



THE UNIVERSITY OF
SYDNEY

ECON1002: INTRODUCTORY MACROECONOMICS

LECTURE 6: AGGREGATE DEMAND AND SUPPLY

March 2017

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Based on slides Wills, Melatos and Bernanke, Olekalns and Frank

Putting it in context

Inflation, spending and output: the AD

- Up to now, we have not taken inflation into account because prices assumed not to change in the short-run.
- However, prices change and inflation does occur.
- How does inflation affect planned aggregate expenditure?

Inflation... hyperinflation

THE HYPERINFLATION TABLE

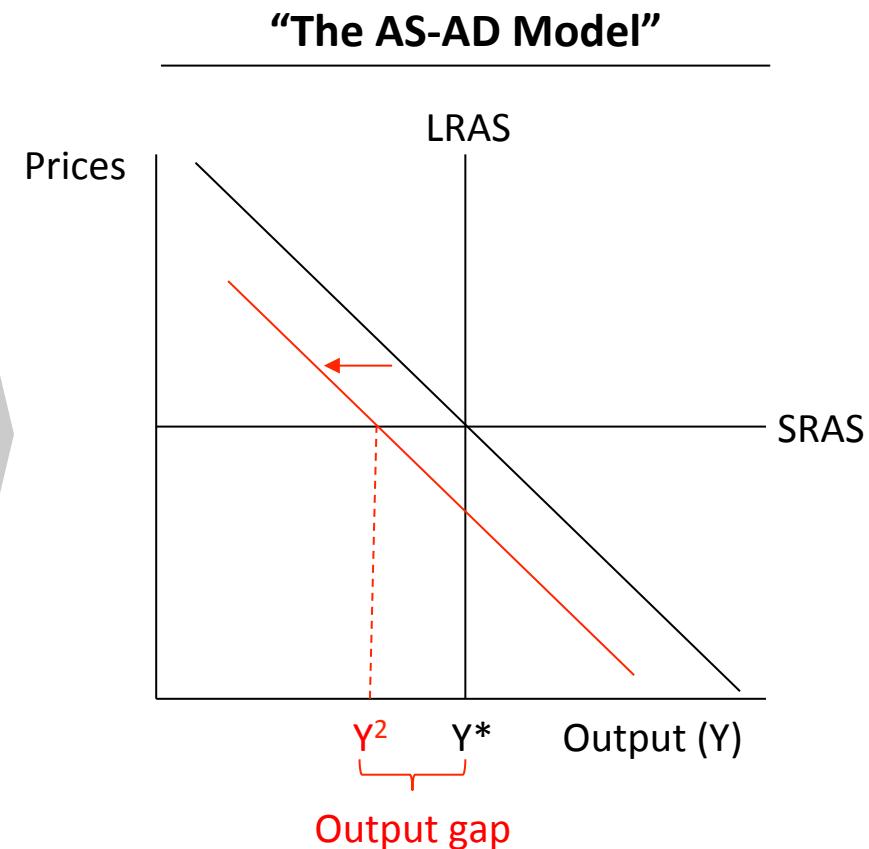
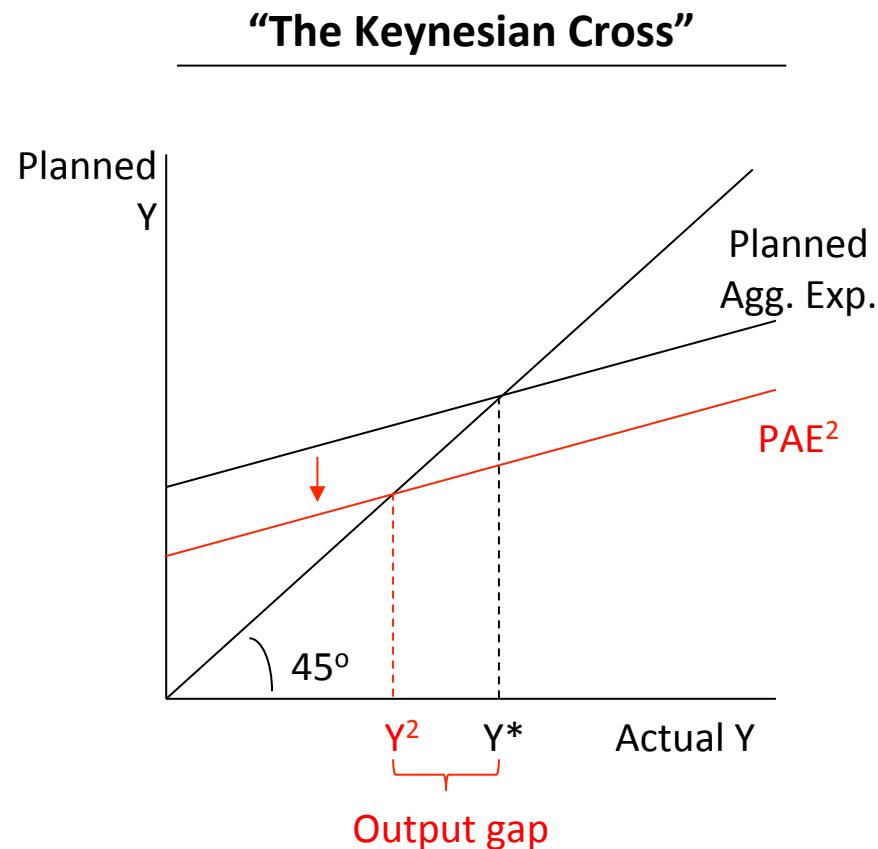
LOCATION	START DATE	END DATE	HIGHEST MONTHLY INFLATION RATE	EQUIVALENT DAILY INFLATION RATE
Hungary ¹	Aug. 1945	Jul. 1946	4.19 x 10 ¹⁶ %	207%
Zimbabwe ²	Mar. 2007	Mid-Nov. 2008	7.96 x 10 ¹⁰ %	98.0%
Yugoslavia ³	Apr. 1992	Jan. 1994	313,000,000%	64.6%
Republika Srpska† ⁴	Apr. 1992	Jan. 1994	297,000,000%	64.3%
Germany ⁵	Aug. 1922	Dec. 1923	29,500%	20.9%
Greece ⁶	May. 1941	Dec. 1945	13,800%	17.9%
China§ ⁷	Oct. 1947	Mid-May 1949	5,070%	14.1%
Danzig ⁸	Aug. 1922	Mid-Oct. 1923	2,440%	11.4%
Armenia ⁹	Oct. 1993	Dec. 1994	438%	5.77%
Turkmenistan†† ¹⁰	Jan. 1992	Nov. 1993	429%	5.71%
Taiwan ¹¹	Aug. 1945	Sep. 1945	399%	5.50%
Peru ¹²	Jul. 1990	Aug. 1990	397%	5.49%
Bosnia and Herzegovina ¹³	Apr. 1992	Jun. 1993	322%	4.92%
France ¹⁴	May 1795	Nov. 1796	304%	4.77%
China ¹⁵	Jul. 1943	Aug. 1945	302%	4.75%
Ukraine ¹⁶	Jan. 1992	Nov. 1994	285%	4.60%
Poland ¹⁷	Jan. 1923	Jan. 1924	275%	4.50%
Nicaragua ¹⁸	Jun. 1986	Mar. 1991	261%	4.37%
Congo (Zaire) ¹⁹	Nov. 1993	Sep. 1994	250%	4.26%
Russia†† ²⁰	Jan. 1992	Jan. 1992	245%	4.22%
Bulgaria ²¹	Feb. 1997	Feb. 1997	242%	4.19%
Moldova ²²	Jan. 1992	Dec. 1993	240%	4.16%
Soviet Union ²³	Jan. 1922	Feb. 1924	212%	3.86%
Georgia ²⁴	Sep. 1993	Sep. 1994	211%	3.86%
Tajikistan†† ²⁵	Jan. 1992	Oct. 1993	201%	3.74%

