# Why is corruption so hard to beat?

What a bribe buys, the bribe game and why it ends with everyone paying, why one honest person alone cannot break it, and what two real studies found cut the stealing.

## 1 The gate

rent

- Amara's license (Palmera, money in pesos) · clerk: **6 months**, or **1 week for 500 pesos** · the license is the same → the bribe buys **speed**
- **Rent** = money earned by controlling access to something (a gate, a stamp), not by producing anything · **Bribe** = secret payment to an official · **Corruption** = public job used for private gain
- The clerk can sell speed because he controls the wait · the wait is the product
- Practice · a **second office** for the same license → no single gate → smaller rent (people can go elsewhere)

## 2 The bribe game

best reply · equilibrium

- Contract **20** pesos, bribe **2** · alone pays → wins all · both or neither → split
- Neither `20 ÷ 2 = 10` each · one alone `20 − 2 = 18` / 0 · both `10 − 2 = 8` each
- **Best reply** (underlined in the table) = the move that pays most against the other's move · **dominant strategy** = best reply whatever the other does → pay: `18 > 10`, `8 > 0`
- **Nash equilibrium** = a cell where nobody gains by changing only their own move (**John Nash**, American mathematician, 1950) → both pay, **8 / 8** < 10 / 10 (Micro 8, Games 1)
- Practice · contract 30, bribe 4 → 15 / 15 · 26 / 0 · both **11 / 11** = equilibrium

| | B pays | B no |
|---|---|---|
| A pays | 8 / 8 | 18 / 0 |
| A no | 0 / 18 | 10 / 10 |

## 3 The trap

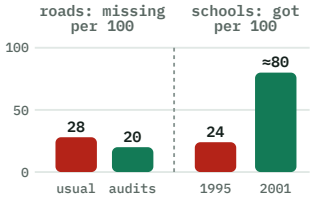
rule of law

- Refuse alone while the other pays → **0** → nobody stops alone · a **trap**, not a flaw of character
- What breaks it → change the payoffs, the risk or what people know · **rule of law** = the same rules for everyone, enforced by someone the clerk fears
- **Transparency International** (nonprofit, Berlin, 1993) · Corruption Perceptions Index = what experts *think*, not counted bribes
- Practice · **expected fine** = chance of being caught × fine (expected value, Finance 11) · fine 40: `¼ × 40 = 10` → pay alone 16 > 15, still pay · `½ × 40 = 20` → 6 < 15, −9 < 0 → nobody pays, **15 / 15** · needs > 11, the gain from a bribe

## 4 The evidence

two studies

- **Missing money** = official costs – what engineers find was really built
- **Indonesia** · **Benjamin Olken**, American economist, **2007** · 600+ village roads, villages picked at random · **audit** (outside check of accounts and work) chance 4% → 100%, announced → missing ≈ **28 → 20** per 100 (−8) · community meetings: little change on average
- **Uganda** · **Ritva Reinikka & Jakob Svensson**, World Bank (lender to poorer countries) · school grant: **24** of 100 shillings (Uganda's money) reached schools in 1995 (`100 − 24 = 76` never did; typical school: 0) → from 1997 monthly grants to each district published in newspapers → **about 80** by 2001
- Practice · notice-board trial (toy): 85 vs 70 boxes per 100 → effect **+15**, 10 came anyway · 500 million roads: missing `28 × 5 = 140` → `20 × 5 = 100` → saves 40, costs 10




## 5 Two sides

no verdict

- What worked → theft **riskier** (audits) or **easier to see** (published grants) · a poster changes no payoff
- From the top: audits, courts, penalties → a bribe becomes a bad bet ⟷ from below: newspapers, posted budgets, competition → people see and say no
- One study in one place = a clue, not a law · the studies show how each works, not which side is right

**Watch out:** corruption ≠ "dishonest people" → the payoffs trap honest people too · equilibrium ≠ best for both (8 / 8 < 10 / 10) · trial effect = treatment – control, not the rise from "before" · a perceptions index ≠ counted bribes