

## Integrating Economics & Psychology in Accounting

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## Presentation Plan

- How do economists and psychologists view the world?
- The challenges of integration
- An example of an “integrated” paper

## An Old View



## In a Nutshell

- Economics focuses on outcomes and equilibria
  - Generally at an aggregate level
  - Focus on the discipline of markets
  - Framework driven
- Psychology focuses on processes
  - Generally at an individual level
  - Observation driven
- Intersection is in the study of choice
  - What is chosen
  - How it is chosen

## The Issue of Rational Choice

- What is rational choice? A few principles:
  - Ordering of alternatives
  - Dominance
  - Cancellation
  - Transitivity
  - Invariance
- Sunder's definition: “Agents are rational in the sense that, within the constraints of their opportunities and information, they do not knowingly pick less desirable courses of action over the more desirable ones.”
- Is it irrational to care about honesty or fairness?

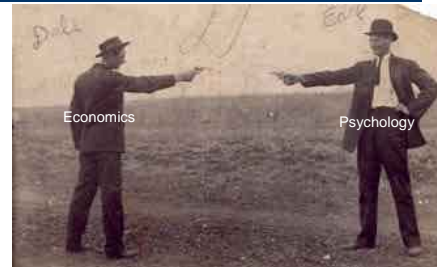
## If you remember one thing. . .

You can be rational and still care about something besides wealth and leisure!

## Debates!

- “But that’s not rational! Your participants left money on the table. There is something wrong with your experiment.”
- I’ve demonstrated that people care about something besides wealth and leisure. Clearly, expected utility theory is wrong.”

## Integration

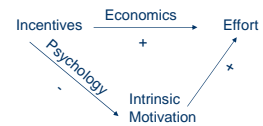


## Is Integration Possible?

- Use psychology theory to enhance economic theory.
- Use economic theory to enhance psychology theory.
- Horse races – Which is right?
- True integration

## A Note on Horse Races

- Economics predicts X
- Psychology predicts Y
- Which is right?
- Implicit Assumption: They can’t both be right!



## True Integration

- Some topics need insights from both!

## A New View



## The Challenge

- Understanding Accounting
- Understanding Economics
- Understanding Psychology
- Understanding different methodological traditions.

## The Effect of Control Systems on Teams and Alliances: Trust and Cooperation in Collaborations

Coletti, Sedatole,  
Towry / TAR 2005

## Research Question

In collaborative settings (teams & alliances), do formal control systems create trust or destroy trust?

## Two Views

- How might an economist characterize trust?
- A psychologist?

## Operational Definitions

Trustworthiness – an individual characteristic, reflecting one's tendency to cooperate, *absent any economic incentives to do so.*

Trust – One person's perception re: another's trustworthiness.

Control System – A formal system that rewards cooperation or punishes lack of cooperation

## The Effect of Control Systems on Trust

- How might an economist expect control systems to affect trust?
- A psychologist?

## Attributions

- When we see another person cooperating in the **presence** of a control system. . .
- vs.
- When we see another person cooperating in the **absence** of a control system. . .

## Malhotra and Murnighan (ASQ, 2002)

- Their conclusion –
  - Control systems (i.e., contracts) reduce trust.
- Cooperation was unaffected by control system.
- What if we bring some economics into their story?



## Why would “control-induced cooperation” lead to trust?

- Fundamental Attribution Error – observers tend to over-attribute behavior to dispositional rather than situational characteristics. . .
- Therefore, when observing control-induced cooperation, we expect collaborators to over-attribute this cooperation to “trustworthiness.”

## Experiment 1

- “Psychology-Type” Experiment
- Experimentally manipulated whether or not a control system was present.
- Two roles (collaborator and observer)

## Collaborator

- Assumed role of R&D manager.
- Had both individual and joint projects.
- Had previously committed to devoting resources to joint project.
- Dilemma – top management wouldn’t know who to blame if joint projects failed.
- Task – devote high level of resources to *either* joint *or* individual projects.

## Control System Manipulation

- Present: A consultant has been hired to make periodic, unannounced visits. If the consultant detects an insufficient level of resources on the joint project -> lower bonus, reduced budgets.
- Absent: No consultant

## Direct Effect of Control System on Cooperation

### Collaborator Choices

	<u>No Ctl</u>	<u>Ctl</u>
Percent of Participants Investing High Resources in Joint Project (Cooperative Action)	24%	75%

## Observer

- Received full experimental package – scenario and responses – from one collaborator.
- Task – Make several judgments about the collaborator.

## Trust

### Observer's Assessments

	<u>No Ctl</u>	<u>Ctl</u>
Trustworthiness	5.62	7.15
Team Player	4.38	6.75
Cooperativeness	5.43	6.70

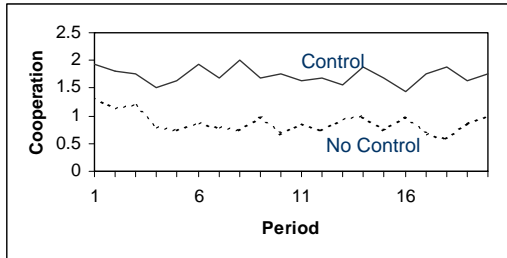
## Experiment 2

- Economics-type experiment
- Very similar setting, but monetary payoffs associated with various decisions
- Multi-period prisoner's dilemma

## Control System Manipulation

- Present: 80% of the time, your choice will be audited, and if you have dedicated high resources to the joint project, you get a bonus.
- Absent: No audits.

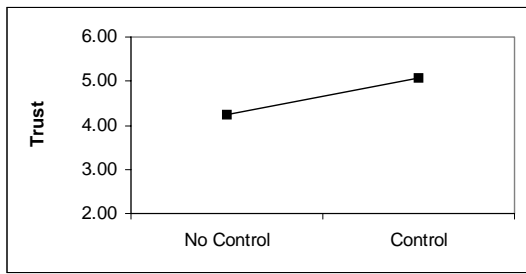
## Results



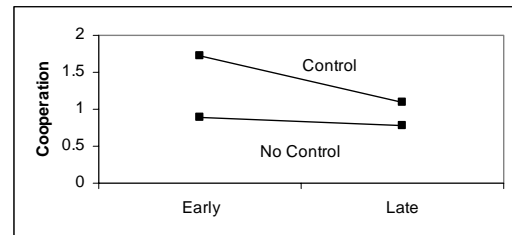
## After 20 periods

- Participants in control system condition notified that there would be no more audits.
- After period 20, the two conditions are equivalent.

## Trust



## Cooperation



## Takeaways

- Control can actually increase trust, due to:
  - Increased Economic Incentives for Cooperation.
  - Mis-attribution of cooperation to inherent personal characteristics (trustworthiness).
  - Self-reinforcing effect of trust on cooperation.

## Final Remarks

- Integration is possible, but it isn't easy.
- Integration includes both theory and methodology.
- It will only be achieved if a few of us are willing to step out of the comfort of a paradigm.
- You will be everybody's friend.
- And everybody's enemy.
- It's where the fun stuff is.