Can anyone plan an economy?

One office would have to set the price of every loaf, nail and pair of shoes in a country, every day. In 1945 Friedrich Hayek said it cannot be done, and not because officials are lazy: the knowledge it needs is scattered in millions of heads, and only prices gather it.

1 The question

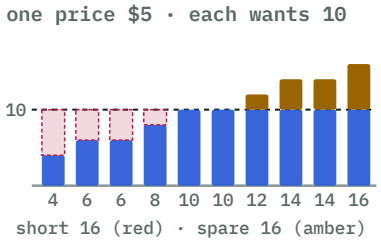
one office?

- **Central planning** = a state office sets targets and most prices for the whole economy, in place of markets · can a government plan a whole economy? · Hayek, 1945 → **no**, not for lack of effort: the planner cannot **know** enough, in time

2 One price, ten villages

Coralia, the planner

- (Micro 2) harvests `4, 6, 6, 8, 10, 10, 12, 14, 14, 16` = 100 · each village wants `20 − 2 × price`
- One price: `$3` short 42 / spare 2 · `$4` 28 / 8 · `$5` each wants 10 → totals match, still **16 short, 16 spare** · `$6` 8 / 28 · `$7` 2 / 42 ⇒ one price carries **no news** about any village
- **Local prices** (own harvest just enough): `$8, 7, 7, 6, 5, 5, 4, 3, 3, 2` → traders buy at $2, sell at $8 → 16 loaves carried → **$5 everywhere**, each eats 10 · nobody knew all ten harvests, nobody gave an order
- Practice: five villages `6–14`: $5 → short 6 · $6 → short 2, spare **12** · alone: `20 − 2 × 7 = 6` → **$7** · good year (+2 each, 120): best one price **$4** → still 16 / 16



3 Hayek

prices carry knowledge

- **Friedrich Hayek** · born Vienna · later British · `1899–1992` · London School of Economics `1931–50` · Nobel **1974**, shared with Gunnar Myrdal (Swedish economist)
- "The Use of Knowledge in Society", American Economic Review, **1945** → "the knowledge of the particular circumstances of time and place" (a failed harvest, a broken machine, a customer who changed her mind) → in millions of heads, changes daily → the **knowledge problem**
- **Tin**: new use or lost source → price ↑ → users "must economize tin" (use less) · **price signal** = a price tells buyers and sellers to use more or less, without saying why · price system = "a mechanism for communicating information"
- Chains: frost in one village → its price ↑ → traders carry bread in → prices elsewhere ↑ a little → everyone eats · drought in one coffee country → coffee price ↑ → far café ↑, some switch to tea → tea price ↑ → tea farmers plant more

4 Calculation

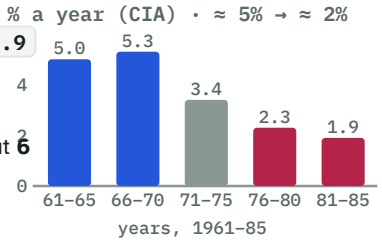
the debate, 1920–37

- **Ludwig von Mises** (Austrian) · "Economic Calculation in the Socialist Commonwealth", **1920** → state owns all firms → no market prices → cannot compare methods (rail or canal?)
- **Oskar Lange** (Polish) · **1936–37** → planner copies the market by trial and error: price ↑ where short, ↓ where spare · Hayek's reply → someone must tell the planner of **every** shortage, everywhere, every day

5 The Soviet Union

1922–1991

- State owned most firms · **Gosplan** (planning office, 1921) → targets, most prices
- GNP (≈ GDP, a year's output) growth, % a year (CIA, US intelligence, estimates): `1961–65 5.0 · 1966–70 5.3 · 1971–75 3.4 · 1976–80 2.3 · 1981–85 1.9` → ≈ 5% → ≈ 2% · rule of 70 (70 ÷ %): doubling `14` → `35` years
- Net grain importer from the early 1970s · after 1980 → **> 30 million tonnes** a year
- 1932–33: farms forced into collectives (state-run farms), grain taken → famine · about **6 to 9 million** deaths · toll, causes still argued · dissolved **26 December 1991**
- `FOR` industrialized a poor country in a generation, ≈ 5% a year in the 1960s · `AGAINST` ≈ 2% by the early 1980s, shortages, a famine, grain imports



6 So what

a warning, survived, argued

- The Road to Serfdom, **1944** (serf = peasant bound to a lord's land) → thesis: planning the **whole** economy → ever more power → freedom at risk · a warning, not a forecast · later: Western European welfare states (state pays pensions, health care) grew large, stayed democratic · defenders → it was about comprehensive planning · critics → thesis too strong · **still debated**
- Added later by others, not in the book → "every welfare state ends in dictatorship" · **survived** → prices as messages (Lesson 1's invisible hand, every market in the course)
- **Timeline of ideas** · 1776 · Smith · prices coordinate strangers → 1798–1817 · Malthus, Ricardo · land is limited → 1867 · Marx · profit from unpaid work (he said) → 1871–90 · Jevons, Menger, Walras, Marshall · the last unit → 1936 · Keynes · spending decides output → **1945 · Hayek · prices carry knowledge no planner can collect** → 1963–1968 · Friedman · more money, higher prices, in the long run

Watch out: the best **one** price matches the totals, not each village ($5: still 16 short, 16 spare) · a price tells people **what** to do, not **why** · Mises (1920) and Lange (1936–37) are not Hayek · the book warned about planning the **whole** economy, not about every welfare program