



# Social Values and Mutual Fund Clienteles

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*We are grateful for financial support from MISTRA*

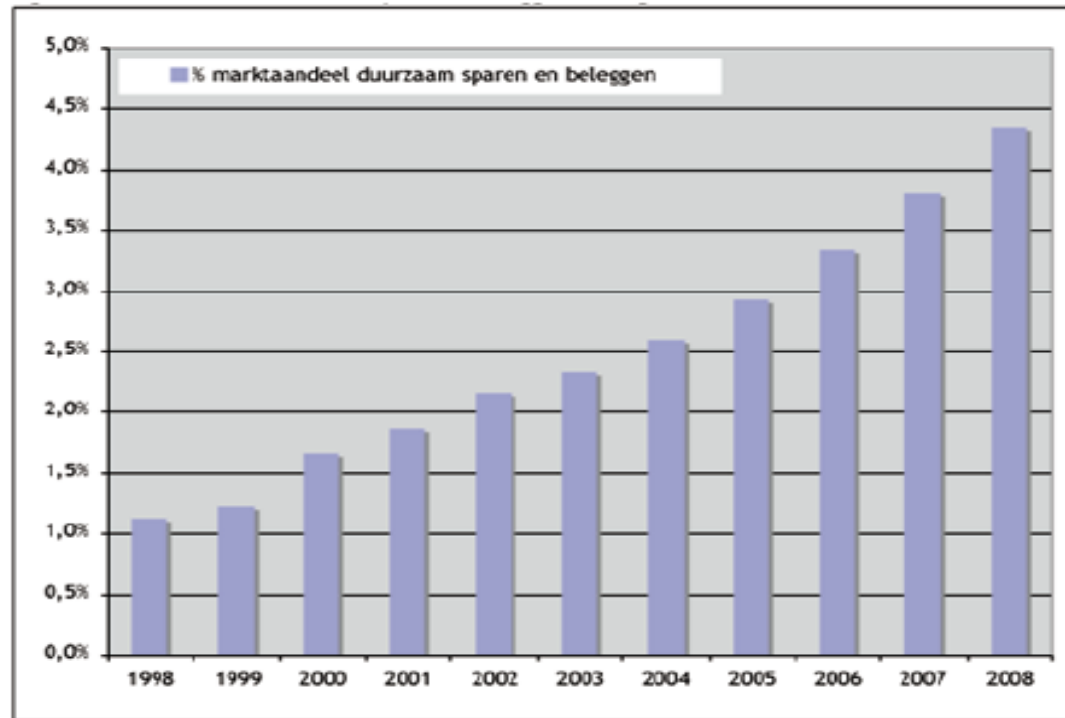




# SRI is growing in the Netherlands and world wide

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*Exponential Growth in the Market Share of  
Socially Responsible Investments & Savings*



Sources: VBDO – Vereniging Beleggers Duurzame Ontwikkeling 2009 and Millward Brown 2009  
Social Investment Forum 2007  
European Social Investment Forum 2008

# Social Values in Finance – only aggregate Level Studies

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Bollen (2007) *JFQA*

- Investors are loyal to SRI mutual funds, even after negative returns, whereas they are more likely to sell poor performing conventional funds.
- Flow volatility of SRI mutual funds lower than that of conventional funds.
- The flow-performance relationship for inflows is larger for SRI mutual funds than for conventional funds. → Socially responsible investors also care about returns.



# Contributions of this paper

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- In spite of the large growth in SRI world wide and the increased attention in the finance literature we know little about the SRI clientele.