Inflation... hyperinflation



Date:	German Marks needed to buy one ounce of gold
Jan 1919.....	170.00
Sept 1919.....	499.00
Jan 1920.....	1,340.00
Sept 1920.....	1,201.00
Jan 1921.....	1,349.00
Sept 1921.....	2,175.00
Jan 1922.....	3,976.00
Sept 1922.....	30,381.00
Jan 1923.....	372,477.00
Sept 1923.....	269,439,000.00
Oct 2, 1923.....	6,631,749,000.00
Oct 9, 1923.....	24,868,950,000.00
Oct 16, 1923.....	84,969,072,000.00
Oct 23, 1923.....	1,160,552,882,000.00
Oct 30, 1923.....	1,347,070,000,000.00
Nov 5, 1923.....	8,700,000,000,000.00
Nov 30, 1923.....	87,000,000,000,000.00

By the end of the lecture we will learn how to use the “Keynesian Cross” to analyse aggregate expenditure, which will feed into the AS-AD model



- The Keynesian cross studies how “planned expenditure” can differ from “actual output”, which underpins the movements in aggregate demand which cause negative output gaps (“recessions”)

Chapter 9

The aggregate supply-aggregate
demand (AS-AD) model

Learning Objectives

- 9.1 What does an aggregate demand curve show?
- 9.2 What implication do the Reserve Bank's anti-inflation policies have for the slope of the aggregate demand curve?
- 9.3 For what reasons might the aggregate demand curve shift?
- 9.4 What is meant by the phrase 'inflation inertia'?
- 9.5 How does the output gap affect the rate of inflation?
- 9.6 How is the aggregate demand–aggregate supply diagram constructed?
- 9.7 In what sense is the economy 'self-correcting'?
- 9.8 What are the main sources of inflation?
- 9.9 What are the effects on the economy of an inflation shock?
- 9.10 Describe how monetary policy can influence the rate of inflation.

Chapter 9: AD- AS model

- Inflation, spending and output: the aggregate demand (AD) curve.
- Inflation and supply decisions: the aggregate supply (AS) curve.
- Understanding business cycles.
- The self-correcting economy.
 - Role for stabilisation policy?

Chapter 9 Outline

1. Aggregate Demand

2. Aggregate Supply

3. Business Cycles: Shocks to AS and AD

Chapter 9 Outline

1. Aggregate Demand

2. Aggregate Supply

3. Business Cycles: Shocks to AS and AD



Full ASAD diagram

Inflation, spending and output: the AD

- Higher inflation reduces the purchasing power of financial assets, and this reduction of real wealth tends to reduce household spending.
- High inflation tends to redistribute resources from less well-off households, who spend greater proportions of their incomes, to better off households, who spend a lesser proportion. Thus overall spending is reduced.

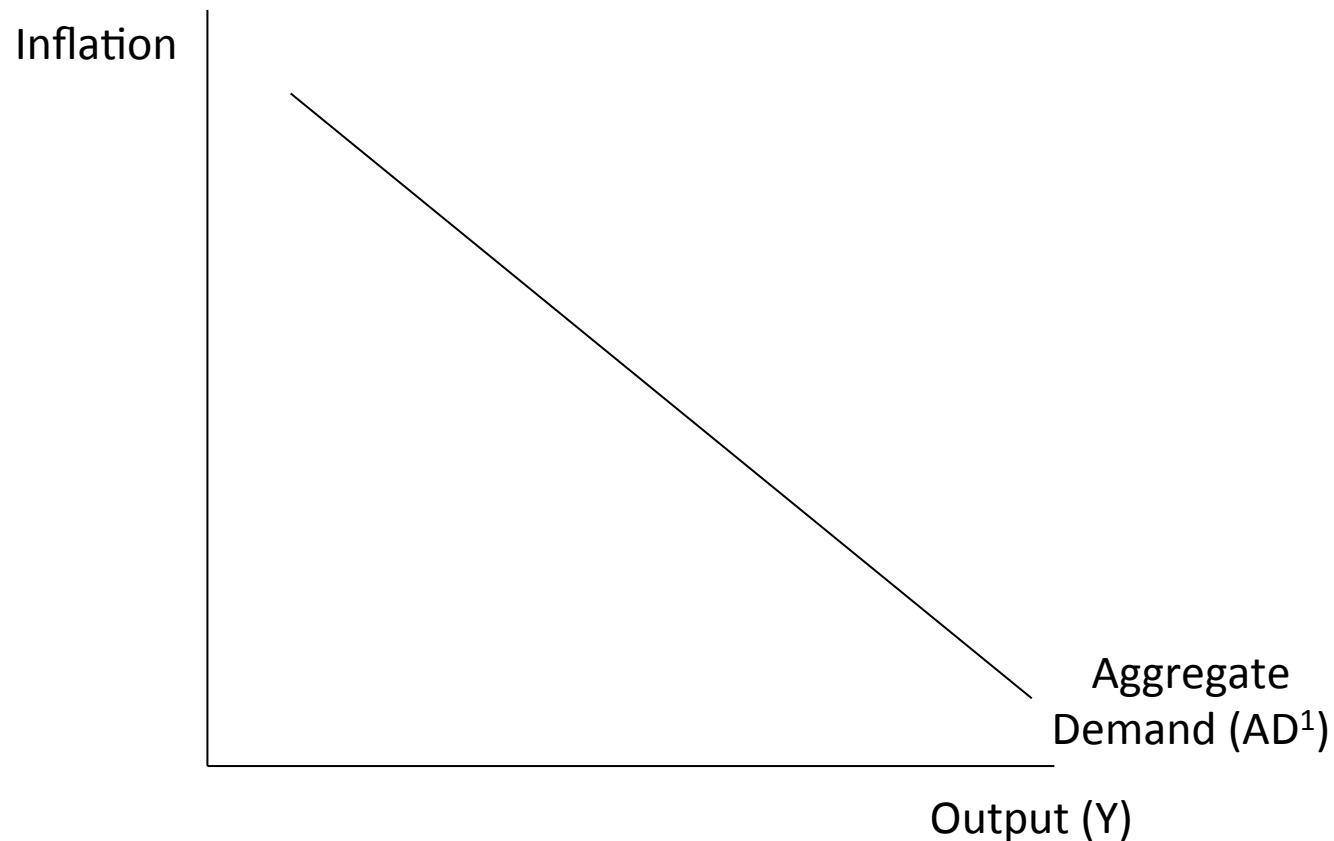
Inflation, spending and output: the AD

- Higher inflation generates uncertainty for households and firms and this makes them more cautious and reduces their spending.
- At constant exchange rates, higher domestic inflation makes exports less competitive, and reduces the level of net exports. Again, this reduces spending at higher levels of inflation.
- Most importantly, when the inflation rate exceeds its targeted level, the Reserve Bank will increase interest rates, which reduces consumption and investment.

