

The effects of various forms of inter-organizational trust on industry competitiveness

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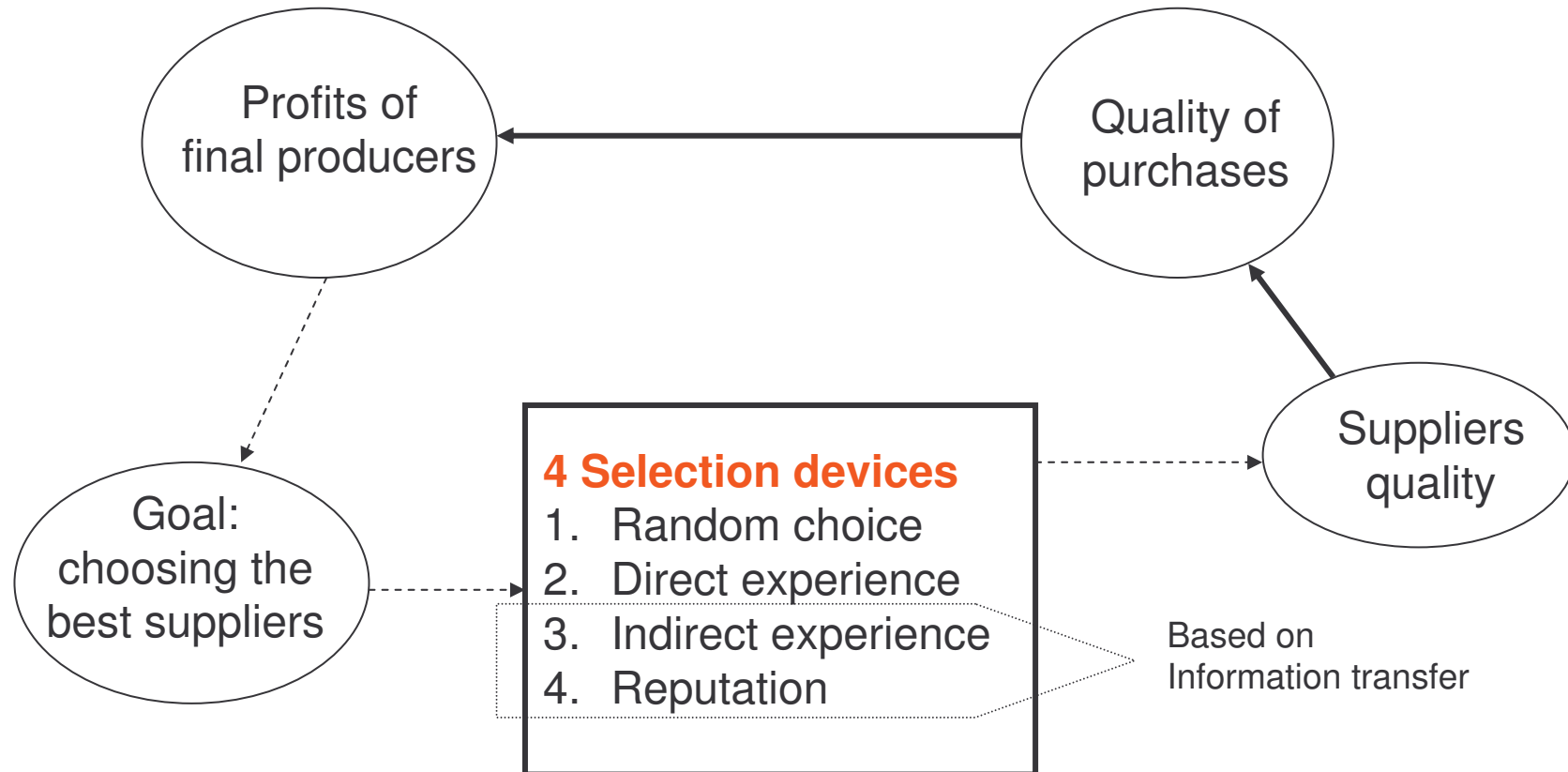
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Research questions

- 1) Does information exchange (INDEBT- and REBT-TRUST) improve performance?
- 2) Does opportunism (cheating behavior) damage performance?
- 3) Do industry segments perform in the same way under the same circumstances?
- 4) Does industry size matter?

