

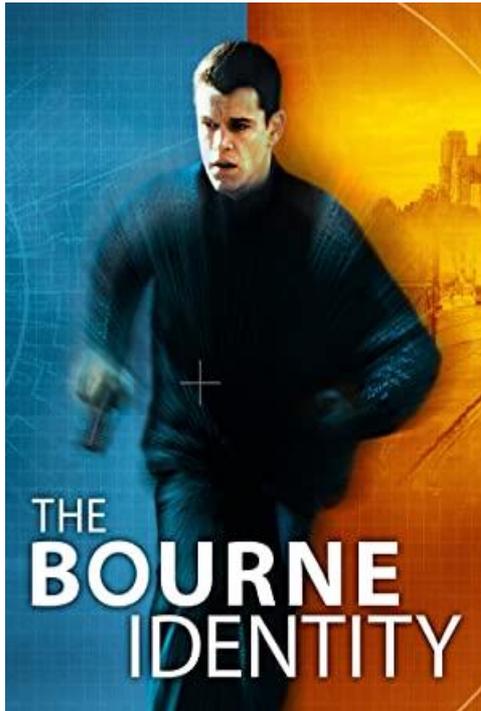
What next for identity economics?

Ryk Bliszczyk, PhD candidate

Professor David Butler

Professor Andreas Chai

What has this got to do with economics?



Weekend Journal: Where to Find the Next Bali

THE WALL STREET JOURNAL.

FRIDAY, DECEMBER 12, 2008 - VOL. CCLII NO. 139 ***** \$2.00

DJIA 8565.09 ▲ 196.33 -2.2% NASDAQ 1507.55 ▼ 3.7% NIKKEI 8720.55 ▲ 0.7% DJ STOXX 50 2141.87 ▼ 0.7% 10-YR TREAS ▲ 11/32, yield 2.648% OIL \$47.98 ▲ \$4.46 GOLD \$824.90 ▲ \$17.80 EURO \$1.3333 YEN 91.75

Top Broker Accused of \$50 Billion Fraud

Sons Turned In Madoff After He Allegedly Told Them His Investment-Advisory Business for the Wealthy Was 'Giant Ponzi Scheme'

Bernard L. Madoff, a former chairman of the Nasdaq Stock Market and a force in Wall Street trading for nearly 50 years, was arrested by federal agents Thursday, a day after his sons turned him in for running what they said their father called "a giant Ponzi scheme."

By Amir Efrati, Tom Lauricella and Dianne Stearcy

The Securities and Exchange Commission, in a civil complaint, said it was an ongoing \$50 billion swindle, and asked a judge to seize the firm and its assets. "Our complaint alleges a stunning fraud that appears to be of epic proportions," said Andrew M. Calamari, associate di-

rector of enforcement in the SEC's New York office.

In a separate criminal complaint, Federal Bureau of Investigation agent Theodore Cacioppi said Mr. Madoff's investment advisory business had "deceived investors by operating a securities business in which he traded and lost investor money, and then paid certain investors purported returns on investment with the principal received from other, different investors, which resulted in losses of approximately billions of dollars."

Dan Horwitz, a lawyer for Mr. Madoff, declined to elaborate on the allegations. "Bernard Madoff is a longstanding leader in the financial-services industry with an unblemished record," Mr. Horwitz said in an interview. "He is a person of integrity. He intends to fight to get through this unfortunate event."

The 70-year-old Mr. Madoff is the founder and primary owner of Bernard L. Madoff Investment Securities LLC. The firm is primarily known for its business in market-making, or serving as the middleman between buyers and sellers of shares. But Mr. Madoff also oversaw an investment-advisory business that managed money for high-net-worth individuals, hedge funds and other institutions.

According to the complaints, Mr. Madoff ran the investment advisory as a secretive business, independent from the firm's proprietary trading and market-making operations. The SEC complaint said that the alleged fraud

was run through this arm of Mr. Madoff's company.

