

Social Values and Mutual Fund Clienteles

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We are grateful for financial support from MISTRA



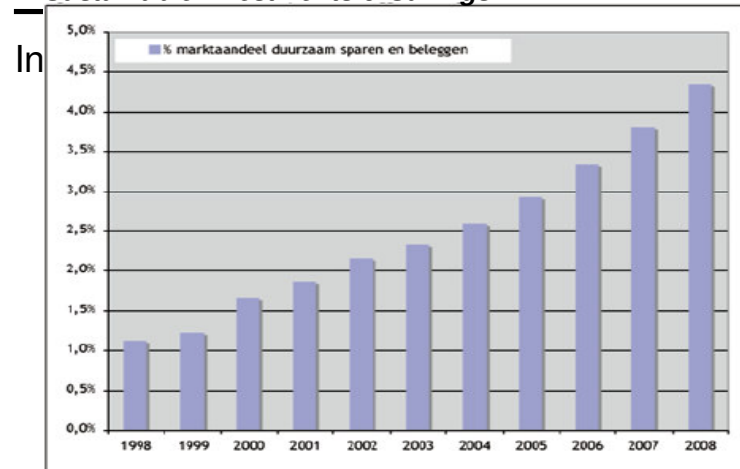
In the Last Years, Sustainable Investing & Savings Together Grew Both in Absolute and Relative Sense

Facts about SRI in the Netherlands

Socially Responsible Investing

1. 16% of Dutch Investors have at least one sustainable fund
2. After UK, NL largest market in EU
3. SRI -16%, Conventional Investing -30% (NL fastest growing market in EU)
4. SR Savings +17%, Regular Savings +7%
5. Market Share SRI 4,3% (+0,5%) (EU Av. 3,4%)

Exponential Growth in the Market Share of Sustainable Investments & Savings



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

Content

- Importance SRI in the Netherlands

■ Literature Review

- The Clientele Effect
- Investor Heterogeneity
- Reasons to Invest Sustainably
- Conclusion

Large Scale Quantitative Research on Sustainable Mutual Fund Investors at the Individual Level

Institutional Investors

Hong & Kostovetsky (2009)

- Democratic fund managers select stocks that are more socially responsible

Barber (2007, JI)

- Monitoring the monitor
- Fund managers sometimes advance their own moral values at the expense of shareholders

Hong & Kacperczyk (2009, JFE forthcoming)

- Institutions divested from sin stocks resulting in positive abnormal returns of these stocks

Individual Investors

Renneboog, ter Horst & Zhang (2006)

- SRI Investors less sensitive to negative returns
- Aggregate level analysis (fund flows)

Bollen (2007, JFQA)

- SRI investors more loyal than conventional investors
- Aggregate level analysis (fund flows)

Statman (2007)

- Interviewed social responsible investors and their advisors: mixed motives to invest sustainably
- Qualitative Study

Large-Scale and Comprehensive Survey Among Sustainable Investors

Research Design

- Comprehensive on-line survey among individual investors in mutual funds of 2 purely sustainable banks
- Bank expertise on sustainable investing incorporated into research design
- More than 3,000 respondents (17% response rate)
- “Investors put their money where their mouth is”

Advantages of our design

- **Explicit decision** by investors
- Almost **entire Dutch** market for sustainable investing covered
- **Recent** after-crisis data
- **Investor heterogeneity** investigated
- Measurement of **attitudes and beliefs**; not possible with aggregate level data
- **Tax advantage** on thematic sustainable funds in the Netherlands investigated
- **Large number** of respondents and serious

Limitations of our design

- Self-reported **holdings data** (slight deviations possible)
- **Only Dutch** data so far
- **Only sustainable** investors surveyed so far



Financial Mindset

Social Mindset



Content

- Importance SRI in the Netherlands
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The Clientele Effect

Hypotheses Part I

Hypothesis 1: *There exists a clientele of mutual fund investors that have a **large proportion** of their money invested socially responsible.*

Hypothesis 2: *The **proportion** of sustainable investments in the portfolio **depends on investor characteristics**.*

Hypothesis 3: *The **segment with a high proportion** of sustainable investments in the portfolio, **is profitable** for mutual fund families and banks.*

Socially Responsible Fund Clientele Profitable for Fund Families and Banks



Findings of the Surveys at Two Sustainable Banks - Part I

Socially responsible investors are...

- H1* convinced of their ideals → invest a large proportion of their portfolio sustainably
- H2* highly educated and more risk averse than conventional investors
- H3*
 - less cost sensitive
 - *more loyal**
 - *chasing past returns to a lesser extent**

** In this presentation we will focus on cost sensitiveness regarding H3*

Comparison of Sustainable Investors to Conventional Investors

Summary Statistics: Investment Portfolios of Sustainable Investors

	N Valid	Mean / %	Overall Dutch Inv.	Barber & Odean (1996)
# of Mutual Funds	2932	3,58		4,36
Portfolio Value	-	€ 74k		\$ 65k
Owning Direct Stock	3187	38%		
ASSET ALLOCATION				
% Savings	2987	55%	33%	
% Equity	2666	29%	43%	
% Bonds	1380	10%	17%	
% Others	713	6%	5%	
I don't know	3187	5%		
Professional Advise	3145	14%		

Comparison of Sustainable Investors to Conventional Investors

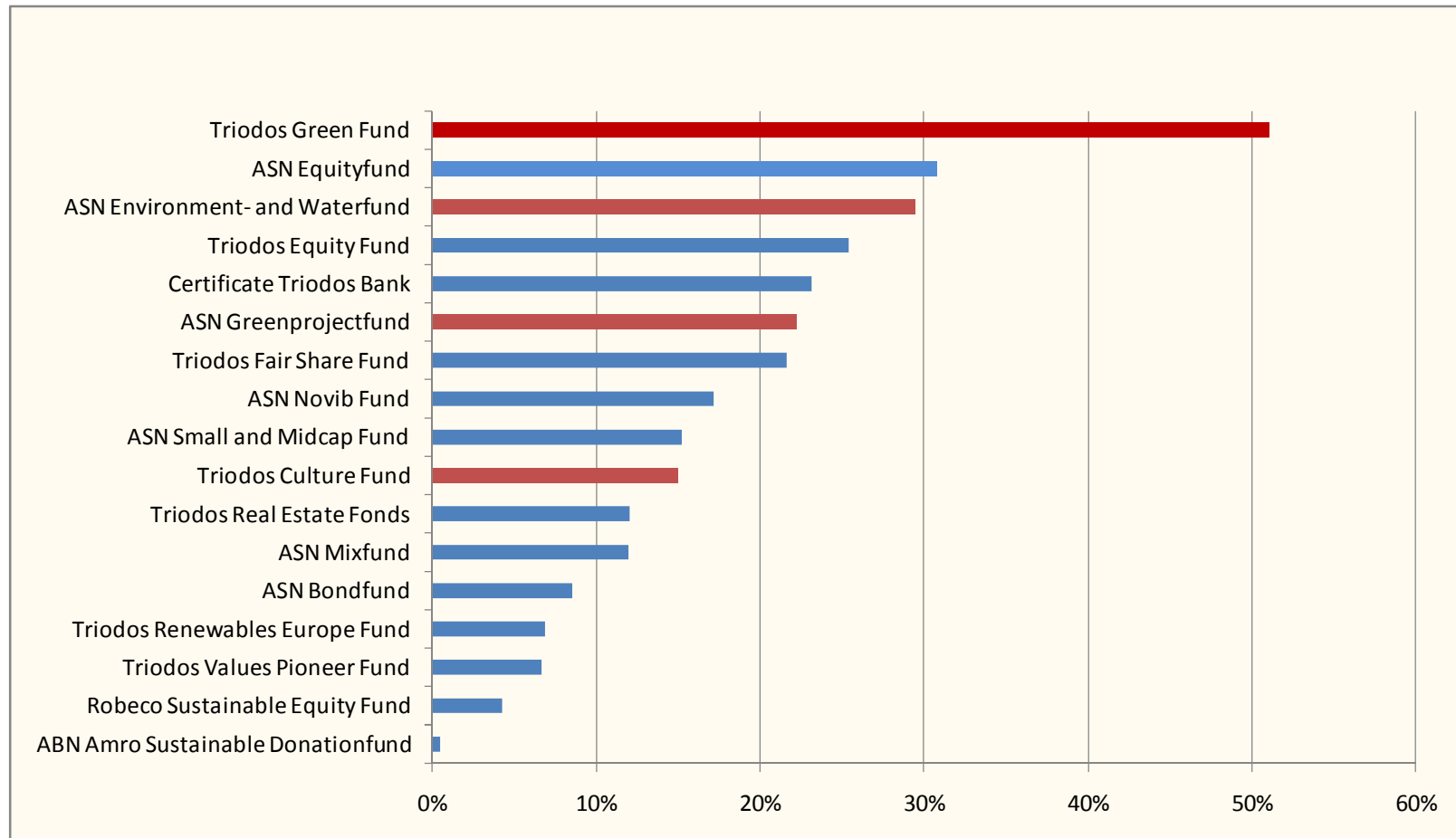
Summary Statistics: Demographics

	N Valid	Mean / %	Overall Dutch Inv.	Barber & Odean (1996)
Gender (Male)	3163	68%		79%
AGE	3076	56,1	49,0	50,6
Education	3159	6,1		NA
Lower	485	15%		
University of Applied Science	1166	37%		
University	1508	48%		
Married	3137	57%		40%
# of Kids at Home	3187	0,5		NA*
Income (in€ / Yr) (\$)				\$72k
<50k (34k)	1161	41%		
50k-130k (34k-89k)	1487	52%		
>130k (89k)	185	7%		
Wealth (in €)				NA
<50k (34k)	1090	38%		
50k-125k (34k-85k)	907	32%		
125k-500k (85k-340k)	718	26%		
>500k (340k)	101	4%		

