

# Is there an „industry bias“ in private investing?

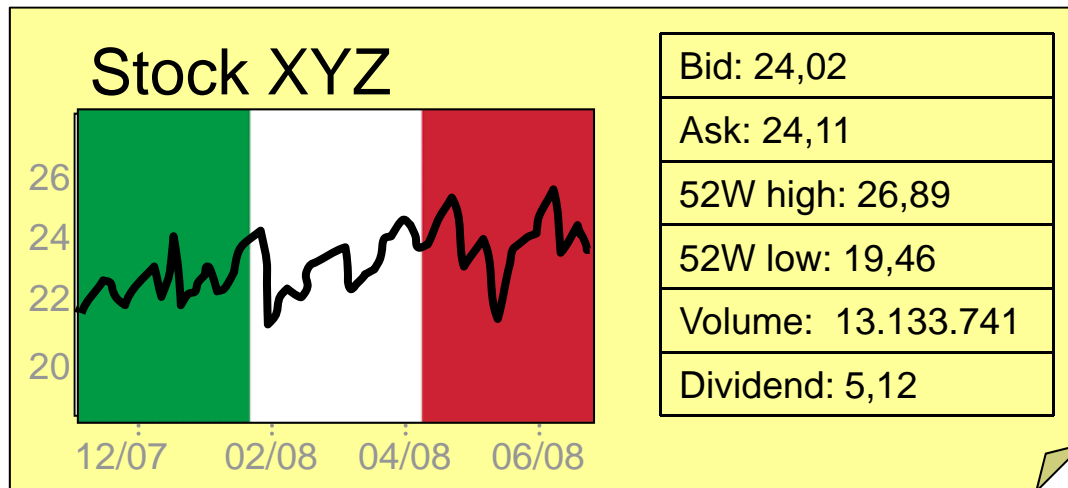
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# Introduction



- According to traditional theories of finance the willingness to invest is determined by risk and return.



- Other factors like e.g. the “home” of the company also affect investment decisions.

# The *Home Bias*

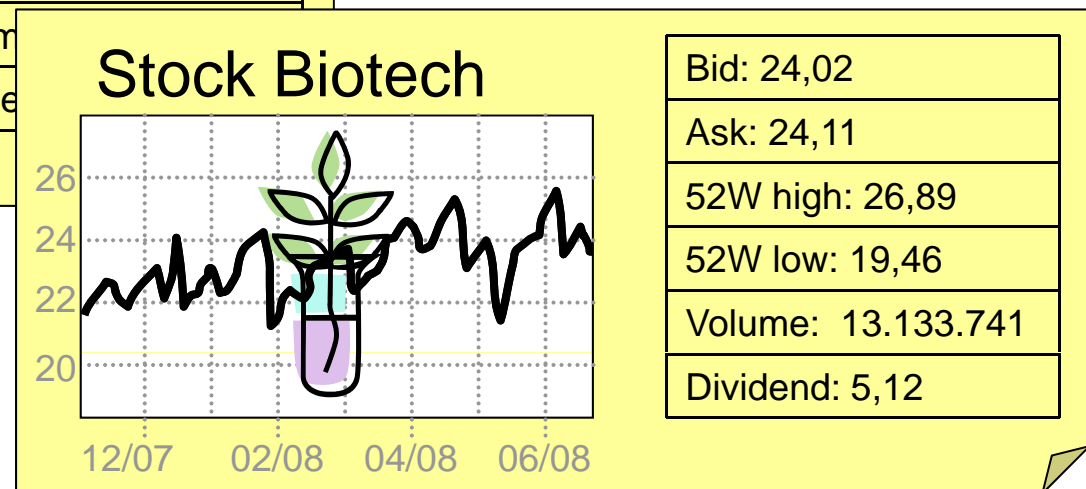
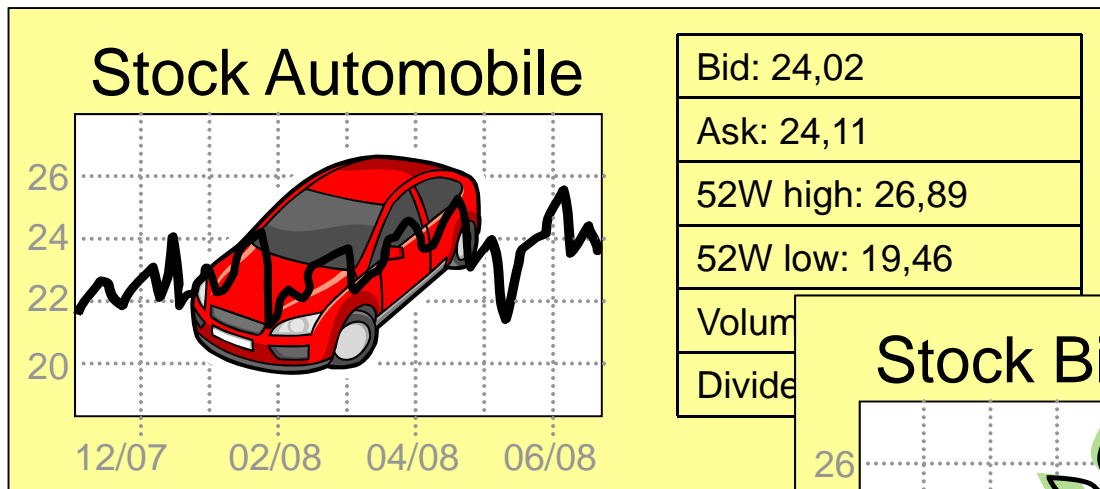


