Can a law make rent cheaper?

A rent cap is a price ceiling: the shortage it makes, how it grows with time, and what San Francisco saw after 1994.

1 Problem · tool

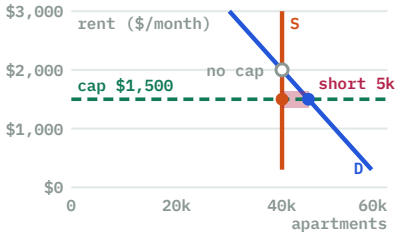
rent control

- **Problem** → rents rise faster than pay ⇒ families must move away
- **Tool** → **rent control** = law capping the rent (or how fast it may rise) = **price ceiling** on housing · tenants pay less · the city pays nothing
- **Price ceiling** = legal maximum price · matters only if **below** the market price (Micro 4)

2 The cap in the model

year 0

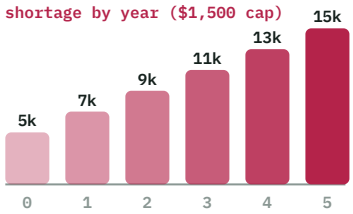
- Toy city · demand `Q = 60 − 10r` (r in $ thousands, Q in thousands) · **40,000** apartments this year (supply vertical) · market rent **$2,000**
- Cap **$1,500** → renters want **45,000** · exist **40,000** ⇒ SHORTAGE **5,000** = wanted − for rent
- Tenants inside save **$500** a month = **$6,000** a year
- Cap at or above market rent ⇒ **nothing changes** · e.g. $2,400 cap, $2,000 rent · but rent would rise to $2,600 ⇒ cap **bites**



3 Time matters

elasticity of supply

- Short run: buildings exist ⇒ supply **inelastic** (barely reacts to rent) · long run: landlords sell, rebuild, build fewer rentals ⇒ supply **elastic** (reacts a lot; Micro 3)
- Cap stays $1,500 · supply `Q = 40 + 4t(r − 2)` (t = years since the cap) → for rent **40, 38, 36, 34, 32, 30** thousand (years 0-5) ⇒ shortage **5 → 15** thousand
- Gentler cap $1,800: shortage **2,000** (year 0) → **6,000** (year 5)



4 Life in a shortage

non-price rationing

- Rent cannot rise ⇒ something else decides who gets a home: **queues**, luck, friends, illegal extra payments = **non-price rationing**
- Tenants stay even if home no longer fits · **less repair** (queue of renters ⇒ apartment in poor repair still rents)
- Numbers: cap $1,600 → renters want **44,000** · shortage **4,000** · tenants save 40,000 × $400 = **$16 million** a month

5 Evidence

San Francisco 1994

- Nov 1994 · cap extended to buildings with **2-4 apartments** built **before 1980** · newer ones stay free ⇒ **natural experiment** (like buildings, only the cap differs)
- Economists Diamond, McQuade, Qian (Stanford) · tenants **~20% more likely to stay** · rentals of capped landlords **−15%** (sold to owners who live in them, rebuilt) · city rents **~+5%**
- Rentals gone ⇒ renters move to uncapped apartments ⇒ **more demand** ⇒ higher rents · gain to tenants 1995-2012 ≈ **$2.9 billion** ≈ cost of higher rents to all renters
- 200 capped rentals − 15% = **170**

6 Other tools

build · vouchers

- **Build more** (zoning: what may be built where) ⇒ supply **right** · 50,000 apartments ⇒ market rent **$2,000 → $1,000** · below $1,500 cap ⇒ cap **no longer matters**
- **Vouchers** = state pays part of rent for low incomes ⇒ demand **right** ⇒ with a cap, shortage **wider**

7 Trade-off

policy card

- **Insiders** (tenants already in) gain · **outsiders** (newcomers) pay: fewer rentals, higher rents · landlords collect less
- FOR shields tenants from sudden rises, stay near jobs, schools, friends · AGAINST shrinks supply over time, raises rents for newcomers
- **Positive** (testable: rentals −15%) vs **normative** (values: "should")
- Policy card: problem **rising rents** → tool **price ceiling** → model **shortage 5,000 → 15,000** → evidence **San Francisco: tenants stayed, rentals −15%, rents +5%** → trade-off **today's tenants vs tomorrow's renters**