The FBI complaint quotes two senior Madoff employees as saying Mr. Madoff ran the investment arm on a separate floor of the firm's offices. The two employees said Mr. Madoff kept the financial statements from the firm under lock and key and was "cryptic" about the firm's investment business.

The complaint did not name the two senior employees. But according to people familiar with the matter, they are Mr. Madoff's

Client Shock Waves
Country-club investors targeted. Please see A14.

Andrew and Mark. Mark Madoff is the firm's senior managing director and chief compliance officer. Andrew Madoff is its director of trading.

A call to the sons' attorney was not returned.

Both complaints say Mr. Madoff told his sons he believed losses from his fraud exceeded \$50 billion. That figure couldn't be confirmed. But such a loss is plausible, had money been flowing in and out for years: At the beginning of 2008, according to the SEC filing, his operation had more than \$17 billion under management.

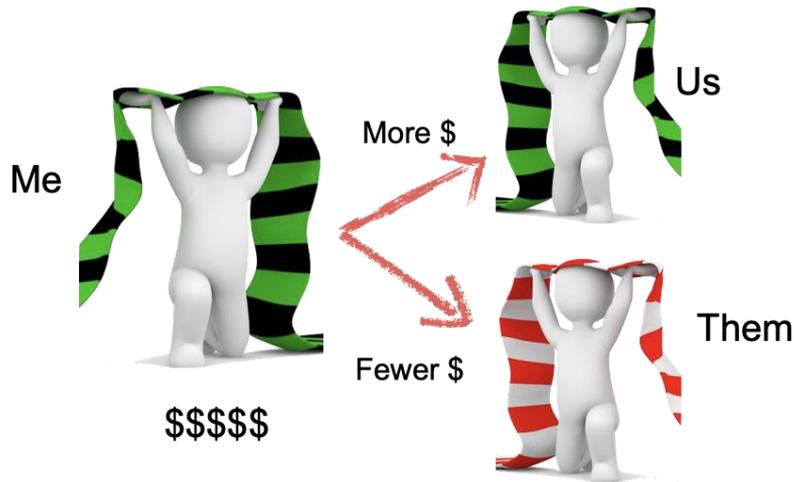
Such a scheme would dwarf past Ponzi schemes. It would also be nearly five times larger than the accounting fraud that

Money manager Bernard Madoff, at a party earlier this year.



Identity as a driver of decisions

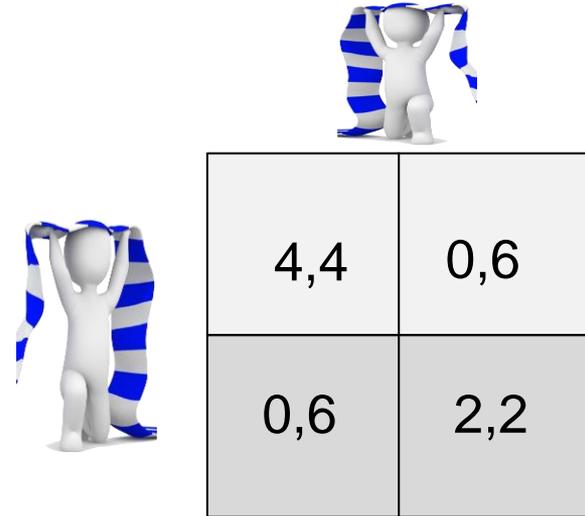
Social Psychology - Social Identity Theory



