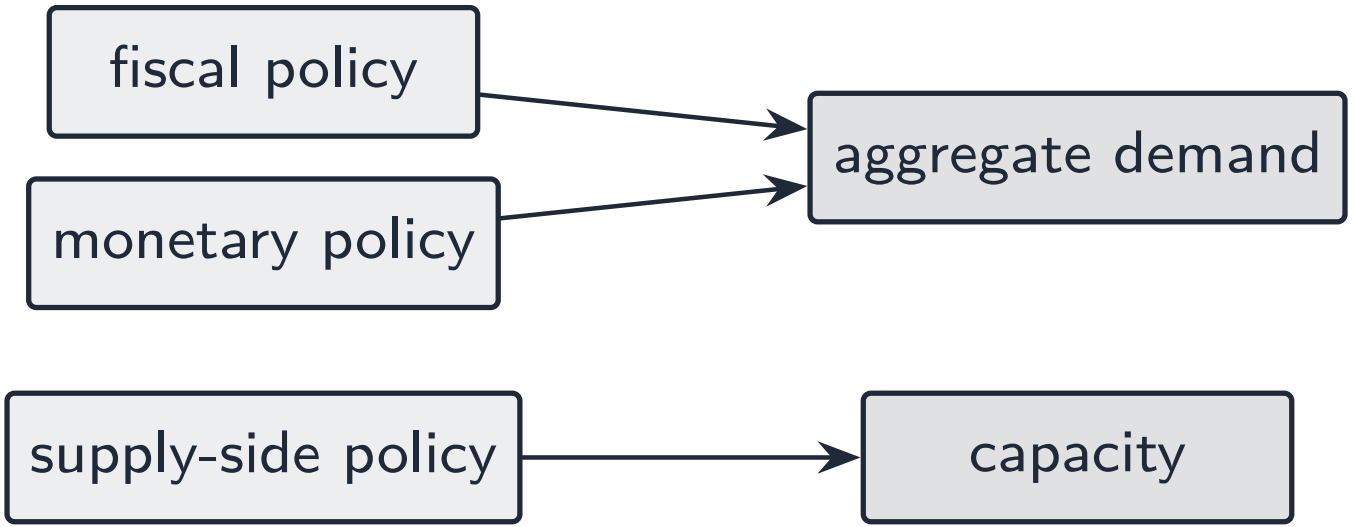
Exercise walk-through

5.6
Demand management: monetary policy

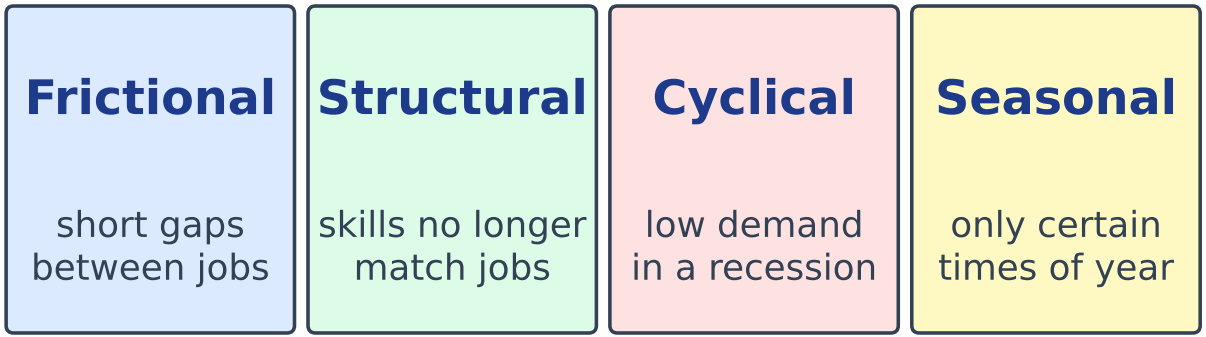
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Figure: Macroeconomic activity, objectives and policy



- Fiscal and **monetary policy** act on demand; supply-side on capacity
- Match each part of the diagram to the text.

