

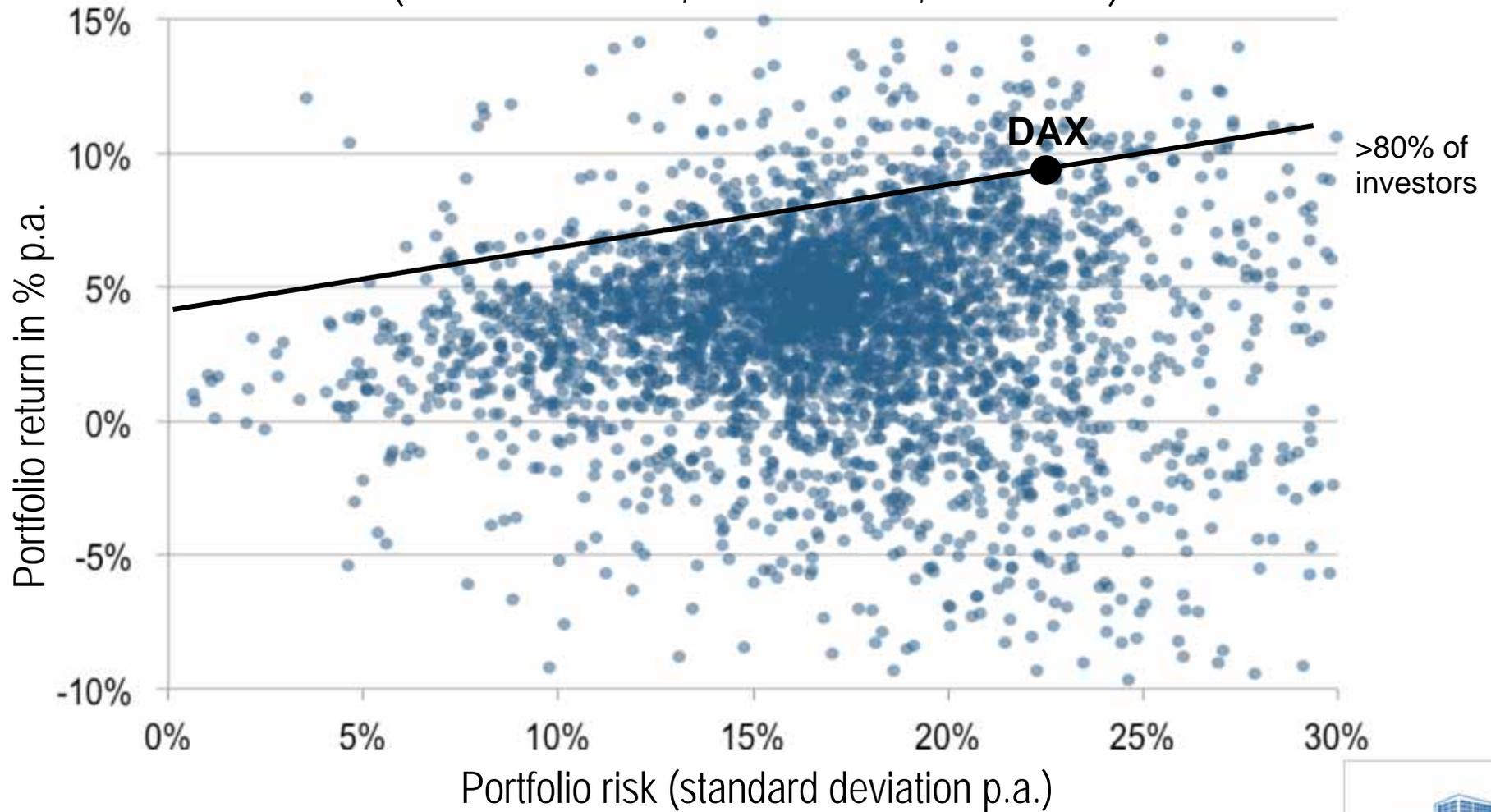
# **Investor behavior: the Last Mile problem and possible fixes**

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2015 GSBE Marketing-Finance Symposium  
Oct 8, 2015