The general structure



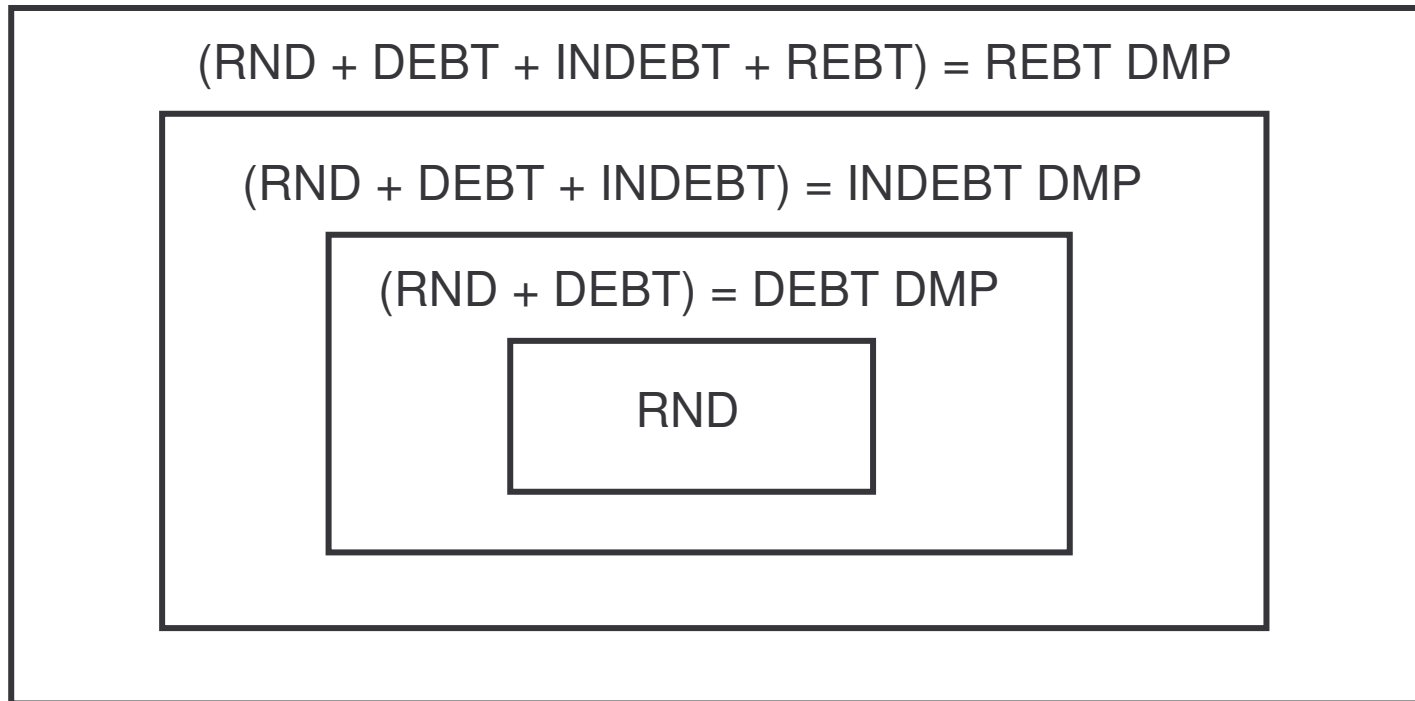
3 trust-based selection devices
that is
3 trust-based decision-making
processes

Direct experience-based trust (DEBT)

Indirect experience-based trust (INDEBT)

Reputation-based trust (REBT)

The nested complexity of decision-making *patterns (DMP)*



In many markets prices are not good signals

In this model price and quality carry the same information, because price is a direct function of quality

But both lose its informative utility when:

1. Agents lie;
2. It's difficult to define price or quality requirements (i.e. health care, house renovation, etc)

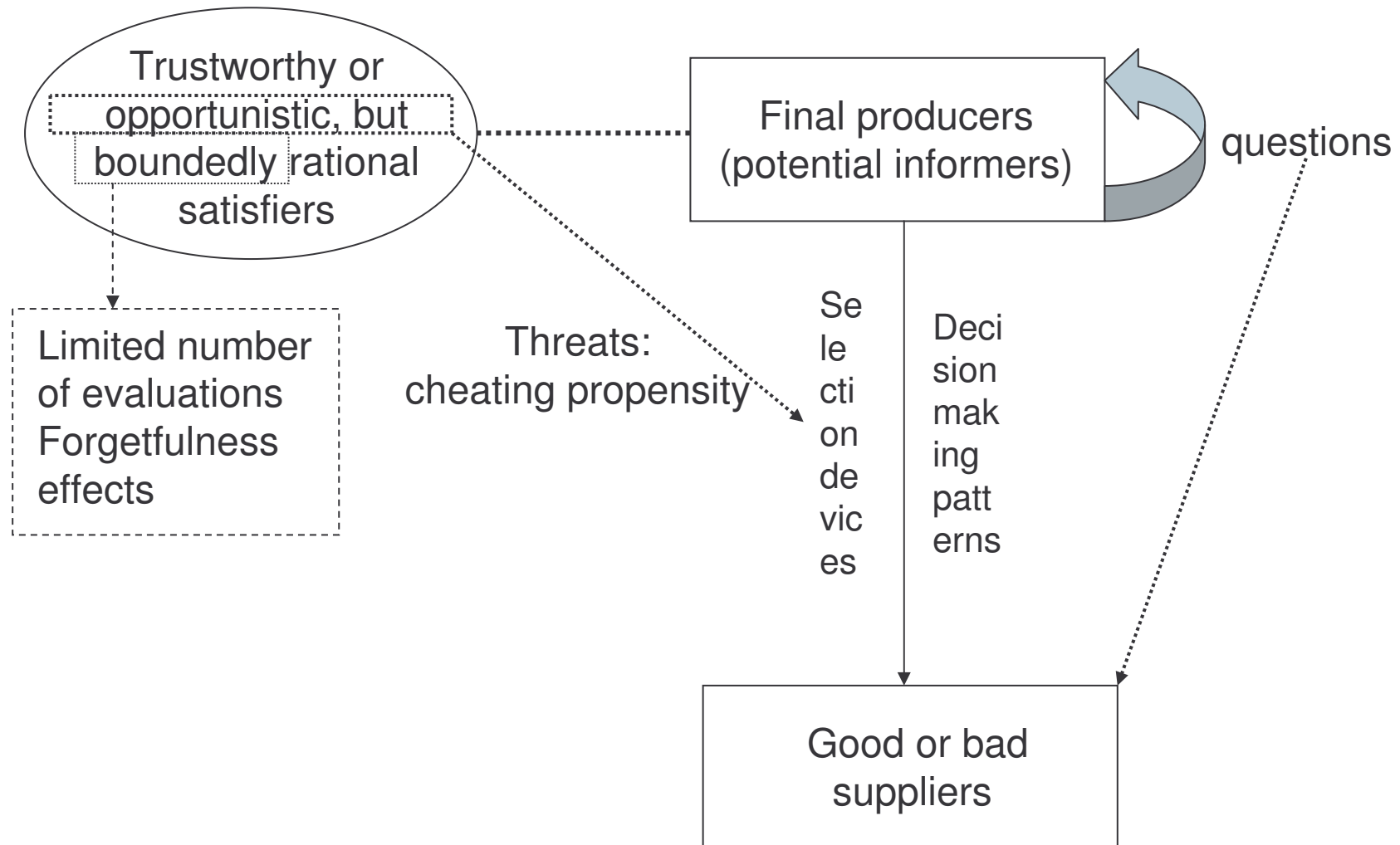
In this model prices do not help
finding the best suppliers