Figure: Macroeconomic objectives



Exam: name the type + cause — match policy to cause; results depend on vacancies and spare capacity

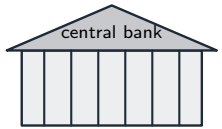
- The four types of unemployment: frictional (between jobs), structural (skills no longer match), cyclical (low demand in a **recession**) and seasonal
- Match each part of the diagram to the text.

Key terms (2)

- **Multiplier**: the ratio of the final change in national **income** to the initial change in spending.
- **Natural rate of unemployment**: the rate of unemployment when the labour market is in equilibrium, made up of frictional, structural and seasonal unemployment.
- **Monetary policy**: the **central bank**'s use of interest rates and the **money supply** to influence aggregate demand.
- **Supply-side policy**: policy that aims to increase the economy's productive capacity (LRAS).

Exercises 2.1·2.2

2.1 Outline **two** tools of monetary policy. [2]

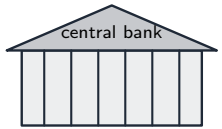


2.2 Explain why many central banks are made independent of government. [2]



Exercises 2.1·2.2

2.1 Outline **two** tools of monetary policy. [2]



2.1

any two: changing the policy interest rate; open market operations: buying or selling government bonds; changing minimum reserve requirements; quantitative easing

2.2 Explain why many central banks are made independent of government. [2]

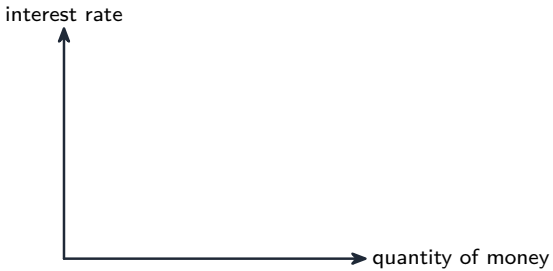


2.2

governments may want lower interest rates before elections, even if this causes inflation; an independent bank can take unpopular decisions to keep inflation low, so its targets are more credible

Exercise 2.3

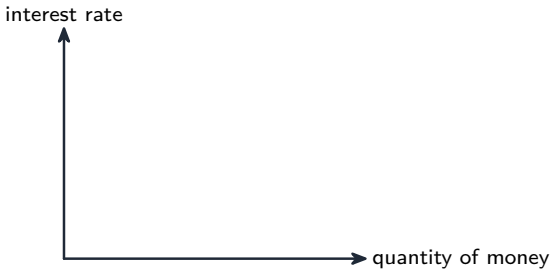
2.3 Using a money market diagram, explain how an increase in the money supply affects the interest rate. [4]



[[drawlines:4]]

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2.3

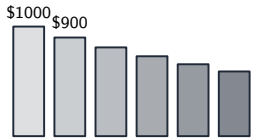
diagram: interest rate on the vertical axis, quantity of money on the horizontal; downward-sloping D_m and vertical S_m; the central bank increases the money supply: S_m shifts right; at the old rate there is excess money supply, so people buy bonds and the interest rate falls; new equilibrium at a lower interest rate

Exercises 2.4·2.5

2.4 A bank pays 4% interest on savings. Inflation is 6%. Calculate the real interest rate and explain what it means for savers. [3]



2.5 A new deposit of $1000 is made. The reserve requirement is 10%. Calculate the maximum total new money that the banking system can create from it, and state **one** reason why actual money creation is smaller. [3]



Exercises 2.4·2.5

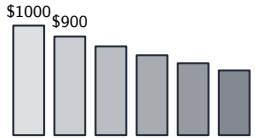
2.4 A bank pays 4% interest on savings. Inflation is 6%. Calculate the real interest rate and explain what it means for savers. [3]



2.4

real rate $\approx 4 - 6 = -\mathbf{2}\%$; savers' money grows by less than prices rise; so the purchasing power of their savings falls

2.5 A new deposit of \$1000 is made. The reserve requirement is 10%. Calculate the maximum total new money that the banking system can create from it, and state **one** reason why actual money creation is smaller. [3]