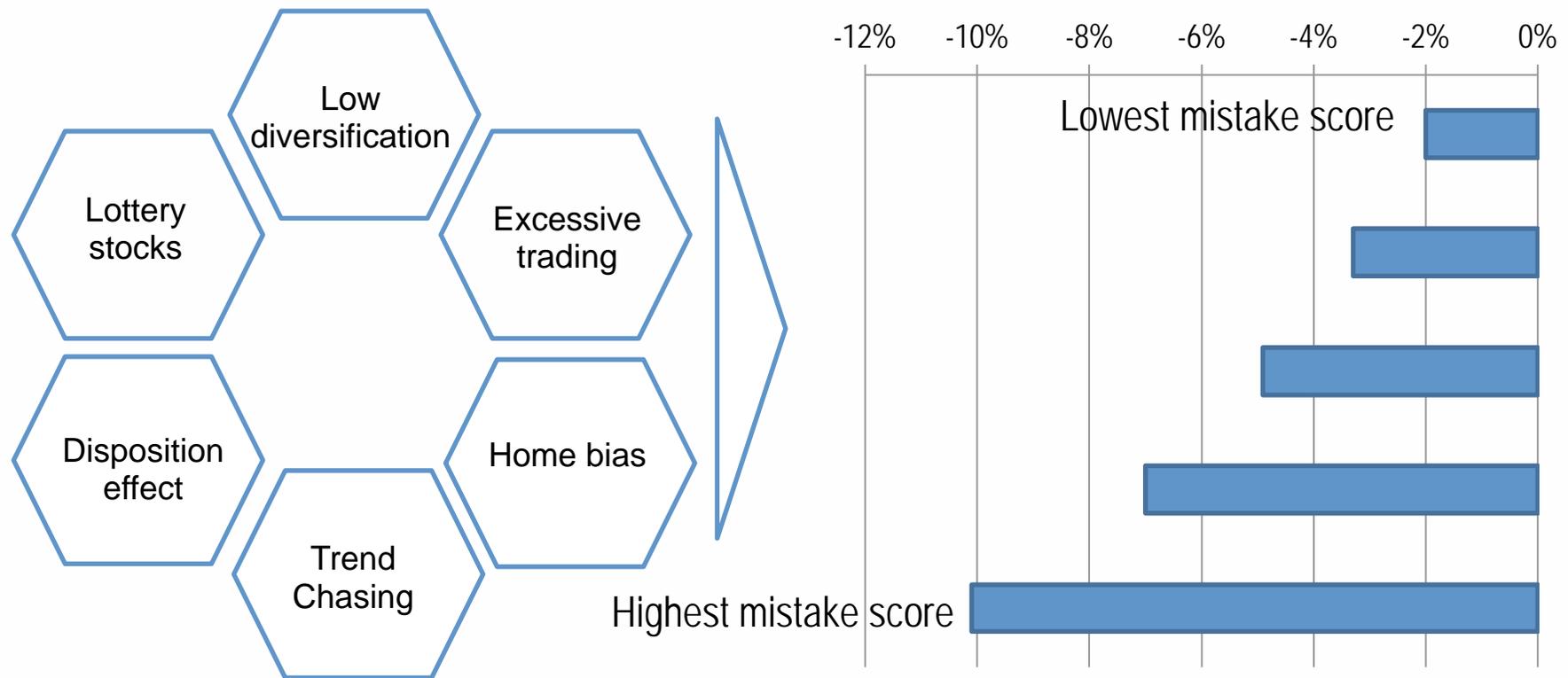
# Return gap of self-directed investors

Return-Risk Profile of German Individual Investors  
( 3.400 individuals, Online Broker, 2003-2012)



