

Socially Responsible Investments:

Return Expectations or Social Preferences?



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Financial Returns

Social Preferences



What is this Paper about?

○ Traditional finance theory

only heterogeneity in **risk preferences** and **expected returns** matter for portfolio choices

○ Recent evidence

Social preferences influence investment decisions

- Hong and Kostovetsky (2012), JFE
- Kaustia and Torstila (2011), JFE
- Hong and Kacperczyk (2009), JFE
- Bollen (2007), JFQA

Investors' preferences influence investment decisions

- Keloharju, Knupfer and Linnainmaa (2012), RFS
- Cohen (2009), RFS

Different Motives to Buy SRI Funds

① Financial Returns

- Higher *ex ante* return expectations
- Tax benefits

② Social preferences

- Intrinsic social preferences
 - isolated with an incentivized experiment

Main Findings

Investments in **SR mutual** funds are primarily driven by **social preferences**

Socially responsible investors:

- **expect lower** *ex ante* **returns** on SRI funds
- have a long term **impact on asset prices**

Experimental behavior **correlated** with field behavior (previous evidence is mixed)

Individual-Level Data

A Field behavior

Transaction data: January 1992 to August 2012

1. Monthly amounts invested in SRI funds and in all other funds
2. Investor portfolio returns
3. Basic investor characteristics

B Incentivized Experiment

1. Trust game
2. Risk preference task

C Survey

1. Return expectations
2. Investment knowledge

SRI Funds at Robeco

Two types of SRI funds

- **SRI equity** funds **without** tax incentives
- **SRI bond** funds **with** tax incentives

Classification of SRI in accordance to Robeco

SRI Funds at Robeco

- **SRI funds without tax benefits**
 - Fund managers are left free by the government in the selection of companies
- **Examples of SRI equity funds**
 - Robeco duurzaam aandelenfonds (1999)
 - SAM sustainable water (2001)
 - SAM healthy living (2007)
 - SAM sustainable climate (2007)

SRI Funds at Robeco

- **SRI funds with tax incentives**
 - Meet certain criteria of the government
 - Fund managers are restricted in their selection of companies by the government
 - Tax benefits of up to 2.2% in June 2011 when investors participated in the experiments
- **Examples of SRI bond funds with tax incentives**
 - Robeco groen garant
 - Robeco groenrente
 - Rabo groen obligaties

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Administrative Data

	Invited sample (n = 39,379)	Respondents (n = 3,254)
Female	24.7%	20.6%
Age	55.5	57.9
Total Portfolio Value (euro)	61,509	74,259
% Holds only SRI fund <i>without</i> tax benefits	7.6%	10.2%
% Holds only one SRI fund <i>with</i> tax benefits	1.8%	2.9%
% Hold both SRI funds with and without tax benefits	0,6%	0,8%

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Administrative Data

Respondents	Socially responsible investors	Conventional investors
	14%	86%
Female	18,1%	20.9%
Age	57	59
University degree	49.9%	46.2%
Mean portfolio value (euro)	106,678	73,250

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Administrative Data

	Conditional on owning a SRI fund
Percentage SRI in total portfolio	14.9%
Only hold SRI with tax benefits	19.5%
Only hold SRI without tax benefits	68.4%
Hold both SRI with and without tax benefits	12.1%

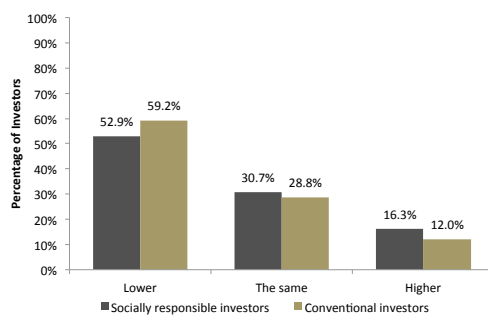
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Return Expectations

	Socially responsible investors (n = 435)	Conventional investors investors (n = 2819)
Expected risk SRI	3.55	3.57



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The Trust Game

B Incentivized Experiment

Berg, Dickhaut and McCabe (1995):

1. Two players both endowed with 50 euro
2. Focus on second mover behavior
3. Strategy method

Xx Tobias, can you make a slide with the picture of the trust game that you made for the poster in Cologne

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The Trust Game

○ The Design

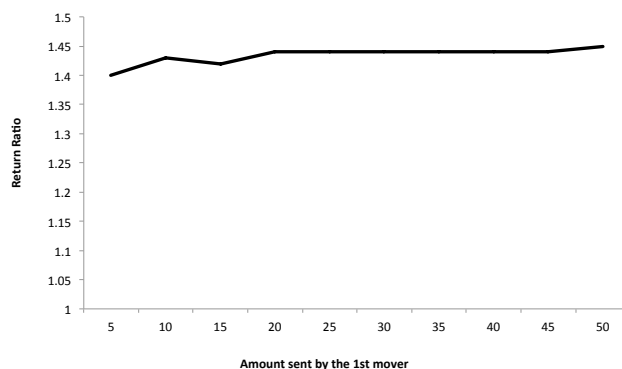
1. We invited all socially responsible investors
2. Randomly selected conventional investors
3. **Real money** at stake
4. Internet experiments
5. Match to **administrative investor data**