because

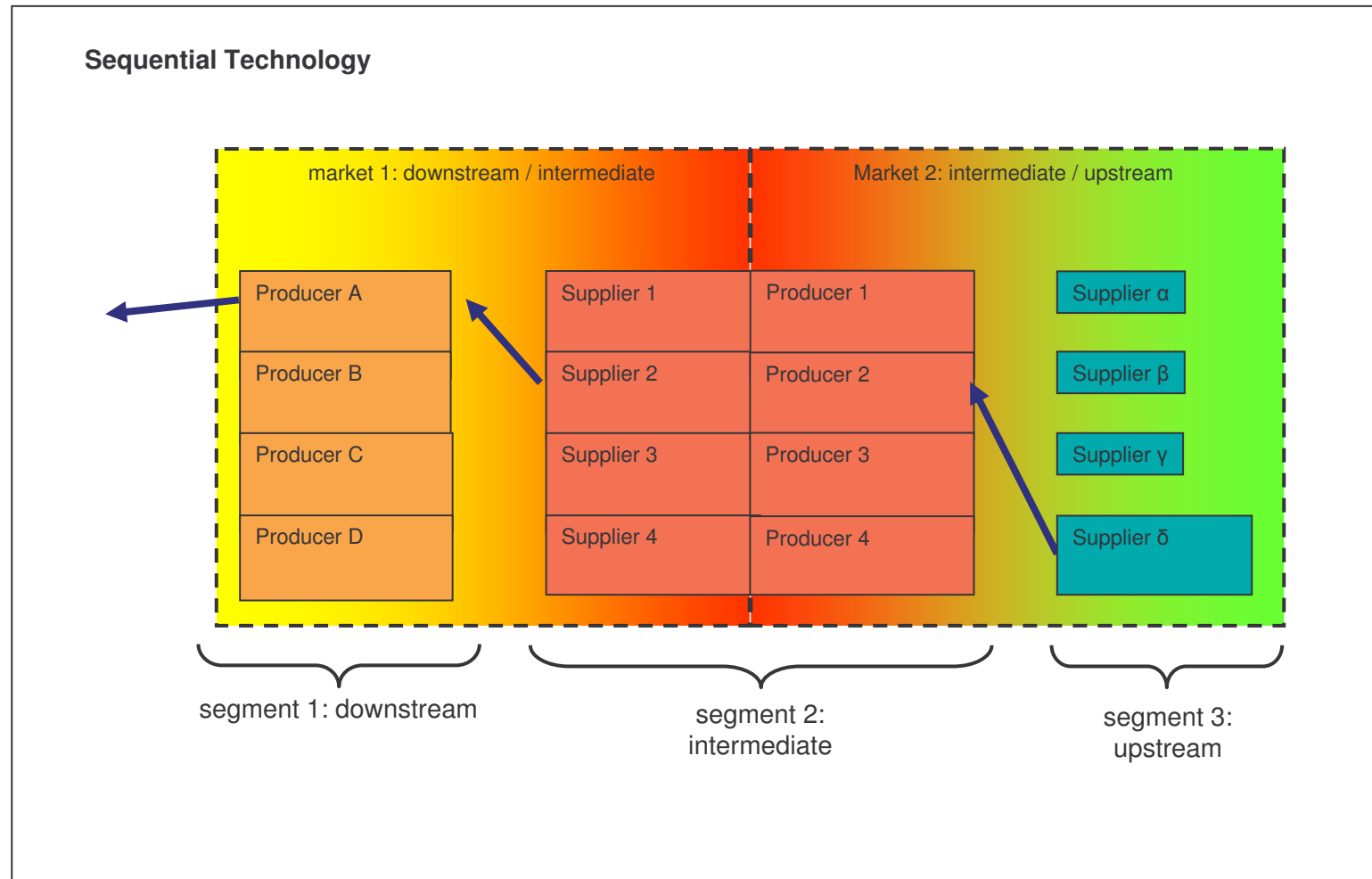
They are not good signals

It is supposed that clients can
sell any quantity depending on
purchasing quality

