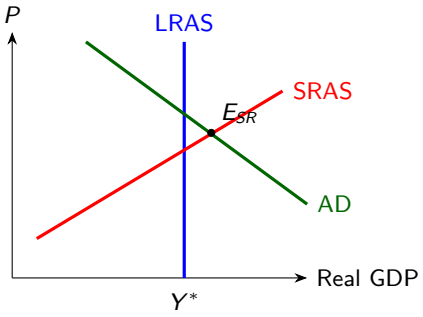
Bilkent University
Department of Economics

Fiscal Policy in the AD/AS Framework

Mahmut S. İpek

April 14, 2026

Quick Reminder: Where Is Equilibrium?



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- **Short-run equilibrium:** Always where **SRAS** $\cap$ **AD**. Determines *both* P and Y. Here: E_{SR} with $Y_{SR} > Y^*$ (overheating). A recessionary scenario is also possible.

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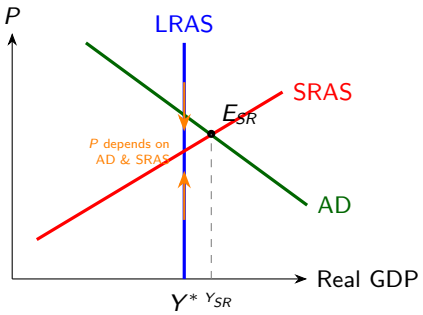

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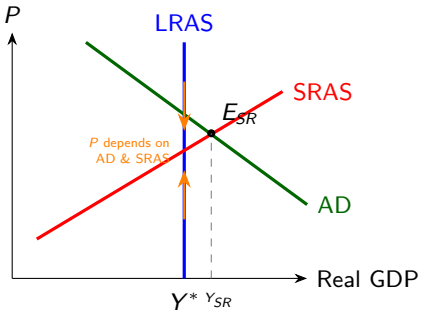

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Key: The economy is *always* at the SR equilibrium. In the long run, output gravitates to Y^*, but the price level at which that happens is *not* pinned down by LRAS — it depends on the stabilization path (self-correction vs. policy intervention).

The Government Budget Balance

The government's books must balance:

$$\underbrace{T + \Delta D}_{\text{Inflows}} = \underbrace{G + Tr + i \cdot D}_{\text{Outflows}}$$

- **Inflows:** Tax revenue (T) + new borrowing (ΔD).
- **Outflows:** Purchases (G) + transfers (Tr) + interest on existing debt ($i \cdot D$).

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Key ratio: D/Y. If D grows faster than Y, this spiral becomes unsustainable. Running deficits during booms erodes the fiscal space you need for recessions.

Discretionary Fiscal Policy

Deliberate changes in G, T, or Tr to shift AD.

Expansionary (recession):

- $G \uparrow$ or $T \downarrow$ or $Tr \uparrow$
- $\Rightarrow$ AD shifts **right**
- Budget moves toward **deficit**

Contractionary (overheating):

- $G \downarrow$ or $T \uparrow$ or $Tr \downarrow$
- $\Rightarrow$ AD shifts **left**
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Multiplier recap:

$$\Delta Y = \frac{1}{1 - MPC} \cdot \Delta G \qquad \text{vs.} \qquad \Delta Y = \frac{MPC}{1 - MPC} \cdot (-\Delta T)$$

G multiplier $>$ tax multiplier because \$1 of G is spent immediately; \$1 tax cut is partly saved.

Automatic Stabilizers

Fiscal policy that kicks in **without** new legislation:

Progressive income tax:

- Boom: incomes rise $\Rightarrow$ people move into higher brackets $\Rightarrow$ T rises automatically $\Rightarrow$ dampens AD.
- Recession: incomes fall $\Rightarrow$ T falls automatically $\Rightarrow$ supports AD.

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Why they matter:

- **No lag:** activate immediately.
- **Counter-cyclical by design:** budget deficit widens in recessions, shrinks in booms — automatically.
- **Limit:** they *dampen* cycles, they don't *eliminate* them. Large shocks still need discretionary action.

Counter-Cyclical Fiscal Policy

Good fiscal (or monetary) policy **leans against the wind**.

	Counter-cyclical	**Pro-cyclical**
Recession ($Y < Y^*$)	$G \uparrow$, $T \downarrow$ (stimulus)	Austerity
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Türkiye reminder: Pro-cyclical policy (cutting rates *and* expanding fiscal spending during overheating) is the textbook recipe for an inflation spiral. Automatic stabilizers were overridden by discretionary choices.