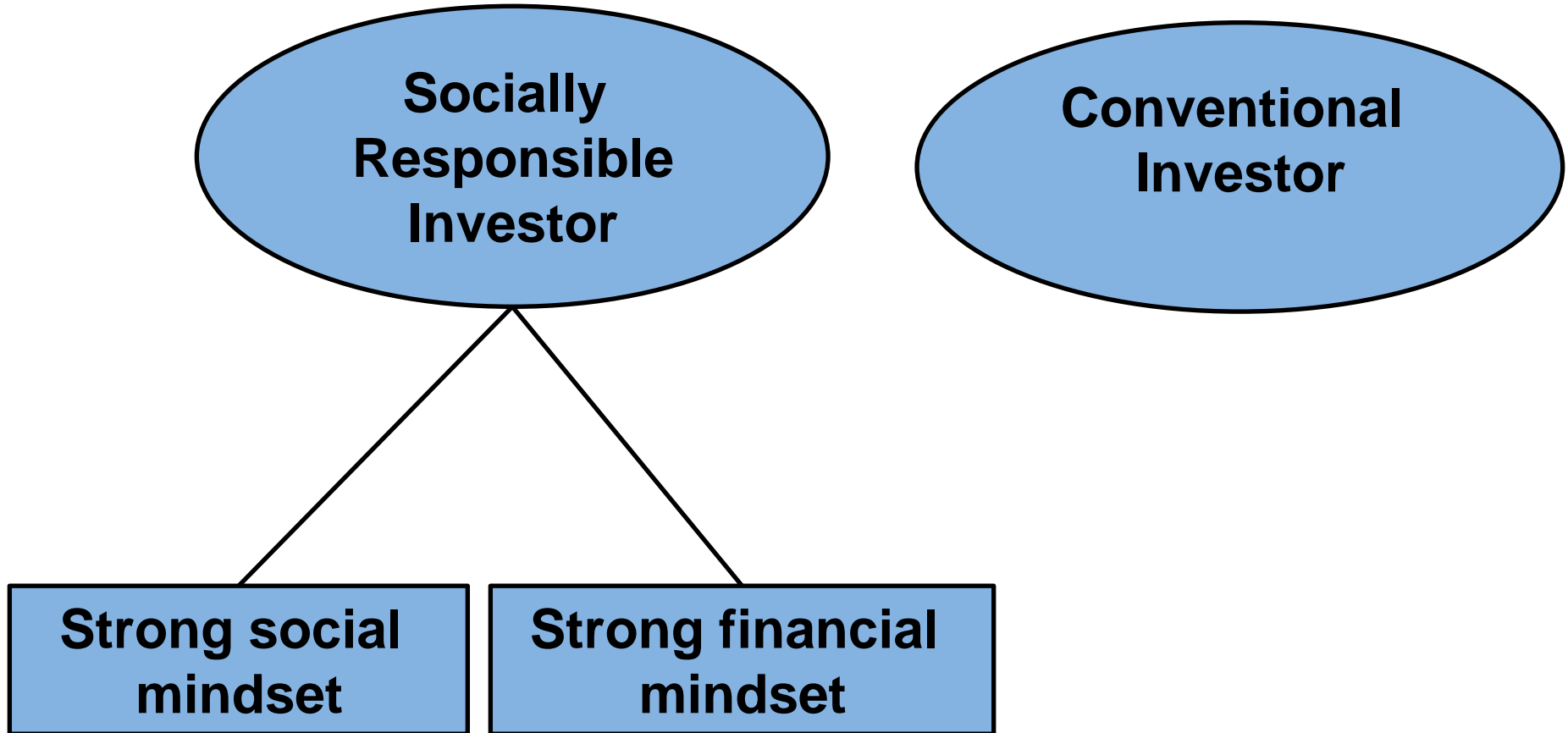
## Hypothesis

Investors with a strong social mindset pay less attention to fees and past performance and are more loyal to their funds than investors with a pronounced financial mindset.

- Only making a distinction between socially responsible investors and conventional investors is too simple.

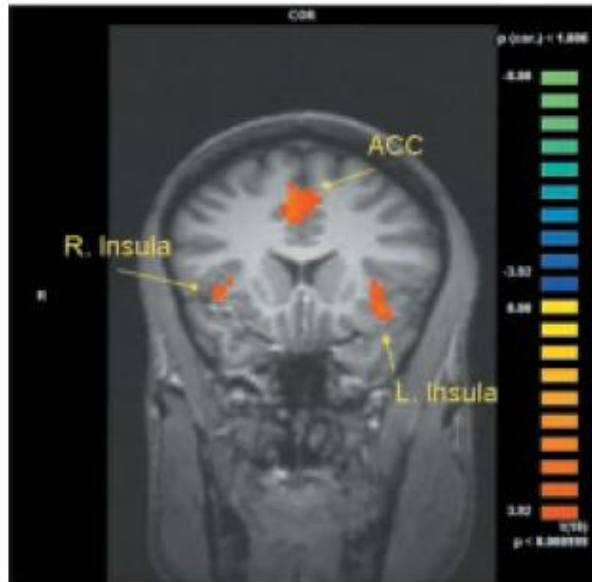
# Distinction Socially Responsible Investor from Conventional Investor too simple

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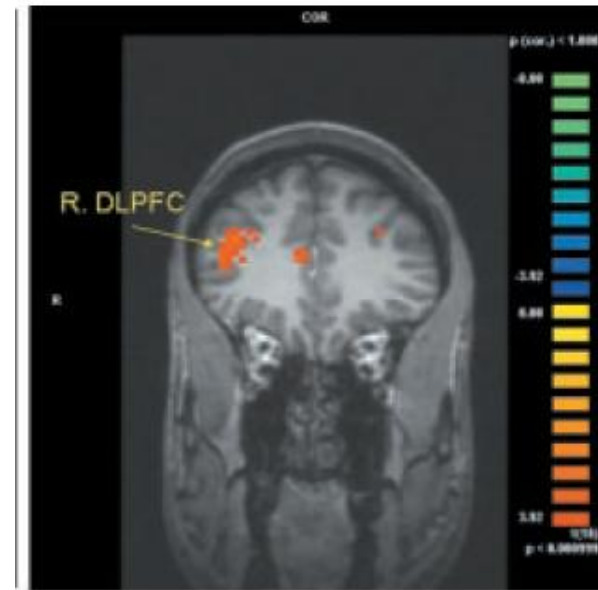


# Trade-off between the emotional and cognitive Part of the Brain

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- Left and right insula deal with emotions
- ACC resolves conflicts between brain areas



- Right DLPFC deals with cognition

## Financial Mindset



- 10% SRI mutual funds
- Return-driven

## Social Mindset



- 100% SRI mutual funds
- Values-driven



# Research Design

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- Powerful and novel methodology in finance research by combining three data sources:
  - 1) Holdings data
  - 2) Questionnaire
  - 3) Conjoint experiment
- Data from two explicitly socially responsible banks in the Netherlands
  - Covers almost the entire SRI market in the Netherlands
  - Most comprehensive range of SRI vehicles in Europe
- More than 3,000 respondents

# Menu of SRI Mutual Funds available at the two Banks

	1 Yr Return	5 Yr Return	TER	Asset Class	Launch Date	AuM (mn €)	Screens	Tax Benefits	National
<b>FUNDS</b>									
Triodos Green Fund	3.50%	2.30%	1.23%	Fixed Income	Jun-98	572	Green projects (Renewables, environment and forestry)	Yes	National
ASN Equity Fund	49.3%	1.8%	1.29%	Equity	Jan-93	270	Large and growth stocks Social and environmental screens	No	Inter-national
ASN Environment and Waterfund	52.3%	6.68%	1.56%	Equity	Jul-01	177	Water, renewables and recycling	No	Inter-national
Triodos Bank Certificate	3.80%	2.80%	0%	Equity	Jul-03	117	Invest directly into Triodos	No	National
ASN Green Project Fund	3.4%	1.87%	1.04%	Fixed Income	Nov-95	354	>70% in green projects	Yes	National
Triodos Fair Share Fund	11%	6.90%	3.33%	Micro-finance	Oct-02	81	Microfinance in developing countries	Yes	Inter-national
ASN Small and Midcap Fund	84.8%	-4.78%	1.6%	Equity	May-06	131	European small and midcap sustainable businesses	No	Europe
Triodos Culture Fund	9.10%	N/A	1.69%	Fixed Income	Feb-06	139	Loans for cultural preservation of arts and culture	Yes	National



