

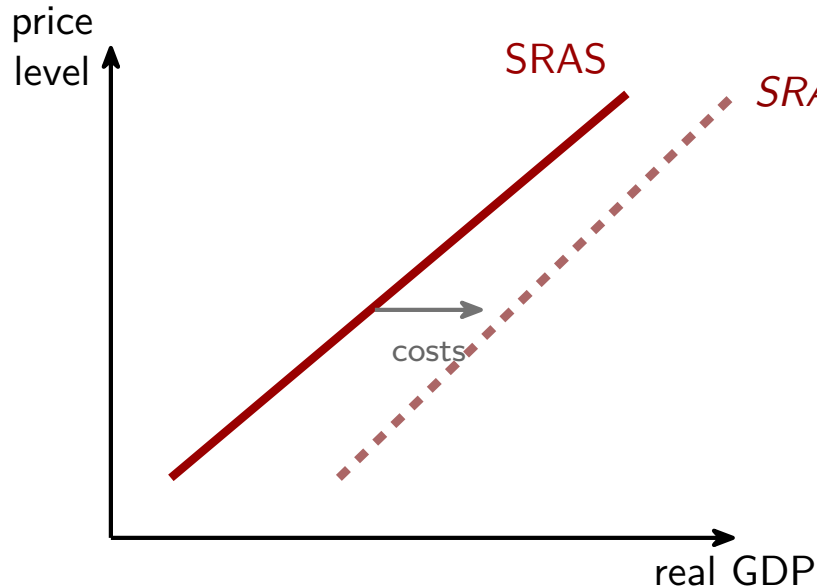
Exercise walk-through

3.5

Equilibrium in the Aggregate Demand–Aggregate Supply (AD–AS) Model

AP Macroeconomics

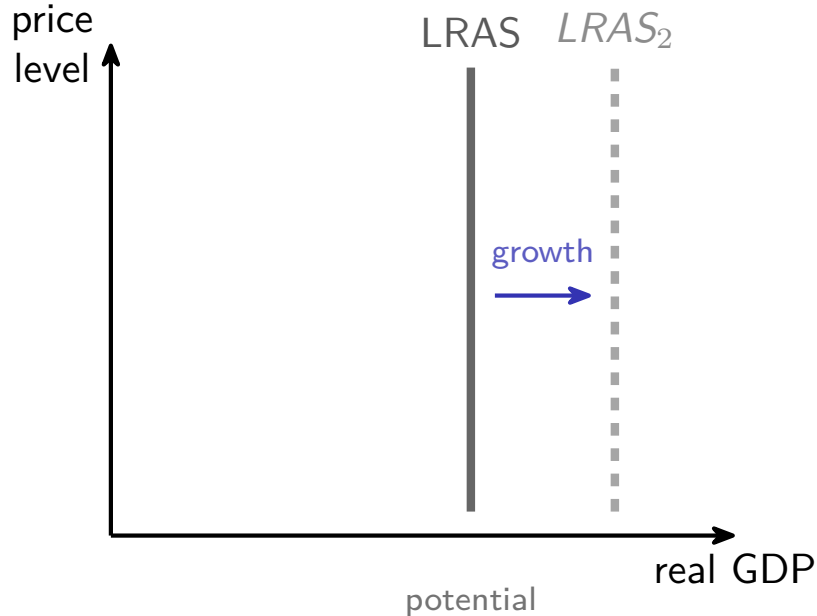
Short-run aggregate supply



In the short run some costs are **sticky** above all **nominal wages**. A higher price level with fixed wages $\Rightarrow$ more profit per unit $\Rightarrow$ more output. So SRAS slopes **up**. Shifters: input prices, **productivity**, **supply shocks**.

- higher costs $\Rightarrow$ shift **left**
- better productivity $\Rightarrow$ shift **right**

Long-run aggregate supply



In the long run wages and prices are **fully flexible**, so output settles at **potential GDP** – the **full-employment output**. LRAS is **vertical**: the same real output at any price level.

More resources, capital, or better technology shift LRAS **right** – that is **economic growth**.

Potential output, and the curve that shows it

Full-employment output

Full-employment (potential) output is what the economy produces when unemployment sits at its natural rate.

LRAS

Vertical at that output: in the long run the price level does not change what the economy can produce.

