

---

# Financial Literacy and Financial Decision Making: Status quo and open questions

**Martin Weber**

UNIVERSITY OF  
MANNHEIM

---

Financial Education and Financial Awareness:  
Challenges, Opportunities ,and Strategies

Istanbul 2011

## Financial Literacy: Review of the current situation

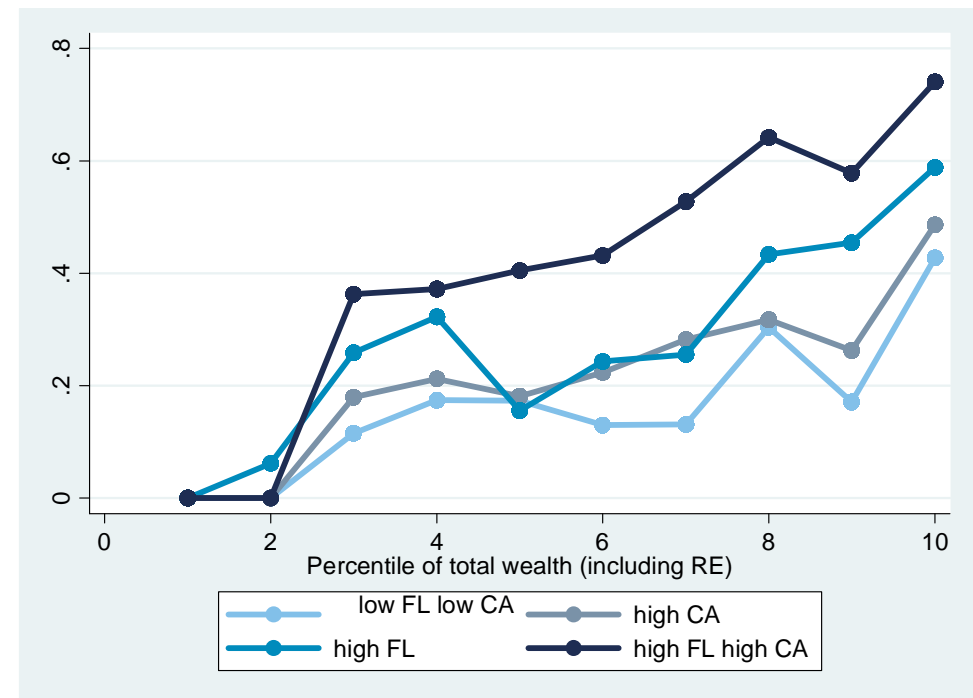
---

- Goal of Financial Literacy: to enhance financial decision making
- Elements of Financial Literacy (e.g. Lusardi (2008), Weng (2008)):
  - Institutional knowledge
  - Mathematical knowledge
  - Economic knowledge
- We know that Financial Literacy is generally low
- We need more research:
  - i. About the influence of Financial Literacy
  - ii. How to teach “which” Financial Literacy
  - iii. How to enhance Financial Literacy “on the spot”

# Influence of Financial Literacy on Financial Decision Making

## Financial Literacy and Stock Market Participation in Germany (SAVE-Data)

Probit Regression	Stock Market Participation
Financial Literacy Score	0.35*** (0.03)
Cognitive Ability Score	0.12 (0.03)
Risk Attitude	0.07*** (0.01)
Gender	-0.02 (0.07)
Age	0.00 (0.00)
Net Income / 1000	0.15*** (0.03)
Education	0.04* (0.02)
Observations	2,222



Kaufmann/Weber (2011)

- ⇒ People with higher FL and higher CA are more likely to invest in stocks (only sig. for FL)
- ⇒ People with high FL **and** high CA invest sig. more than all the others (ttest, p=0.00) and also more than people with 'only' high FL (ttest, p=0.00).

## First Remark: Influence of Financial Literacy - Positive relation

Study	Design	Major Results
Lusardi/ Mitchell (2006)	Questionnaire data from the 2004 Health and Retirement Study (HRS), regression analysis	Financially illiterate subjects save less for their retirement
Calvet/ Campbell/Sodini (2007)	Portfolio data of all investors in Sweden (1999-2002), regression analysis	Financial Literacy proxies (e.g. wealth) are positively (negatively) related to portfolio diversification (disposition effect)
Weber/ Welfens (2008)	Portfolio data of customers of a large German discount broker	Financially more literate subjects exhibit a lower disposition effect
Borgsen (2010)	Questionnaire data from German consumer protection agency , regression analysis	People with a higher level of Financial Literacy are more likely to accept financial advice

Low levels of Financial Literacy are associated with puzzling financial decisions.