# Main Take-aways from this Paper

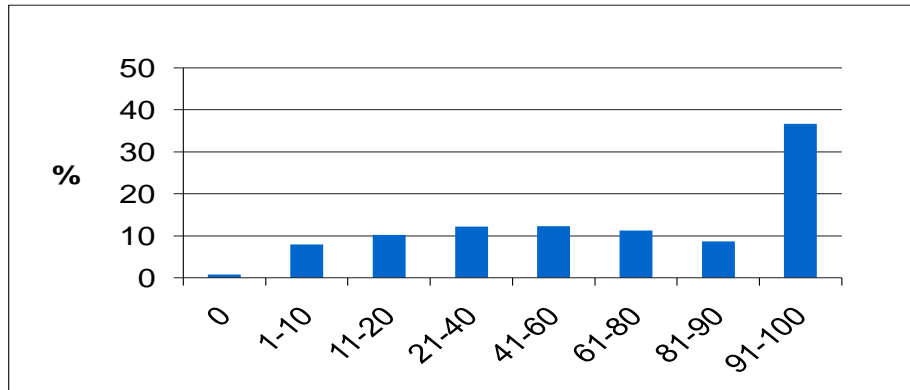
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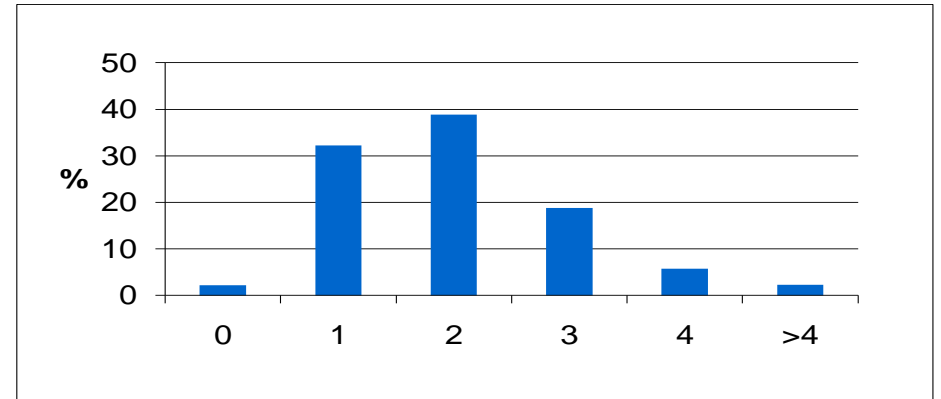
- 1 Investors with a strong social mindset pay less attention to fees and past performance and they are more loyal to their funds than investors with a pronounced financial mindset.
- 2 We identify different segments of investors within the SRI clientele.