The PPC

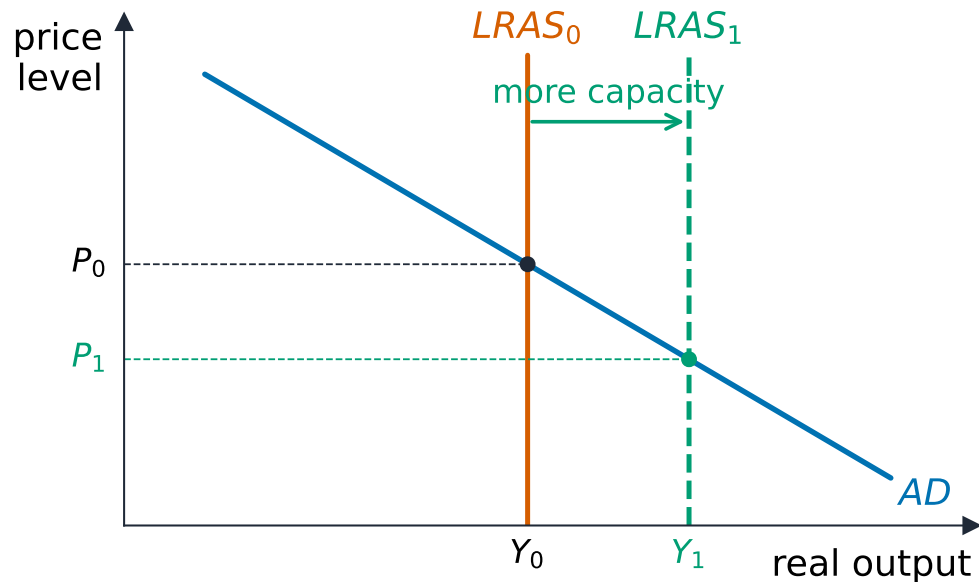
The **production possibilities curve (PPC)** shows the same limit in goods-against-goods form – and both shift out for the same reasons.

What shifts it

More or better resources, more capital, better technology, higher productivity.

An AD shift moves output only until wages adjust. Only an LRAS shift raises output permanently.

Supply-side policy shifts long-run aggregate supply



Supply-side policy shifts long-run aggregate supply right: more output, lower prices

Exercises 2.1-2.3

2.1 State where short-run macroeconomic equilibrium occurs.

[1]

2.2 State how to identify a recessionary gap on the AD–AS diagram.

[1]

2.3 Define an inflationary gap.

[1]

Exercises 2.1-2.3

2.1 State where short-run macroeconomic equilibrium occurs. [1]

2.1

- where the AD curve intersects the SRAS curve
-

2.2 State how to identify a recessionary gap on the AD–AS diagram. [1]

2.2

- equilibrium output lies to the left of (below) full-employment output
-

2.3 Define an inflationary gap. [1]

2.3

- the gap when equilibrium output is above potential (full-employment) output

Exercises 3.1-3.2

3.1 Short-run macroeconomic equilibrium is where AD meets

[1]

☐

A LRAS

B SRAS

C the price axis

D the origin

3.2 If equilibrium output is below full-employment output, there is a

[1]

☐

A inflationary gap

B recessionary gap

C trade surplus

D boom

Exercises 3.1-3.2

3.1 Short-run macroeconomic equilibrium is where AD meets

[1]

☐

A LRAS

B SRAS

C the price axis

D the origin

3.1 B

- SRAS.

3.2 If equilibrium output is below full-employment output, there is a

[1]

☐

A inflationary gap

B recessionary gap

C trade surplus

D boom

3.2 B

- recessionary gap.

Exercise 3.3 (a)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(a) Name the gap.

[1]

Exercise 3.3 (a)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(a) Name the gap.

[1]

(a)

- an inflationary gap

Exercise 3.3 (b)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(b) State what is likely happening to the price level.

[1]

Exercise 3.3 (b)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(b) State what is likely happening to the price level.

[1]

(b)

- it is rising

Exercise 3.3 (c)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(c) State whether unemployment is above or below the natural rate.

[1]

Exercise 3.3 (c)

3.3 An economy's short-run equilibrium output is **above** its potential output.

(c) State whether unemployment is above or below the natural rate. [1]

(c)

- below the natural rate

Exercise 3.4

3.4 A schematic economy has short-run equilibrium output 120 and potential output 100. Its equilibrium price-level index is 115. (a) Calculate the output gap and classify it. [2]

(b) Holding SRAS fixed, describe the directions of the short-run changes in output and price level when AD shifts left. [2]

Exercise 3.4

3.4 A schematic economy has short-run equilibrium output 120 and potential output 100. Its equilibrium price-level index is 115. (a) Calculate the output gap and classify it. [2]

(b) Holding SRAS fixed, describe the directions of the short-run changes in output and price level when AD shifts left. [2]

3.4

(a) Output exceeds potential by $120 - 100 = 20$ units, an inflationary output gap.

(b) Equilibrium real output falls and the price level falls, as the intersection moves left and down along SRAS.