* Percentage of Kids at home available: Average 25%

Investors Hold a Broad Range of Sustainable Mutual Funds

Sustainable Fund Holdings



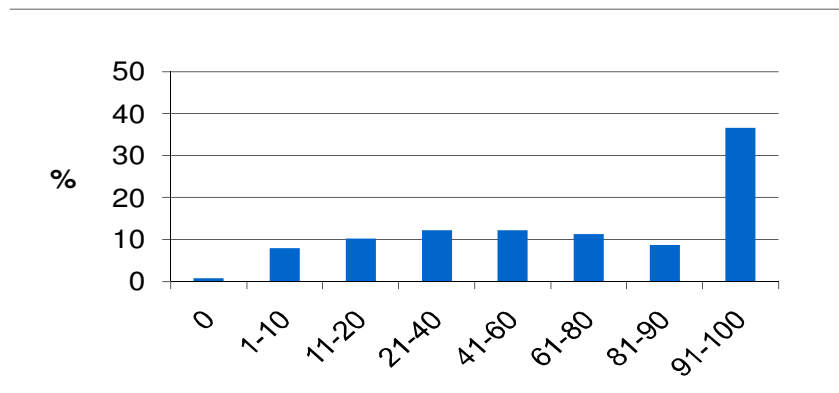
■ Thematic Funds, Tax Advantage

Triodos Investors appear disproportionately more in our data set, due to larger number of respondents

37% of Sustainable Investors Invest All Their Money in Sustainable Mutual Funds

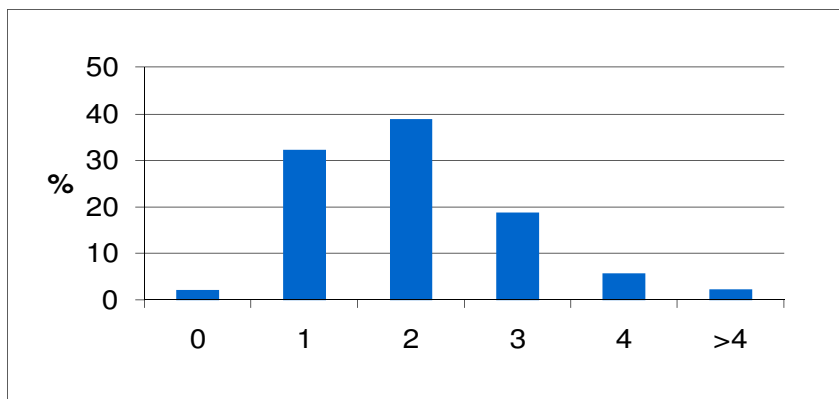
Descriptives on Investments

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

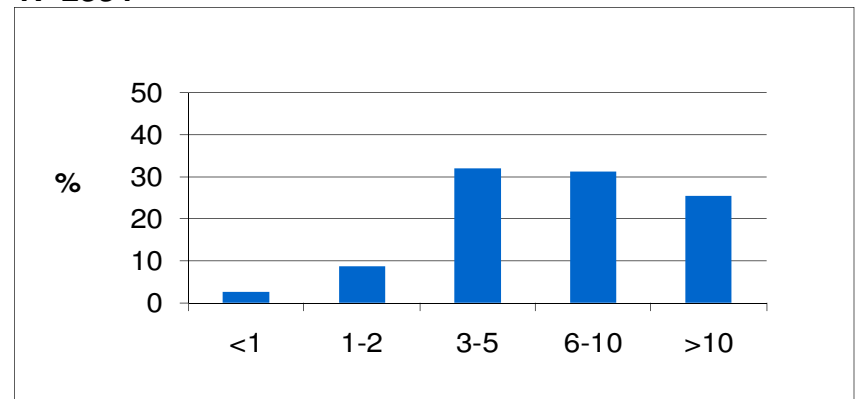


- Amount invested sustainably (in k€):
Mean: 36 (Median: 16)
- Average total invested € 74k (B&O: \$ 65k (1996))
- Most investors have investment accounts at more than 1 bank
- Most investors are long-term oriented
- ➔ Social Mindset results in convinced SR Investors

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



What is your investment horizon (in years)?
N=2834



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The Clientele Effect

Hypotheses Part I

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Hypothesis 2: *The **proportion** of sustainable investments in the portfolio **depends on investor characteristics**.*

Hypothesis 3: *The **segment with a high proportion** of sustainable investments in the portfolio **is profitable** for mutual fund families and banks.*

Selected Sub-Hypotheses and Expectations

<i>Hyp.</i>	<i>Measure</i>	<i>Question</i>	<i>Scale</i>	<i>Expectation</i>
2a	Knowledge	How large is your inv. knowledge?	1 (very low) - 5 (very high)	-
2b	Prof. Advisor	Do you have a prof. financial adv?	Yes / No	-
2c	Risk Tolerance	How would you describe your attitude towards investing?	1 (min. risks) - 7 (take a chance)	-
2d	Pension	What are your investment goals?	E.g. pension, emergency, inheritance (mult. possible)	+
3a	Index Trackers	Do you own index trackers?	Yes / No	-

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
(Constant)***	5,32		16,08
INVESTOR CHARACTERISTICS			
Knowledge***	-0,39	-0,14	-6,19
Index trackers***	-0,85	-0,12	-5,52
Professional Advise***	-0,85	-0,15	-7,10
Decide Alone	-0,06	-0,01	-0,60
Risk Tolerance***	-0,21	-0,13	-6,15
Inv. Horizon*	0,08	0,04	1,88
Pension***	-0,29	-0,06	-3,14
Adjusted R-Squared	0,10		
N	2164		

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

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
(Constant)	7,80		13,85
INVESTOR CHARACTERISTICS			
Knowledge***	-0,18	-0,06	-2,64
Index Trackers***	-0,78	-0,11	-4,70
Professional Advise***	-0,56	-0,10	-4,31
Decide Alone	-0,21	-0,04	-1,89
Risk Tolerance***	-0,24	-0,15	-6,45
Inv. Horizon*	-0,03	-0,01	-0,56
Pension***	-0,26	-0,06	-2,64
DEMOGRAPHICS			
Gender*	0,22	0,04	1,93
AGE***	-0,02	-0,09	-3,51
Education**	0,10	0,05	2,45
Married	-0,13	-0,03	-1,22
Kids	0,05	0,02	0,94
Income*	-0,07	-0,05	-1,93
Wealth***	-0,25	-0,13	-5,17
Adjusted R-Squared	0,14		
N	1865		

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



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Drivers of Socially Responsible Investors

Hypotheses Part II

Fama & French (2007, JFE)

- Disagreement and tastes for assets impact asset prices

→ Sustainable Investors are driven by:

Hypothesis 4: *Disagreement*

Hong & Stein (2007, JEP)

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

Hypothesis 5: *Tastes for Assets (Expressive / Affective Benefits)*

Statman (2008, FAJ)

Believes that sustainable investing improves the world

Hypothesis 6: *Tax Advantages*

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



Findings of the Survey at Two Sustainable Banks - Part II

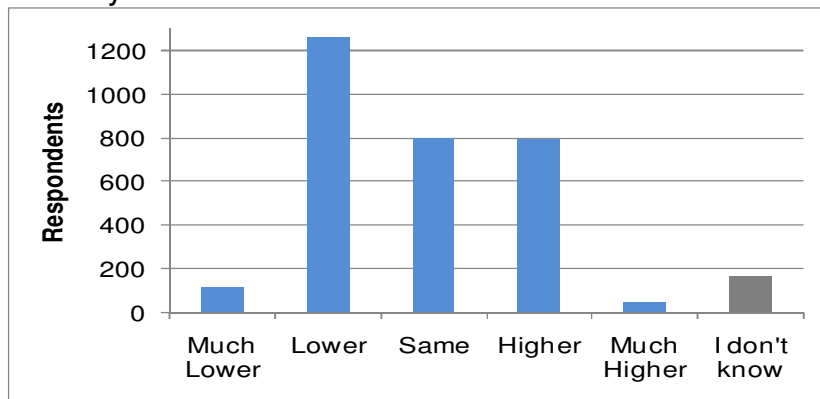
Investors hold a larger proportion of SRI mutual funds in their portfolio if they...