# 37% of SRI Investors hold only SRI Mutual Funds, whereas 63% also hold conventional Funds

Which proportion of your mutual funds is invested in SRI?  
N=2870



At how many banks do you have an investment account?  
N=3179



## ▪ Amount invested in SRI:

Average: € 36,000

Median: € 16,000

## ▪ Portfolio size:

Average: € 74,000

Median: € 31,000

# Estimating the Multi-Attribute Utility Function of Investors with a Conjoint Analysis

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## Experimental Design

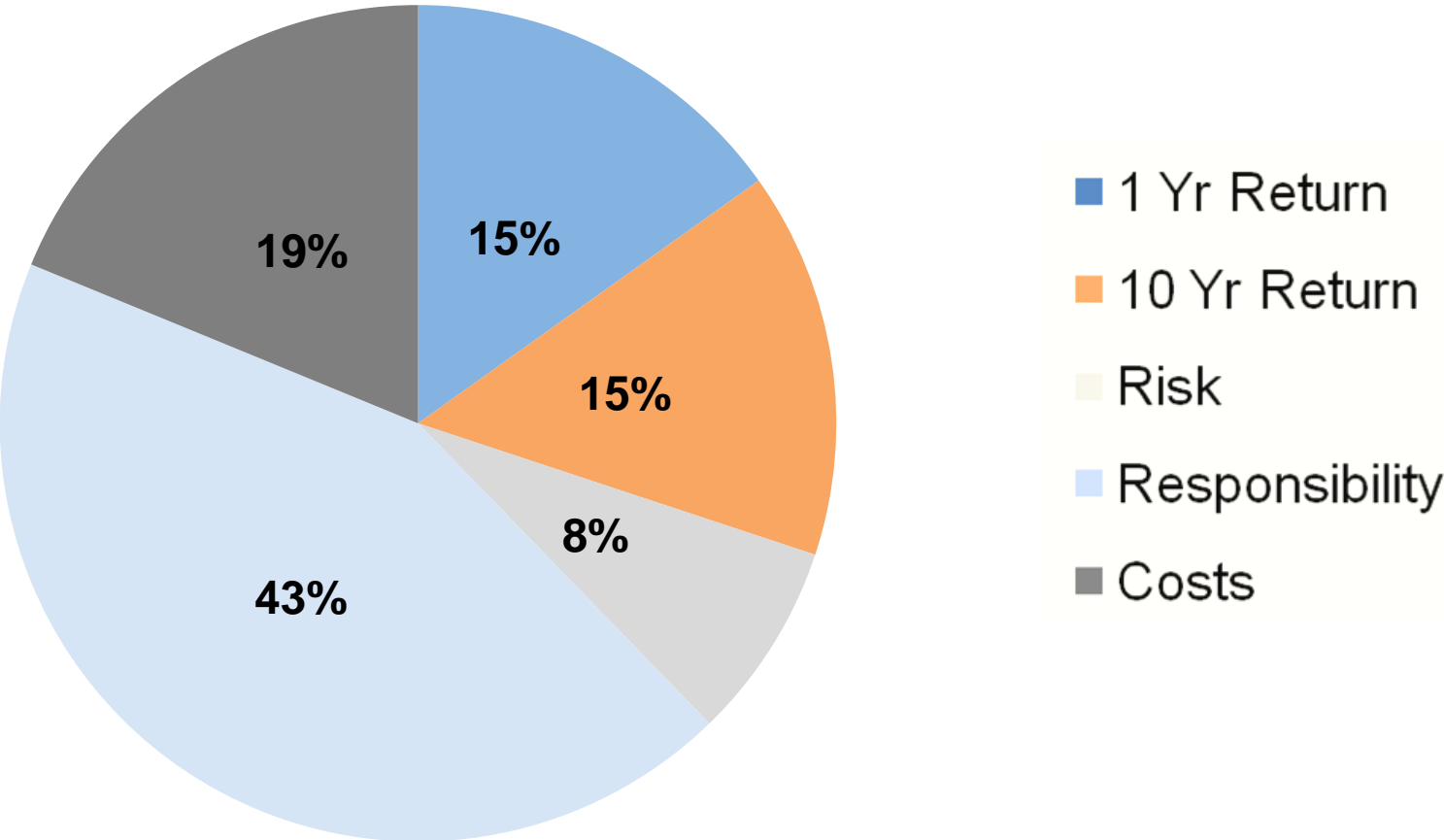
Mutual Funds Attributes	Levels				Example
1 Yr return	-21,00%	-28,00%	-35,00%	-	-35,00%
10 Yr return	-4,20%	-3,50%	-2,80%	-	-4,20%
Risk	Below Average	Average	-	-	Average
Responsibility	No Filters	Only Social	Only Environmental	Social & Environmental	Social & Environmental
Cost	1,00%	1,50%	2,00%	-	1,50%

- All mutual funds are globally diversified equity funds

# Preferences of the Average Socially Responsible Investor

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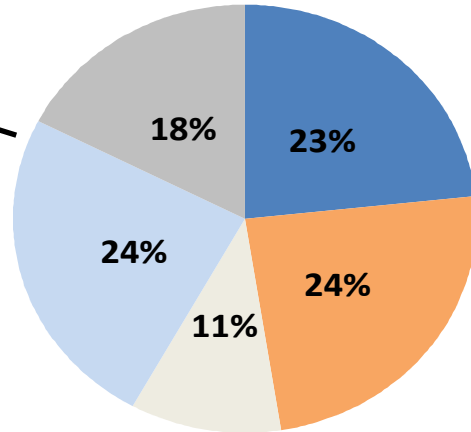
Importance Mutual Fund Attributes



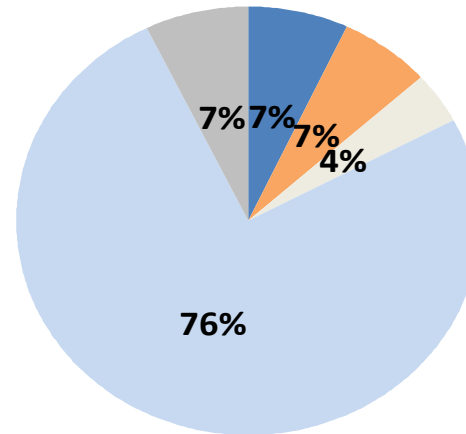
# Investor Heterogeneity: 4 Segments of SRI Investors

## Importance of Mutual Fund Attributes

Past Return Chasers (28% of sample)



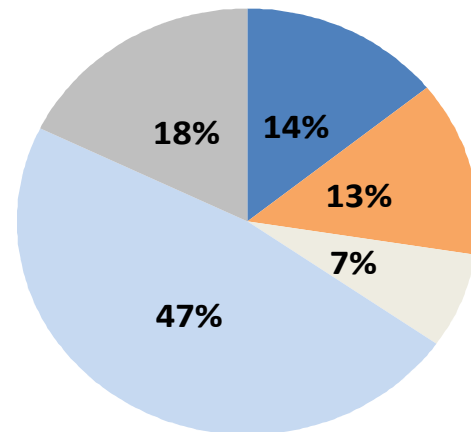
Values-driven (21%)



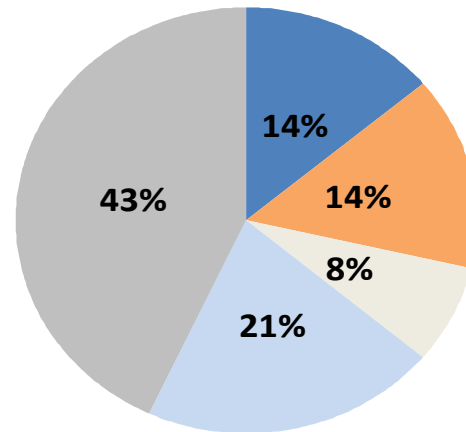
- 1 YR Return
- 10 YR Return
- Risk
- Responsibility
- Costs



Mixed (38%)