# Return gap caused by investment mistakes

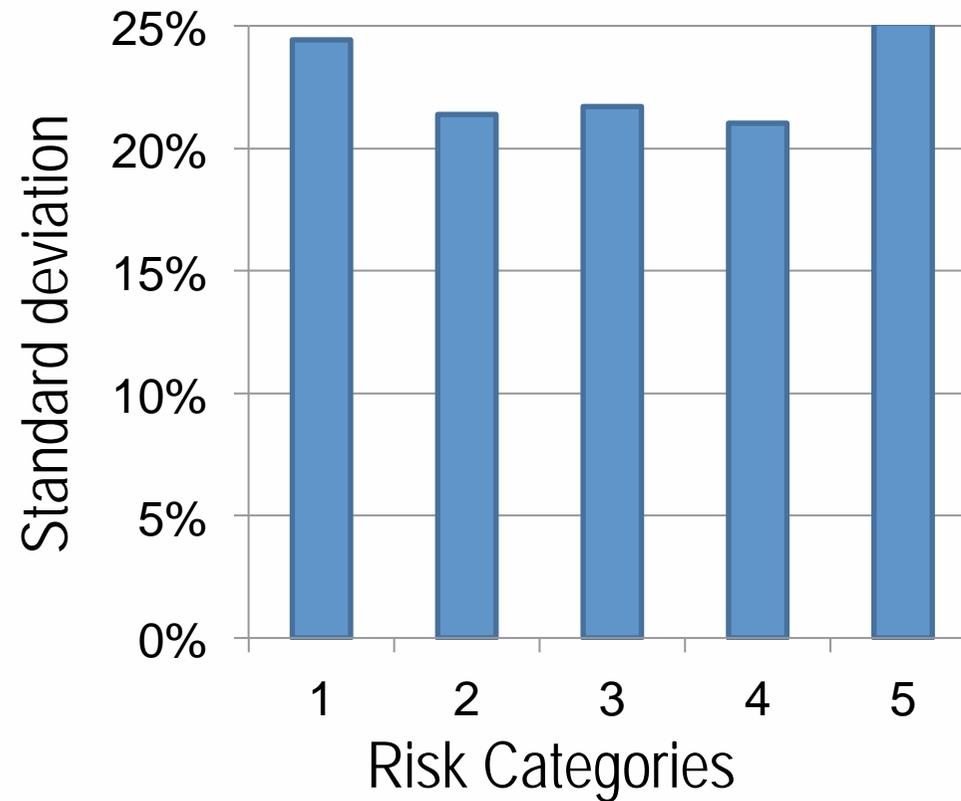
Determinants of investment results  
(5000 clients of Online Broker, 1999-2011)



Weber/Meyer/Loos/Hackethal (2014)

## Actual portfolio risk not in line with desired risk

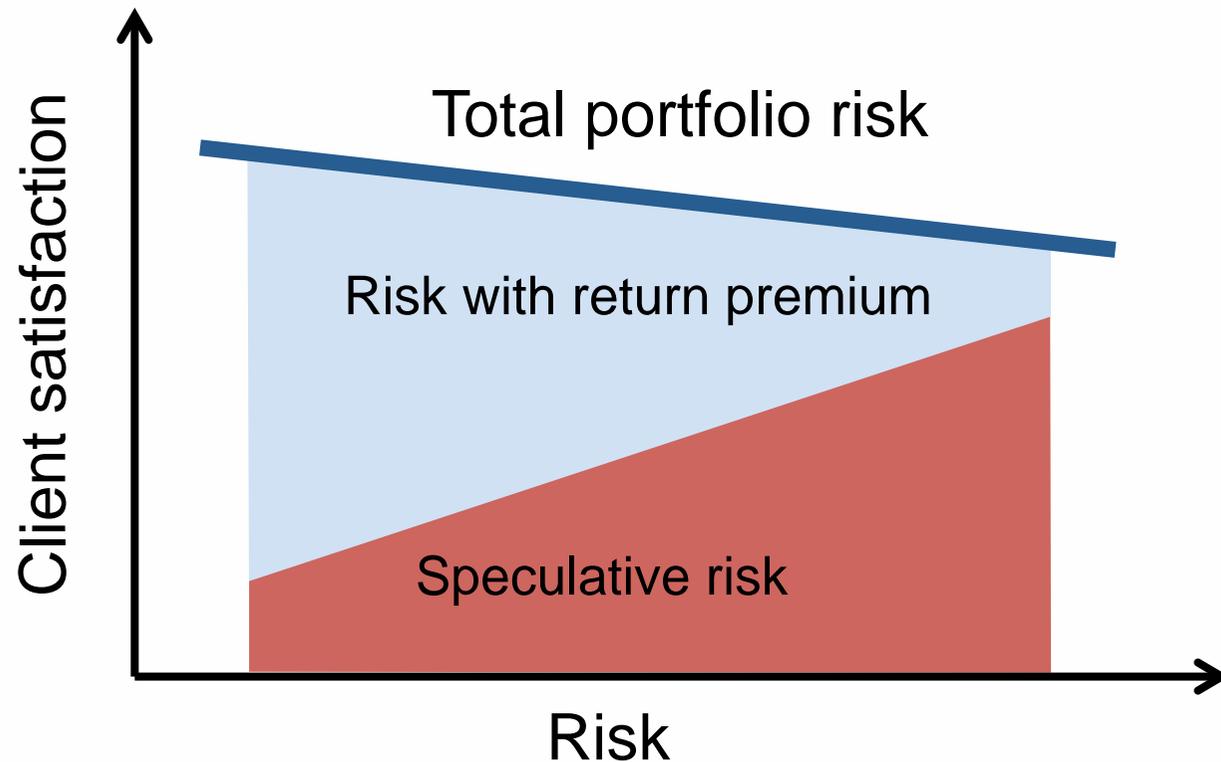
14,000 customers of a German online brokerage (2007-2008)