- H4 ...expect a higher return on SRI mutual funds
- H5 ...believe that SRI investing improves the world
- H6 Tax advantages have no effect**

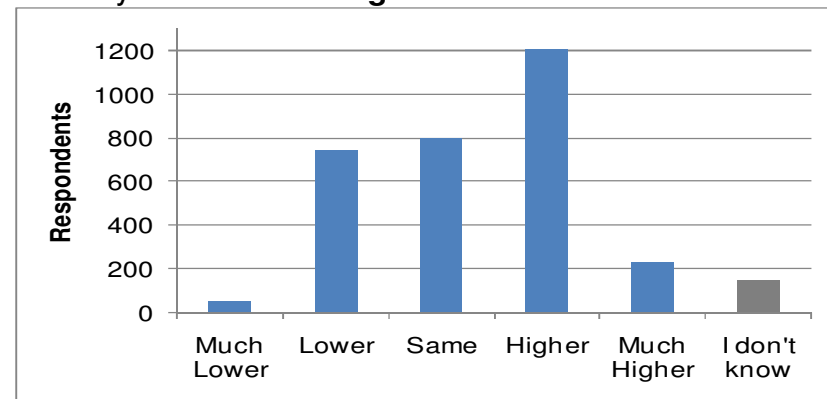
Sustainable Investors on Average Expect a Long Term Overperformance, but Disagree with Each Other

Expected Return and Risk Measures (Hypothesis 4)

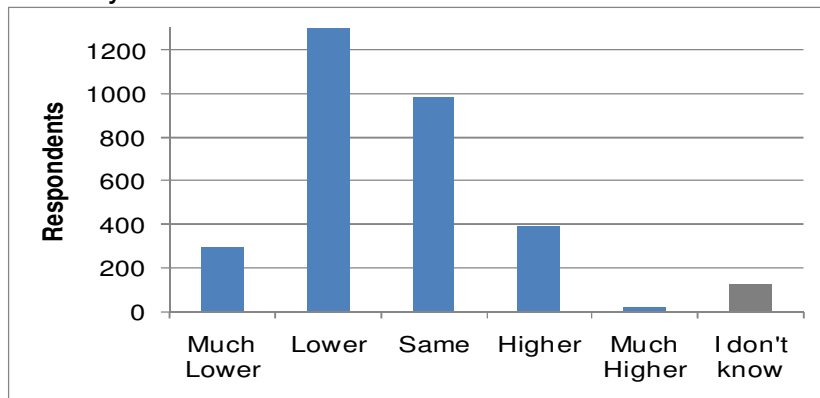
I believe that the return of SRI in comparison to ordinary funds **in the short run** is:



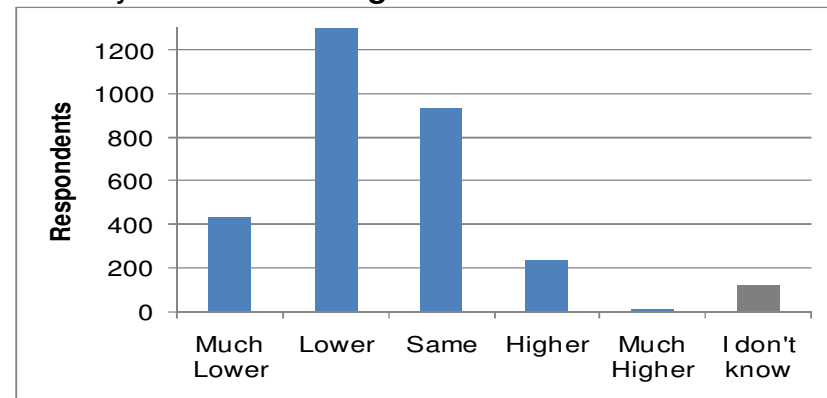
I believe that the **return** of SRI in comparison to ordinary funds **in the long run** is:



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:



Measurement of Hypotheses 5 and 6

Hypothesis 5: *Tastes for Assets (Expressive / Affective 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) Sustainable investing adds something useful to our society
- Scale: 1 (completely disagree) – 7 (completely agree)

Average score of three questions taken

Hypothesis 6: *Tax Advantages*

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

Sustainable 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) ^{***}	3,14		4,81
INVESTOR CHARACTERISTICS			
Knowledge^{***}	-0,23	-0,07	-3,43
Index Trackers^{***}	-0,73	-0,10	-4,66
Professional Advise^{***}	-0,58	0,12	-4,67
Decide Alone*	-0,19	0,10	-1,80
Risk Tolerance^{***}	-0,21	0,04	-5,92
Inv. Horizon	-0,07	0,05	-1,62
Pension^{***}	-0,28	0,10	-2,92
DISAGREEMENT vs. TASTES FOR ASSETS			
E. Return LongRun^{***}	0,22	0,05	4,77
Improving World^{***}	0,60	0,05	11,47
Tax Motive	-0,12	0,21	-0,56
DEMOGRAPHICS			
Gender	0,10	0,11	0,87
AGE^{***}	-0,02	0,00	-3,88
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
Wealth^{***}	-0,19	0,05	-3,90
Adjusted R-Squared	0,22		
N	1767		

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

Socially Responsible Investors have a Multi-Attribute Utility Function

Investor Heterogeneity - Conjoint Experiment

Wilcox (2003, JB)

Multi-attribute Utility Function

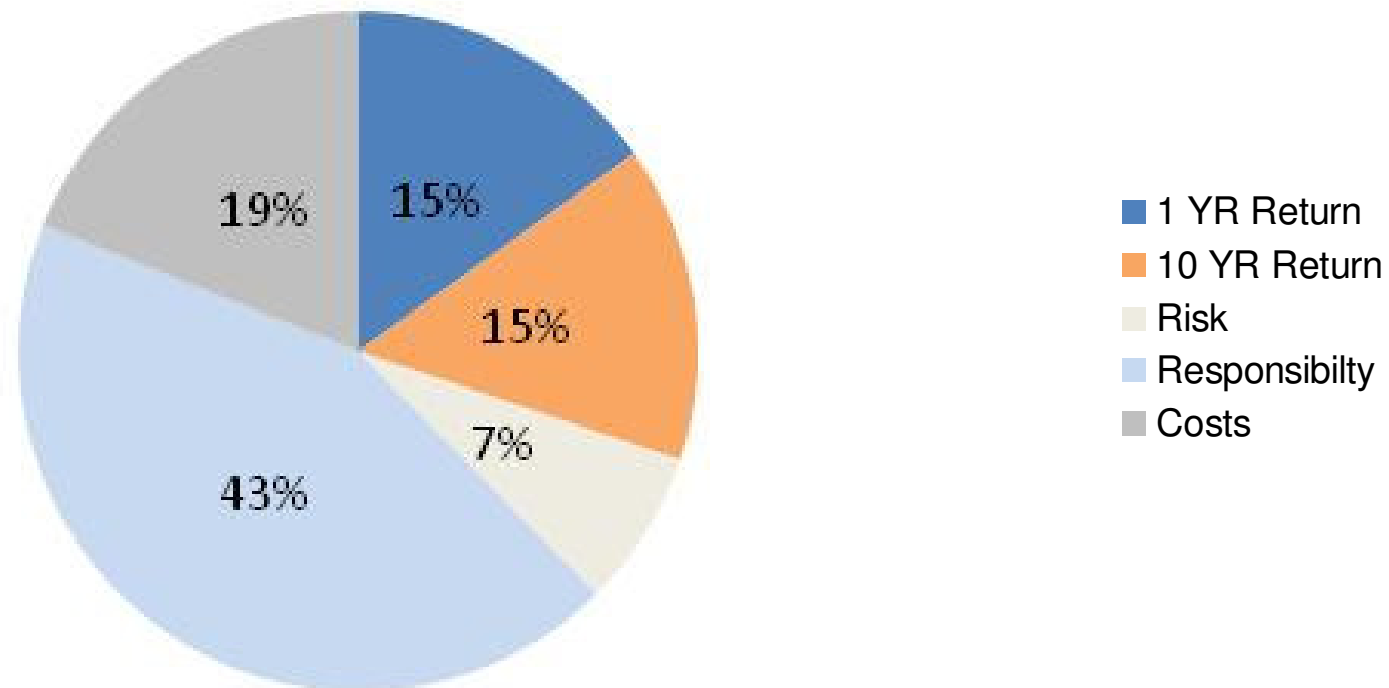
$$U = Return_{t-1} + Return_{t-10} - Risk - Costs + Social Responsibility$$

Factors levels in the experiment

Mutual Funds Attributes		Levels				Example
1 Yr return	-4,20%	-3,50%	-2,80%	-	-	-4,20%
10 Yr return	-21,00%	-28,00%	-35,00%	-	-	-35,00%
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%