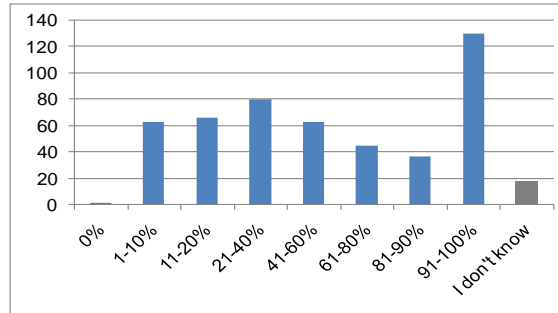
Cost Sensitive (13%)



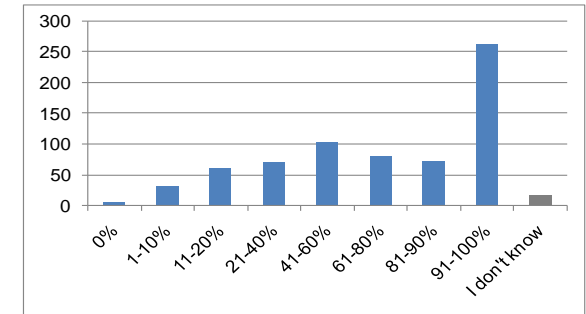
# Proportion of SRI Funds in the Portfolio of the different Segments

**% SRI all mutual fund holdings\*\*\***

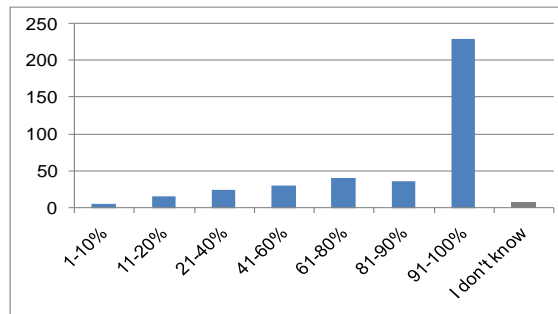
**Past Return Chasers**



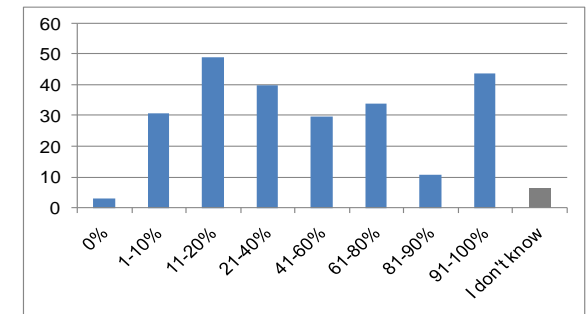
**Mixed**



**Values-driven**



**Cost Sensitive**



**External validation of the conjoint analysis**

## Values-driven Investors (21% of our Sample) ...

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- Obtain many **non-pecuniary benefits** (75% of their utility)
- Highest proportion of **females** (cf. Spreckelmeyer (2009))
- Have the lowest wealth, income and investment knowledge
- Hold the smallest number of mutual funds, single stocks and index-trackers
- Most **loyal** to their SRI mutual funds



## Cost sensitive Investors (13% of our Sample) ...

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- These investors do not fall prey to the **bias** of **ignoring fees** documented by Barber, Odean and Zheng (2005) and Elton, Gruber and Busse (2004)
- Lowest proportion of **females** (17%)
- Highest wealth, income and investment knowledge
- Hold the largest number of mutual funds, single stocks and index-trackers
- Least **loyal** to SRI mutual funds



## Past Return Chasers (28% of our Sample) ...

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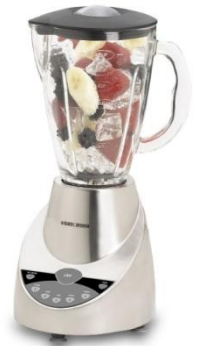
- Buy mutual funds that showed good performance in the past years
- Are **wealthy** investors with relatively good **investment knowledge** (cf. Wilcox (2003))
- 73% uses the **internet** as a source for financial information



## Mixed Segment (38% of our Sample) ...

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- Base their investment decisions on a combination of the five mutual fund attributes
- 33% has a **professional financial advisor** (15% for the average socially responsible investor)
- Hold 57% of their portfolio in **savings accounts** (largest % of the four segments)



# Who pays Attention to Fees?

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- Important for mutual fund families
- We expected that the following variables are related to paying attention to fees:
  - Investment knowledge (Dorn and Huberman (2005) and Graham, Harvey and Huang (2009))
  - Having a professional financial advisor (Bergstresser, Chalmers and Tufano, 2009)
  - Social mindset (%SRI)
  - Demographics
- Multivariate regression with **cost sensitivity** as dependent variable (conjoint)

# Who pays Attention to Fees?

	Coefficient	Std. Coefficient
(Constant)	<b>0.23***</b> (7.49)	
Investment Knowledge	<b>0.01***</b> (2.82)	-0.07
Professional Advisor	<b>-0.02**</b> (-1.98)	-0.05
<b>%SRI</b>	<b>-0.01***</b> (-8.88)	<b>-0.23</b>
<b>DEMOGRAPHICS</b>		
Gender (Male)	<b>0.02***</b> (3.00)	0.08
Age	0.00 (-0.58)	-0.02
Education	-0.00 (-1.39)	-0.04
Married	-0.01 (-0.78)	-0.02
Kids	0.00 (1.24)	0.03
Income	0.00 (1.58)	0.05
Wealth	0.00 (0.63)	0.02
Adjusted R-Squared	0.08	
N	1537	

# Implications of this Paper

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Implications for Academics	Implications for Practitioners
<ul style="list-style-type: none"><li>▪ Social values influence investment behavior</li></ul>	<ul style="list-style-type: none"><li>▪ Investors with strong social values pay less attention to fees and are more loyal</li></ul>
<ul style="list-style-type: none"><li>▪ Social values influence investors to a different extent and it is important to use individual level data</li></ul>	<ul style="list-style-type: none"><li>▪ Consider heterogeneity in product development, the selection of distribution channels and advertising</li></ul>

heat-up *your*  
investments,  
not *his* home.