Source: Own data analysis

# Investor preferences result in dilemma also for advisors

Client survey and portfolio data  
(1280 clients, 2010-2013)



## Example for optionated trading: Tetrachobia

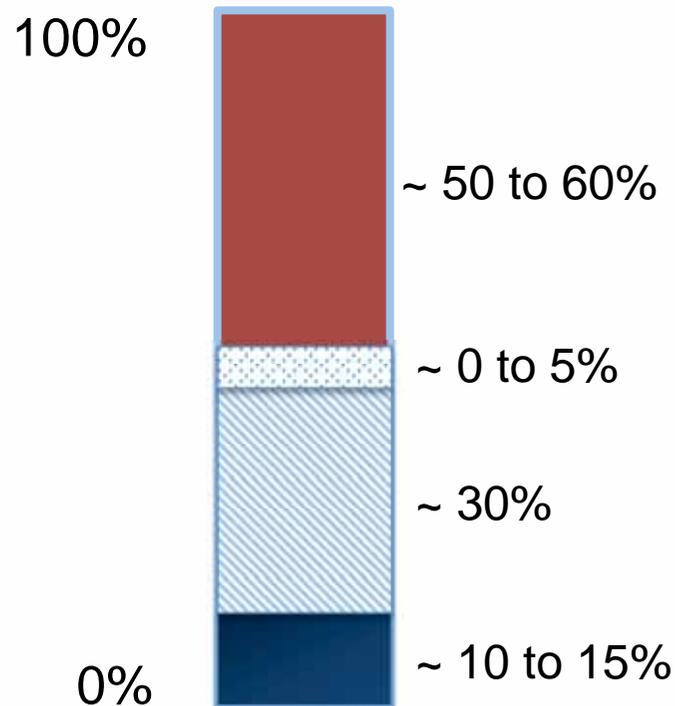


- Probability that Taiwanese traders place limit orders  $\_ \_ \_ 8$  is 50% higher than  $\_ \_ \_ 4$
- Superstitious traders earn on average \$250 less per trade

Quelle: Bhattacharya et al (2014): Do Superstitious Traders Lose Money?

# Sound investment behavior can be learned

## Variation across investors

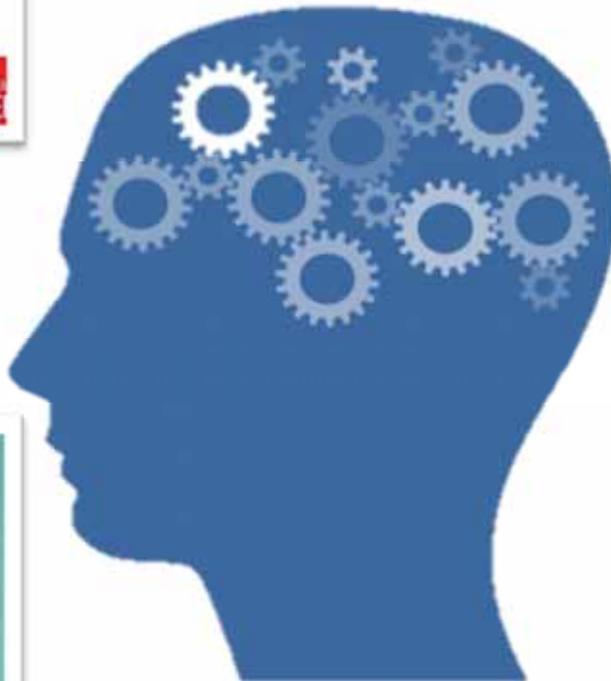
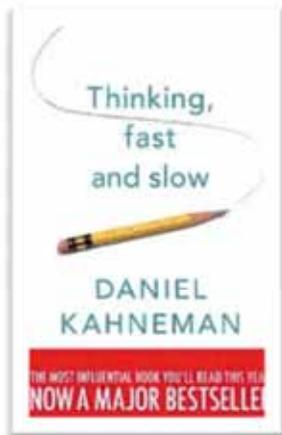