Implicit Preferences of Investor Revealed

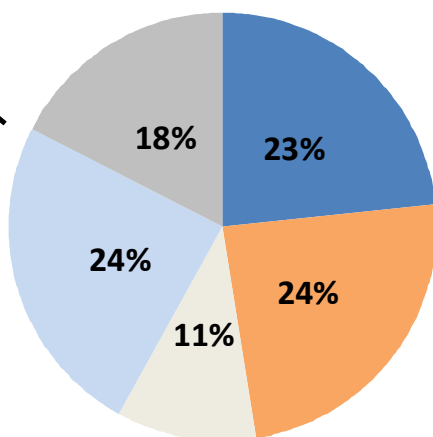
Importance Mutual Fund Attributes



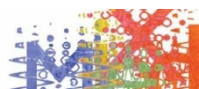
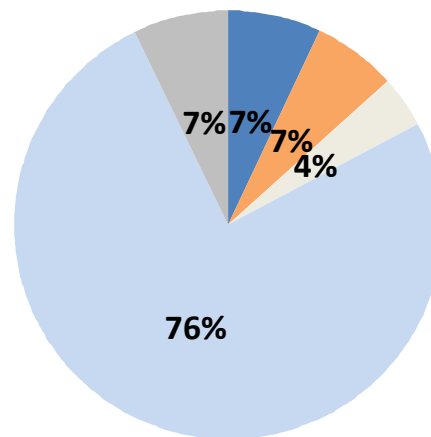
Investor Heterogeneity: 4 Segments of SRI Investors

Importance of Mutual Fund Attributes

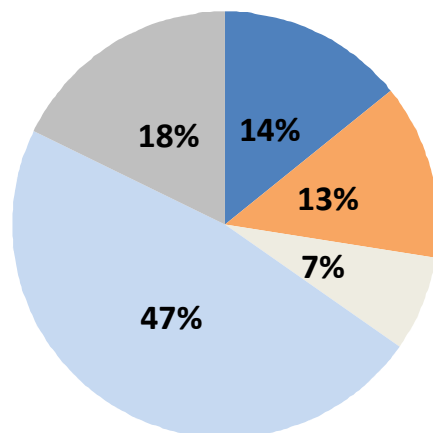
Past Return Chasers



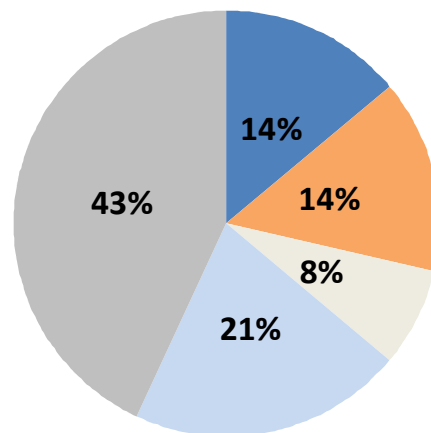
Dark Green



Mixed



Cost Sensitive



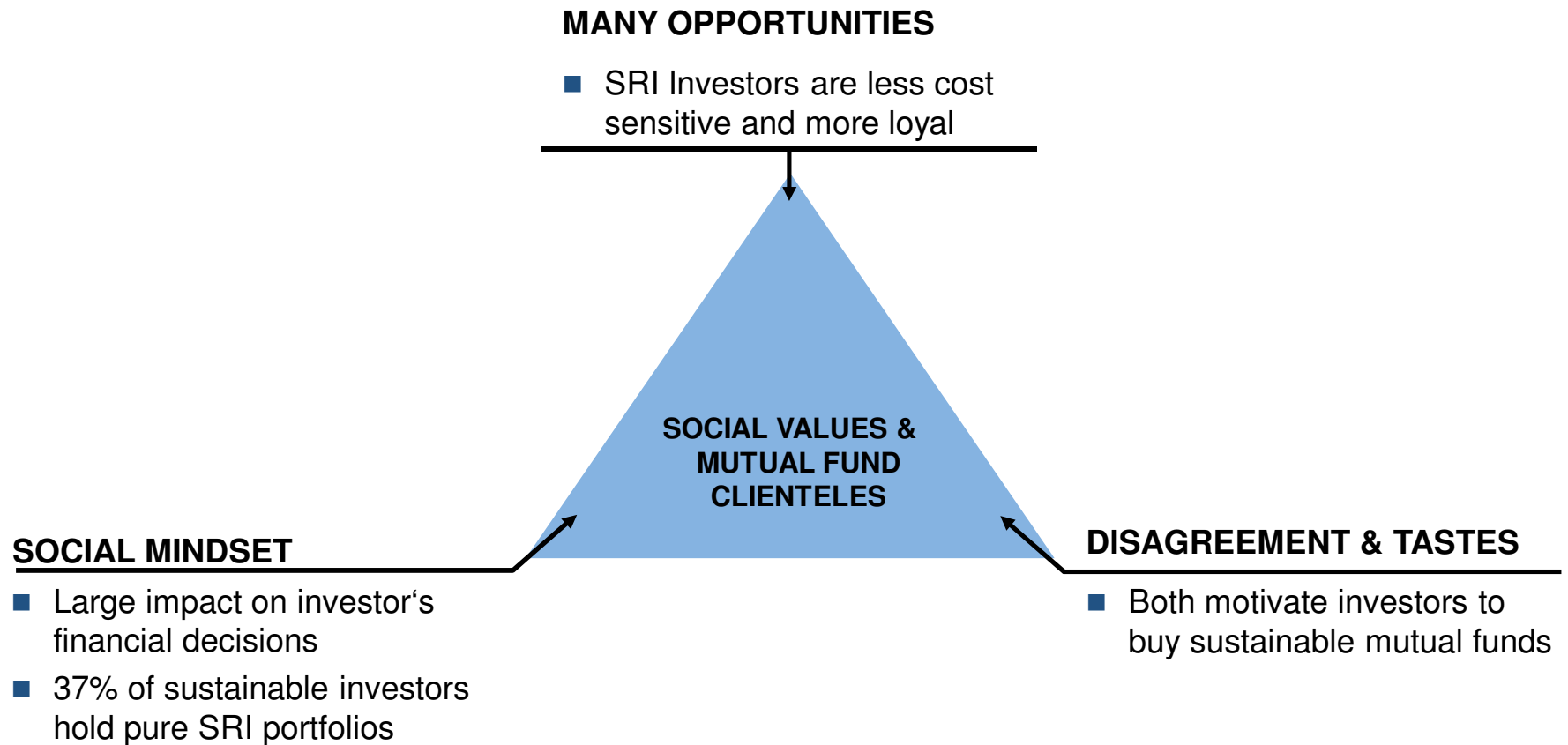
- 1 YR Return
- 10 YR Return
- Risk
- Responsibility
- Costs

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Conclusion





BACK UP

- % SRI Segmentation
- Correlation
- Savings Descriptives
- Bank profiles
- Experiment
- Male vs. Female
- The Effect of Wealth
- Clientele Effect

Substantial Differences in Degree of Social Mindset

Investor Heterogeneity Segmentation Based on the Proportion of Sustainable Investing within the Portfolio

Demographics

<i>Variable</i>		Segment 1 <i>Smaller than 20% SRI</i>	Segment 2 <i>21-90% SRI</i>	Segment 3 <i>91%-100% SRI</i>
<i>Demographics</i>	Male^{***}	80%	71%	60%
	Age^{***}	57,18	56,73	53,46
	Education	6,06	6,15	6,11
	Married^{***}	65%	60%	51%
	# of Kids at home	0,51	0,50	0,55
	Income^{***}	4,80	4,64	4,22
	Wealth^{***}	3,21	2,97	2,45
	<i>N</i>	<i>517</i>	<i>1276</i>	<i>1053</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

Substantial Differences in Degree of Social Mindset

Variable		Segment 1 <i>Smaller than 20% SRI</i>	Segment 2 <i>21-90% SRI</i>	Segment 3 <i>91%-100% SRI</i>
<i>SRI</i>	Euros invested Sustain. ***	€ 8.029	€ 38.220	€ 48.125
	Customers at Triodos and ASN (YES)***	0,25	0,36	0,28
<i>N</i>		<i>517</i>	<i>1272</i>	<i>2026</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

Variable		Segment 1 <i>Smaller than 20% SRI</i>	Segment 2 <i>21-90% SRI</i>	Segment 3 <i>91%-100% SRI</i>
<i>Outcome SRI</i>	Loyalty***	4,75	5,48	5,98
	Risk Tolerance General***	4,08	3,99	3,74
	Risk Tolerance Financial***	4,04	3,78	3,26
	Invest. Knowledge***	2,94	2,77	2,47
<i>N</i>		<i>520</i>	<i>1276</i>	<i>1053</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

Substantial Differences in Degree of Social Mindset

<i>Variable</i>		Segment 1 <i>Smaller than 20% SRI</i>	Segment 2 <i>21-90% SRI</i>	Segment 3 <i>91%-100% SRI</i>	
<i>Financial Descriptives</i>	# Mutual Funds***	4,45	4,15	2,51	
	Own Direct Stocks (YES)***	59,62%	44,67%	16,62%	
	# Invest. Accounts***	2,60	2,34	1,45	
	# Saving Accounts***	3,35	2,99	2,30	
	ASSET ALLOCATION				
	% Savings***	49,88%	50,69%	61,69%	
	% Equity***	34,69%	35,22%	30,83%	
	% Bonds	20,99%	21,84%	21,86%	
	% Other**	20,87%	25,02%	28,15%	
	% I don't know	0,03%	0,03%	0,04%	
	Own Index Trackers (YES)***	29,74%	24,66%	6,53%	
	Information on Index Trackers (YES)***	15,38%	10,27%	2,85%	
	Invest. Horizon	4,19	4,19	4,22	
	Investment for Pension (YES)***	69,81%	62,77%	60,02%	
	Decide alone (YES)	75,77%	72,26%	73,31%	
	Internet for info (YES)***	65,96%	64,11%	63,81%	
Professional Advice (YES) ***	22,05%	15,63%	7,49%		
N	520	1276	1053		