# Triodos Bank

Make your money make a difference



AEROSPACE/DEFENSE



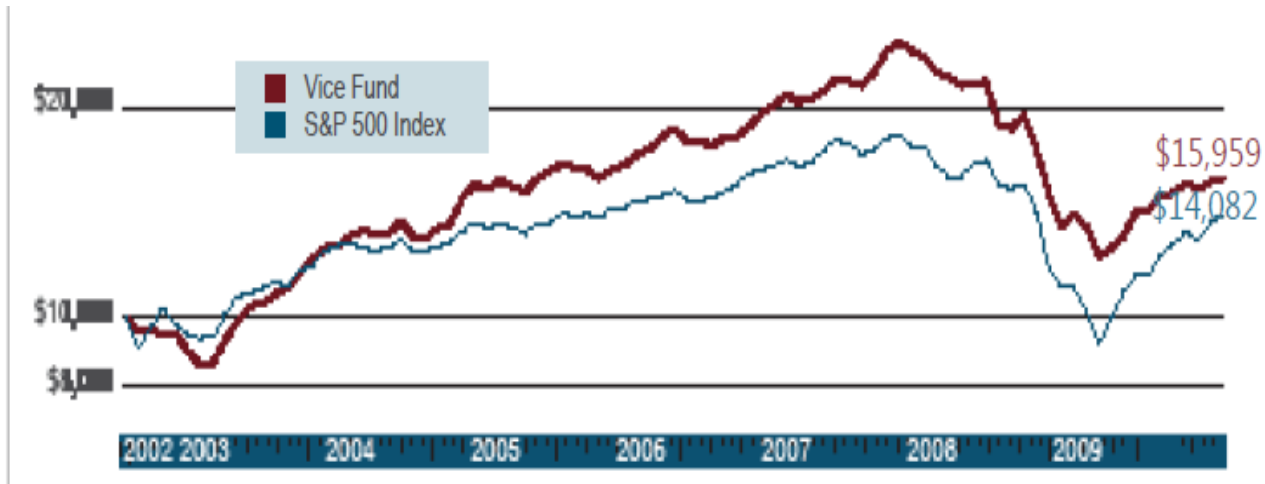
GAMING



TOBACCO



ALCOHOLIC BEVERAGES



DAN AHRENS

# INVESTING IN VICE

THE RECESSION-PROOF PORTFOLIO OF BOOZE, BETS, BOMBS, AND BUTTS



# Correlation Part I

	Knowledge	Index Trackers	Professional Advise	Decide Alone	Risk Tolerance	Inv. Horizon	Pension	E. Return LongRun
Knowledge	1	,224(**)	0,012	,107(**)	,330(**)	0,024	,055(**)	-0,01
Index Trackers		1	,049(**)	0,018	,163(**)	0,04	,055(**)	-,052(**)
Professional Advise			1	-,048(**)	,055(**)	-0,009	,064(**)	-0,031
Decide Alone				1	,118(**)	-0,01	-0,003	0,009
Risk Tolerance					1	,071(**)	0,023	-0,012
Inv. Horizon						1	,163(**)	,055(**)
Pension							1	-0,013
E. Return LongRun								1
Improve World								
Tax Advantage								
Gender								
Age								
Education								
Married								
# of Kids at home								
Income								
Wealth								

\*\* Significant at 1% Level

\* Significant at 5% Level

## Correlation Part II

	Improve World	Tax Advantage	Gender	Age	Education	Married	# of Kids at home	Income	Wealth
Knowledge Index Trackers	-,088(**)	,044(*)	-,275(**)	-,072(**)	,089(**)	,081(**)	,040(*)	,201(**)	,275(**)
Professional Adv	-,040(*)	-0,002	-0,006	,109(**)	,053(**)	,071(**)	-0,015	,081(**)	,190(**)
Decide Alone	-0,035	-0,026	0,013	-0,022	0,005	-,279(**)	-0,018	-,150(**)	0,006
Risk Tolerance	-,098(**)	0	-,149(**)	-,094(**)	,048(**)	0,005	,040(*)	,113(**)	,097(**)
Inv. Horizon	0,033	-0,004	,133(**)	-,322(**)	,072(**)	-,074(**)	,149(**)	,139(**)	0,005
Pension	-0,017	0,027	,070(**)	-,088(**)	,051(**)	-0,011	0,021	,080(**)	,171(**)
E. Return LongRi	,168(**)	-,081(**)	,036(*)	-,069(**)	-0,012	-,049(**)	0,026	-,071(**)	-,127(**)
Improve World	1	-,116(**)	,123(**)	0	-0,01	-,049(**)	-0,033	-,109(**)	-,122(**)
Tax Advantage		1	-0,011	0,007	-,040(*)	0,033	-0,008	0,016	,094(**)
Gender			1	-,072(**)	0,016	-,247(**)	-0,033	-,149(**)	-,144(**)
Age				1	-,124(**)	,196(**)	-,350(**)	-,142(**)	,202(**)
Education					1	0,019	,080(**)	,256(**)	,152(**)
Married						1	,185(**)	,293(**)	,182(**)
# of Kids at							1	,183(**)	-,080(**)
Income								1	,316(**)
Wealth									1