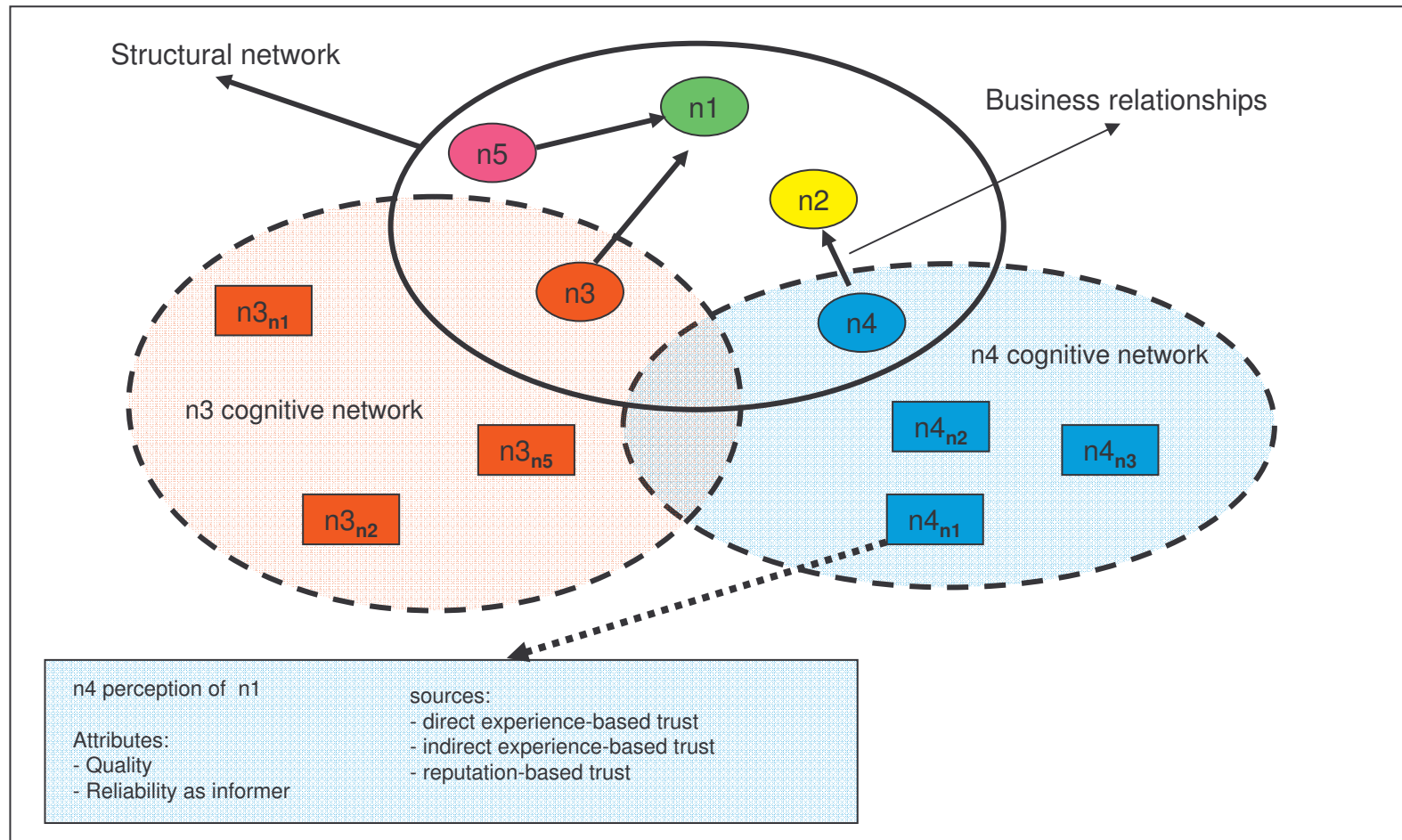
The nature of agents and their selection processes



Filiere and market structure



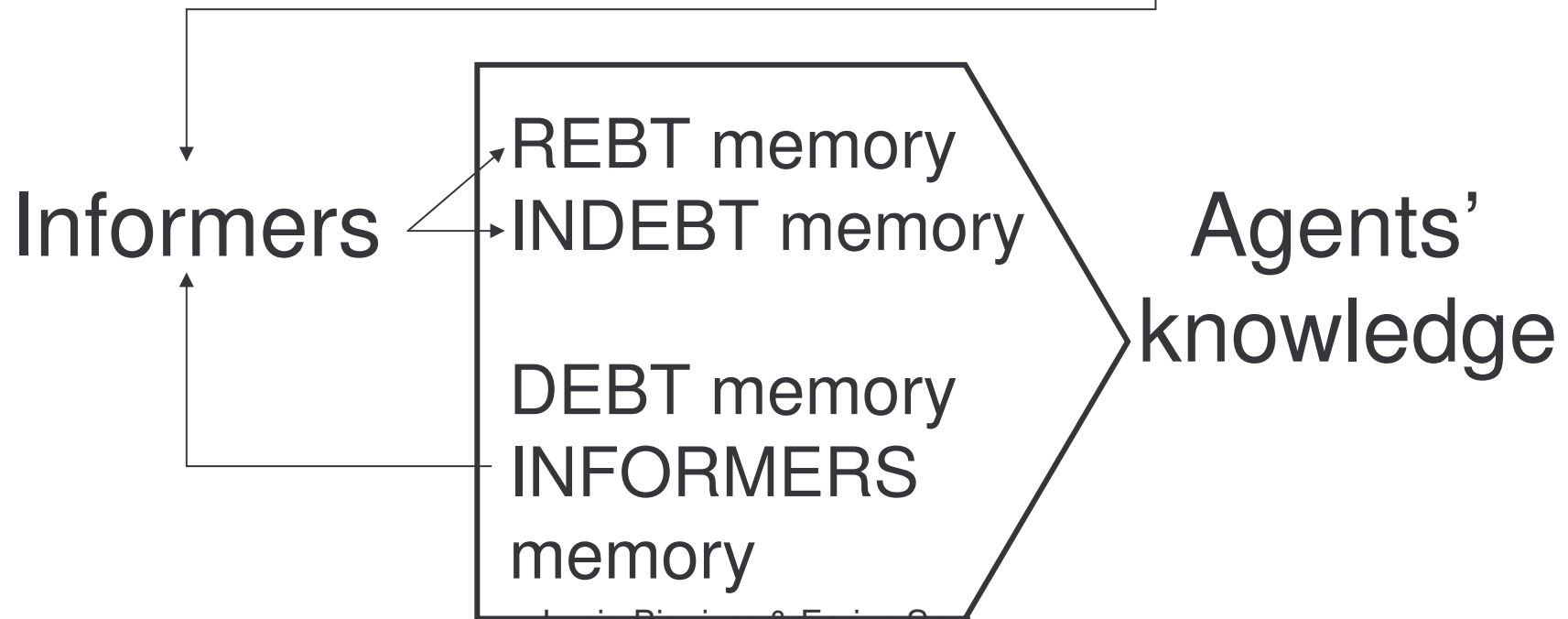
The interaction between structural and cognitive networks