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

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	-,088(**)	,044(*)	-,275(**)	-,072(**)	,089(**)	,081(**)	,040(*)	,201(**)	,275(**)
Index Trackers	-,086(**)	0,015	-,103(**)	-,065(**)	,046(*)	,040(*)	,040(*)	,129(**)	,143(**)
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 LongR	,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

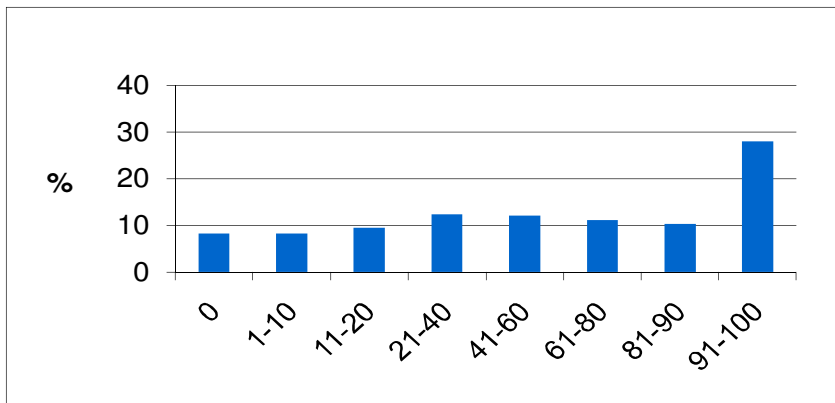
* Significant at 5% Level

28% of all SR Investors Also Put Almost all their Savings on a Sustainable Account

Descriptives on Savings

How much % of your savings are at a sustainable bank?

N=3103



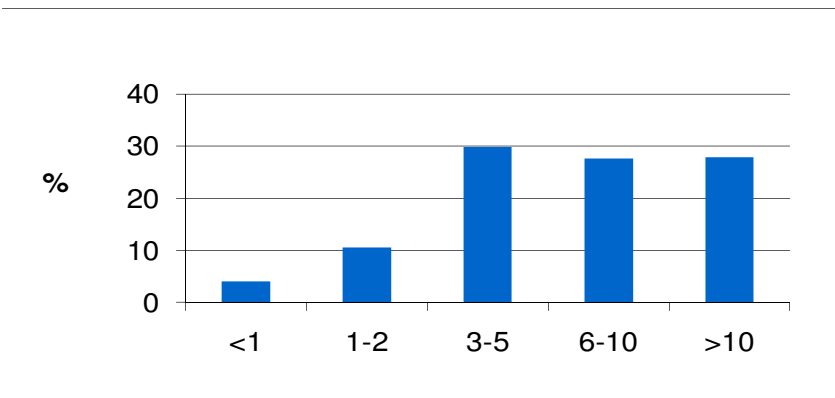
▪ Euros saved in sustainable accounts

Mean: 37,000 (Median: 21,000)

➔ Consistency with social mindset

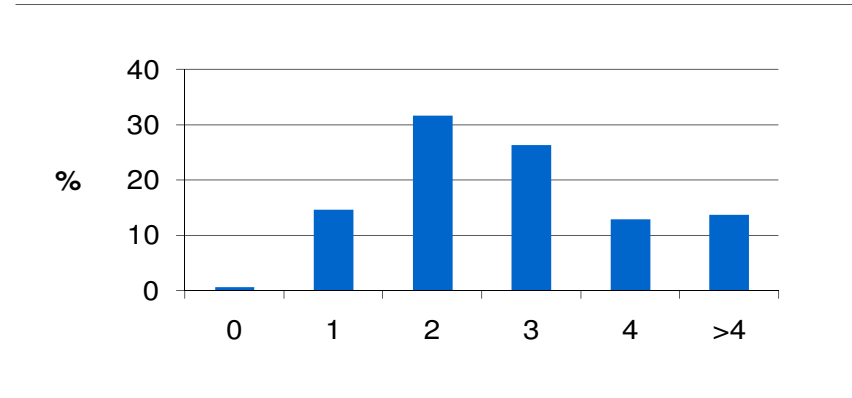
What is your savings horizon (in years)

N=2854



At how many banks do you have a savings account?

N=3182



ASN Bank is the Marketleader in the Netherlands for Sustainable Savings and Investments

Profile ASN Bank N.V.



KEY FACTS

- Subsidiary of SNS Reaal
- Distribution 100% via Internet
- **Marketleader** in the Netherlands for sustainable savings and investments
- Investment selection based on env. & soc. aspects

PRODUCT PORTFOLIO

- Sustainable Savings
- Current Accounts
- Sustainable Mutual Funds
 - Equity, Bonds, Mixed
 - Green Funds
 - Env. & Water Funds
 - Small & Mid Cap Funds
- Microcredits

FINANCIALS

- Net Profit (2008): € 16.9 mln.
- Assets under Management (2008): € 6bln.
- Number of clients: 420,000 (+ 15.7%)

HISTORY

- Founded in 1960
- Started as a bank for labor unions
- Moved into sustainable banking

Triodos is a Pioneer in Ethical Banking

Profile Triodos Bank N.V.

The logo for Triodos Bank, featuring the text "Triodos Bank" in white on a dark blue background, with a green circular icon containing a white symbol.

KEY FACTS

- **Pioneer** in ethical banking
- **Internationally active** in the Netherlands, UK, Belgium, Spain & Germany
- Investment selection based on env. & soc. aspects

PRODUCT PORTFOLIO

- Sustainable Mutual Funds
 - Equity, Bonds, Mixed
 - Green, Cultural
 - Real Estate
- Venture Capital
- Financing: Environment, Social, Cultural
- Microfinancing in Developing Countries

FINANCIALS

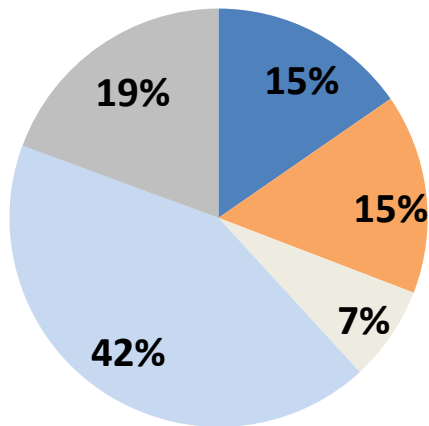
- Av. Net Profit (2005-2008): € 3,30 Mln
- Assets under management (2008): € 3.97 Bln.
- Number of clients: 100,000 (rounded)

HISTORY

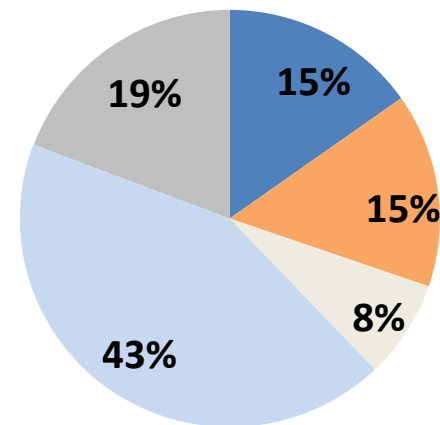
- **1968:** Research group for sustainable banking
- **1980:** Triodos Bank NV founded
- **1990:** First sustainable investment fund
- **1993:** Start of intern. expansion (Belgium)
- **1994:** First cooperation (Stichting DOEN)
- **2007:** Transparent Banking introduced

Both Triodos and ASN Clients

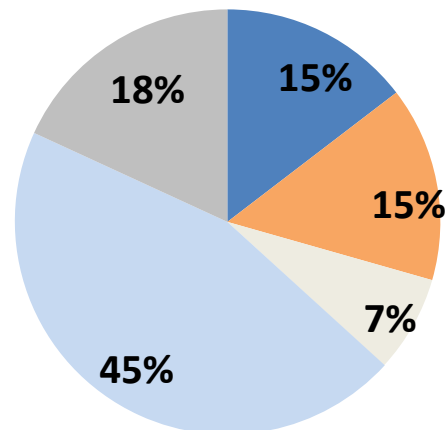
Triodos



ASN



Both- Triodos and ASN



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

<i>Variable</i>		Segment 1 <i>Clients at both Triodos & ASN</i>	Segment 2 <i>Clients at either Triodos or ASN</i>
<i>Demographics</i>	Male	68%	70%
	Age	56,00	56,06
	Education	6,06	6,15
	Married	58%	55%
	# of Kids at home	0,54	0,47
	Income	4,45	4,52
	Wealth***	2,69	3,02
	<i>N</i>	<i>2172</i>	<i>945</i>