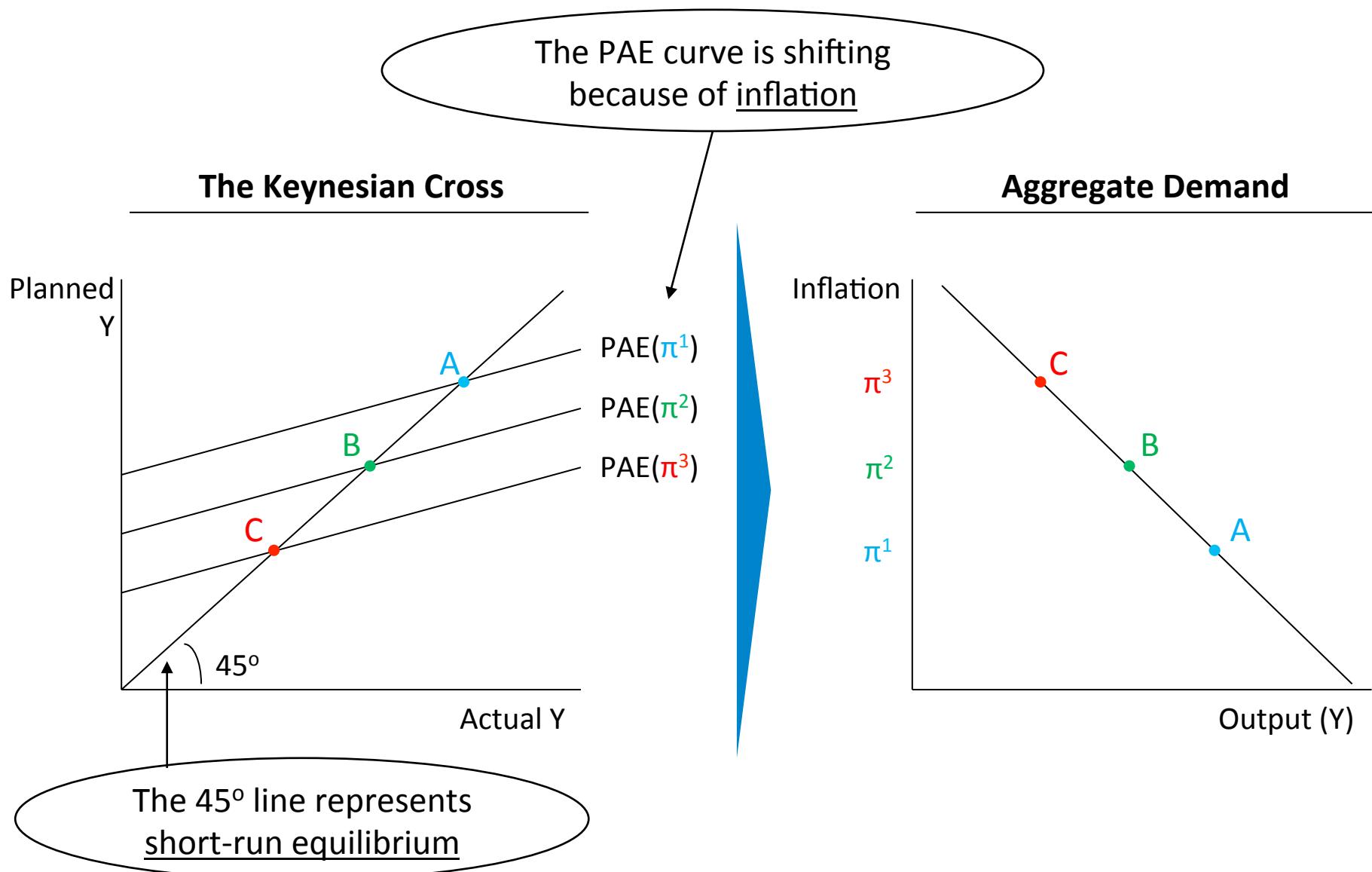
Inflation, spending and output: the AD

- Recall from the Keynesian model that the short-run equilibrium level of output equals planned aggregate expenditure. Therefore, lower aggregate expenditure due to inflation implies lower equilibrium level of output.
- That is, **from the demand (or expenditure) side, there is a negative relationship between inflation and output.**
- **Aggregate demand (AD)** curve = relationship between the short-run equilibrium level of output (Y) and the rate of inflation (π).
 - Because increases in inflation reduce planned spending and short-run equilibrium output, the AD curve is downward-sloping.

Aggregate demand shows the downward-sloping relationship between inflation and short-run equilibrium output



The points on the AD curve show how the short-run equilibrium between PAE and Actual Y changes as inflation changes



High inflation causes the PAE curve to shift down, and therefore the AD to slope downwards, for a number of reasons

1. Monetary Policy

- If inflation exceeds its target, the Central Bank will raise real interest rates, reducing C and I, and equilibrium output.

2. Wealth

- High inflation reduces the value of future income, reducing C

3. Uncertainty

- High inflation creates uncertainty, so households and firms spend less

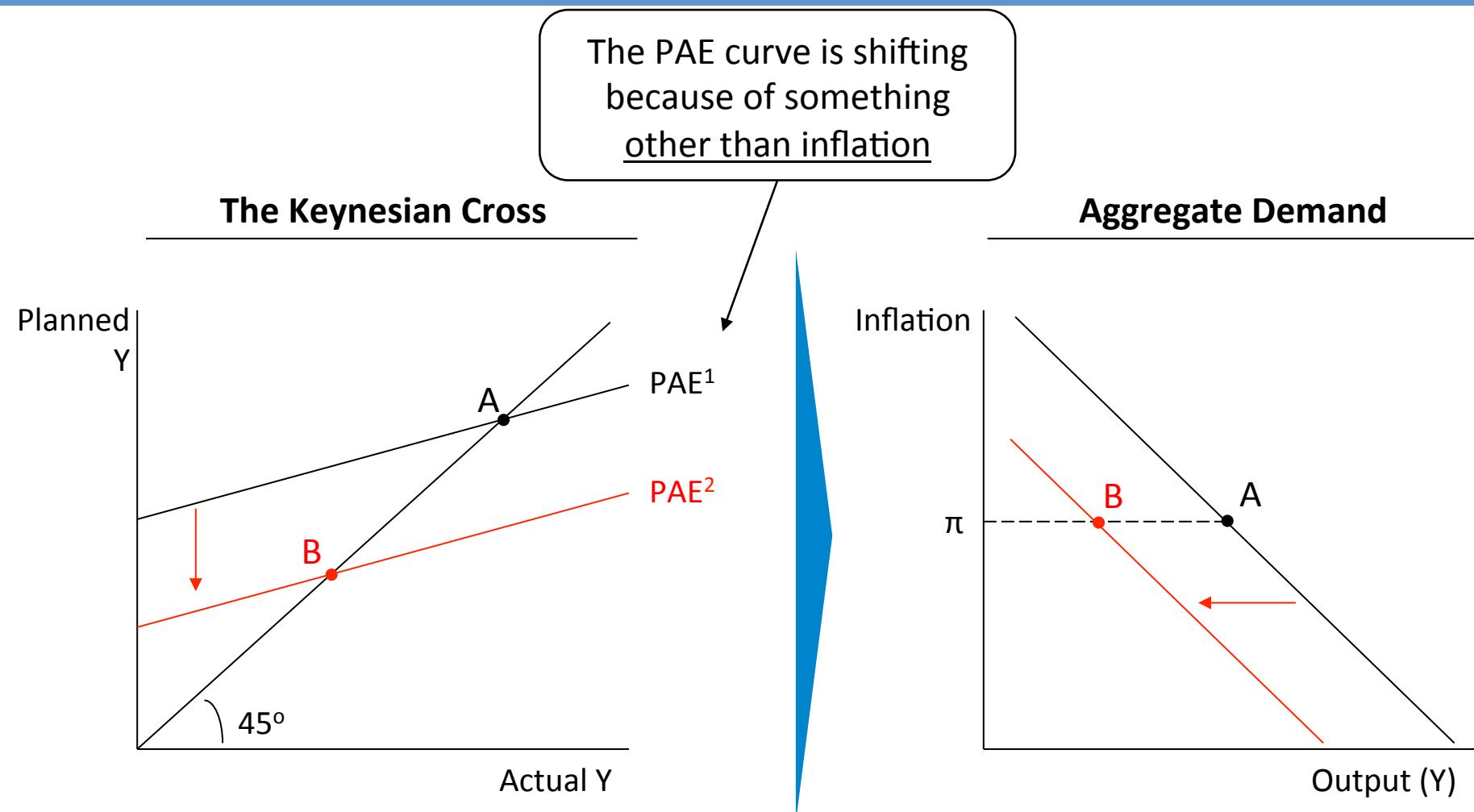
4. Exports

- High inflation (if exchange rate is pegged) makes exports less competitive, and reduces the level of net exports.