- Investors prefer domestic stocks against foreign stocks because they perceive themselves more knowledgeable about companies of their own country than about companies of foreign countries.
- **Ambiguity** = the feeling of not knowing exactly
- **Ambiguity aversion**: people avoid situations where they feel unknowledgeable

# Is there also an industry bias?



Maybe investors prefer stocks of companies producing well known commodities (e.g. automobiles) compared to stocks of companies producing unfamiliar commodities (e.g. biotechnology products).



# Method Study 1

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- 189 participants were asked to invest hypothetically in a given equity fund investing in a specific industry
- We **manipulated** the ambiguity of the industry (independent variable):
  - Well known industry: media
  - Unfamiliar industry: construction
    - Industries were selected by a pretest.
- We **measured** (dependent variables):
  - a) Knowledge about the industry group
  - b) Willingness to invest
  - c) Amount invested
  - d) Perceived risk of the fund

# Results Study 1

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## ■ Correlations:

- knowledge and willingness to invest:  $r=.08$ ,  $N=189$ ,  $p=.14$
- knowledge and amount invested:  $r=-.02$ ,  $N=69$ ,  $p=.44$
- knowledge and perceived risk:  **$r=.21$** ,  $N=184$ ,  $p=.00$

## ■ Regression analysis (willingness to invest as criterion):

- Nagelkerkes  $R^2=.10$ , Beta *knowledge*= $0.17$  ( $df=1$ ,  $p=.18$ ), Beta *risk*= $-0.48$ , ( $df=1$ ,  $p=.00$ )

# Discussion Study 1



- Ambiguity differences do not result in investment differences.
- Possible explanations:
  - contradictory effects of knowledge and perceived risk
  - knowledge differences are too weak
  - *comparative ignorance hypothesis* (Fox & Tversky, 1995): ambiguity affects behavior only in situations, where ambiguous and non-ambiguous options are presented together
  - ambiguity really does not play a crucial role when investing in different industry groups

# Image effects?

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- Some industries are perceived more positively than others.
- People declare to be more willing to invest in industries with a good image than in industries with a bad image. (MacGregor, Slovic, Dreman & Berry, 2000)
- Can investment choices be explained by the image of the industries?



# Method Study 2

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- 131 participants were asked to invest hypothetically in a given set of equity funds.
- We **varied** the industry of the funds (independent variable):
  - Industries differed with regard to image.
    - Industries were selected by a pretest in which participants rated the image of several industry groups on a semantic differential.
- We **measured** (dependent variables):
  - Image of the industry group
  - Amount invested
  - Perceived risk of the funds
  - Perceived return (probability and magnitude of possible gains)

# Results study 2

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## ■ Correlations:

- image and amount invested:  $r = .43$ ,  $N = 393$ ,  $p = .00$
- image and perceived risk:  $r = .02$ ,  $N = 393$ ,  $p = .32$
- image and probability of gain:  $r = .12$ ,  $N = 393$ ,  $p = .02$
- image and magnitude of gain:  $r = .07$ ,  $N = 393$ ,  $p = .17$

## ■ Regression analysis (amount invested as criterion):

corr.  $R^2 = .27$

Beta *image* =  $.42$  ( $p = .00$ )

Beta *risk* =  $-.14$  ( $p = .01$ )

Beta *probability of gain* =  $.21$  ( $p = .00$ )

Beta *magnitude of gain* =  $-.12$  ( $p = .01$ )

# Discussion Study 2

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- The investment decision seems to be substantially influenced by the image of the industry.
- Willingness to invest can be predicted better by image than by risk- and return-features.
- Critique:
  - Decisions did not have real monetary consequences.
  - Maybe participants were not motivated to evaluate complex financial information and relied on information that is easy to assess.