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

<i>Variable</i>		Segment 1	Segment 2
		<i>Clients at both Triodos & ASN</i>	<i>Clients at either Triodos or ASN</i>
<i>Financial Descriptives</i>	# Mutual Funds**	3,24	4,41
	Own Direct Stocks (YES)	0,38	0,40
	# Invest. Accounts***	1,81	2,60
	# Saving Accounts***	2,60	3,21
	ASSET ALLOCATION		
	% Savings***	56,45	52,05
	% Equity**	32,51	32,05
	% Bonds**	21,29	34,92
	% Other	26,61	23,82
	% I don't know*	0,06	0,04
	Own Index Trackers (YES)	0,22	0,22
	Information on Index Trackers (YES)	0,07	0,09
	Invest. Horizon*	4,15	4,26
	Investment for Pension (YES)	0,60	0,63
	Decide alone (YES)	0,73	0,74
	Internet for info (YES)**	0,58	0,64
	Professional Advice (YES)*	0,15	0,12
<i>N</i>	<i>2172</i>	<i>945</i>	

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Variable		Segment 1 <i>Clients at both Triodos & ASN</i>	Segment 2 <i>Clients at either Triodos or ASN</i>
SRI	Pure SRI (YES)*	0,37	0,32
	Euros invested Sustain. ***	31.946 €	43.899 €
	Yrs Investing Sustain.***	3,52	4,06
	Euros saved Sustain.***	32.661 €	46.521 €
	% Sustain. Savings***	5,07	5,72
	Customers at Triodos and ASN (YES)	-	-
N		2108	926

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Variable		Segment 1	Segment 2
		<i>Clients at both Triodos & ASN</i>	<i>Clients at either Triodos or ASN</i>
Drivers of SRI	Expct. Return S. Run**	2,77	2,87
	Expct. Return L. Run	3,26	3,27
	Expct. Risk S. Run	2,52	2,47
	Expct. Risk L. Run 41	2,34	2,29
	Social and Environmental Concern***	0,73	0,74
	Imrpoving World***	5,95	6,09
	Tax Motive (YES)	0,05	0,05
<i>N</i>		<i>2172</i>	<i>945</i>

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Variable		Segment 1	Segment 2
		<i>Clients at both Triodos & ASN</i>	<i>Clients at either Triodos or ASN</i>
Outcome SRI	Loyalty***	5,28	5,64
	Risk Tolerance General	3,89	3,90
	Risk Tolerance Financial*	3,56	3,68
	Invest. Knowledge***	2,61	2,80
	<i>N</i>	<i>2172</i>	<i>945</i>

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Two Behavioral Biases in Mutual Fund Selection

Chasing Past Returns

- Gruber (1996, JF)
- Sirri & Tufano (1998, JF)
- Bergstresser & Poterba (2002, JFE)
- Sapp & Tiwari (2004, JF)
- Renneboog, ter Horst & Zhang (2006)

Neglecting Loads and Fees

- Gruber (1996, JF)
- Elton, Gruber & Buse (2004, JF)
- Bailey, Kumar & Ng (2009)

The Longer the Social Mindset the Smaller the Behavioral Biases

<i>Variable</i>		Segment 1 <i>Past Return Chasers</i>	Segment 2 <i>Mixed</i>	Segment 3 <i>Dark Green</i>	Segment 4 <i>Cost Sensit.</i>
<i>Drivers of SRI</i>	Expct. Return S. Run***	2,76	2,80	2,95	2,67
	Expct. Return L. Run***	3,21	3,34	3,44	3,08
	Expct. Risk S. Run	2,55	2,53	2,51	2,59
	Expct. Risk L. Run 41**	2,41	2,31	2,23	2,34
	Social and Environmental Concern***	5,30	5,64	6,04	5,26
	Imrpoving World***	5,69	6,10	6,37	5,69
	Tax Motive (YES)***	0,07	0,02	0,02	0,08
<i>N</i>	<i>519</i>	<i>727</i>	<i>404</i>	<i>259</i>	

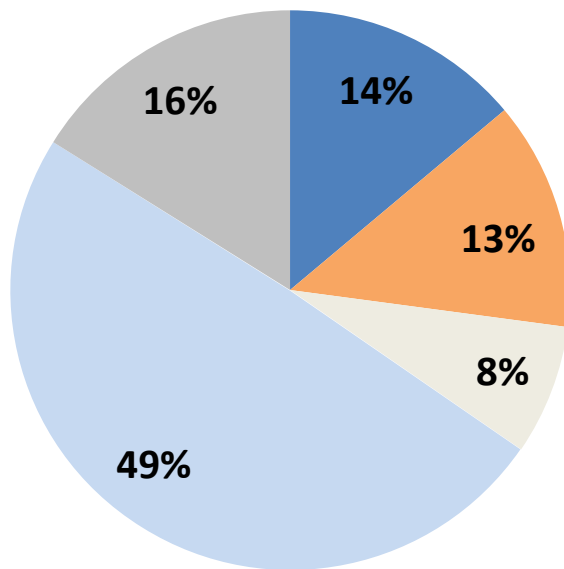
*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

<i>Variable</i>		Segment 1 <i>Past Return Chasers</i>	Segment 2 <i>Mixed</i>	Segment 3 <i>Dark Green</i>	Segment 4 <i>Cost Sensit.</i>
<i>Outcome SRI</i>	Loyalty***	4,93	5,57	6,00	4,91
	Risk Tolerance General***	4,01	4,00	3,93	4,10
	Risk Tolerance Financial	3,88	3,71	3,50	4,05
	Invest. Knowledge***	2,88	2,69	2,55	3,00
	<i>N</i>	<i>528</i>	<i>727</i>	<i>404</i>	<i>259</i>

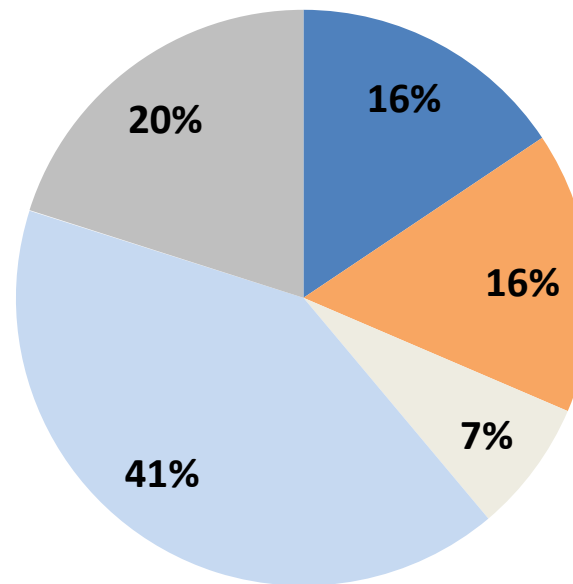
*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

The Never Ending Debate – Male versus Female

Female



Male



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

*Significance: *** for all ,Risk not significant*

The Never Ending Debate – Male versus Female

<i>Variable</i>		Segment 1	Segment 2
		<i>Female</i>	<i>Male</i>
<i>Drivers of SRI</i>	Expct. Return S. Run^{***}	2,95	2,74
	Expct. Return L. Run^{**}	3,32	3,24
	Expct. Risk S. Run^{***}	2,44	2,53
	Expct. Risk L. Run	2,30	2,33
	Imrpoving World^{***}	6,15	5,92
	Tax Motive (YES)	0,05	0,05
<i>N</i>		<i>1004</i>	<i>2159</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

<i>Variable</i>		Segment 1	Segment 2
		<i>Female</i>	<i>Male</i>
<i>Outcome SRI</i>	Loyalty^{***}	5,69	5,24
	Risk Tolerance General	3,84	3,90
	Risk Tolerance Financial^{***}	3,28	3,72
	Invest. Knowledge^{***}	2,34	2,81
	<i>N</i>	<i>1004</i>	<i>2159</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

The Never Ending Debate – Male versus Female

Demographics

<i>Variable</i>		Segment 1	Segment 2
		<i>Female</i>	<i>Male</i>
<i>Demographics</i>	Male	-	-
	Age***	54,83	56,67
	Education	6,12	6,07
	Married***	39%	65%
	# of Kids at home*	0,46	0,53
	Income***	4,12	4,61
	Wealth***	2,54	2,89
<i>N</i>		<i>1004</i>	<i>2159</i>

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

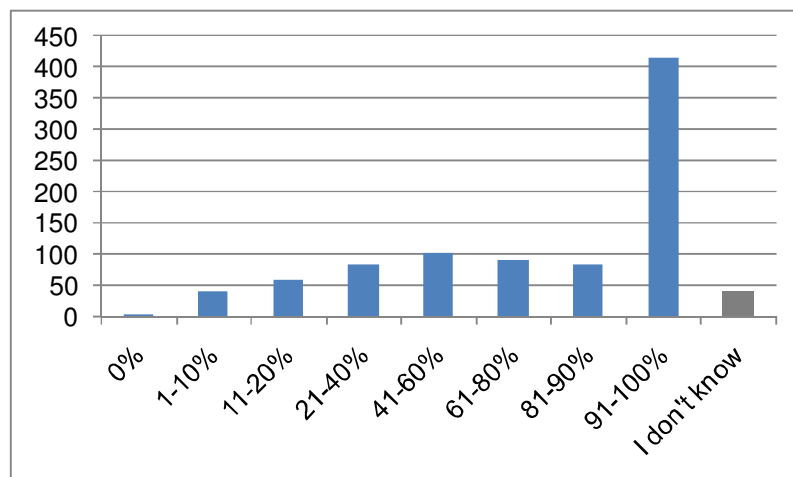
The Never Ending Debate – Male versus Female

