## Lecture 1 DHX\_MET1 Methodology 1

Stanislav Ježek

Faculty of Social Studies MU

## Overview

- Course introduction
- Research with people
- The process of research

## Course introduction

- Textbook
- Consultations Wednesdays afternoon, Fridays after econometrics
- Final assignment project proposal, due January 31, 2020
- Final exam 1st week in January, based on textbook, , or Friday 13 December

## This course

- Is an introduction to social-science research
- Research of people's behavior, emotions, beliefs...
- Research of something else using data about people
- Assuming no previous knowledge, just some exposure to research
- Assuming you have a broad dissertation topic but not a particular focus yet
- Assuming research with people may not be a significant part of your dissertation

## Follow-up elective course DHX\_MET2

Workshop

## An example to start.

### Financial literacy and stock market participation<sup>☆</sup>

Maarten van Rooij a,b, Annamaria Lusardi c,b,d,\*, Rob Alessie e,b,f

- <sup>a</sup> Dutch Central Bank, The Netherlands
- <sup>b</sup> Netspar, The Netherlands
- <sup>c</sup> Department of Economics, Dartmouth College, Hanover, NH 03755, United States
- d NBER. United States
- <sup>e</sup> University of Groningen, The Netherlands
- <sup>f</sup> Tinbergen Institute, The Netherlands

#### ARTICLE INFO

#### Article history:

Received 9 October 2008

Received in revised form

1 March 2010

Accepted 2 August 2010

Available online 10 March 2011

#### JEL classification:

D91

G11

D83

#### Keywords:

Portfolio choice

Knowledge of economics and finance

Financial sophistication

Risk diversification

Learning from peers

#### ABSTRACT

We have devised two special modules for De Nederlandsche Bank (DNB) Household Survey to measure financial literacy and study its relationship to stock market participation. We find that the majority of respondents display basic financial knowledge and have some grasp of concepts such as interest compounding, inflation, and the time value of money. However, very few go beyond these basic concepts; many respondents do not know the difference between bonds and stocks, the relationship between bond prices and interest rates, and the basics of risk diversification. Most importantly, we find that financial literacy affects financial decision-making: Those with low literacy are much less likely to invest in stocks.

© 2011 Elsevier B.V. All rights reserved.

#### Financial advisors: A case of babysitters?

Andreas Hackethal a, Michael Haliassos a,c,d, Tullio Jappelli b,c,e,\*

<sup>a</sup> House of Finance, Goethe University Frankfurt, Grueneburgplatz 1, D-60323 Frankfurt am Main, Germany

<sup>b</sup> Department of Economics, University of Naples Federico II, Via Cinzia 45, 80126 Naples, Italy

<sup>c</sup> CEPR, Centre for Economic Policy Research, London, United Kingdom <sup>d</sup> CFS, Center for Financial Studies, Frankfurt, Germany

<sup>e</sup> CSEF, Centre for Studies in Economics and Finance, Naples, Italy

#### ARTICLE INFO

Article history:

Received 1 March 2011

Accepted 31 August 2011

Available online 8 September 2011

JEL classification:

G1

D8

Keywords:

Financial advice

#### ABSTRACT

We use two data sets, one from a large brokerage and another from a major bank, to ask: (i) whether financial advisors are more likely to be matched with poorer, uninformed investors or with richer and experienced investors; (ii) how advised accounts actually perform relative to self-managed accounts; (iii) whether the contribution of independent and bank advisors is similar. We find that advised accounts

offer on average lower net returns and inferior risk-return tradeoffs (Sharpe ratios). Trading costs contribute to outcomes, as advised accounts feature higher turnover, consistent with commissions being the main source of advisor income. Results are robust to controlling for investor and local area characteristics.

The results apply with stronger force to bank advisors than to independent financial advisors, consistent with greater limitations on bank advisory services.

© 2011 Elsevier B.V. All rights reserved.

Portfolio choice Household finance

## Understanding financial information used to assess small firm performance

### An Australian qualitative study

#### Abstract

**Purpose** – The purpose of this paper is to investigate the reality of financial and management accounting in a small group of small firms. Specifically, from the owner's perspective, an exploration is undertaken to see what financial information is collected, how it is used (or not) to make business decisions and evaluate the firm's performance, and the role played by the accountant in that process.

