The analysis that follows is based on 2,258 responses: 356 investors that are primarily "equity investors" and 1,902 "fixed income investors."<sup>4</sup>

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

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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 responders, fixed income investors believe that savings accounts and gold are attractive investment vehicles.

We have sketched a psychological portrait of the semi-affluent individual investor in Western Europe. Until now, little was known about how, outside the US, mental frames are linked to investment strategy and portfolio choice. As anticipated, our study has found that clusters of values and beliefs, correlated with national identity, predict portfolio choice. Culture matters.

Our findings are still preliminary (as mentioned before, a technical report is currently in preparation). It is easy to see, however, that the results have valuable implications for financial marketing, product

design, and other aspects of the money management industry. Many behavioral questions remain. We end, therefore, with the ritual cry for further research.

## NOTES

1. The theory does allow for exogenous differences in taste parameters. The differences are not explained.
2. 43% of the residents of Britain have visited the US.
3. De Bondt (2001) presents a multivariate analysis of the data. In that study, data reduction techniques such as factor analysis are used to characterize the links between values, beliefs, and investment strategy.
4. We build the profiles with the statements listed in table 1 and with some additional questions. We only list statements where the t-statistics for tests of differences in means between "equity" and "fixed income investors" exceed 3.0.

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