## First Remark: Influence of Financial Literacy - Inconclusive connection

Study	Design	Major Results
Meier/Sprenger (2009)	Combination of field study and experimental data (2007), regression analysis	“Financial Literacy as an investment“: Only patient investors are willing to acquire financial information
Cole/Shastry (2009)	Questionnaire data from the US Census (1980, 1990, 2000), regression analysis	Financial education programs have no influence on individual saving decisions
Guiso/Jappelli (2008)	Customer survey data from Italian bank (2007), regression analysis	Strong correlation between Financial Literacy and diversification but only weak link to perceived financial knowledge
Müller/Weber (2010)	Survey with readers of the „Frankfurter Allgemeine Zeitung“, regression analysis	Positive correlation between Financial Literacy and Overconfidence: Literate participants overwhelmingly invest actively

It is not yet clear, whether Financial Literacy really causes better financial decision making.

## **Second Remark: How to teach “which” Financial Literacy?**

---

### In General:

- Focus on basic and simple messages which stem from generally accepted (and also academic) wisdom (“Grandma”-idea), e.g.:
  - Higher expected returns require higher risk taking
  - There is no free lunch in investment except diversification
  - Look at the incentives of sales people

### For specific situations:

- Increase context-specific Financial Literacy, i.e. specific knowledge which people should have to be able to make informed judgments and effective decisions in a particular situation (e.g. buying a house)
- Educate people for those decisions which are relevant right now



Most studies focus on the effects of Financial Literacy on e.g. investment behavior. Little is known about how to “optimally” teach Financial Literacy

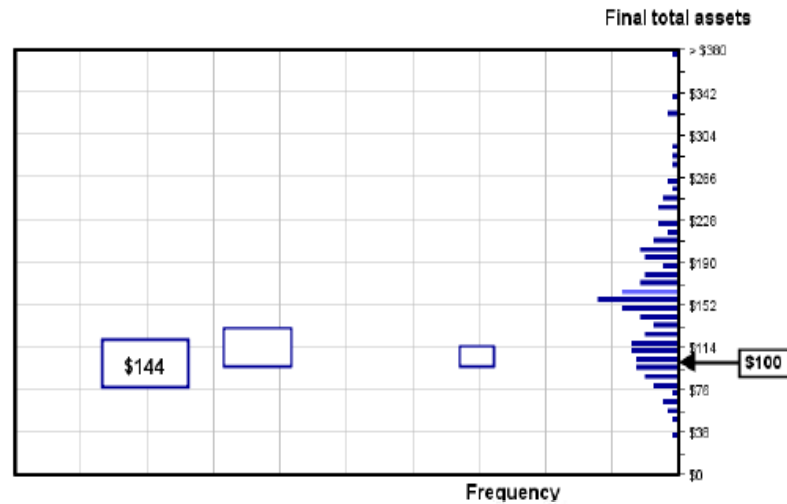
## Third Remark: Enhance Financial Literacy “on the spot”

---

- Examples: saving for retirement, being a new parent, buying a house, inheritance,...
- Compulsory:
  - “TÜV”-certified finance seminars (with continued education)
  - TÜV: German organization which independently tests and certifies services and products (in particular cars)
  - Regular finance “check-ups”
- Voluntarily:
  - Learning methods using tools (e.g., risk tool → next slide)
  - Offering better products or services (e.g., SMART)

# Third Remark: Enhance Financial Literacy “on the spot”

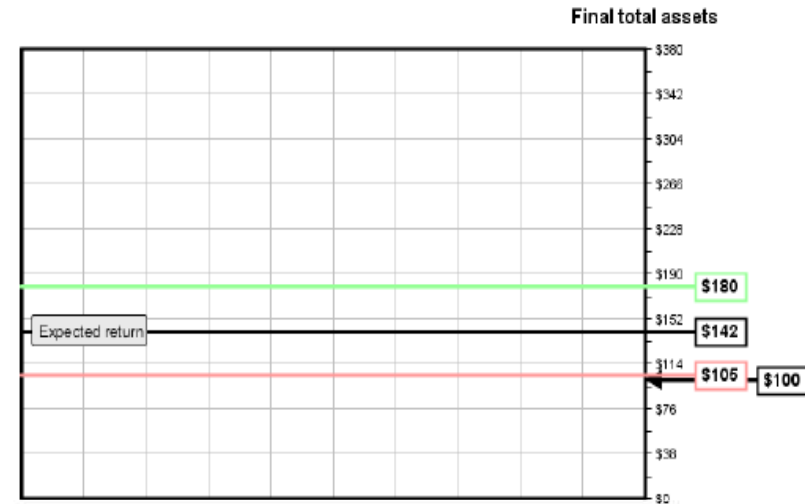
- Risk tool (Haisley/Kaufmann/Weber (2010)):



Start simulation  Fast mode Show final result

Back Investment only in Fund B Next

As soon as the button 'Show final result' appears, you can directly display the final result of this simulation.



Amount to invest in Fund A 31 Amount to invest in Fund B 69

Fund A < Fund B (As a reminder, fund B was the riskier fund.)

Back Risk slider Next

- Nudging



## Summary

---

- Financial Literacy is the ability to understand finance – however, we know that Financial Literacy is generally low
  - We should ...
    - know more about the positive (and potentially also opposing) effects of Financial Literacy and about
    - how Financial Literacy should be taught effectively
- ⇒ ... **educate people “on the spot”**