\*\* Significant at 1% Level

\* Significant at 5% Level

# The Bigger the Financial Mindset, the Less SRI

## Regression Table 1: Investor Characteristics

*Dependent Variable: % of Mutual Funds Invested Socially Responsible*

	Coefficient	Std. Coefficient	T-Stat
<b>(Constant)***</b>	<b>7,63</b>		<b>29,40</b>
<b>FINANCIAL MINDSET</b>			
<b>Index trackers***</b>	<b>-0,85</b>	<b>-0,12</b>	<b>-5,52</b>
<b>Knowledge***</b>	<b>-0,39</b>	<b>-0,14</b>	<b>-6,19</b>
<b>Pension***</b>	<b>-0,29</b>	<b>-0,07</b>	<b>-3,14</b>
<b>OTHER INVESTOR CHARACTERISTICS</b>			
<b>Professional Advisor***</b>	<b>-0,85</b>	<b>-0,15</b>	<b>-7,10</b>
<b>Risk Tolerance***</b>	<b>-0,21</b>	<b>-0,13</b>	<b>-6,15</b>
Decide Alone	-0,06	-0,01	-0,60
Investment Horizon*	0,08	0,04	1,88
Adjusted R-Squared	0,10		
N	2164		

**-Financial Knowledge decreases % of SRI  
- Index Trackers as a proxy for cost sensitivity**

Significant at the 1% (\*\*\*), 5% (\*\*), 10% (\*)

# Results Remain Significant when Controlling for Demographics

## Regression Table 2: Investor Characteristics & Demographics

*Dependent Variable: % of Mutual Funds Invested Socially Responsible*

	Coefficient	Std. Coefficient	T-Stat
<b>(Constant)</b>	<b>9,31</b>		<b>18,92</b>
<b>FINANCIAL MINDSET</b>			
<b>Index Trackers***</b>	<b>-0,78</b>	<b>-0,11</b>	<b>-4,70</b>
<b>Knowledge***</b>	<b>-0,18</b>	<b>-0,06</b>	<b>-2,64</b>
<b>Pension***</b>	<b>-0,26</b>	<b>-0,06</b>	<b>-2,64</b>
<b>OTHER INVESTOR CHARACTERISTICS</b>			
<b>Professional Advisor***</b>	<b>-0,56</b>	<b>-0,10</b>	<b>-4,31</b>
<b>Risk Tolerance***</b>	<b>-0,24</b>	<b>-0,15</b>	<b>-6,45</b>
Decide Alone	-0,21	-0,04	-1,89
Investment Horizon	-0,03	-0,01	-0,56
<b>DEMOGRAPHICS</b>			
Gender*	0,22	0,04	1,93
<b>AGE***</b>	<b>-0,02</b>	<b>-0,09</b>	<b>-3,51</b>
<b>Education**</b>	<b>0,10</b>	<b>0,05</b>	<b>2,45</b>
Married	-0,13	-0,03	-1,22
Kids	0,05	0,02	0,94
Income*	-0,07	-0,05	-1,93
<b>Wealth***</b>	<b>-0,25</b>	<b>-0,13</b>	<b>-5,17</b>
Adjusted R-Squared	0,14		
N	1865		



**Remain Significant**

# Latent psychological Constructs, Beliefs and Attitudes regarding SRI

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## Disagreement

Hong & Stein (2007, JEP)

- SRI Investors might have a different Bayesian Prior
- Expected Return and Expected Risk of SRI funds compared to conventional funds

## Non-pecuniary Benefits of investing into SRI Mutual Funds

Statman (2004, JPM)  
Anginer, Fisher and Statman (2008)

Beliefs that investing socially responsible improves the world

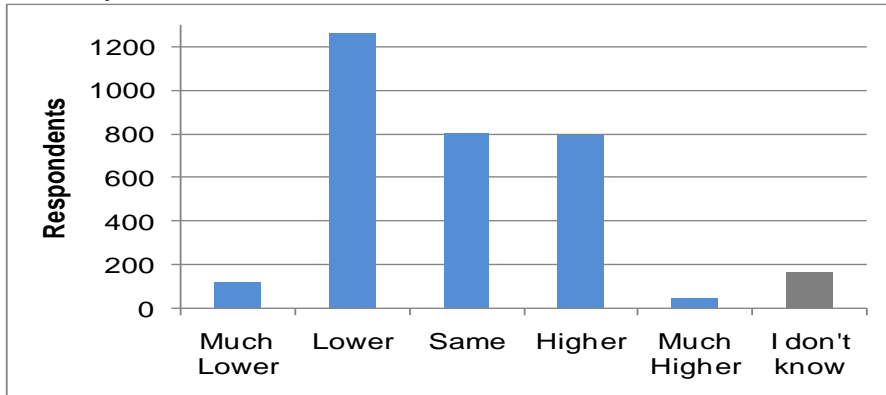
## Tax Advantages

- Dutch Investors can get tax benefits up to 2,5% on thematic SRI funds

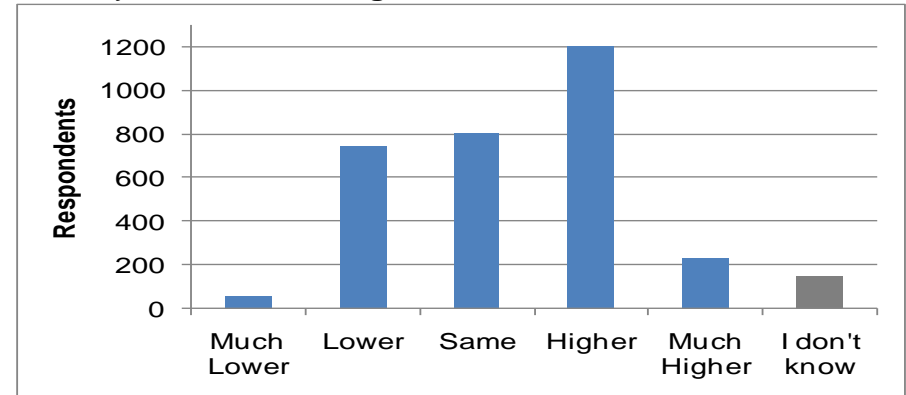
# SRI Investors on Average Expect a Long Term Outperformance, but Disagree with Each Other