## Determinants

- Remaining differences must be individual-specific experiences and environmental factors (still 50-60%)
- ▨ Differences in parenting matter little
- ▨ Genetic differences across individuals
- Standard socio-economic factors

Source: Cronqvist and Siegel (2014)

## Psychology: investors typically in „System 1“



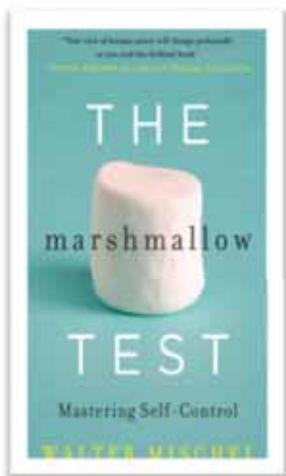
### System 1 –INTUITION

- Always on
- Effortless, fast, simultaneous
- Objective: match own mental model with world

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### System 2 - LOGIC

- Needs to be activated
- effort, slow, sequential
- Objective: check System 1 and trade off consuming now against long-term well-being



# The Last Mile Problem

Lack of relevant information

Poor decision rules

Options inconvenient

Low self control

Bild: Wikimedia Commons



Lack of relevant information

Poor decision rules

Options inconvenient

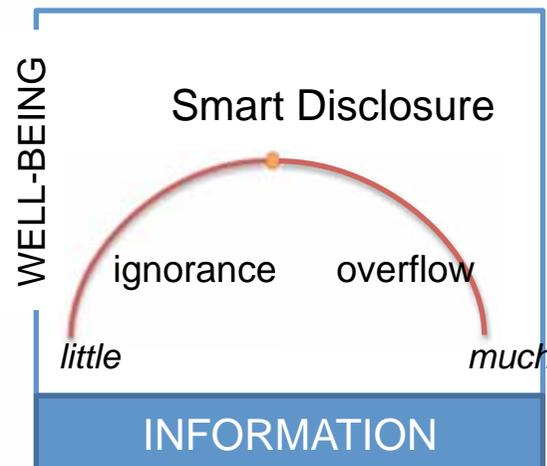
Low self control

- **Financial Education**  
works when smart & „just-in-time“
- **Defaults**  
works but paternalistic
- **Financial Advice**  
works under specific conditions
- **Goal Orientation**  
works in health

## Efficacy of smart disclosure depends on details

### Typical challenges

- Inattention
- Motivated attention (eg ostrich effect)
- Low comprehensibility
- No verifiability
- => No behavioral change plus unintended side effects such as „moral licensing“ and „insuniation anxiety“



### Solutions

- Simplification
- Sequence/Saliency
- Standards (indicators, format)
- Feedback on own behavior
- Benchmarks and peer groups
- Indirect effects through supply side responses
- => Significant reactions and learning effects

## Actionable information: smart disclosure of portfolio performance

### Returns 2014

+2.245€      8,3%      Before cost

+1.913€      7,3%      After cost

### Risk 2014

 Actual risk 2014

 Planned risk 2014

### Risk concentration 2014

45% Single stocks

Meyer/Ahslwede/Urban (2015):  
Recipients of salient portfolio reports increase diversification and reduce trading