# Questions for further research

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- Can image effects also be obtained in investment decisions with real monetary consequences?
- How can private investors be encouraged to use risk and return information more appropriately?
  - Design of the decision situation
    - Motivation
    - Expertise/experience
  - Design of the information
    - Salience of risk and return-information

Thank you!

# Theoretical note

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- Results can be explained by recent dual-process-models of decision making (Glöckner & Betsch, 2008, Kahneman & Frederick, 2001, Loewenstein, Weber, Hsee & Welch, 2001):
  - System 1 (The intuitive system):
    - Information processing is rapid, effortless, parallel, and tacit
    - Used information is salient, affective, easy to evaluate
  - System 2 (The deliberate system):
    - Information processing is slow, effortful, serial, and controlled
    - Used information is abstract, neutral, quantitative
  - Decision making always starts with system 1. Processing of system 2 is then influenced by the results of system 1 processes.
  - Qualitative information such as the image or the “home” of an investment option are more salient and easier to evaluate than quantitative risk-return-information and therefore more likely to affect investment decisions.

# Pretest study 2 (semantic differential)



Results of the pretest  
(N=36)

Examples of the items:

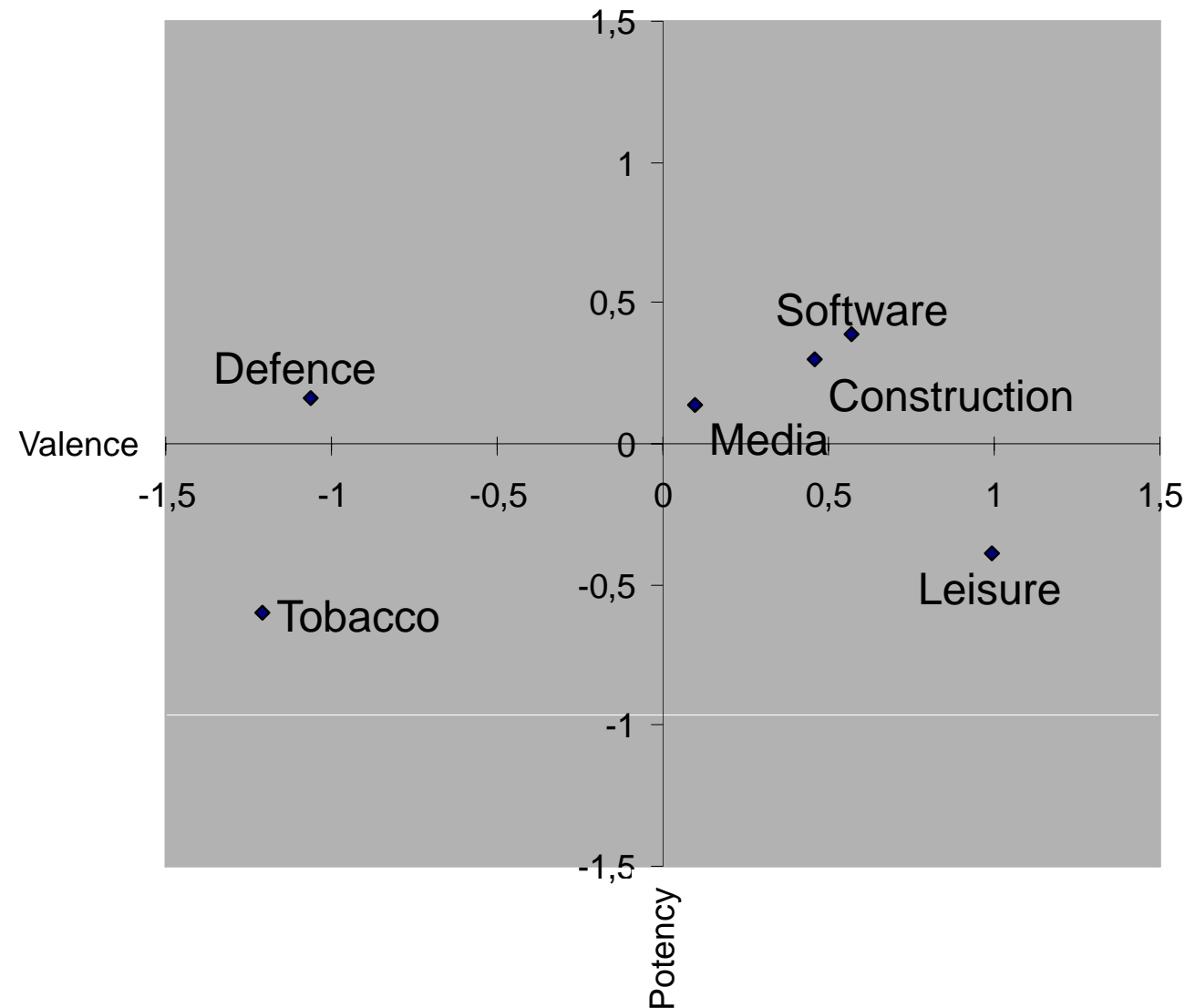
pleasant – unpleasant

useful – useless

exciting – boring

stable – instable

strong - weak

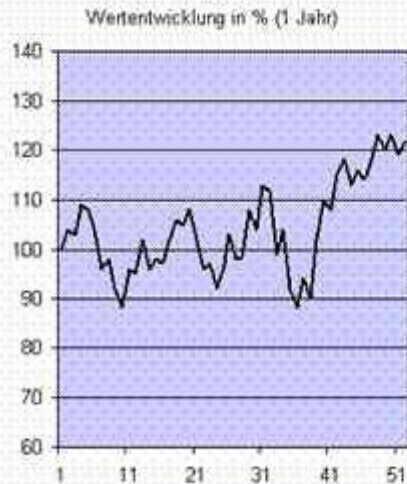


## Die Fonds

### MaxInvest Security Industries

Der MaxInvest Security Industries ist ein Aktienfonds, der nur in Aktien von Unternehmen der Rüstungsindustrie investiert.

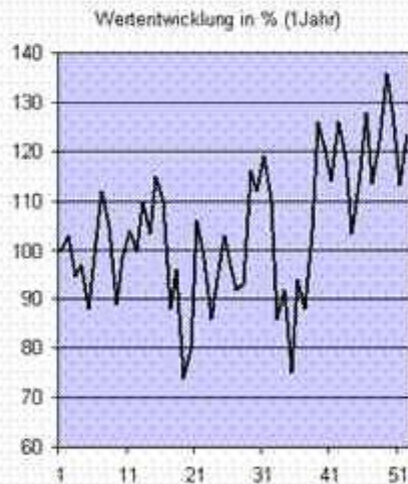
Fondstyp	Aktienfonds
Branche	Rüstung
Fondswährung	EUR
Ausgabenpreis	120,52 EUR
Rücknahmepreis	119,32 EUR
Mindestanlagebetrag	beliebig



### MaxInvest Global Leisure

Der MaxInvest Global Leisure ist ein Aktienfonds, der nur in Aktien von Unternehmen der Freizeitbranche investiert.

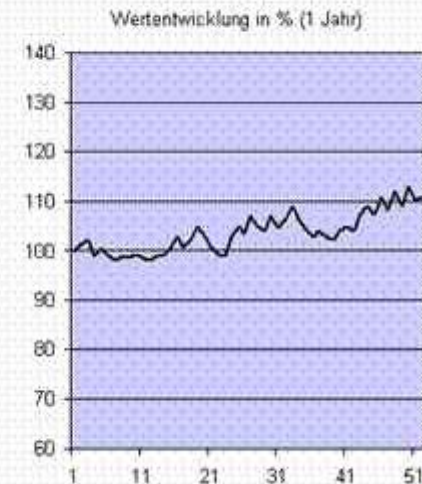
Fondstyp	Aktienfonds
Branche	Freizeit
Fondswährung	EUR
Ausgabenpreis	119,13 EUR
Rücknahmepreis	118,02 EUR
Mindestanlagebetrag	beliebig



### MaxInvest Construction

Der MaxInvest Construction ist ein Aktienfonds, der nur in Aktien von Unternehmen der Maschinenbaubranche investiert.

Fondstyp	Aktienfonds
Branche	Maschinenbau
Fondswährung	EUR
Ausgabenpreis	122,11 EUR
Rücknahmepreis	120,89 EUR
Mindestanlagebetrag	beliebig





# References

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