2.5

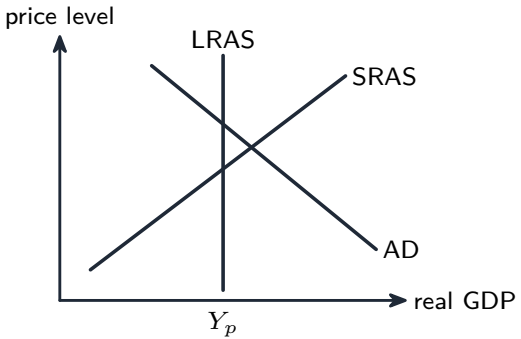
multiplier $= 1 \div 0.1 = 10$; maximum money $= \mathbf{\$10\,000}$; any one: banks keep extra reserves; people hold some cash; firms and households may not want to borrow

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Exercise 3.1 (a)

3.1 Inflation has risen to 7%, well above the central bank's target of 2%.

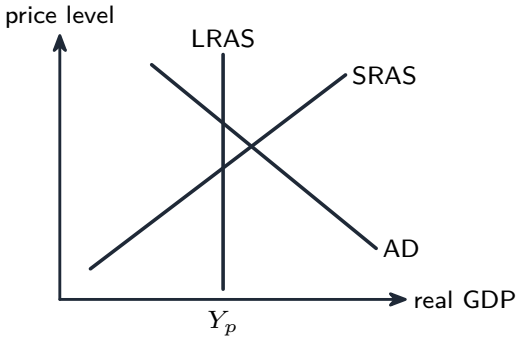
(a) Define **contractionary monetary policy**. [2]



Exercise 3.1 (a)

3.1 Inflation has risen to 7%, well above the central bank's target of 2%.

(a) Define **contractionary monetary policy**. [2]



(a) action by the central bank to reduce aggregate demand; e.g. raising interest rates / reducing the money supply

Exercise 3.1 (b)

3.1 Inflation has risen to 7%, well above the central bank's target of 2%.

(b) Using an AD/AS diagram, explain how raising interest rates could bring inflation down. [6]

[[drawlines:6]]

Exercise 3.1 (b)

3.1 Inflation has risen to 7%, well above the central bank's target of 2%.

(b) Using an AD/AS diagram, explain how raising interest rates could bring inflation down. [6]

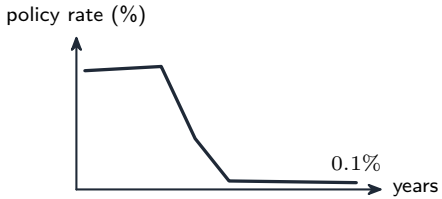
[[drawlines:6]]

(b) higher rates make borrowing dearer and saving more attractive; consumption and investment fall; the currency may rise, so net exports fall; AD shifts left; the price level rises more slowly / inflation falls, but real GDP falls too; correctly labelled diagram showing $\mathrm{AD}_1 \to \mathrm{AD}_2$ with lower P and Y

Exercise 3.2

3.2 After a financial crisis, a central bank cut its policy rate to 0.1%, but borrowing and spending stayed low.

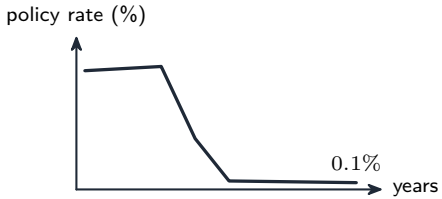
Evaluate the effectiveness of monetary policy in a deep recession. [8]



Exercise 3.2

3.2 After a financial crisis, a central bank cut its policy rate to 0.1%, but borrowing and spending stayed low.

Evaluate the effectiveness of monetary policy in a deep recession. [8]



3.2

award up to [8]: low rates should make borrowing cheaper and raise C and I; but in a deep recession confidence is very low: firms do not invest and households save to pay off debt; banks may be unwilling to lend after losses; rates cannot be cut much below zero (the zero lower bound); QE can lower long-term rates and raise asset prices; but the benefits go mainly to asset owners, raising wealth inequality; fiscal policy may be more effective here: government spending enters AD directly; judgement: monetary policy is weaker in a deep recession and works best with fiscal policy