<i>Variable</i>		Segment 1	Segment 2	
		<i>Female</i>	<i>Male</i>	
<i>Financial Descriptives</i>	# Mutual Funds***	3,20	3,75	
	Own Direct Stocks (YES)***	30,00%	42,00%	
	# Invest. Accounts***	1,80	2,09	
	# Saving Accounts***	2,53	2,89	
	ASSET ALLOCATION			
	% Savings***	58,36%	54,05%	
	% Equity***	30,94%	33,97%	
	% Bonds**	23,40%	21,34%	
	% Other	26,97%	25,46%	
	% I don't know***	0,09%	0,03%	
	Own Index Trackers (YES)	19,96%	22,54%	
	Information on Index Trackers (YES)***	3,88%	9,91%	
	Invest. Horizon***	4,41	4,10	
	Investment for Pension (YES) ***	65,00%	57,00%	
	Decide alone (YES)	73,80%	72,53%	
	Internet for info (YES)***	51,00%	66,00%	
Professional Advice (YES)	13,93%	14,35%		
N	1004	2159		

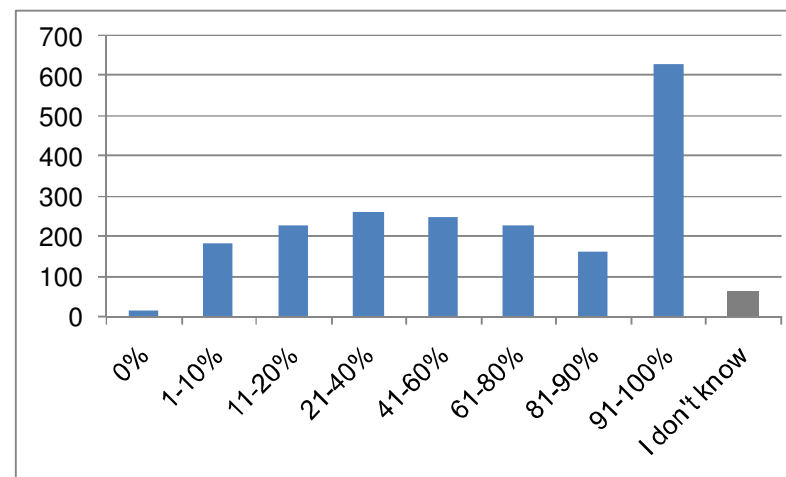
*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

The Never Ending Debate – Male versus Female

% SRI all mutual fund holdings* - Female**



% SRI all mutual fund holdings* - Male**

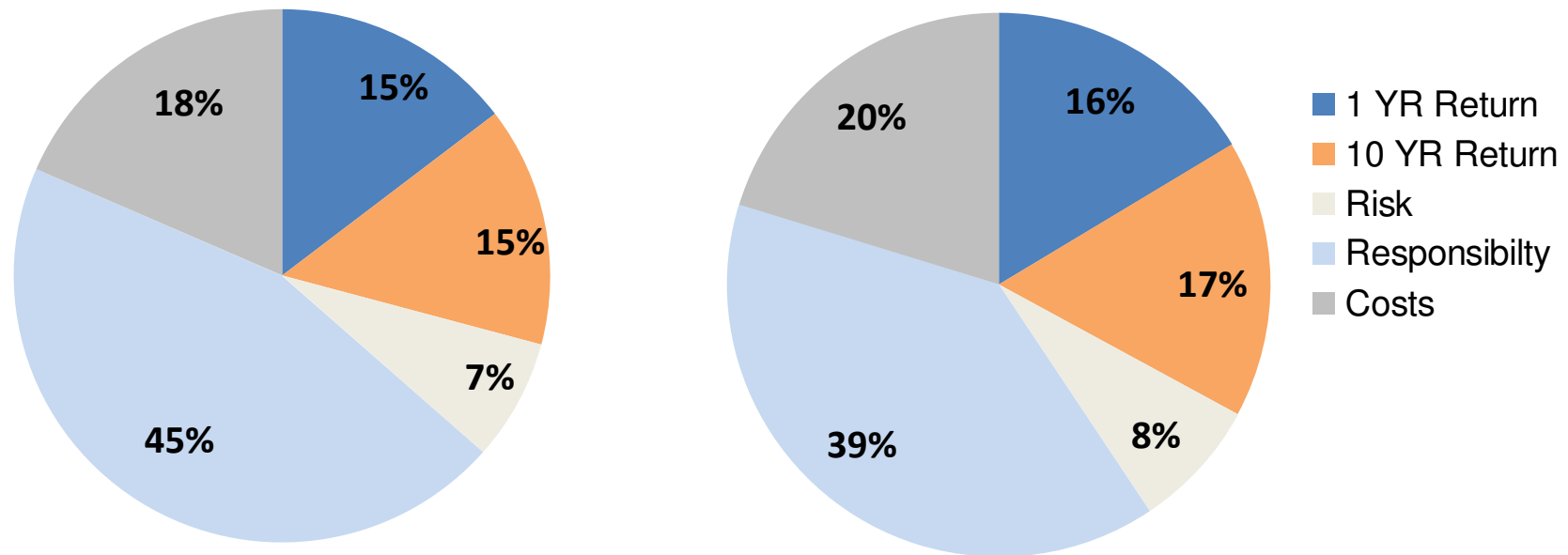


Variable		Segment 1	Segment 2
		<i>Female</i>	<i>Male</i>
SRI	Pure SRI (YES)***	0,45	0,31
	Customers at Triodos and ASN (YES)	0,29	0,31
N		981	2112

*Note: Significant at the 1%(***), 5%(**) and 10%(*) Level*

The Effects of Wealth

Wealth below the median Wealth above the median



Significance: *** for 1YR Return, 10YR Return, Responsibility, **Costs

The Effects of Wealth

<i>Variable</i>		Segment 1 <i>Below Median</i>	Segment 2 <i>Above Median</i>
<i>Demographics</i>	Male^{***}	65%	77%
	Age^{***}	55,15	58,72
	Education^{***}	6,01	6,31
	Married^{***}	54%	66%
	# of Kids at home^{***}	0,46	0,53
	Income^{***}	4,25	5,00
	Wealth^{***}	2,23	4,12
	<i>N</i>	<i>2368</i>	<i>819</i>

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

The Effects of Wealth

<i>Variable</i>		Segment 1 <i>Below Median</i>	Segment 2 <i>Above Median</i>
<i>Financial Descriptives</i>	# Mutual Funds***	3,32	4,31
	Own Direct Stocks (YES)***	0,33	0,53
	# Invest. Accounts***	1,85	2,46
	# Saving Accounts***	2,60	3,29
	ASSET ALLOCATION		
	% Savings***	58,15	47,92
	% Equity	32,79	33,85
	% Bonds	21,34	22,87
	% Other	26,32	25,01
	% I don't know***	0,06	0,01
	Own Index Trackers (YES)	0,21	0,24
	Information on Index Trackers (0,06	0,13
	Invest. Horizon	4,18	4,17
	Investment for Pension (YES)	0,57	0,69
	Decide alone (YES)	0,72	0,74
	Internet for info (YES)	0,61	0,63
	Professional Advice (YES)***	0,11	0,25
<i>N</i>	<i>2368</i>	<i>819</i>	

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

The Effects of Wealth

<i>Variable</i>		Segment 1 <i>Below Median</i>	Segment 2 <i>Above Median</i>
<i>Drivers of SRI</i>	Expct. Return S. Run	2,81	2,77
	Expct. Return L. Run***	3,32	3,14
	Expct. Risk S. Run	2,52	2,46
	Expct. Risk L. Run	2,33	2,30
	Social and Environmental Concern	5,63	5,55
	Imrpoving World***	6,03	5,89
	Tax Motive (YES)***	0,04	0,07
<i>N</i>		2368	819

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

<i>Variable</i>		Segment 1 <i>Below Median</i>	Segment 2 <i>Above Median</i>
<i>Outcome SRI</i>	Loyalty***	5,40	5,33
	Risk Tolerance General**	3,84	4,00
	Risk Tolerance Financial***	3,50	3,82
	Invest. Knowledge***	2,56	2,93
	<i>N</i>	2368	819

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Supply Meets Demand

Clientele Effect

Massa (1998) & (2003, JF)