**Design/methodology/approach** – A phenomenological paradigm underpins this exploratory study. Semi-structured interviews were undertaken with the owners of ten small firms, where the focus was on understanding what happens in an organisational setting, as opposed to theory and textbook practice.

**Findings** – The qualitative data supported prior research in other countries. The in-depth analysis revealed a very basic understanding of accounting information and problems with the financial literacy amongst these small firm owners. Accounting reports were not widely produced or used, so an informal assessment, such as how much cash was in the bank, was the primary means of assessing business performance. Accountants were used for taxation services, although some owners sought more general business advice.

**Originality/value** – An understanding is developed of why there might be a gap between textbook rhetoric and reality of accounting practice in small firms. The conclusion is that accounting textbooks need to include more information about the reality of financial management in small firms.

**Keywords** Financial information, Accountants, Australia, Small enterprises, Financial reporting

Paper type Research paper

## Discounting financial literacy: Time preferences and participation in financial education programs ☆

Stephan Meier <sup>a</sup>  $\stackrel{\triangle}{\sim}$  M, Charles D. Sprenger <sup>b</sup> M

**⊞** Show more

https://doi.org/10.1016/j.jebo.2012.02.024

Get rights and content

#### Abstract

Many policymakers and economists argue that financial literacy is key to financial well-being. But why do many individuals remain financially illiterate despite the benefits of being financially informed?

This paper presents results from a field study linking individual decisions to acquire financial information to a normally unobservable characteristic: time preferences. We elicited time preferences using incentivized choice experiments for all individuals to whom a financial education program was offered. Our results show that individuals who choose to acquire personal financial information have substantially higher discount factors than individuals who do not. The results can be interpreted as non-participants discount the benefits of being financially literate more.

## Asking For Help: Survey And Experimental Evidence On Financial Advice And Behavior Change

Angela Hung and Joanne Yoong

**RAND Corporation** 

First draft: 08/08/2009 This draft: 01/04/2010

#### **Abstract**

When do individuals actually improve their financial behavior in response to advice? Using survey data from current defined-contribution plan holders in the RAND American Life Panel (a probability sample of US households), we find little evidence of improved DC plan behaviors due to advice, although we cannot rule out problems of reverse causality and selection. To complement the analysis of survey data, we design and implement a hypothetical choice experiment in which ALP respondents are asked to perform a portfolio allocation task, with or without advice. Our results show that unsolicited advice has no effect on investment behavior, in terms of behavioral outcomes. However, individuals who actively solicit advice ultimately improve performance, in spite of negative selection on financial ability. One interesting implication for policymakers is that expanding access to advice can have positive effects (particularly for the less financially literate); however, more extensive compulsory programs of financial counseling may be ultimately ineffective.

## Research with/about people

...just like any other science,
systematic, data-based, critical investigation into a problem
except...

- People study people
- People react to being studied
- People react to findings
- There are other people besides the researcher and the participants who have other interests...

... it is difficult to achieve as much control as we would wish for.

#### SOME COMMONLY RESEARCHED AREAS IN BUSINESS

- 1. Employee behaviors such as performance, absenteeism, and turnover.
- 2. Employee attitudes such as job satisfaction, loyalty, and organizational commitment.
- 3. Supervisory performance, managerial leadership style, and performance appraisal systems.
- **4.** Employee selection, recruitment, training, and retention.

Validation of performance appraisal systems.

- 6. Human resource management choices and organizational strategy.
- **7.** Evaluation of assessment centers.
- **8.** The dynamics of rating and rating errors in the judgment of human performance.
- 9. Strategy formulation and implementation.
- 10. Just-in-time systems, continuous-improvement strategies, and production efficiencies.
- 11. Updating policies and procedures in keeping with latest government regulations and organizational changes.
- 12. Organizational outcomes such as increased sales, market share, profits, growth, and effectiveness.
- 13. Consumer decision making.
- 14. Customer relationship management.
- 15. Consumer satisfaction, complaints, customer loyalty, and word-of-mouth communication.
- 16. Complaint handling.

- Management employees, leaders...
- Marketing customers
- Finance professionals, customers
- Accounting?

