




A behavioural approach to farmer decision-making: The case of sustainable agriculture

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The views expressed in this presentation are those of the authors and do not necessarily reflect the official European Commission's view on the subject

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OUTLINE OF THE PRESENTATION

I. Introduction
II. Farmers' decision making
III. The 3 types of motives
    a. Dispositional factors
    b. Social factors
    c. Cognitive factors
IV. Policy implications for CAP 2020+
V. Research agenda implications

I. INTRODUCTION

Experiments gaining importance in Ag Policy assessment

Experiments ≠ Behavioural Insights but related…

How can we better understand the relationship between both?

- Structure behavioural factors involved in farmer decisions
- Identify policy options under CAP 2020+ that can be informed by experiments
  - Focus on environment – higher ambition
  - Focus on voluntary – new Pillar I payments

II. FARMERS' DECISION MAKING PROCESS

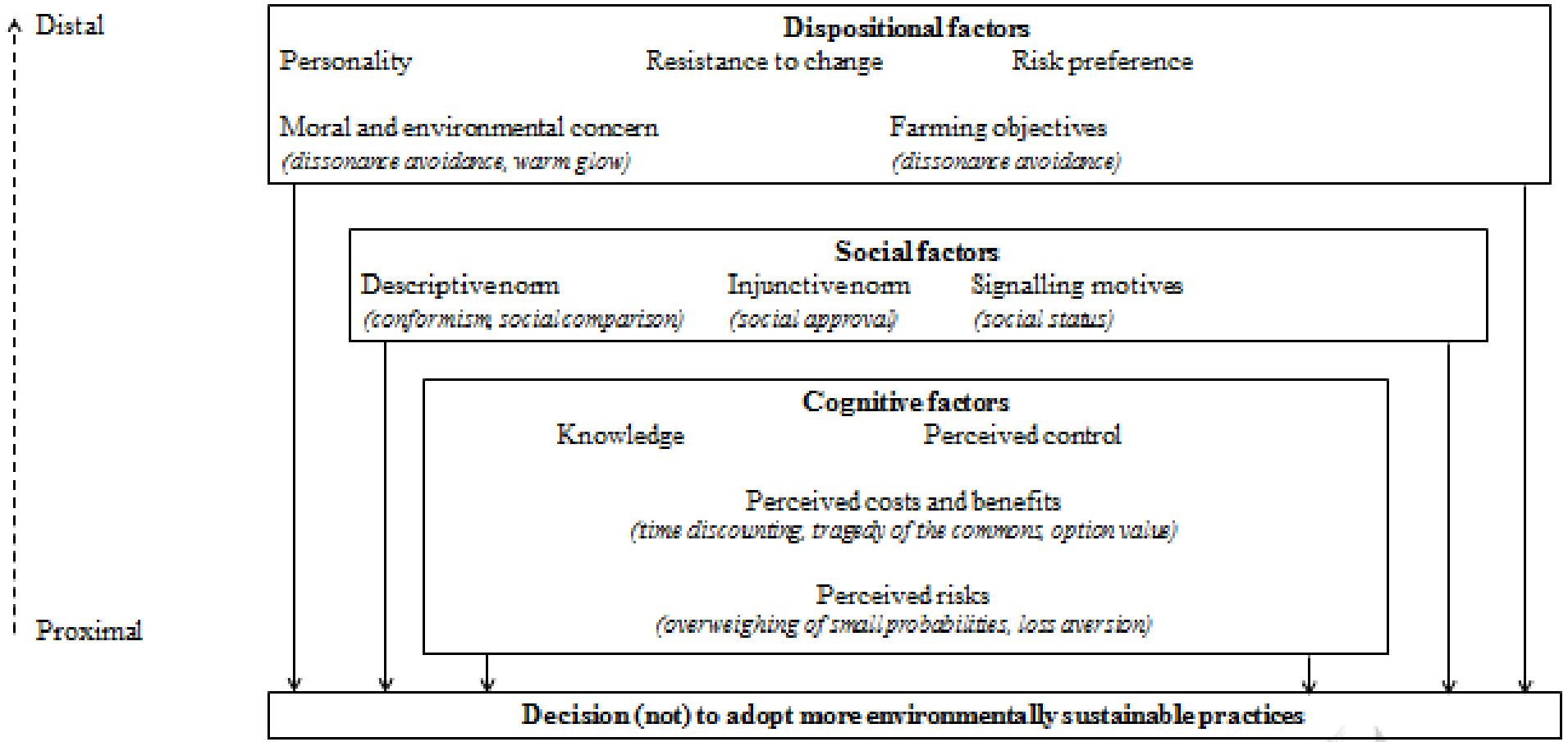
System 2 thinking rather than System 1

However System 2 thinking is not bias proof

Transfer of lessons from nudging not clear

II. FARMERS' DECISION MAKING PROCESS

Framework for analysis



III. THE THREE TYPES OF MOTIVES: dispositional

Personality:

- Extraversion, openness and conscientiousness

Resistance to change:

- Linked to personality traits + inertia
- Status quo bias – CE literature evidence for farmers

Risk preference:

- Aversion to risk of farmers
- Temporal dynamics – mavericks and followers

III. THE THREE TYPES OF MOTIVES: dispositional

Moral and environmental concerns:

- Concerns for others and the environment
- Avoidance of guilt
- Moral licensing – risk of rebound effects in other domains

Farming objectives:

- Beyond farming as a business
- Continuum of trade-offs

III. THE THREE TYPES OF MOTIVES: dispositional

Policy options to leverage adoption

- *Short-term:*
  - Segmentation based on personality – or proxies
  - Optimal mix of voluntary and compulsory
  - Targeting based on specific events:
    - Entry into farming
    - Investments
- Long term:
  - Reduce risk – direct payments
  - Social recognition, change in advisory services

III. THE THREE TYPES OF MOTIVES: Social

Descriptive norms (*what people do*):

- Clustering of adoption in specific areas or groups
- Threshold effects - (*changes in risks and benefits too*)

Injunctive norms *(what people think you should do):*

- Social advice and pressure (processor, advisors, consumers)

Signalling motives:

- Improving social status and recognition
- The agronomic benchmark vs the invisible environment

III. THE THREE TYPES OF MOTIVES: Social

Policy options to leverage adoption

- *Descriptive norms*
  - Targeting regions with low adoption
  - Focusing on collective bonuses
  - Nudging farmers when adoption is high
- *Injunctive norms*
  - Increasing awareness of other actors
- *Social signalling*
  - Bring to light environmental performance
  - Certification / labelling

III. THE THREE TYPES OF MOTIVES: cognitive

Knowledge:

- Knowing the technology
- Knowing the policy

Perceived control:

- Freedom to farm
- Flexibility in providing the public goods

Perceived costs and benefits:

- Overestimating costs
- Uncertainty of economic benefits
- Timing of costs and benefits
- Recognition of environmental benefits
- Concept of profit (NPV vs ROA)

III. THE THREE TYPES OF MOTIVES: cognitive

Perceived risks:

- Increased risk – costs and benefits
- Kind of risks considered
- Asymmetric discounting – frequent vs rare events
- Loss aversion

III. THE THREE TYPES OF MOTIVES: cognitive

Policy options to leverage adoption

- *Knowledge:*
  - Advisory services – expand scope
  - Consumer awareness
- *Perceived control:*
  - Paying for practices rather than outcomes 
  - Flexibility in implementation
  - Linking risk management tools and sustainability
  - Training
- *Perceived costs and benefits:*
  - Allocation mechanisms

III. THE THREE TYPES OF MOTIVES: cognitive

Policy options to leverage adoption

- *Perceived costs and benefits:*
  - Allocation mechanisms - auctions
  - Compensated costs – forgone profit vs value of provision
  - Nudging via name of payment or practice
  - Rewarding and punishment
  - Risk management or lump-sums
  - Timing of payments

IV. OUR CONTRIBUTIONS

- Provided a theoretical framework to address behavioural issues in adoption of sustainable practices
- Clarified the link between evidence and BI biases and processes
- Highlighted farmers as irrational beings too
- Clear set of recommendations to leaver BI for better policy design with a CAP 2020+ focus

V. WHAT'S IN ALL THIS FOR REECAP

- Move research to early phases of decision making - from choice and implementation to problem detection and definition
- Consider household and group decisions too
- How do environmental and health costs come into play
- Provide evidence in causality (beyond econometrics) and overcome the social desirability bias

V. WHAT'S IN ALL THIS FOR REECAP

Pressure to move from the lab to the field

172nd European Association of Agricultural Economists (EAAE) Seminar

MAY 28 2019 ▶ MAY 29 2019

Brussels (BE)

Agricultural policy for the environment or environmental policy for agriculture?

Find out at the 172nd European Association of Agricultural Economists (EAAE) Seminar.

Enhancing the environmental and climate ambition of the EU farming sector is one centrepiece of the latest European Commission's proposal for the reform of the Common Agricultural Policy (CAP).

The theme of the seminar are the policy and research implications of these heightened environmental and climate ambitions.

The Commission department for Agriculture and Rural Development (DG AGRI) and the Joint Research Centre (JRC) are supporting the European Association of Agricultural Economists (EAAE) in the organisation of this seminar.

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Any questions?

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