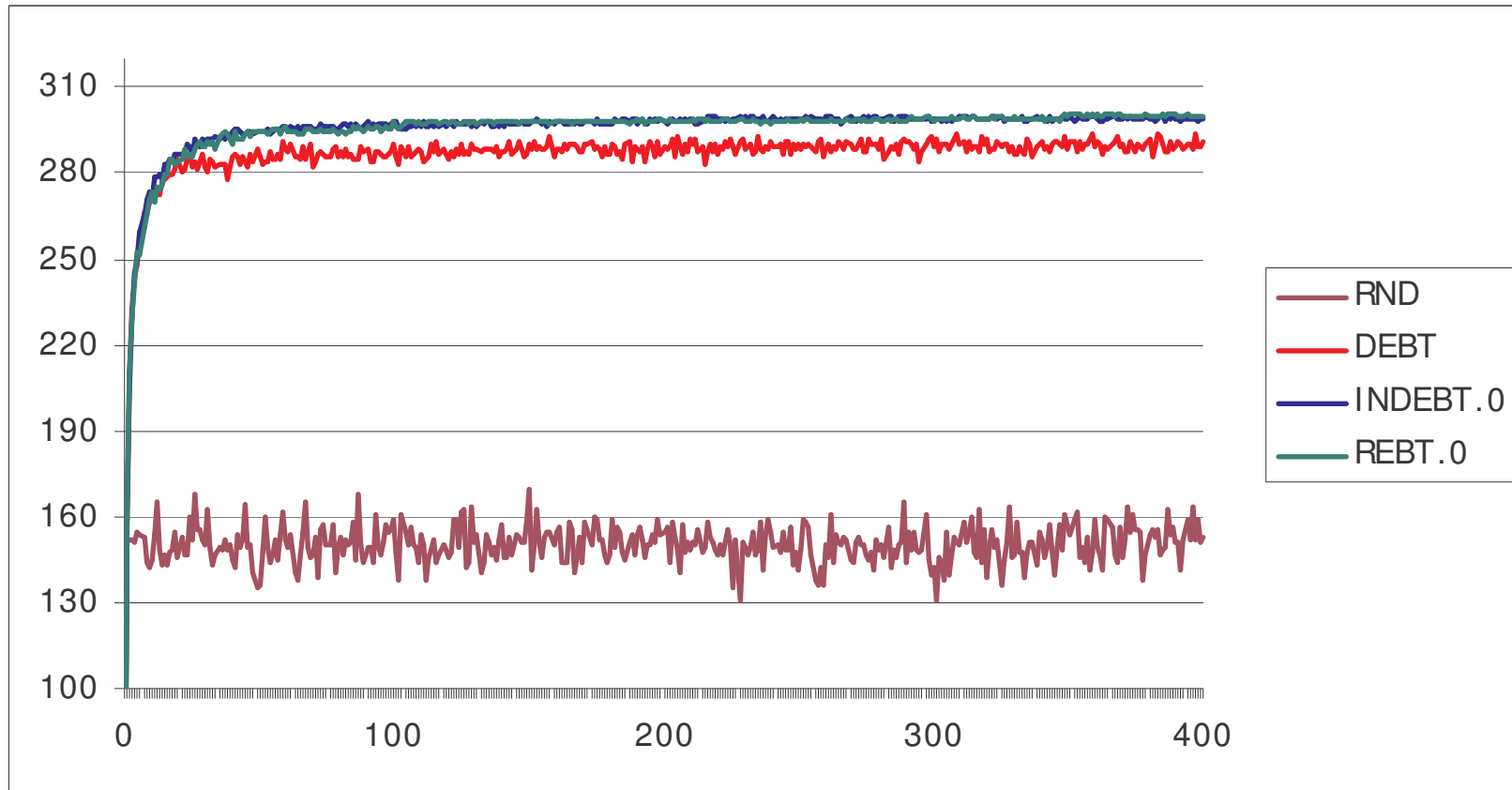
Decision and information space

Suppliers \longrightarrow Decision space (DS)

$DS(\Sigma REBT + \Sigma INDEBT) \longrightarrow$ Information space



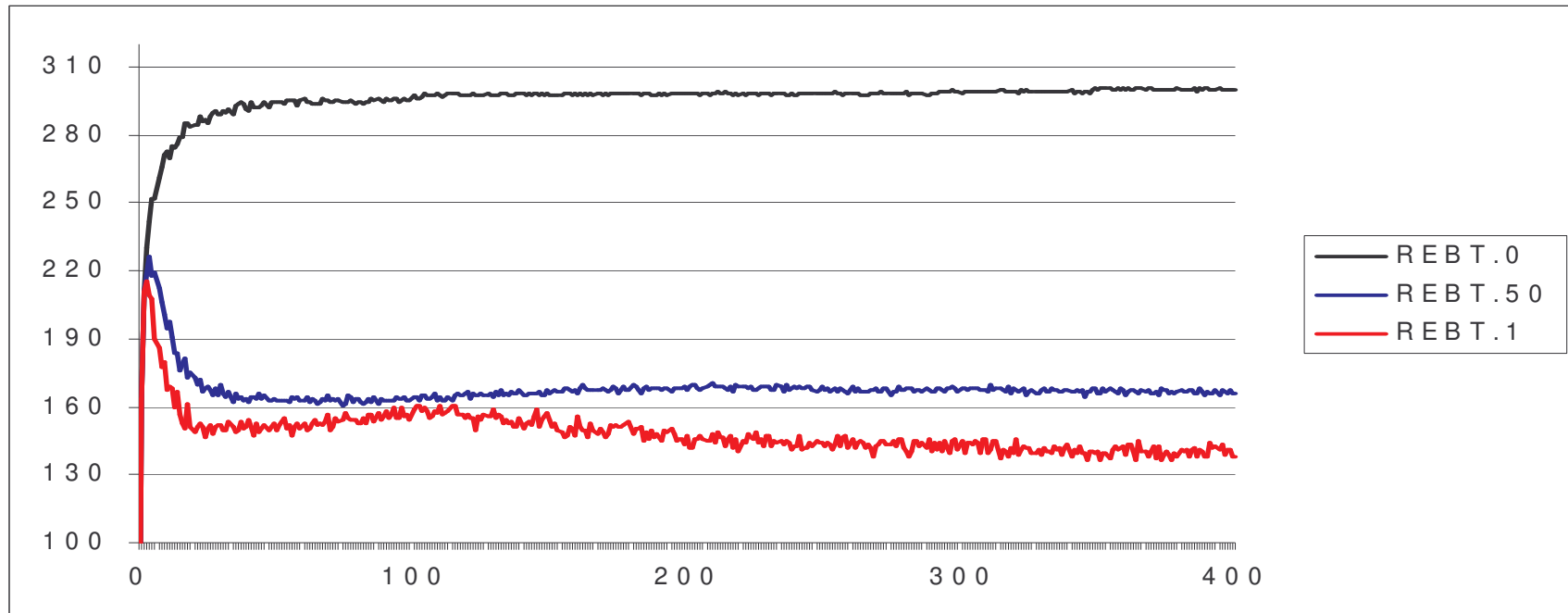
Honest final producers – general results



- ✓ DEBT produces a worse performance than INDEBT and REBT
- ✓ REBT ensures more stability and higher average profit than INDEBT
- ✓ reliable communication makes easier and faster the information space exploration.