Social science x Business research

General answers valid for populations x answers valid

for business (segment)

Basic & aplied x mostly applied

## What do we need?

- Observe & measure people
- Make use of people's observations of themselves Interview them
- Use the products of people's activity to learn about them
- Achieve enough control over people to be able to experiment with them without limiting their rights
- Select the right people as sources of information and Persuade them to participate
- Make sense of all the data through analysis while humbly taking into account all the things that have or might have gone wrong

## Why? What for?

- To be able to plan & carry out research successfully.
- To be a critical consumer of research
- To be a manager knowing when to get a consulting firm to do research and recognize if they do a good job
- To be a social scientist or a psychologist in an economic field

## What is research?

Activity producing new KNOWLEDGE by

- Posing a question to which the knowledge would be an answer
- Gathering information from which we could rationally infer the answer
- Producing the answer and estimating uncertainties

## What is (scientific) research?

Activity producing new KNOWLEDGE

KNOWLEDGE is a BELIEF about the world that is TRUE based on some argument

The type of ARGUMENTATION gives different meanings of TRUTH

### A little epistemological detour

## Truth as Correspondence and

Coherence Truth based on Corespondence

- A belief (a proposition) about the world is true when it is consistent with the actual state of the world
  - But we must believe that there is some actual world and that we are able to get to know its state – epistemological realism (objectivism)
  - It is intuitively easy to believe in but complicated by language

#### Truth based on **Coherence**

- A belief about a world is true when it is consistent with other beliefs about the world within a domain of discourse
  - The world is what we believe it is, it is made of our beliefs epistemological idealism (subjectivism)
  - While it is serious philosophy to try to defend this position for the natural world, it is easy to believe this about the social world and people's minds

A little epistemological detour

## The Pragmatic position

- Truth considered in the context (of inquiry) not absolutely
- Truth as the correspondence with the limit of infinite scientiufic investigation – Peirce, Dewey
- True are beliefs that work (have effect) when aplied in practice – William James

## A little epistemological detour Epistemology

- What does it mean to know?
- What is knowable?
- How can we get to know what is knowable?

Answers come in packages "-isms"

Empiricism, positivism, realism – sensing the real world Constructivism – creating a meaningful intersubjective world Pragmatism – relaxed, contextuial empiricism, if it works...

**Critical realism** – Roy Bhaskar – empiricism-constructivism hybrid – social phenomena are construed and become part of the real world. This increases uncertainty but doesnt make empirical social science meaningless.

What does it mean to KNOW something? How do we know we have LEARNED something? How do we know whether our belief is TRUE?

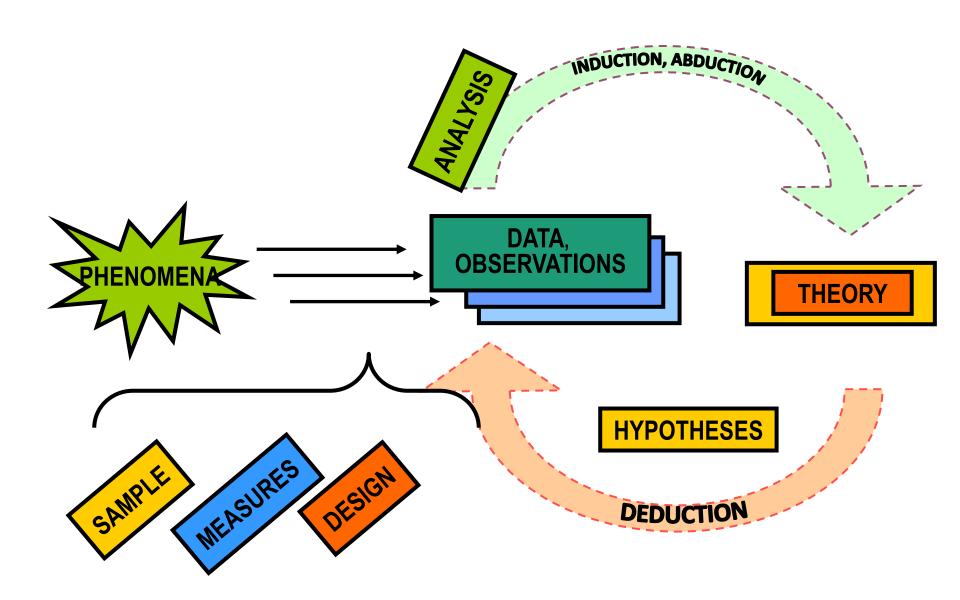
- Refuse to doubt and stick to TRADITION
- Delegate the decision to AUTHORITY
- Cast away authority (and data) and A PRIORI rationally argue the (obvious) truth
- Do SCIENCE by combining data (facts) with previous beliefs