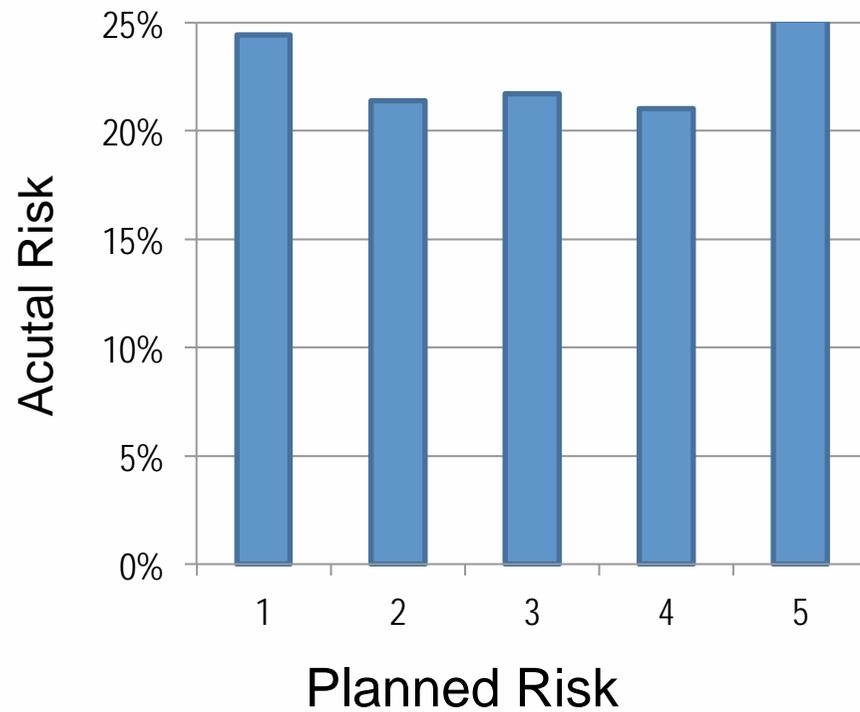
# Defaults : Robo advice with built-in sound decision rules



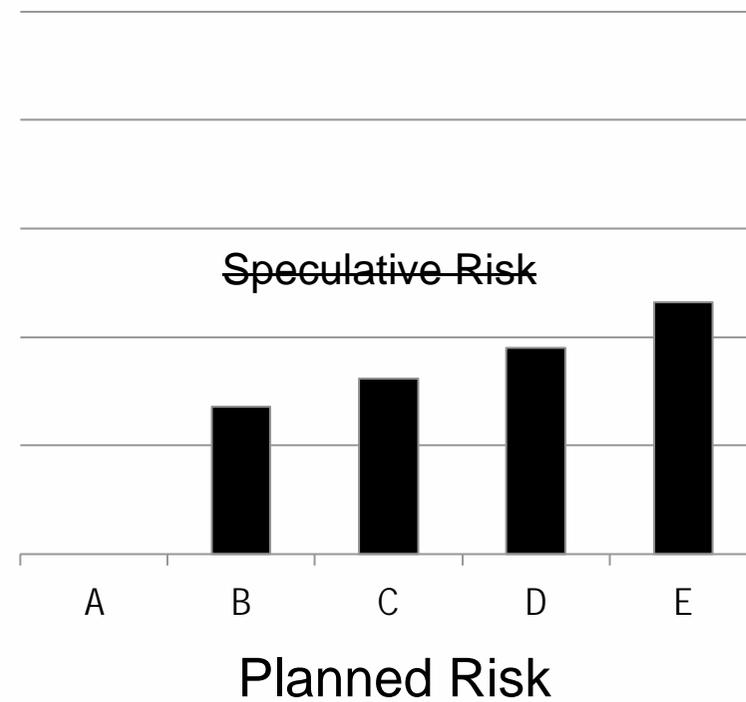
- Fully automated
- 0.25% p.a. all-in
- 0.0% <\$10k AuM