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Strategy Method Trust Game

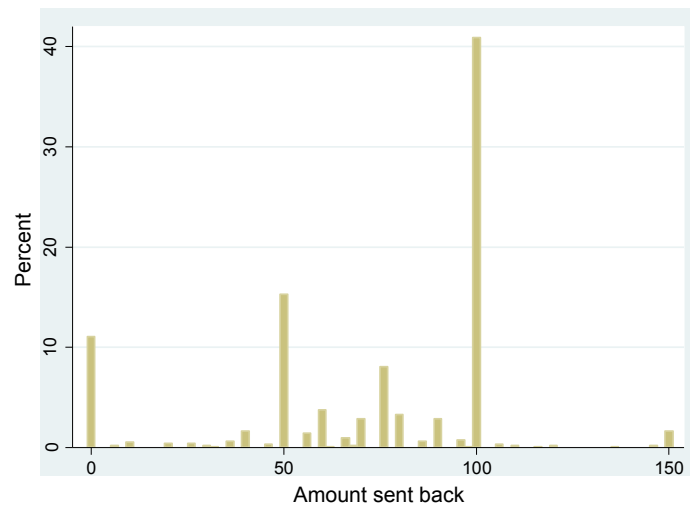


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Trust Game – All Investors



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Likelihood to own a SRI Fund (probit)

	Avg. Return Ratio	Max. Transfer of 50 Euro
Intrinsic social preferences	0.0405** (0.0205)	0.0080** (0.0040)
Lower expected returns on SRI	-0.0295 (0.0271)	-0.0295 (0.0271)
Lower perceived risk on SRI	-0.0257 (0.0267)	-0.0253 (0.0267)
Log total portfolio value	0.0431*** (0.0098)	0.0427*** (0.0098)
Investment knowledge	0.0189* (0.0107)	0.0186* (0.0107)
University degree	0.0390 (0.0281)	0.0383 (0.0281)
Risk preferences	-0.0003 (0.0003)	-0.0003 (0.0003)
Other control variables		YES
N		764
Pseudo R squared	0.0522	0.0525

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SRI funds with & without tax benefits (multinomial logit)

SRI funds: tax benefits	with	without	with & without
Intrinsic social preferences (average return ratio)	0.8089 (0.2717)	1.4791** (0.2626)	1.9400 (1.0638)
Lower expected returns on SRI	1.4309 (0.7585)	0.7319 (0.1612)	0.5519 (0.3549)
Lower perceived risk on SRI	1.5537 (0.7548)	0.6964 (0.1571)	1.2696 (0.8042)
Log total portfolio value	1.6691** (0.3661)	1.2953*** (0.1078)	2.2811*** (0.7337)
Investment knowledge	1.8387*** (0.4252)	1.0812 (0.0942)	1.1280 (0.2629)
University degree	0.4103 (0.2275)	1.4316 (0.3346)	4.6472* (3.8557)
Other control variables		YES	
N		764	
Pseudo R squared		0.0916	

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Controlling for portfolio returns and standard deviation of returns

SRI funds: tax benefits	with	without	with & without
Intrinsic social preferences (average return ratio)	0.7985 (0.2734)	1.4759** (0.2621)	1.9164 (1.0580)
Lower expected returns on SRI	1.6320 (0.8816)	0.7302 (0.1612)	0.5236 (0.3408)
Lower perceived risk on SRI	1.7162 (0.8639)	0.6911 (0.1563)	1.2474 (0.7912)
Monthly portfolio returns	0.3140*** (0.1370)	1.0587 (0.2120)	2.0373 (1.3918)
St.Dev. monthly portfolio returns	0.8721 (0.1158)	1.0395 (0.0486)	1.0707 (0.1370)
Other control variables		YES	
N		764	
Pseudo R squared		0.1010	

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Intrinsic social preferences and reputation (OLS)

Intrinsic social preferences (average return ratio)	-0.2779*** (0.0715)
Lower expected returns on SRI	-0.1026 (0.0955)
Lower perceived risk on SRI	0.0332 (0.0954)
Log total portfolio value	-0.0552** (0.0281)
Investment knowledge	0.4792*** (0.0362)
University degree	-0.0328 (0.0997)
Risk preferences	-0.0003 (0.0012)
Female	-0.3530* (0.1293)
Other control variables	YES
N	764
R squared	0.2410

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Conclusion

- ① Stronger intrinsic social preferences **increase likelihood** of investments in SR mutual funds without tax benefits. (experiment rules out reputation benefits)
- ② Most socially responsible investors *ex ante* expect **lower financial returns** on socially responsible mutual funds compared to conventional mutual funds
- ③ Investors with stronger intrinsic social preferences buy SRI **less often for reputational reasons** (some suggestive evidence).

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Implications for Practice

- ① Many investors care about more than risk and return
→ long run effects on asset prices
- ② Carefully consider whether to stress financial returns or social responsibility in advertisements / when giving advice
- ③ Government gives tax incentives:
Reducing it might scare away selfish investors