## Expected Return and Risk Measures

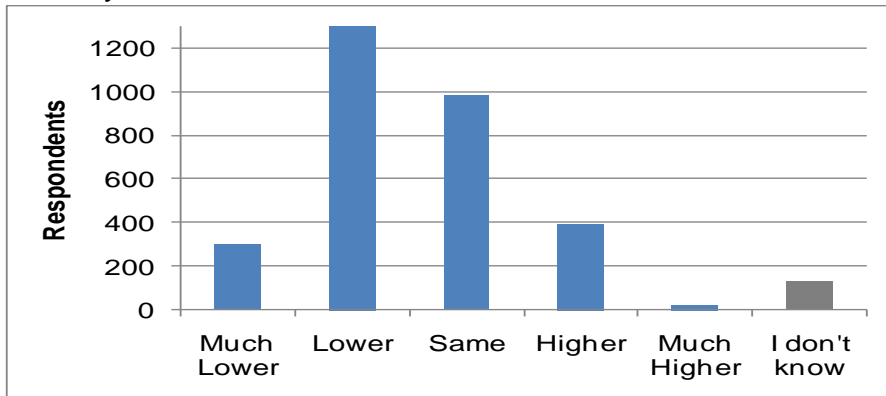
I believe that the return of SRI in comparison to ordinary funds **in the short run** is:



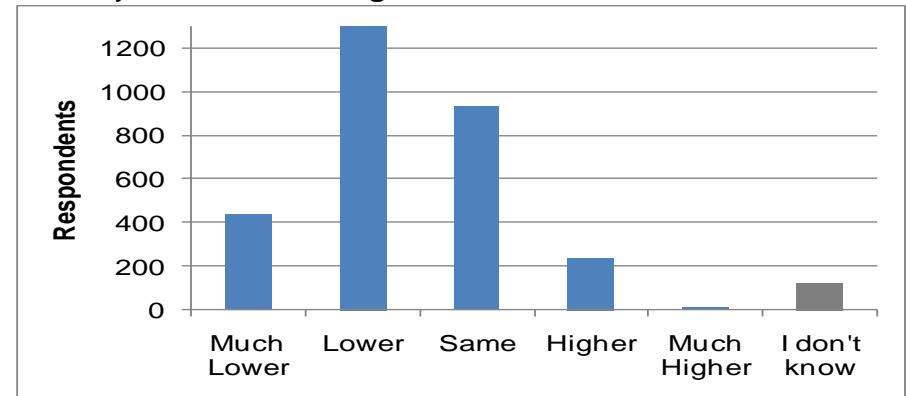
I believe that the **return** of SRI in comparison to ordinary funds **in the long run** is:



I believe that the **risk** of SRI in comparison to ordinary funds **in the short run** is:



I believe that the **risk** of SRI in comparison to ordinary funds **in the long run** is:



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## Measures of non-pecuniary benefits and tax advantages

### Non-pecuniary Benefits

To what extent do you agree to the following:

- a) SRI funds have a **positive impact** on a sustainable development of society
  - b) SRI funds are **better for society** than ordinary mutual funds
  - c) Socially responsible investing **adds something useful** to our society
- Scale: 1 (completely disagree) – 7 (completely agree)

**Average score of three questions taken**

### Tax Advantages

Open question: *Why did you decide to buy SRI mutual funds?*

# SRI Investors are Driven Both by Disagreement and Tastes for Assets But Not by Tax Advantages

## Regression Table 3: Disagreement vs. Tastes for Assets

*Dependent Variable: % of Mutual Funds Invested Socially Responsible*

	Coefficient	Std. Coefficient	T-Stat
(Constant) <sup>***</sup>	<b>4,99</b>		<b>8,37</b>
<b>FINANCIAL MINDSET</b>			
<b>Index Trackers<sup>***</sup></b>	<b>-0,73</b>	<b>-0,10</b>	<b>-4,66</b>
<b>Knowledge<sup>***</sup></b>	<b>-0,23</b>	<b>-0,07</b>	<b>-3,43</b>
<b>Pension<sup>***</sup></b>	<b>-0,28</b>	<b>0,10</b>	<b>-2,92</b>
<b>OTHER INVESTOR CHARACTERISTICS</b>			
<b>Professional Advisor<sup>***</sup></b>	<b>-0,58</b>	<b>0,12</b>	<b>-4,67</b>
<b>Risk Tolerance<sup>***</sup></b>	<b>-0,21</b>	<b>0,04</b>	<b>-5,92</b>
Decide Alone*	-0,19	0,10	-1,80
Investment Horizon	-0,07	0,05	-1,62
<b>DISAGREEMENT vs. TASTES FOR ASSETS</b>			
<b>E. Return LongRun<sup>***</sup></b>	<b>0,22</b>	<b>0,05</b>	<b>4,77</b>
<b>Improving World<sup>***</sup></b>	<b>0,60</b>	<b>0,05</b>	<b>11,47</b>
Tax Motive	-0,12	0,21	-0,56
<b>DEMOGRAPHICS</b>			
Gender	0,10	0,11	0,87
<b>AGE<sup>***</sup></b>	<b>-0,02</b>	<b>0,01</b>	<b>-3,88</b>
Education*	0,07	0,04	1,94
Married	-0,12	0,10	-1,17
Kids	0,03	0,05	0,53
Income	-0,03	0,03	-0,76
<b>Wealth<sup>***</sup></b>	<b>-0,19</b>	<b>0,05</b>	<b>-3,90</b>
Adjusted R-Squared	0,22		
N	1767		