# Financial advice can bridge last mile

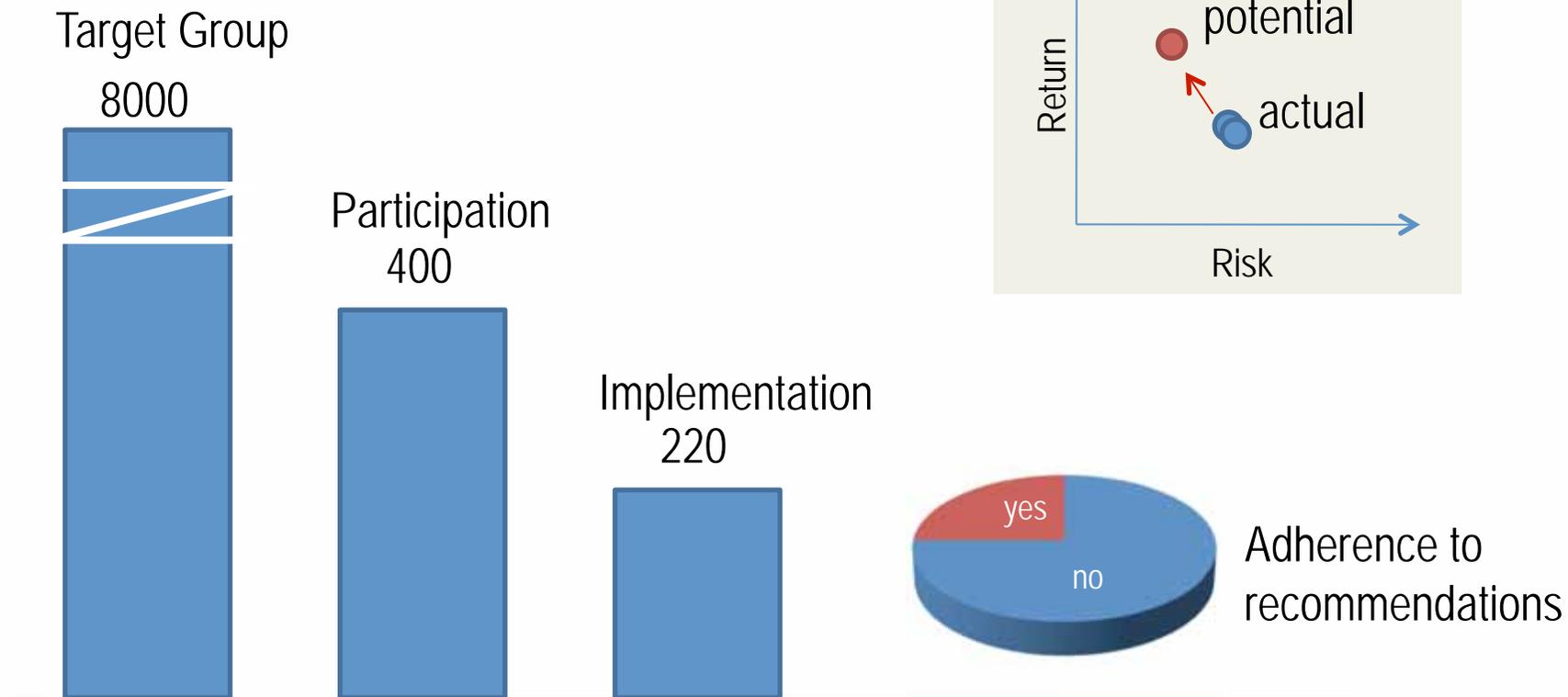
14,000 Brokerage clients



Advisor recommendations



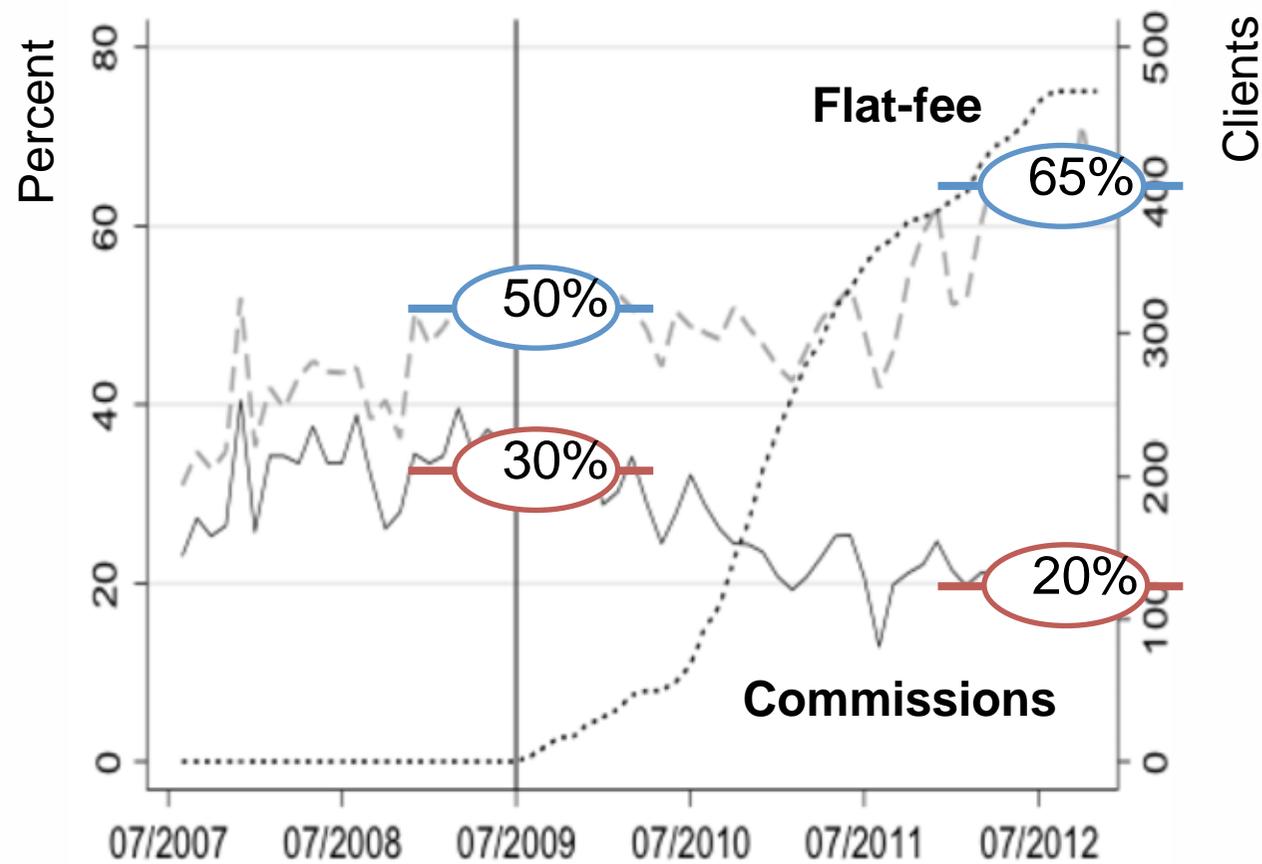
# However, even beneficial advice is hardly followed by retail investors