5. Distortions

- High inflation distorts the relative prices of goods, reducing aggregate demand

A shift in the PAE that is not due to inflation will also cause the aggregate demand curve to shift



- Potential causes of a shift in AD include exogenous changes in G , T , C , I , X and r (via a new policy reaction function, not the same one)

The aggregate demand curve

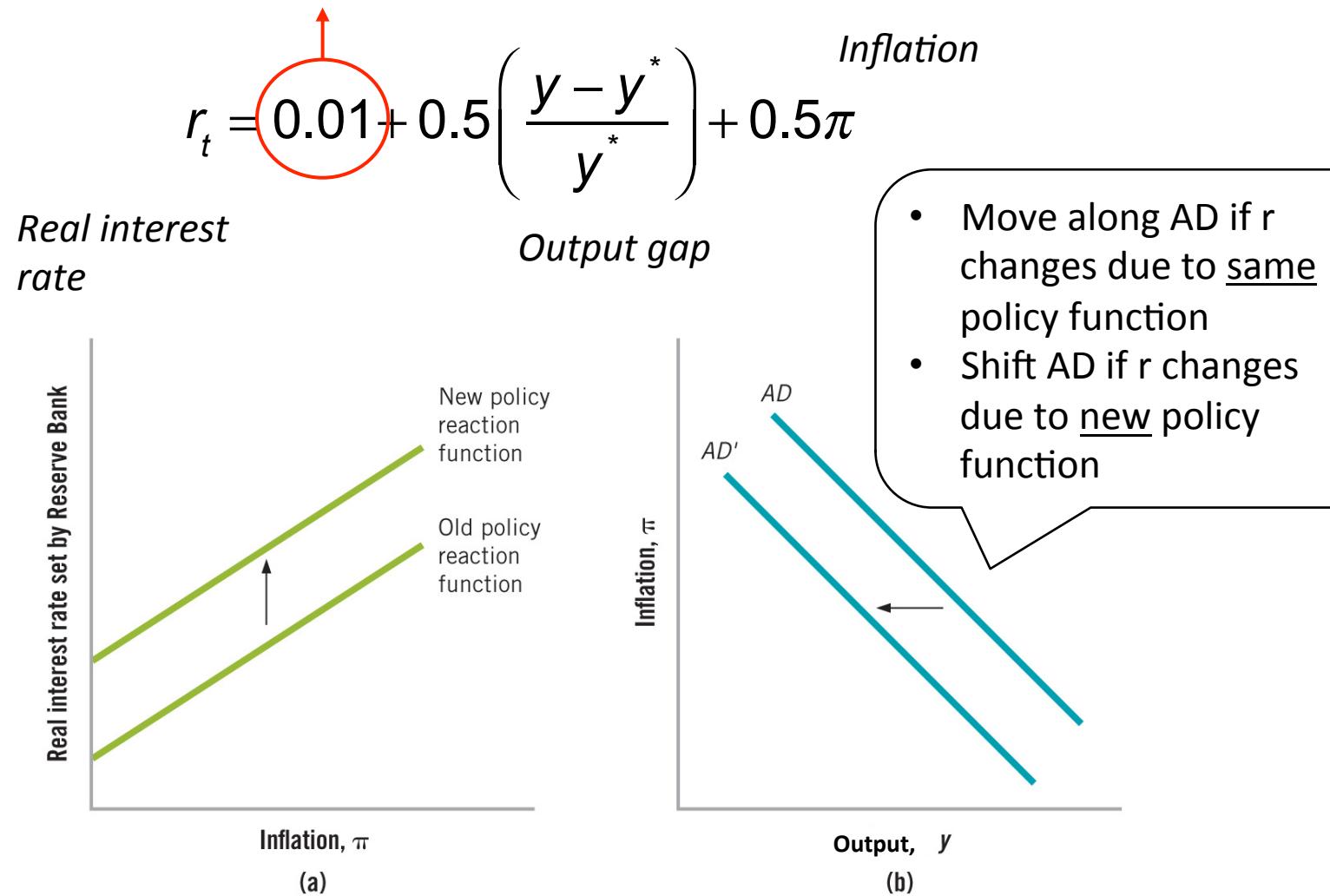
- **Important to distinguish between movements along the AD and shifts of the AD.**
- Changes in spending caused by changes in inflation will lead to movements along the AD.
 - For example: an increase in the inflation rate that leads the Reserve Bank to change the real interest rate according to its policy reaction function, will result in a decrease in the short-run equilibrium level of output → Movement from point A to B.

The aggregate demand curve

- Any factor that changes the equilibrium level of output at a given level of inflation will shift the *AD* curve. For example:
 - **Exogenous changes in spending.**
 - For example, the level of government spending, consumer and business confidence, increased business investment, increases in exports, etc
 - An increase in exogenous spending increases equilibrium output at each level of inflation and the *AD* curve shifts to the right.
 - A change in the Reserve Bank policy reaction function, ie., in the way the Reserve Bank's interest rate reacts to inflation and/or output gaps.
 - This shift in the policy reaction function would cause the *AD* curve to shift as a different equilibrium output would result at each inflation rate.

A change in the policy reaction function (the Central Bank's Taylor Rule) alters the relationship between y and π so will shift the AD curve

The Taylor Rule



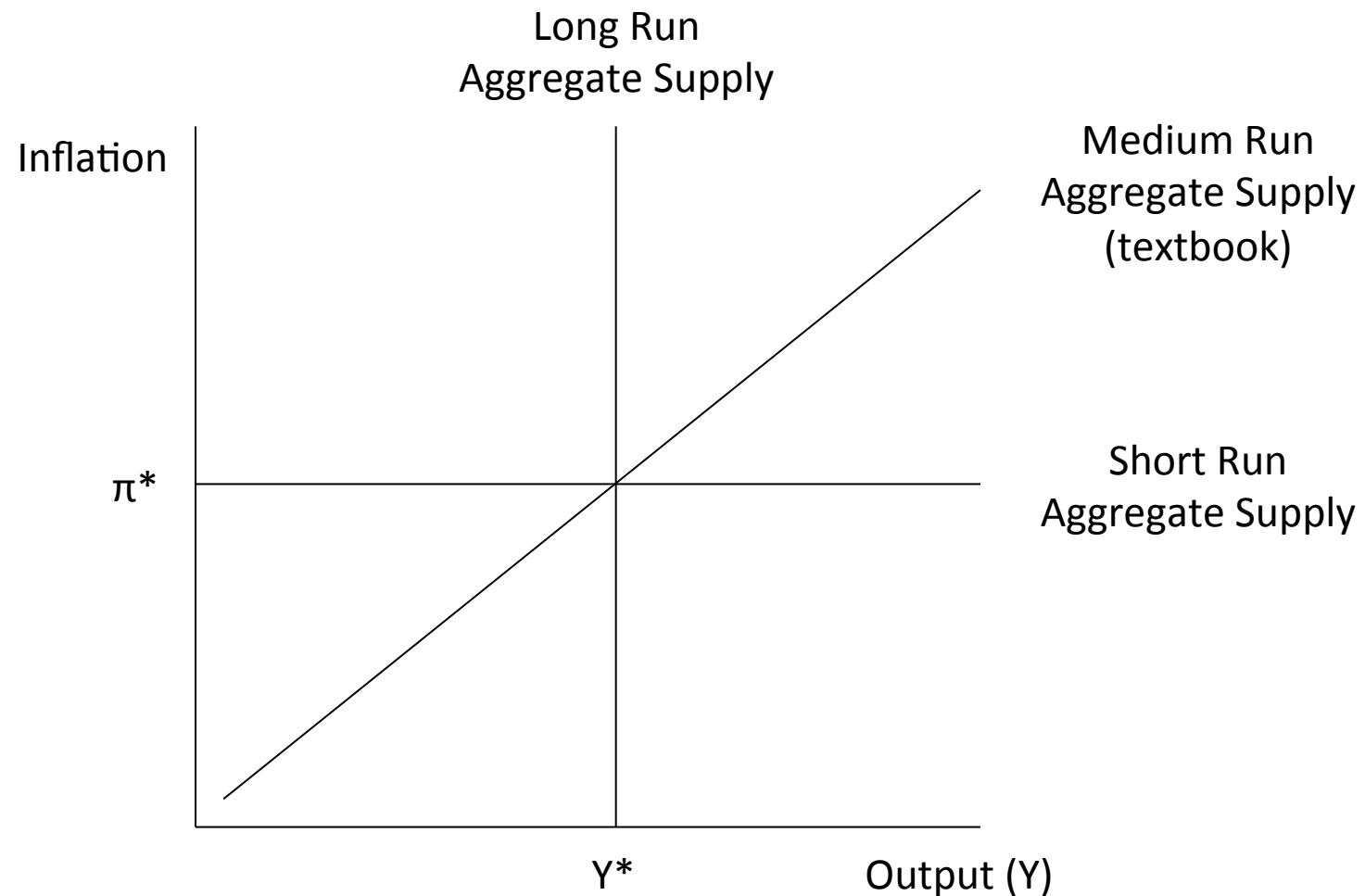
Chapter 9 Outline

1. Aggregate Demand

2. Aggregate Supply

3. Business Cycles: Shocks to AS and AD

The aggregate supply curve is horizontal in the short term, sloped in the medium term, and vertical in the long term