## The Process of Science Hypothetico-deductive method

- 1. Identify a broad problem area. Define the problem statement or research question.
- 2. Identify relevant theory

- 3. Develop hypotheses from theory.
- 4. Determine measures, procedures to create data
- 5. Collect data
- 6. Analyze data and compare findings with expectations
- 7. Evaluate conclusions and update theory (in writing).

### THE EMPIRICAL CYCLE



## The inductive method

- Developing theory from individual observations
- No "pure" induction there is always some preexisting theory (beliefs)
- Starting from "pre-conceptual" theory so far we have no concepts/variables allowing us to describe the phenomenon
- Either
  - starting from existing rich data
  - or creating rich data free from (most) preconceptions

# Values of scientific research i.e. ways to make the argument for truth more convincing and open to improvement

- Purposiveness focus
- Rigor unbroken "chain of evidence" from theory to data and confusions
- Testability of hypotheses
- Replicability even great rigor does not mean certainty
- Precision & confidence knowledge thereof
- Objectivity intersubjectivity & transparency of the chain of reasoning
- Generalizability knowledge thereof
- Parsimony sufficient simplicity

### I hold that the following eight principles are self-evident and true:

- Research is an *inquiry* that results in an *addition to* knowledge
- The research question and findings need to be discussed in the context of prior knowledge
- Research always involves making assumptions different researchers inevitably work within different paradigms
- All research involves making practical and theoretical choices, and must embody a set of ethical principles
- Procedures used in the research should be systematic and rigorous, and must be clear enough for others to replicate
- The research findings should be clear and convincing to others
- Research is *rarely conclusive* research usually leads to ideas for further research
- We undertake research because we care and want to make a difference - writing-up, *publication* and sharing the findings are a part of the research process

## Types of research by purpose

#### Descriptive

- what phenomena are there and how frequent they are
- Classifications as a way to understand the variability

#### Predictive

- How is the probability of one phenomenon related to the probability of other phenomena
- How well can we predict

#### Causal

- Can we show how one phenomenon affects another?
- How things work prediction and explanation in one

### Understanding

- How people understand situations, how they experience them and what language they use to communicate about this
- What are relevant classes of phenomena, variables

## Types of research by design

- Surveys
- Observation studies
- Experiments lab or field, quasiexperiments
- Qualitative studies
- Ex-post-facto, post-hoc studies
- Case studies

#### Scenario 2 Reasons for absenteeism

A university professor wanted to analyze in depth the reasons for absenteeism of employees in organizations. Fortunately, a company within 20 miles of the campus employed her as a consultant to study that very issue.

#### Scenario 3 Effects of service recovery on customer satisfaction

A research scientist wants to investigate the question: What is the most effective way for an organization to recover from a service failure? Her objective is to provide guidelines for establishing the proper "fit" between service failure and service recovery that will generalize across a variety of service industries.

## Summary

- Research is for making knowledge of various levels of generality personal, local, company, country, mankind...
- Methodological knowledge is good for doing research, consuming it, and contracting it
- Many research questions in economic fields are about people –
   either directly (object of interest) or indirectly (sources of data)
- Research of people (social world) is complicated by its unstable nature, reactivity and variability of people, ethical requirements etc.
- The process of scientific research with people is only partially the same as in natural sciences and the level of uncertainty is much higher.
- While there are other ways of justifying beliefs, scientific research is the one most careful and transparent in the argument WHY something is true.

## What next?

For efficiency we need to make best use of what we already know. We know a lot, maybe too much in the way of quantity and too little in the way of quality.

Next we will identify available theory and use it to develop a sound research question.