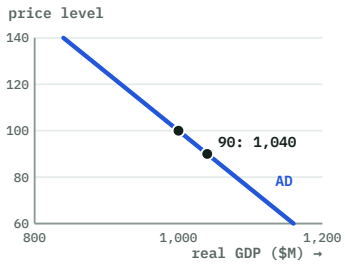
# Why does everything slow down at once?

Coralia's whole economy on one chart: aggregate demand, aggregate supply, and what shocks do to prices and output.

## 1 AD

aggregate demand

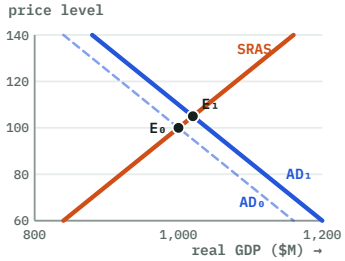
- **AD** = all spending on the island's output at each price level → `C + I + G + NX` (consumption, investment, government, net exports = exports − imports)
- Axes: **price level** (index, 100 today) ↑ · **real GDP** ($ million) →
- Slopes **down**: price level ↓ ⇒ real GDP demanded ↑ (100 → 90: 1,000 → 1,040M)
- Why: **wealth** effect (savings buy more) · **interest-rate** effect (less cash needed ⇒ cheaper loans) · **exchange-rate** effect (exports ↑, imports ↓)




## 2 Shifts of AD

move along ≠ shift

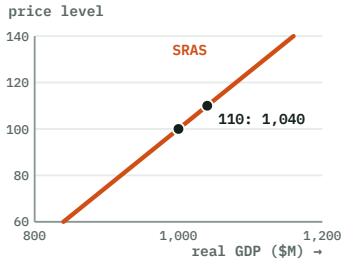
- **Price level** changes ⇒ move along AD · **C, I, G or NX** change at every price level ⇒ AD shifts
- → right: tax cut, new machines, new harbor, boom abroad · ← left: the opposite, fewer tourists
- Tax cut: C +40 ⇒ AD → 40 · price level 100 → **105** · real GDP 1,000 → **1,020M** (+20 only: higher prices take back demand)




## 3 SRAS

short-run supply

- Wages **sticky** (contracts) ⇒ prices ↑, costs fixed ⇒ profit per sale ↑ ⇒ output ↑
- Slopes **up**: 100 → 110: 1,000 → 1,040M
- Shifts with **firms' costs** at every price level: fuel, wages, imported inputs
- costs ↑ ⇒ SRAS ← · costs ↓ ⇒ SRAS → · price level alone ⇒ move along




## 4 LRAS

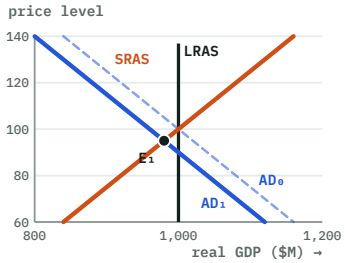
long-run supply

- Wages catch up with prices ⇒ price level no longer moves output ⇒ **vertical** line
- At **potential output** = full employment ($1,000M) · set by workers, capital, technology

## 5 Equilibrium, gaps

where AD meets SRAS

- **Short-run equilibrium** = where AD crosses SRAS · price level and real GDP now · Coralia: 100 and 1,000M
- `gap = real GDP − potential` · RECESSIONARY below potential ⇒ unemployment above natural rate (normal rate at full employment) ⇒ cyclical · INFLATIONARY above potential ⇒ unemployment below natural, wages ↑
- Find it in a table: gap = want − make · > 0 ⇒ price level ↑ · < 0 ⇒ ↓ · 90: 1,000 − 960 = **+40** · 95: 980 − 980 = **0** ✓ · 100: 960 − 1,000 = **−40** ⇒ 95, $980M, **20 below** potential




## 6 Shocks

which curve, what result

| SHOCK | CURVE | PRICE LEVEL | REAL GDP | RESULT |
|---|---|---|---|---|
| Tourists −80 | AD ← | 100 → 90 | 960M | recessionary gap 40 |
| Boom +80 | AD → | 110 | 1,040M | inflationary gap 40 |
| Fuel costs ↑ (−80) | SRAS ← | 110 | 960M | **stagflation** |
| Tax cut +40 · tourists −40 | AD → · AD ← | 105 · 95 | 1,020 · 980M | gap 20 above · 20 below |

- **Stagflation** = output ↓ + prices ↑ together · hard to cure: more spending ⇒ prices ↑ still, less spending ⇒ output ↓ still · real case: oil ×4 in 1973–74, US prices +11%, unemployment 9%

## 7 Self-correction

the long run

- **Recession** ⇒ jobs lost ⇒ wages ↓ ⇒ costs ↓ ⇒ SRAS → (+80) ⇒ price level **80**, real GDP 1,000M
- **Boom** ⇒ wages ↑ ⇒ costs ↑ ⇒ SRAS ← (−80) ⇒ price level **120**, real GDP 1,000M · no policy needed, but slow (months or years) ⇒ Lesson 5
- Watch out: a fall in the price level is a move **along** AD, never a shift · AD ← lowers prices but SRAS ← raises them

