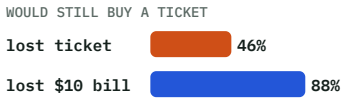
# Why do we keep the gym membership?

Money already spent pulls us to keep going, and we judge money pocket by pocket: sunk costs and mental accounting.

## 1 Two stories

self-test · same $10

- Play, ticket $10 → **ticket lost** at the door → buy another? · **$10 bill lost** → buy a ticket?
- **Kahneman** + **Tversky** (Israeli-American psychologists, Lesson 1) · 1984 → yes: **46%** vs **88%**
- `RATIONAL` both stories: $10 poorer · seat still $10 ⇒ **same answer** · only question: is the play worth $10 tonight?




## 2 Mental accounts

money in pockets

- **Mental accounting** (Richard Thaler, U.S. economist, Nobel 2017): "treating money as if it lived in separate pockets, so the same dollar feels different depending on its label"
- Lost ticket → stays in the **"play" pocket** → 2nd ticket feels like a **$20** play · lost bill → **"cash"** pocket → play still $10
- Also: $50 gift spent on candy (never $50 of pay) · $5 late fee rather than touch the $200 "trip" jar → a dollar is a dollar

## 3 Sunk cost

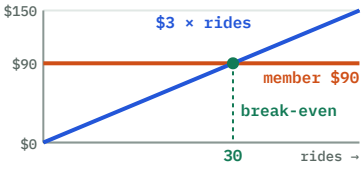
the rational rule

- **Sunk cost**: "money already spent that you cannot get back. A rational choice ignores it" (Micro 5: a fixed cost does not change the next decision)
- **Rational rule** → only **future** costs + benefits count · gym $70 paid, rain tonight → count effort + workout, **not** the $70
- **Sunk-cost fallacy**: "letting money already spent decide what you do next" → bad $12 film: "I paid, so I stay" ×
- Plan paid ⇒ one more visit / ride adds **$0** (marginal cost) → go if it is worth the effort, never "to use it up"

## 4 Break-even

when does a plan pay?

- **Break-even**: "the point where two options cost the same" → `visits = plan ÷ price per visit`
- Gym: `$70 ÷ $10 = 7` visits · 1 visit costs `plan ÷ visits` → 4 visits = **$17.50**
- Pool: `$60 ÷ $5 = 12` swims · 4 swims → $15 each · **$40** more than single swims → sunk → next summer: $20 < $60 → pay per swim
- Bike-share: `$90 ÷ $3 = 30` rides (lines cross) · club pass `$48 ÷ $6 = 8` games




## 5 Evidence

paying not to go · 2006

- **DellaVigna** + **Malmendier** (economists) · ≈ **7,700** members · 3 U.S. health clubs · 3 years
- Flat fee ≈ **$70**/month · ≈ **4** visits/month ⇒ **> $17** a visit vs **$10** with a 10-visit pass
- Leading explanation → **too optimistic** about how often they would go




## 6 So what

who uses it · defense

- **Who uses it**: memberships paid upfront · subscriptions that renew by themselves → once paid, you feel you must use it
- Help: order form shows the real average ("pass holders came 4 times: $12 a game") → fewer passes · a 4-game student saves **$24**
- Chain: $4M stadium → needs $3M more, worth $2M → **"can't waste the $4M"** → pays → **$1M** more lost
- **Your defense** (fresh-start test): "if I had **not paid yet**, would I do it **today**?" → breaks the "pull" link → stop

**Watch out:** ignoring sunk costs ≠ always quitting · keep going when what comes **next** is worth its **future** cost (if $3M more bought a stadium worth $5M → finish) · the past alone never decides