Final producers – Cheating effects on REBT

Rebt.0: agents do not cheat
Rebt.50: agents cheat half times
Rebt.1: agents always cheat



- ✓ When all agents are full cheaters (REBT.1), profitability oscillates around a profit that is near, and sometimes below, that produced by RND
- ✓ when only false information are shared and firms rely on reputation suggestions, agents cognitive efforts are totally wasted and the worst performance is observed.

Effectiveness of decision making patterns

- ✓ When agents cheat, it is better to trust direct than indirect experience in order to avoid false information.
- ✓ Information reliability (quality) is more strategic than its quantity.

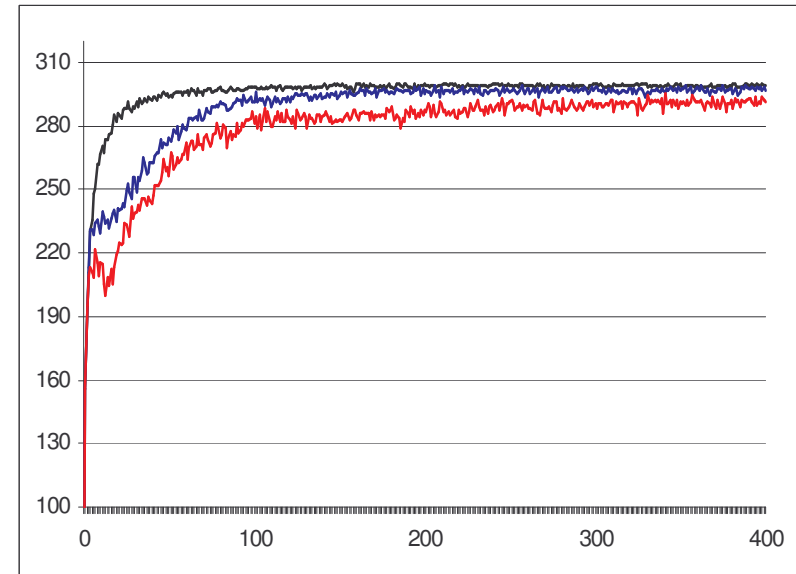
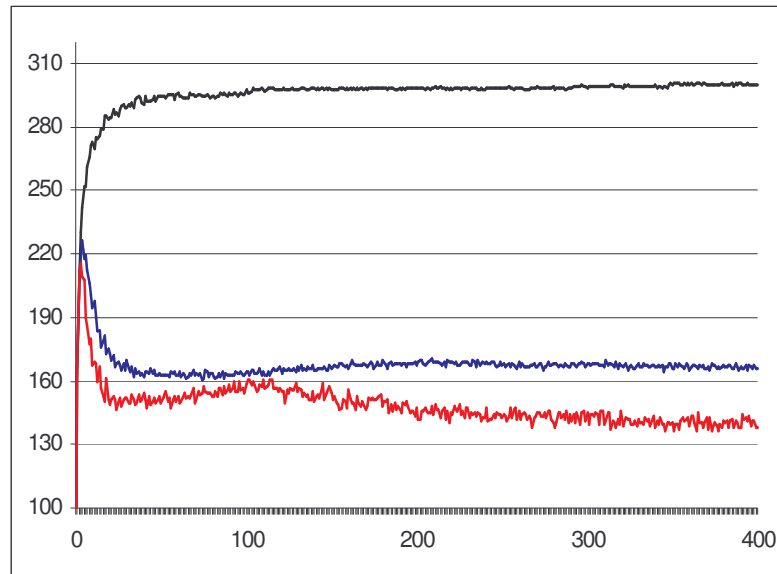


Cheating agents in REBT

Final producers

vs.

First Tiers



— REBT.0 — REBT.5 — REBT.1

- ✓ Even if they are submitted to the same cost structure, mechanisms and threats, **First Tiers explore a smaller part of information space**
- ✓ It ensures a similar profitability when agents do not cheat, and a greater profitability when they cheat

Size effects

- 1) By enlarging information space, size growth reduces performance
- 2) This negative effect is dramatically emphasized with dishonest agents
- 3) The positive effect of large size is the sooner and deeper stabilization of performance

Main findings

- 1) Agents' opportunism and industry size play a crucial role for performance
- 2) With honest agents information exchange improves performance, especially in terms of time efficiency
- 3) With dishonest agents information exchange damages performance
- 4) Even under the same conditions industry segments can perform in a quite different way