The slope of the aggregate supply curve changes with the time horizon because prices are initially sticky, but change eventually

1. Short Run
(days-months)

In the short run prices don't change because

- The public expect inflation to be constant
- Wage and price contracts are already set
- Firms don't know if a change in demand is "noise" or "signal"

2. Medium Run
(quarters-2 yrs)

In the medium run prices change a little because

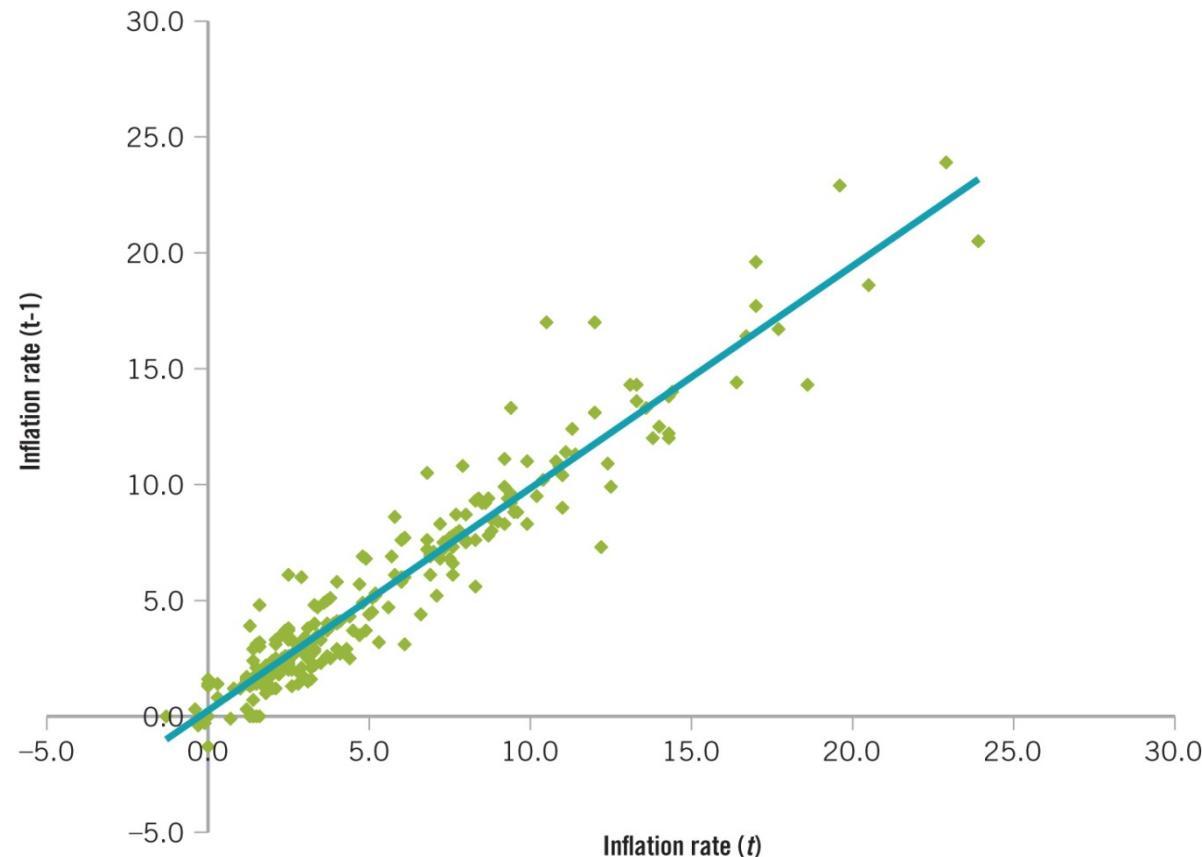
- Inflation expectations remains constant
- Some firms can renegotiate wage and price contracts
- Firms start to think that changes in demand are "signals"

3. Long Run
(~>2 yrs)

In the long run prices change perfectly

- Inflation expectations are fully variable
- All firms can renegotiate wage and price contracts
- All changes in demand are "signals"

The slow adjustment of inflation is called “inflation inertia”, so central banks work very hard to be “credible” to “anchor” inflation expectations



Formally: Backward looking inflation expectations

If inflation is inertial, then expected inflation will equal past inflation:

$$\pi_t^e = \pi_{t-1}$$

Figure 9.5 Australia's inertial inflation rate Inflation inertia is indicated by a scatter diagram of data representing this period's inflation rate and last period's inflation rate lying close to a 45-degree line drawn from the origin.

Source: Reserve Bank of Australia, www.rba.gov.au/statistics/tables/index.html#prices_inflation.

Inflation and supply decisions: the AS

- From the supply or production side, inflation is positively related to the level of output.
- Why?
 - What do firms do (eventually) when output is above potential level of output?
 - What do firms do (eventually) when output is below potential level of output?

Inflation and supply decisions: the AS

- If $Y > Y^*$, most firms' sales exceed their normal production rates, and firms are likely to increase their price relative to other goods and services. To do so, they will increase their prices by more than their costs increase.
- If all firms behave like this, the inflation rate will tend to increase.
- Similar argument applies to the opposite situation, when $Y < Y^*$.
- Only when $Y = Y^*$ will the inflation rate tend to remain the same.

The relationship between unemployment/the output gap and inflation is described by the “Phillips Curve”