- Fund families use product differentiation to exploit investor heterogeneity

Examples of different clienteles

1. Dividends (Graham & Kumar, 2006, JF)

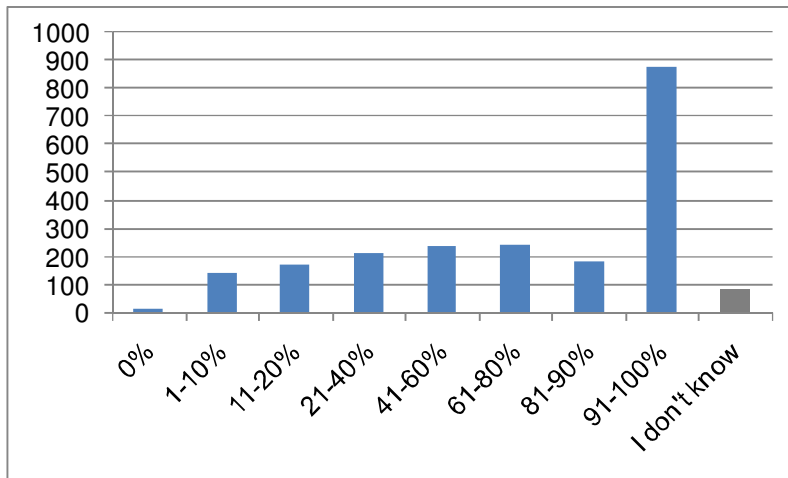
2. Value/Growth Small/Large

- Chan, Chen & Lakonishok (2002, RFS)
- Massa (2003, JFE)
- Cooper, Gulen & Rau (2005, JF)
- Kumar (2009, JFQA)

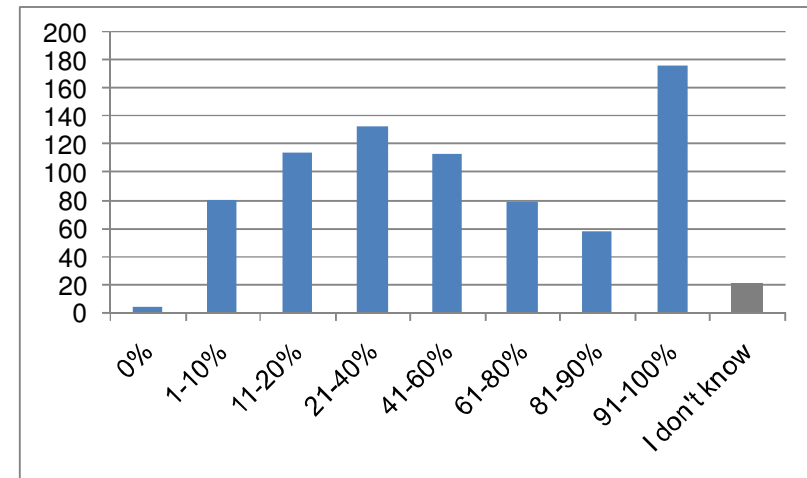
3. Socially responsible investing

- Bollen (2007, JFQA)

% SRI all mutual fund holdings* - Below Median**



% SRI all mutual fund holdings* - Above Median**



	Variable	Segment 1 Below Median	Segment 2 Above Median
SRI	Pure SRI (YES)***	0,40	0,23
	Euros invested Sustain. ***	15.003 €	72.519 €
	Yrs Investing Sustain.****	3,60	3,89
	Euros saved Sustain.***	21.336 €	66.813 €
	% Sustain. Savings***	5,53	4,51
	Customers at Triodos and ASN (YES)***	0,28	0,37
	N	2311	803

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

Questionnaire Items

Loyalty

- a) I would actively search for sustainable mutual funds if I were to invest
- b) I am very loyal to sustainable investing

World

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 the society than ordinary mutual funds
- c) Sustainable investing adds something useful to our society

Environmental / Social Concern

- a) I am very concerned about the environment
- b) I am very concerned about social issues

The Longer the Social Mindset the Smaller the Behavioral Biases

Investor Heterogeneity: 4 Segments of Investors

Demographics

<i>Variable</i>		Segment 1 <i>Past Return</i>	Segment 2 <i>Mixed</i>	Segment 3 <i>Dark Green</i>	Segment 4 <i>Cost Sensit.</i>
<i>Demographics</i>	Male***	76%	70%	61%	83%
	Age	54,66	54,76	53,86	55,30
	Education	6,12	6,22	6,22	6,08
	Married	60%	56%	53%	61%
	# of Kids at home	0,55	0,59	0,50	0,54
	Income**	4,60	4,54	4,36	4,77
	Wealth***	2,93	2,75	2,56	2,95
	<i>N</i>	528	727	404	259

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

The Longer the Social Mindset the Smaller the Behavioral Biases

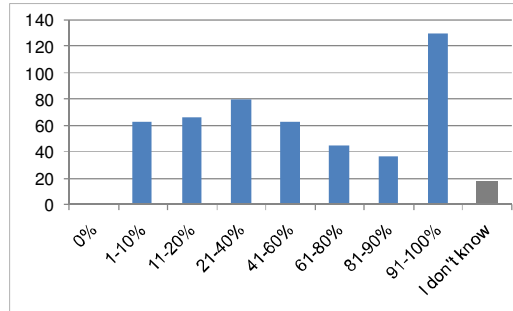
<i>Variable</i>		Segment 1 <i>Past Return</i>	Segment 2 <i>Mixed</i>	Segment 3 <i>Dark Green</i>	Segment 4 <i>Cost Sensit.</i>	
<i>Financial Descriptives</i>	# Mutual Funds***	3,88	3,54	3,35	4,22	
	Own Direct Stocks (YES)***	0,47	0,38	0,28	0,51	
	# Invest. Accounts***	2,17	2,03	1,81	2,40	
	# Saving Accounts***	3,01	2,69	2,36	3,16	
	ASSET ALLOCATION					
	% Savings***	52,90	56,96	54,37	49,64	
	% Equity*	34,70	32,05	35,79	36,48	
	% Bonds	21,29	19,50	22,44	22,79	
	% Other*	24,25	23,42	29,06	17,72	
	% I don't know	0,03	0,03	0,02	0,03	
	Own Index Trackers (YES)**	0,23	0,20	214,00	0,21	
	Information on Index Trackers (0,12	0,08	0,02	0,20	
	Invest. Horizon*	4,14	4,19	4,37	4,31	
	Investment for Pension (YES)*	0,62	0,60	0,55	0,66	
	Decide alone (YES)	0,76	0,74	0,71	0,80	
	Internet for info (YES)***	0,73	0,63	0,55	0,66	
Professional Advice (YES)	0,14	0,33	0,11	0,17		
N	528	727	404	259		

*Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level*

The Longer the Social Mindset the Smaller the Behavioral Biases

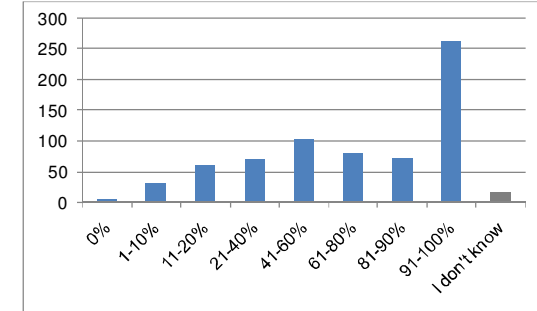
% SRI all mutual fund holdings***

Past Return Chasers



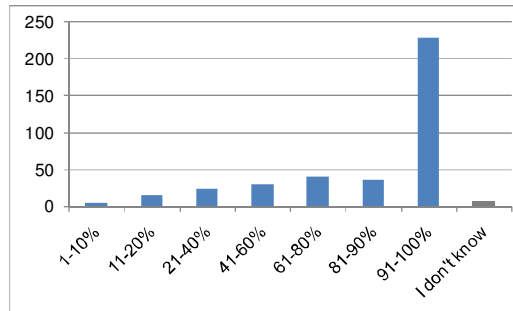
% SRI all mutual fund holdings***

Mixed



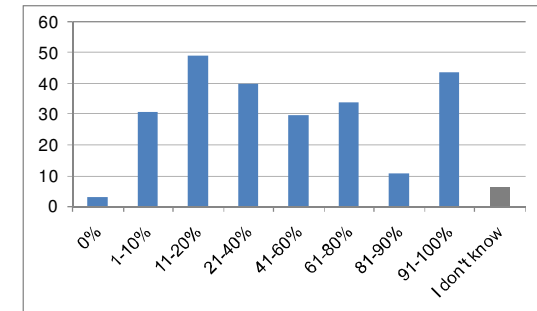
% SRI all mutual fund holdings***

Dark Green



% SRI all mutual fund holdings***

Cost Sensitive



Variable		Segment 1 Past Return Chasers	Segment 2 Mixed	Segment 3 Dark Green	Segment 4 Cost Sensit.
SRI	Pure SRI (YES)***	0,26	0,38	0,59	0,18
	Euros invested Sustain. ***	30.948 €	38.621 €	48.963 €	25.018 €
	Yrs Investing Sustain.***	3,62	3,74	3,94	3,61
	Euros saved Sustain.***	30.102 €	42.716 €	42.883 €	24.888 €
	% Sustain. Savings***	5,21	5,77	6,58	4,31
	Customers at Triodos and ASN (YES)	0,28	0,33	0,34	0,28
N		522	719	400	257

Note: Significant at the 0,1%(***), 1%(**) and 5%(*) Level

SIF

Social Investment Forum (US)

- SRI grew by 324% from \$639bln. in 1995 to \$2.71 tln. in 2007
- 11% of professionally managed assets involved in SRI
- Largest share of SRI held by mutual funds