Tajfel & Turner 1970s & 80s

Minimal group design that excludes self-interest

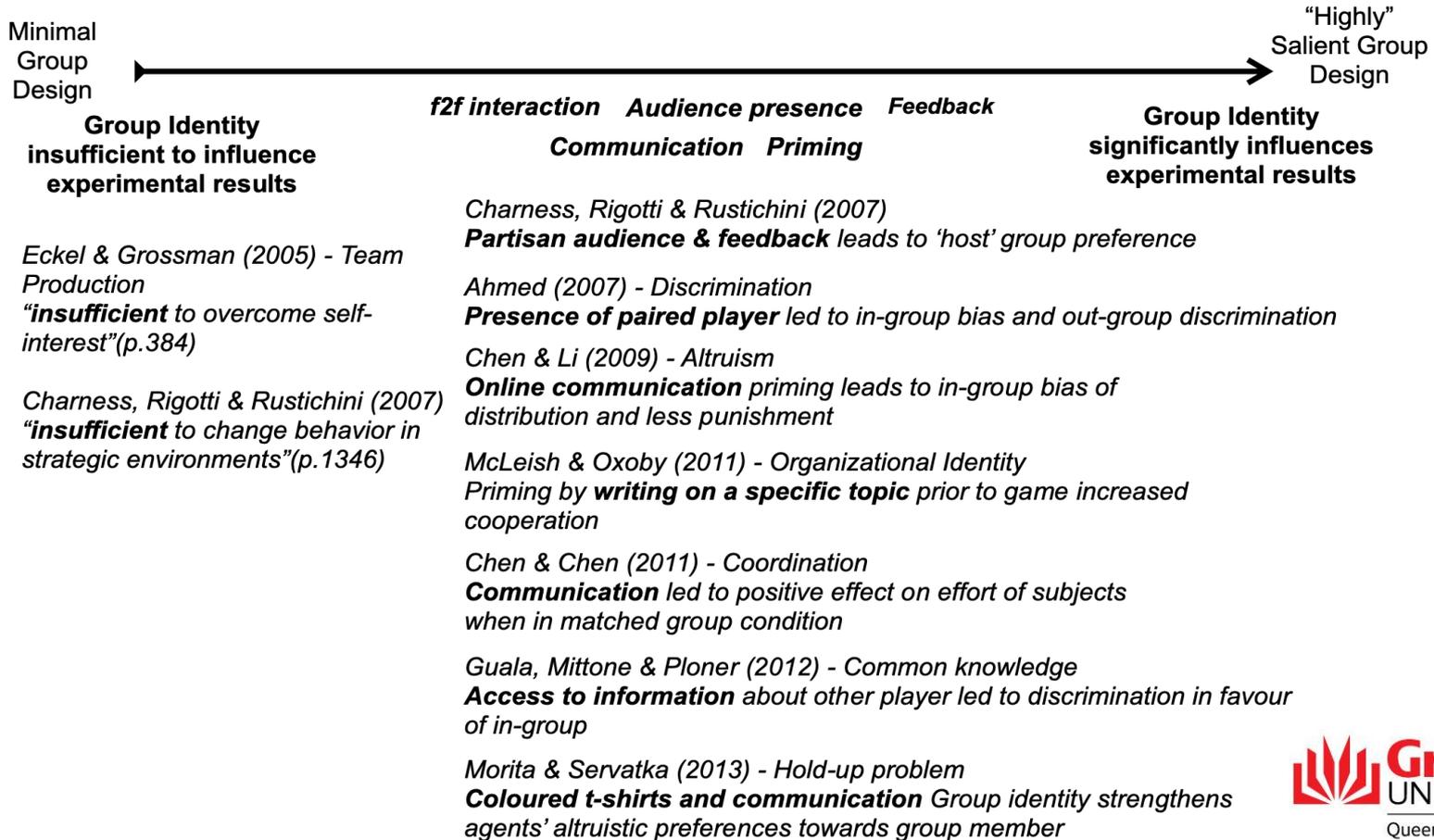
Identity Economics



Akerlof & Kranton 2000, 2010

Can identity overcome self-interest?