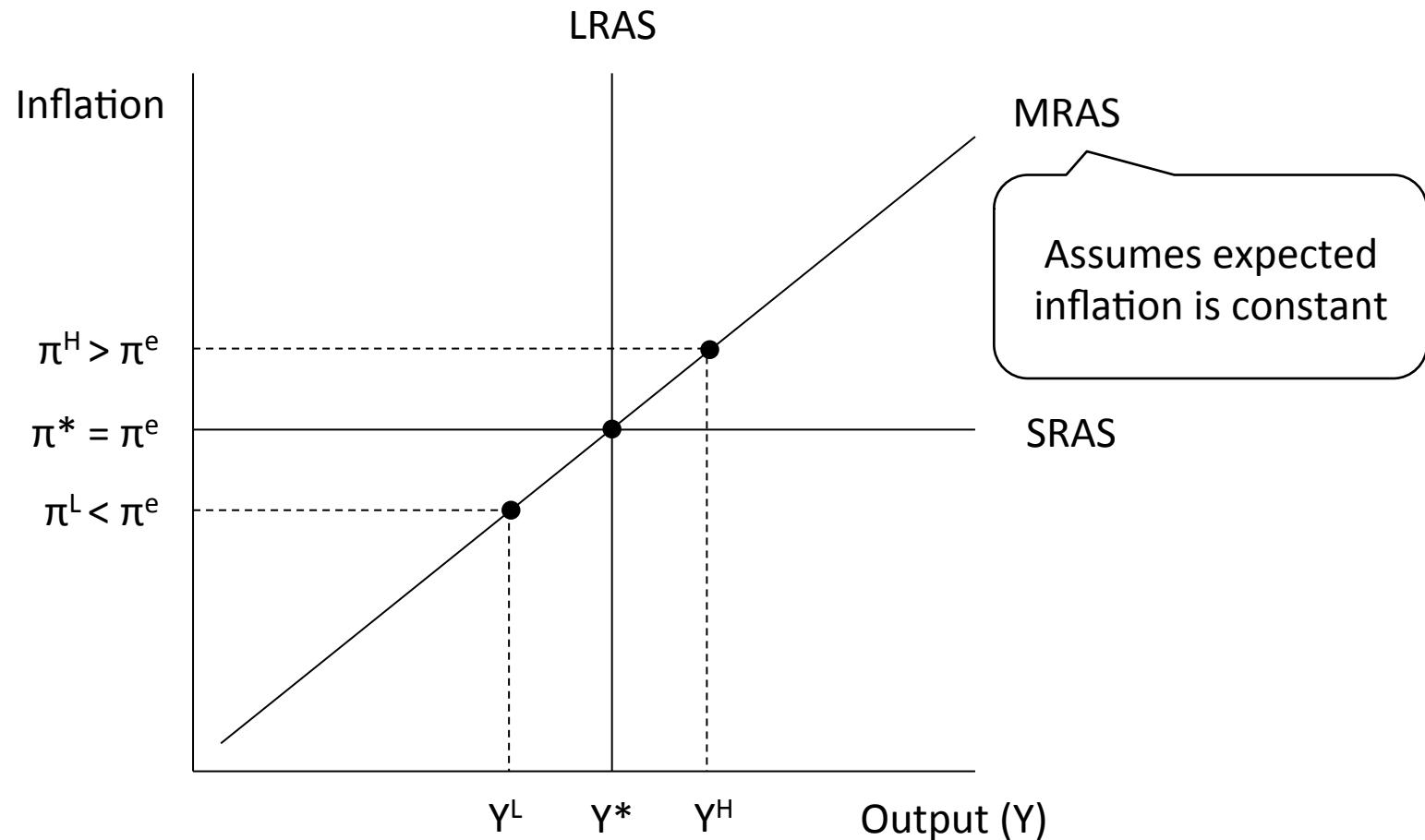
The (backward-looking) Phillips Curve

$$\pi_t = \pi_{t-1} + \gamma \left(\frac{y_t - y^*}{y^*} \right) + \varepsilon_t$$

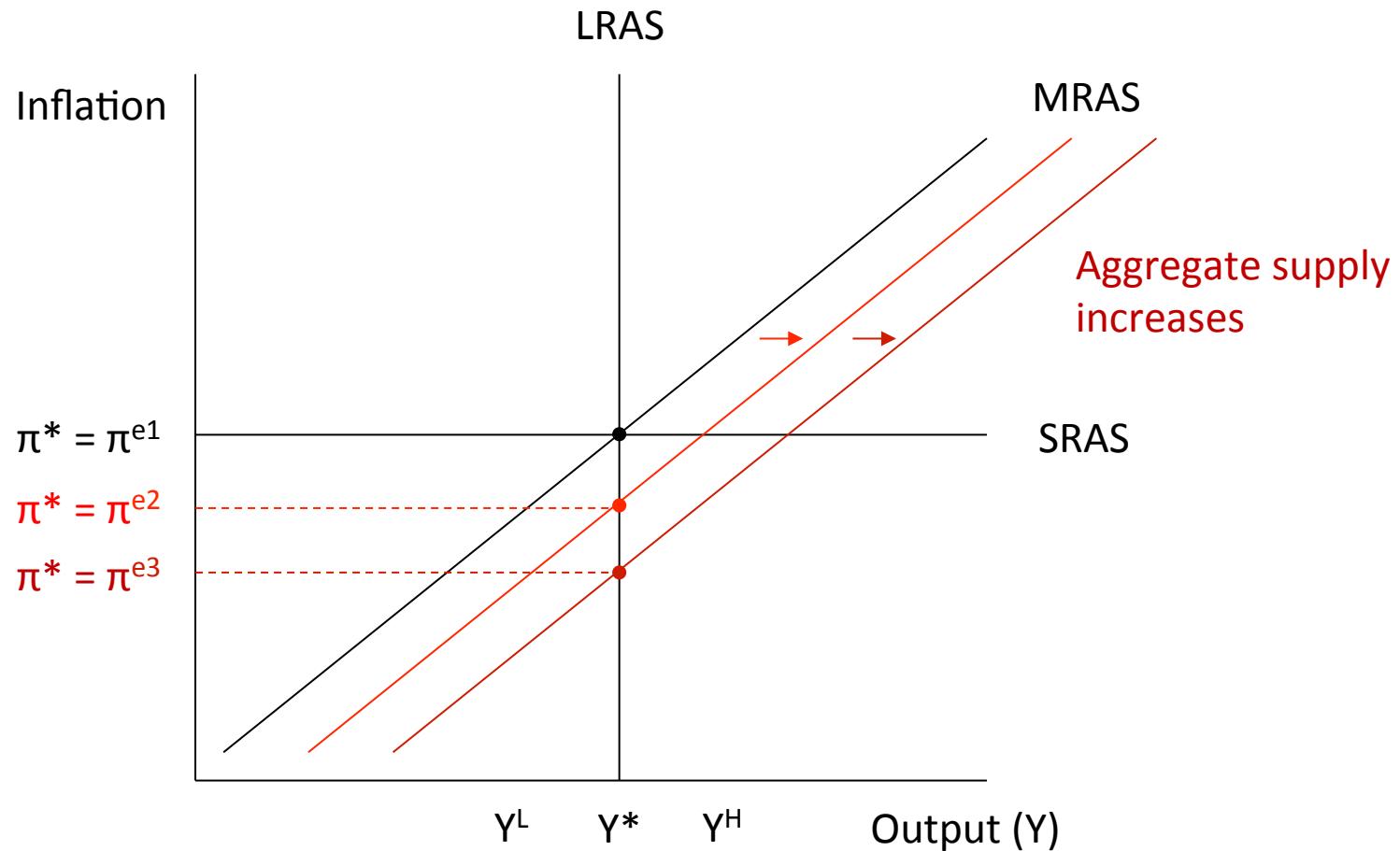
Inflation this quarter Expected Inflation (equal to last quarter) Output gap Shock

Output gap	Behaviour of inflation
No output gap	Inflation remains unchanged
Expansionary gap	Inflation rises
Contractionary gap	Inflation falls

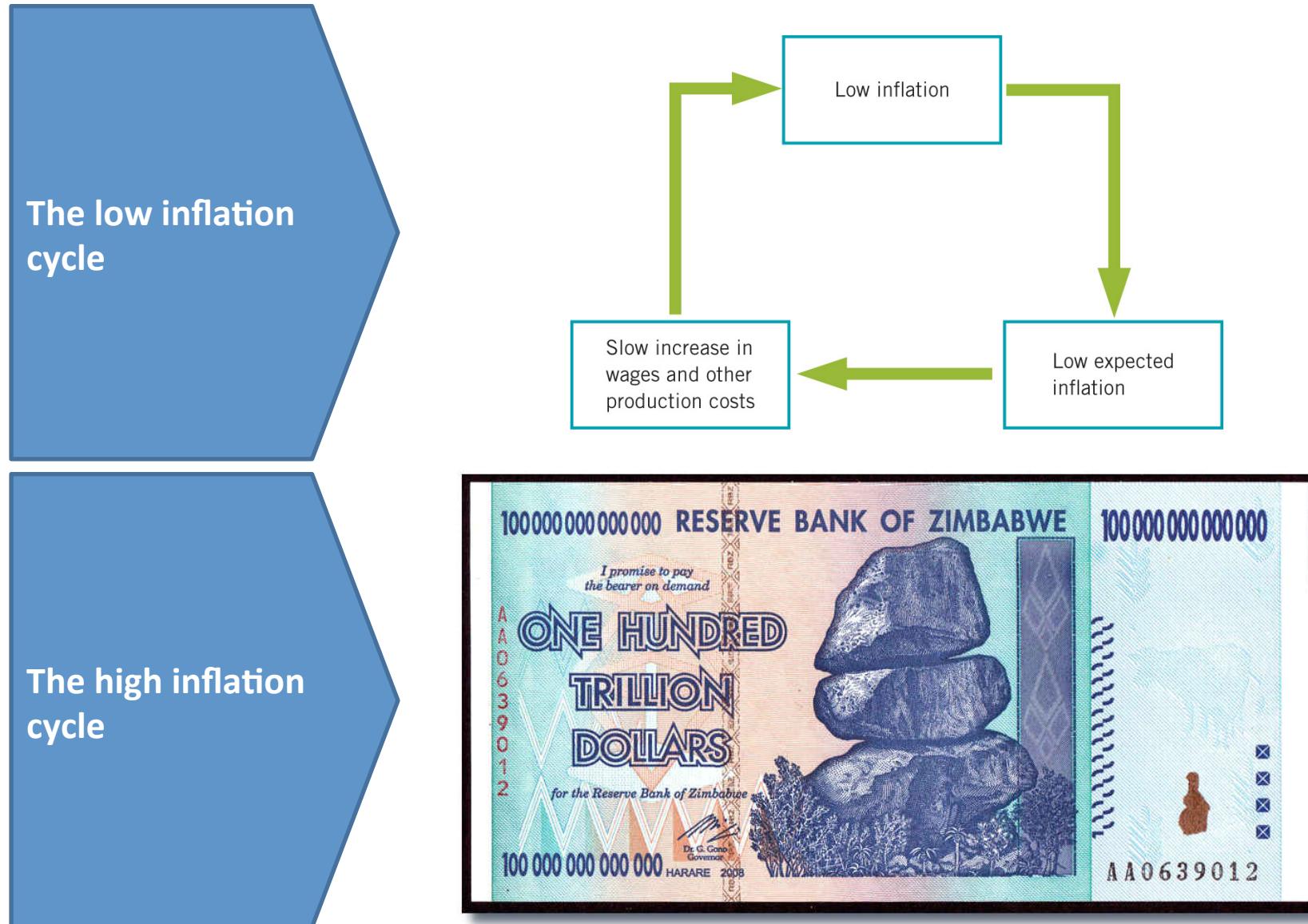
If output is below long-run potential then inflation will be below expectations



