THE TRUST GAME

A small game about money.
A big question about people.

Introduced by
Joyce Berg · John Dickhaut · Kevin McCabe

Published
1995

Original paper
Trust, Reciprocity, and Social History

> Would you risk some of your money on a stranger—and if someone trusted you, would you return the favor?

A readable walk-through of the original experiment: its rules, logic, results, and what those results can—and cannot—tell us.

01 / THE QUESTION BEHIND THE GAME

Can trust be measured?

Imagine you and a stranger are in separate rooms. You will not meet again. No negotiation, no reputation to build, no chance to complain to the manager. Just two choices involving money.

Would you send some money to the stranger, hoping they send some back? If you were the stranger, would you return any?

The Trust Game (also called the investment game) turns this everyday dilemma into an experiment. The sender’s transfer is used as an indicator of trust; the receiver’s return is used to study reciprocity or trustworthiness.

> Important: choices do not reveal motives perfectly. A sender might be trusting, optimistic about repayment, or simply making a calculated investment. Economists have to distinguish these explanations.

THE TWO PLAYERS

PLAYER 1 · SENDER	PLAYER 2 · RECEIVER
Starts with $10 Chooses how much to send.	Starts with $10 Chooses how much to return.

How the game works

The experiment is sequential: the sender moves first; the receiver observes the transfer and then chooses a return.

01 Both start with $10.
The two participants are paired anonymously.

02 Sender chooses $0–$10.
The sender keeps the amount not sent.

03 The sent amount is tripled.
If $4 is sent, the receiver gets $12 from that transfer.

04 Receiver decides what to return.
They can return nothing, part, or all of the tripled transfer. Returned money is not tripled again.

05 Final payoffs are determined.
Sender gets the kept endowment plus the return. Receiver keeps their original $10 plus the tripled transfer minus the return.

> Order matters: Player 2 knows how much was sent before deciding whether to return money.

03 / ONE ROUND, WORKED THROUGH

Let’s calculate

Player 1 sends $4. The experimenter triples it, so Player 2 receives $12. Player 2 returns $5.

PLAYER 1 · SENDER	PLAYER 2 · RECEIVER
Starts with $10 Sends $4 → keeps $6 Receives back $5 Final: $6 + $5 = $11	Starts with $10 Receives transfer $12 Returns $5 → keeps $7 Final: $10 + $12 − $5 = $17

THE PAYOFF FORMULAS

Sender	$10 − amount sent + amount returned
Receiver	$10 + (3 × amount sent) − amount returned

The transfer creates a larger pot of money. But whether the sender benefits depends on the receiver’s return. The multiplier creates the opportunity; trust and reciprocity shape what happens next.

04 / THE BENCHMARK

What does standard theory predict?

Assume both players care only about their own money. We can solve the game by thinking backward.

RECEIVER'S DECISION

Player 2 can keep the tripled transfer. Returning a dollar reduces their own payoff by a dollar. Under pure self-interest, their best response is to return $0.

SENDER'S DECISION

Player 1 anticipates a zero return. Sending money would then only lower their own payoff. So the sender chooses $0.

> Self-interest prediction: Sender sends $0; receiver returns $0. This is the subgame-perfect equilibrium in the standard one-shot game.

Then the experiment asks: do people actually behave this way? Not always. The original study found many positive transfers and meaningful returns. The difference between prediction and observed behavior is the interesting part—not a reason to declare theory useless. It may mean the model left out motives such as reciprocity or beliefs about the other person.

A little humor, but a serious point: the model's receiver is basically saying, "Thanks for the money. We shall never speak of this again." Real participants often did something else.

What did participants actually do?

No-social-history condition · 32 pairs. The outcome is not “everyone trusted” or “everyone was selfish”—choices varied.

OBSERVED CHOICE	RESULT	INTERPRETATION
Senders who sent a positive amount	30 of 32 93.75%	Only two sent $0.
Average amount sent	$5.16 of $10	About half the endowment, on average.
Senders who sent the full $10	5 of 32	Some chose the maximum transfer.
Positive senders whose receiver returned more than the sender sent	11 of 30	For these pairs, the sender’s net return on the transfer was positive.
Average amount returned to sender (overall)	$4.66	Average payback was below the $5.16 average sent.
Average payback after a $5 send	$7.17	Returns differed with transfer size.
Average payback after a $10 send	$10.20	Some full transfers received meaningful returns.

Takeaway: the zero-transfer equilibrium prediction was clearly rejected for senders. Receiver behavior was mixed: some returned money, others returned very little. Trust and reciprocity are not uniform traits.

The social-history treatment

Berg, Dickhaut, and McCabe also asked whether knowing how earlier participants behaved would change choices. Participants received a summary of earlier no-history decisions.

SOCIAL-HISTORY CONDITION	RESULT
Pairs in treatment	28
Senders sending a positive amount	25 of 28 (3 sent zero)
Average amount sent	$5.36
Average amount returned / payback	$6.46
Senders receiving more than they sent	13 of 24 receivers who got more than $1 returned more than the sender’s initial transfer.

What changed? Average sending rose only slightly ($5.16 to $5.36), while average payback increased ($4.66 to $6.46). The authors also reported that the relationship between amounts sent and returned became more systematic when social history was available.

> Interpret carefully: this is evidence that social information can matter for behavior in this setting. It does not establish that every sender was motivated by trust, or every return by reciprocity.

07 / THINK LIKE A RESEARCHER

Do not memorize the result.

Do not stop at “30 out of 32 sent money.” A result is the beginning of a research question.

01 What does sending really measure?

Could a sender be trusting—or simply expect a profitable return? How would you elicit their belief about the receiver’s return?

02 What does returning really measure?

Reciprocity? Fairness? Generosity? Does the receiver return more when the sender makes a larger transfer? What other motive could produce the same choice?

03 What is the treatment—and what is the control?

If testing social information, identify exactly what information changes. Keep payoff rules and other procedures fixed. Then compare a clearly defined outcome.

04 What would convince you of the mechanism?

Could belief elicitation, a dictator-game control, or a carefully chosen additional treatment distinguish trust from altruism or strategic expectations?

> A researcher’s sequence: observe a pattern → propose a mechanism → derive a prediction → design a test that separates explanations.

THE TAKEAWAY

The Trust Game is a simple structure for studying a complex question. One player risks money; the other chooses whether to return it. The incentives make the choices meaningful. The observed behavior tests whether the self-interest benchmark is enough.

ORIGINAL SOURCE

Berg, J., Dickhaut, J., & McCabe, K. (1995). “Trust, Reciprocity, and Social History.” Games and Economic Behavior, 10(1), 122–142. DOI: 10.1006/game.1995.1027.

Outcome figures: original article; EconPort’s experimental handbook summary. Figures are identified by treatment to avoid mixing the no-history and social-history results.