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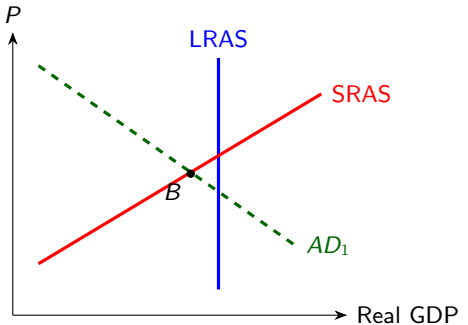
4. **Debt accumulation:** Persistent deficits raise D/Y, which raises future interest burdens and constrains future fiscal space.
5. **Multiplier uncertainty:** Empirical estimates range from < 1 to > 2 depending on the context. Policymakers are shooting in the fog.

Scenario: Demand Shock ⇒ Fiscal Response

Story: Consumer confidence collapses. $C \downarrow \Rightarrow$ AD$\leftarrow$.



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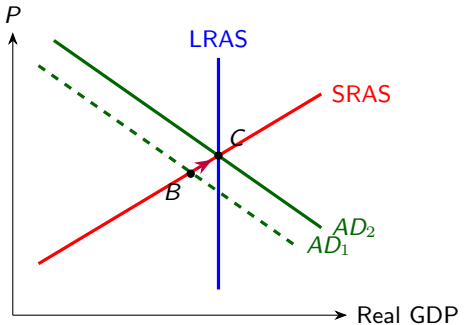

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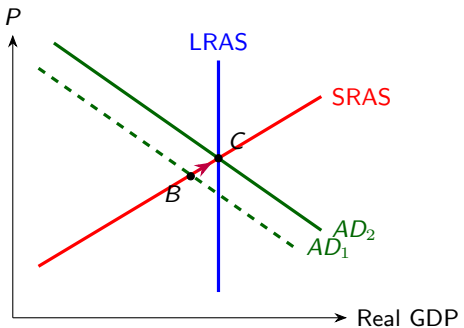

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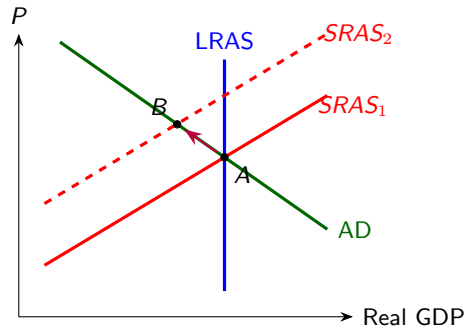
Demand shock = "easy" case.
Stabilising Y also stabilises P. No tradeoff. Fiscal policy and monetary policy both point in the same direction.

Scenario: Supply Shock — What Can Fiscal Policy Do?



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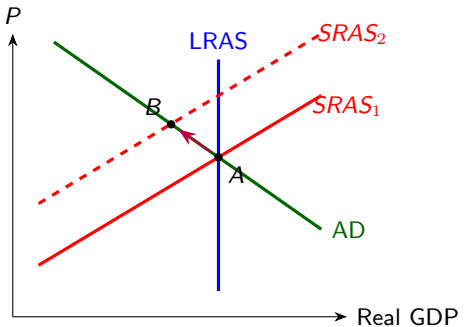

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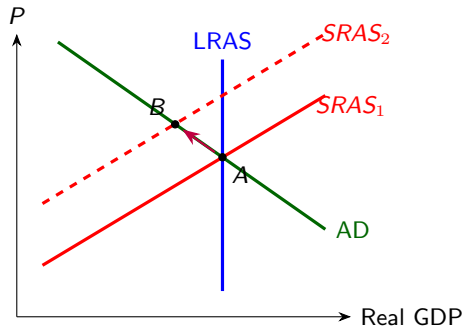

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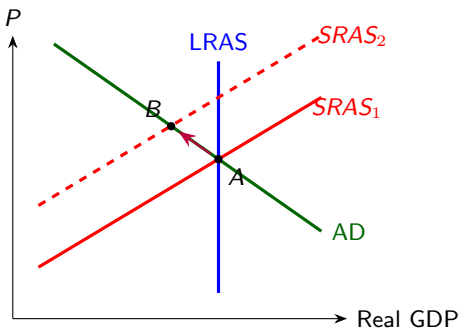

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No free lunch. Supply shocks expose the limits of demand-side tools. The "right" response depends on which problem — inflation or unemployment — the government judges more dangerous.

Practice: Identify and Respond

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- **Can fiscal expansion fix this?** It can push Y back up, but at the cost of even higher P. Classic supply-shock tradeoff.
- **What happens to the budget balance automatically?** Tax revenue falls (lower Y) and transfers rise (higher u) $\Rightarrow$ deficit widens — automatic stabilizers at work.

Takeaways

1. **Short-run equilibrium** is always SRAS $\cap$ AD. Long-run equilibrium pins down Y^* but *not* the price level.

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5. **Supply shocks remain the hard case:** fiscal tools can address Y or P, but not both. Identify the shock first.