Source: Bhattacharya, Hackethal, Kaesler, Loos, Meyer (2012)

## Adherence to advice: flat fee schemes

*Change in adherence from change in pricing model*



Source: Loos/Meyer/Hackethal 2015

🌐 Gesamtwert Deiner Anlagen: € 29.326

📈 Gesamte monatliche Sparrate: € 114

mehr Informationen



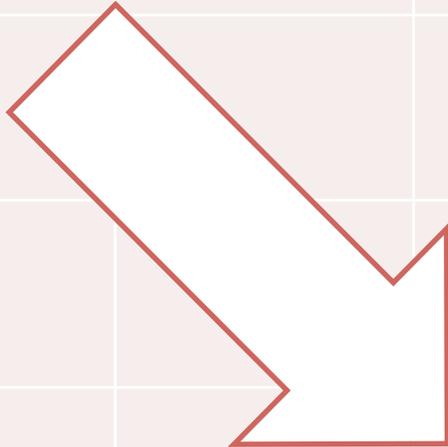
## Self control II: Interaction with virtual future self increased propensity to save money



Source: WSJ, Nov 26., 2011

# Behavioral heterogeneity requires new forms of insight generation for regulators and industry

<i>Focus</i> <i>Approach</i>	Client behavior	Industry behavior	New equilibrium
<b>Survey</b>			
<b>Laboratory experiments</b>			
<b>Administrative Data analysis</b>			
<b>Field studies</b> <ul style="list-style-type: none"> <li>• Natural experiments</li> <li>• Randomized controlled trials</li> </ul>			



FCA 2013: "Randomised Controlled Trials (RCTs) offer one of the most direct ways of getting evidence on consumer choices. RCTs are often used to assess the relative effectiveness of possible interventions."

## RCT example from FCA: how to encourage consumers to claim redress

FCA developed seven changes (“treatments”) to a firm’s letter to contact 200k customers about a failing in its sales process. Changes were applied randomly to the firm’s standard (“control”) letter.

- Envelope with message „act quickly“
- FSA Logo in the letter head
- Salient bullets at the top of the letter
- Simplification by reducing the text by 40%
- Sentence in bold that claims process would only take 5 minutes
- CEO signature
- Reminder letter after six weeks

Making all these changes to a single letter increased the response rate by six and a half times. Interestingly, the FSA logo had no effect, and adding the CEO signature even reduced the response rate slightly.

# Last Mile Problem Fixes

Smart disclosure and j.i.t. education

Sensible defaults and smart rules

Simplification and unconflicted advice

Goal orientation and opportunity cost

Industry:  
experimentation  
mode, agile  
business models

Regulator:  
competition focus,  
understand  
consumer  
behavior

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## Backup: Framework to categorize challenges and fixes