If inflation expectations fall, the medium-run aggregate supply curve will shift right (increase), and vice versa



Inflation inertia comes from low inflation causing people to expect low inflation, which then causes low inflation. A self-fulfilling prophecy



Inflation and supply decisions: the AS

- If there is no output gap, then *inflation inertia* suggests current inflation is equal to expected inflation, which in turn is equal to the previous period's inflation:

$$\pi_t = \pi_t^e = \pi_{t-1}$$

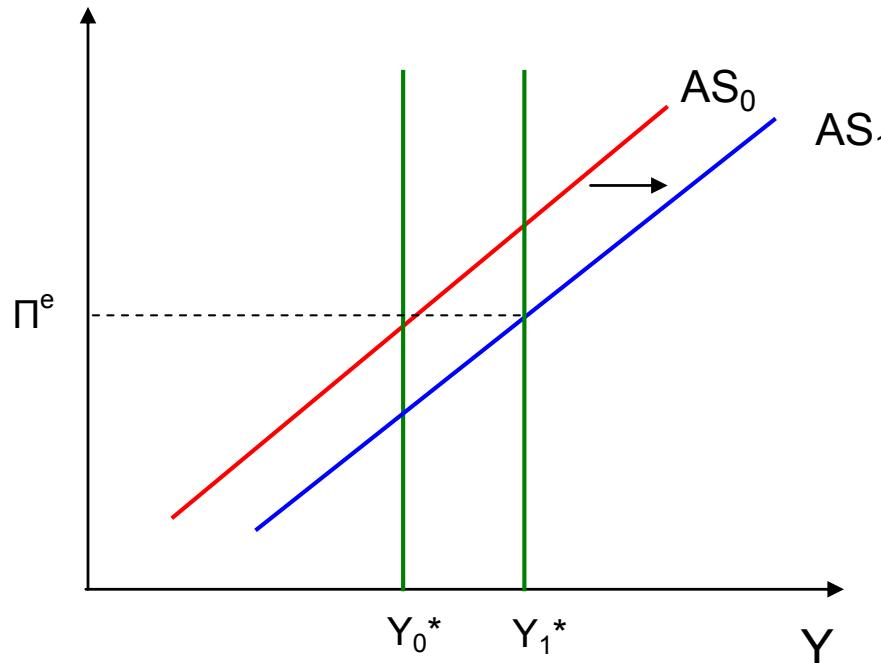
- Otherwise, if there is an expansionary output gap ($Y > Y^*$) inflation rises.
- If there is a contractionary output gap ($Y < Y^*$) inflation falls.

The aggregate supply curve

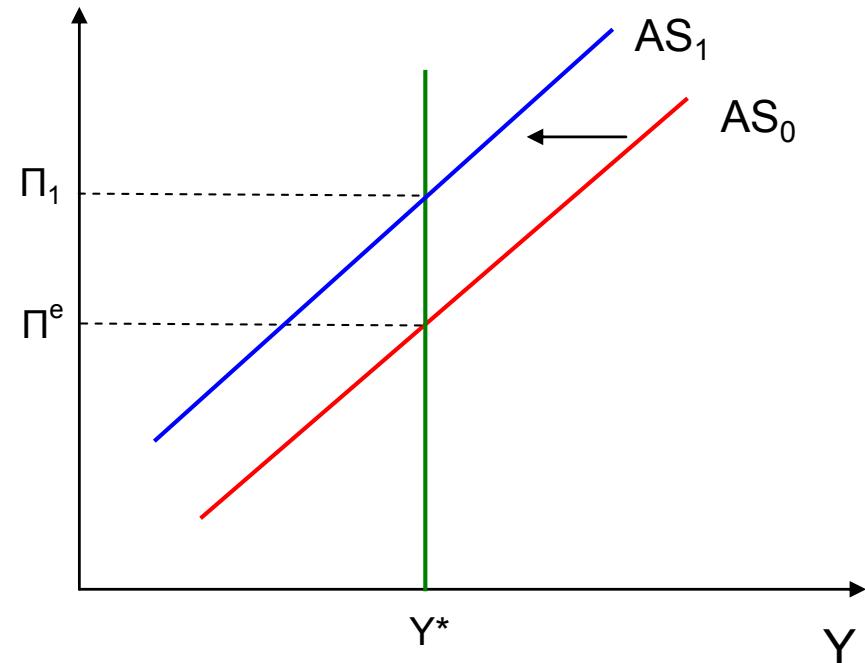
- Again, important to distinguish between movements along the AS and shifts of the AS.
- Changes in inflation due to changes in output → movement along the AS.
- However, examples of shifts in AS:
 - Increase in AS due to technological change.
 - Increase in unexpected inflation due to an inflation shock (f.ex. because of a rise in oil prices).

The aggregate supply curve

Effect of technological change



Effect of a negative inflation shock



The aggregate supply curve

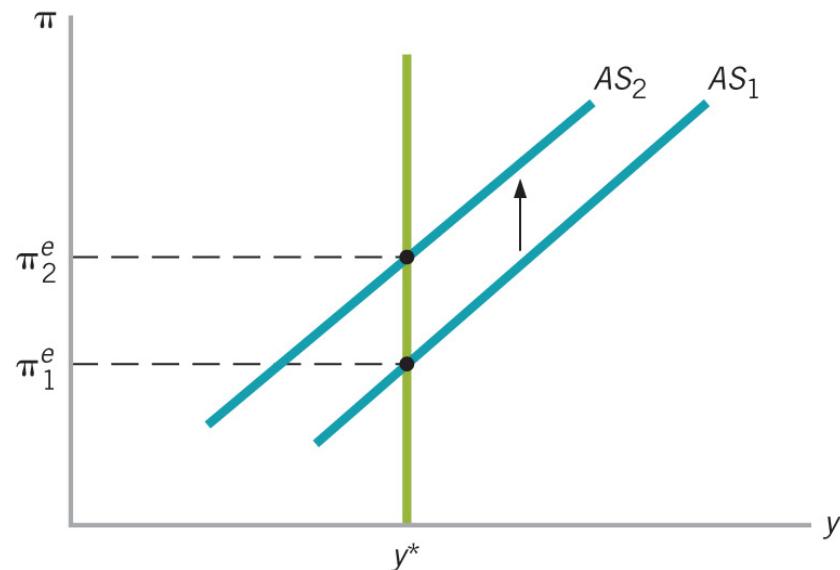


Figure 9.8 An increase in expected inflation An increase in expected inflation from π_1^e to π_2^e shifts the AS curve upward. Similarly, a decrease in expected inflation would shift the AS curve down.