Qualified support from research



Priming increases cooperation independent of identity

Sally 1995 & Cason, Sheremata & Zhang 2012

- “Communicating itself influences people’s preferences”
- 40% more cooperation with prior communication than standard prisoner’s dilemma
- Costless pre-play communication facilitates coordination in games with Pareto-ranked equilibria.
- Inter-group communication leads to greater coordination across groups

Cohn & Marachel, 2016

- Review of priming techniques used in economic experiments
 - increase cooperation
 - change risk behaviour
 - influence ethical decisions

So where does this leave identity economics ?

Cason, T. N., Sheremeta, R. M., & Zhang, J. (2012). Communication and efficiency in competitive coordination games. *Games and Economic Behavior*, 76(1), 26-43; Cohn, A., & Maréchal, M. A. (2016). Priming in economics. *Current Opinion in Psychology*, 12, 17-21; Sally, D. (1995). Conversation and cooperation in social dilemmas a meta-analysis of experiments from 1958 to 1992. *Rationality and Society*, 7(1), 58-92.

Identity Economic Theory is incomplete?

- Akerlof and Kranton claim that “social context matters” to change preferences but research relies on idiosyncratic priming
- Akerlof and Kranton redefine the utility function to accommodate norm changes but that’s not social context
- Relies on ‘payoff transformation’ by individuals to explain behaviour
- Social Categorization theory (1980s); Bacharach’s (2006) frames in game theory; and Sugden’s (2007) ‘team reasoning’ point to **‘agency transformation’** as the key to change in preferences

Identity Economic Theory is incomplete?

Akerlof & Kranton 2000, 2010

Utility function

$$U_j = U_j (\mathbf{a}_j, \mathbf{a}_{-j}, I_j)$$

Identity term

J's identity or self-image

$$I_j = I_j (\mathbf{a}_j, \mathbf{a}_{-j}; \mathbf{c}_j, \epsilon_j, \mathbf{P})$$

J's actions

Others' actions

J's assigned social categories

J's own characteristics

Ideal of category prescriptions or norms

Incomplete

- Expand the utility function but collapse Social identity Theory (SIT), Social Categorization Theory (SCT) into one all-encompassing identity term
- Utility function changes over time, as norms change, not revealing of core and stable preferences
- Relies on 'payoff transformation' but SCT, Sugden's (2007) and Bacharach's (2006) refer to team reasoning and point to 'agency transformation'

Potential theory enhancements

$$I_j = I_j (\mathbf{a}_j \mathbf{a}_{-j}; \mathbf{c}_j, \epsilon_j, \mathbf{P})$$

- Modify the identity term to show which social context induces category salience
 - Yamagishi & Kyonara (1999) (psychologists) the social context that matters is
Common Knowledge
 - Sugden & Bacharach (economists) also refer to common knowledge as a prerequisite to change preferences
- Turner (psychologist) & Sugden & Bacharach
 - Once identity salient then depersonalization occurs
 - Salient identity shifts decisions from 'I' thinking to 'we' thinking
 - Resulting in an **agency transformation** for utility maximization

Single thread - common knowledge is preference changing

Experimental design – cooperation expectations

Identity Knowledge	Common/Full	<p>D Salient/Present</p> <p>$D > B > C > A$</p>	<p>C. Random/Present</p> <p>$C > A$</p>
	Unilateral/absent	<p>B. Salient/Absent</p> <p>$B > C > A$</p>	<p>A. No Group ID /Absent</p> <p><i>Control condition</i></p>
		Salient	Non-Salient
Group/Social Identity			

Salient identity
EPL football team allegiance

Common Knowledge
"I know your team"
"I know that you know my team"
"I know that you know that I know"

Preliminary results

- Online experiments using Prolific (UK) pairing players to compete in Prisoner's Dilemma and Chicken games
- Pairing was the most difficult to code and resulted in problems and delays to complete - so no analysed data yet, but soon
- So far levels of cooperation are trending in the right direction conforming to the hypotheses generated
- Solves for :
 - Priming so can observe a pure identity effect
 - Confirms the social context that changes preferences