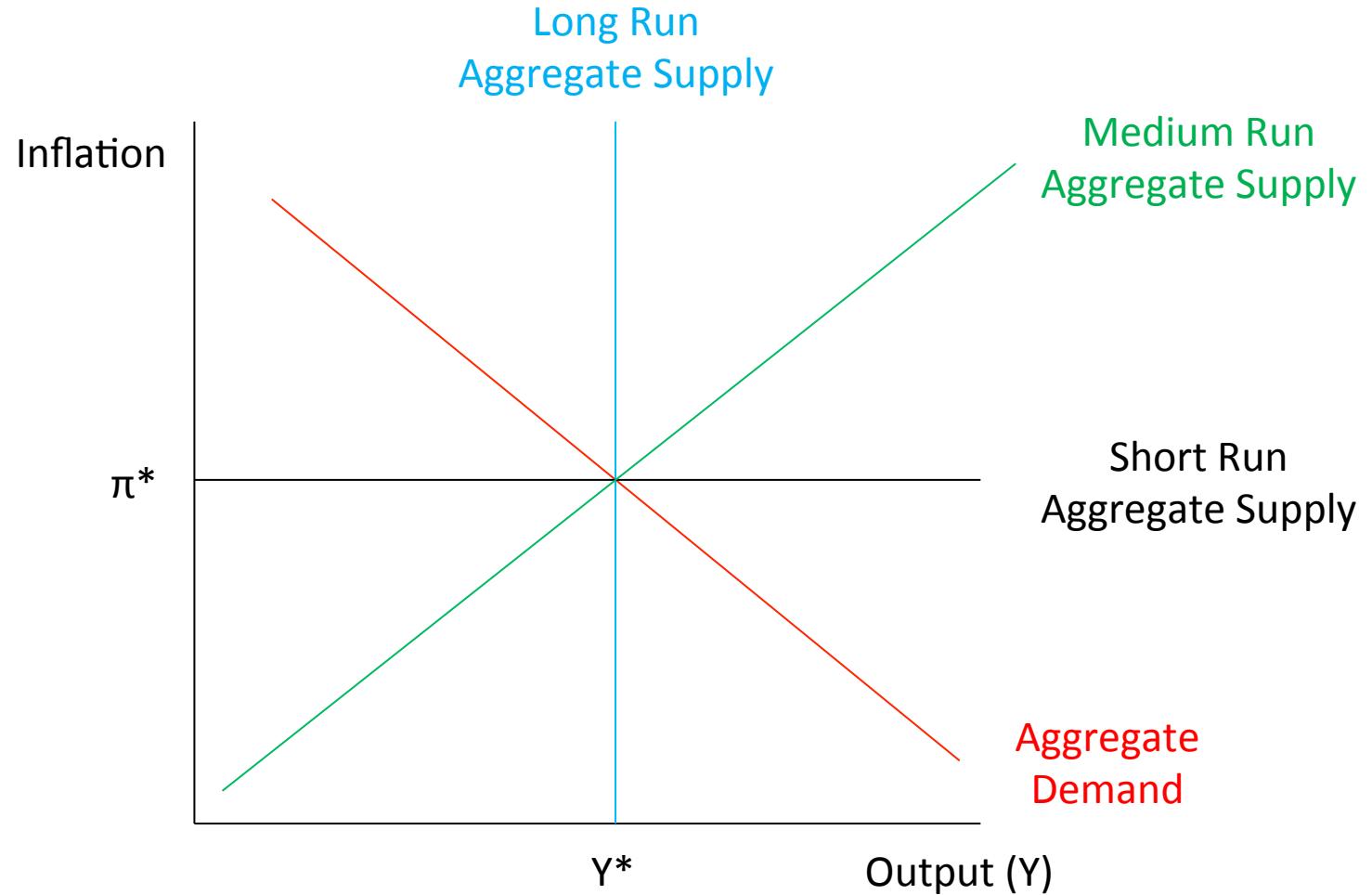
Chapter 9 Outline

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2. Aggregate Supply

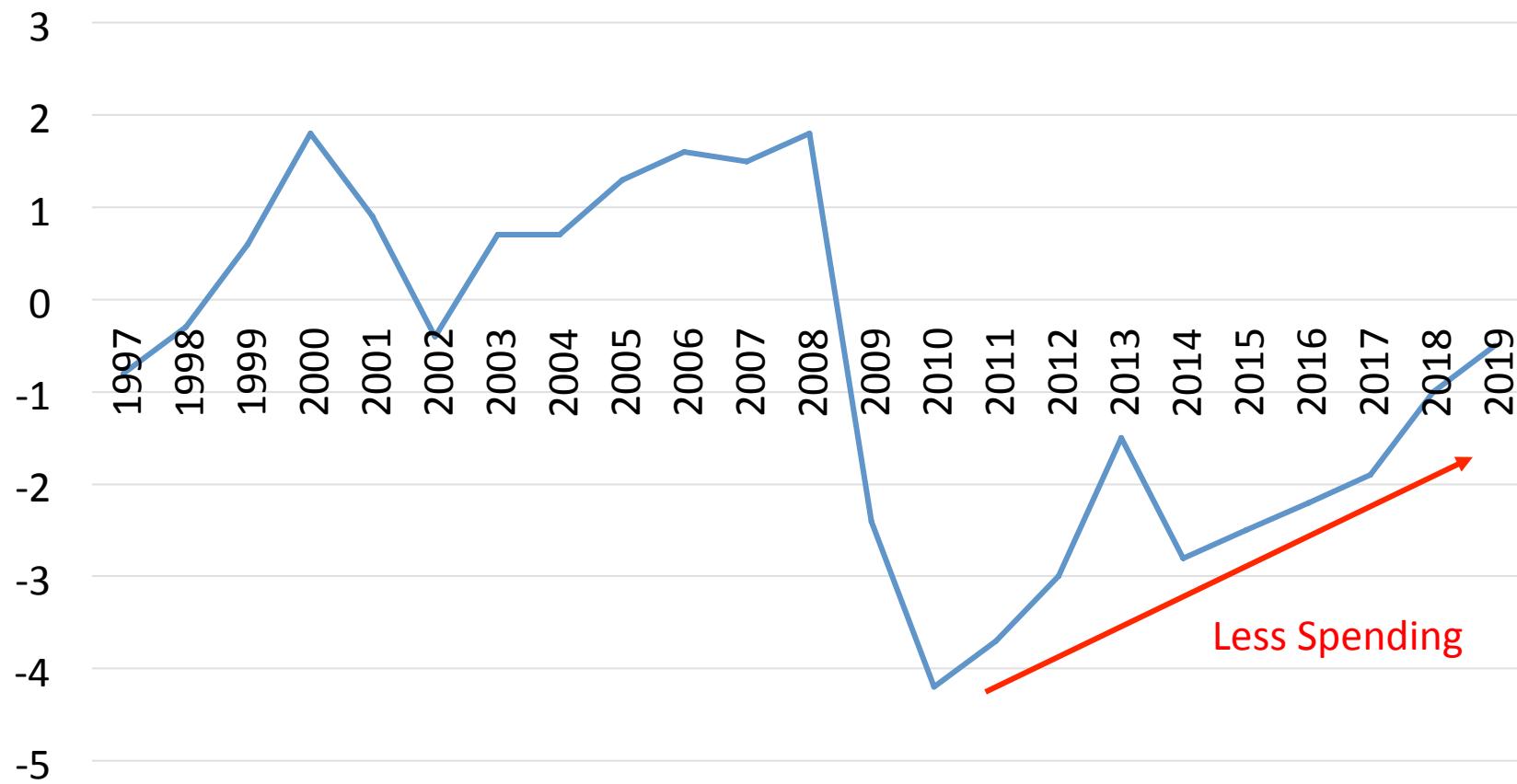
3. Business Cycles: Shocks to AS and AD

Three types of shocks can cause inflation to change



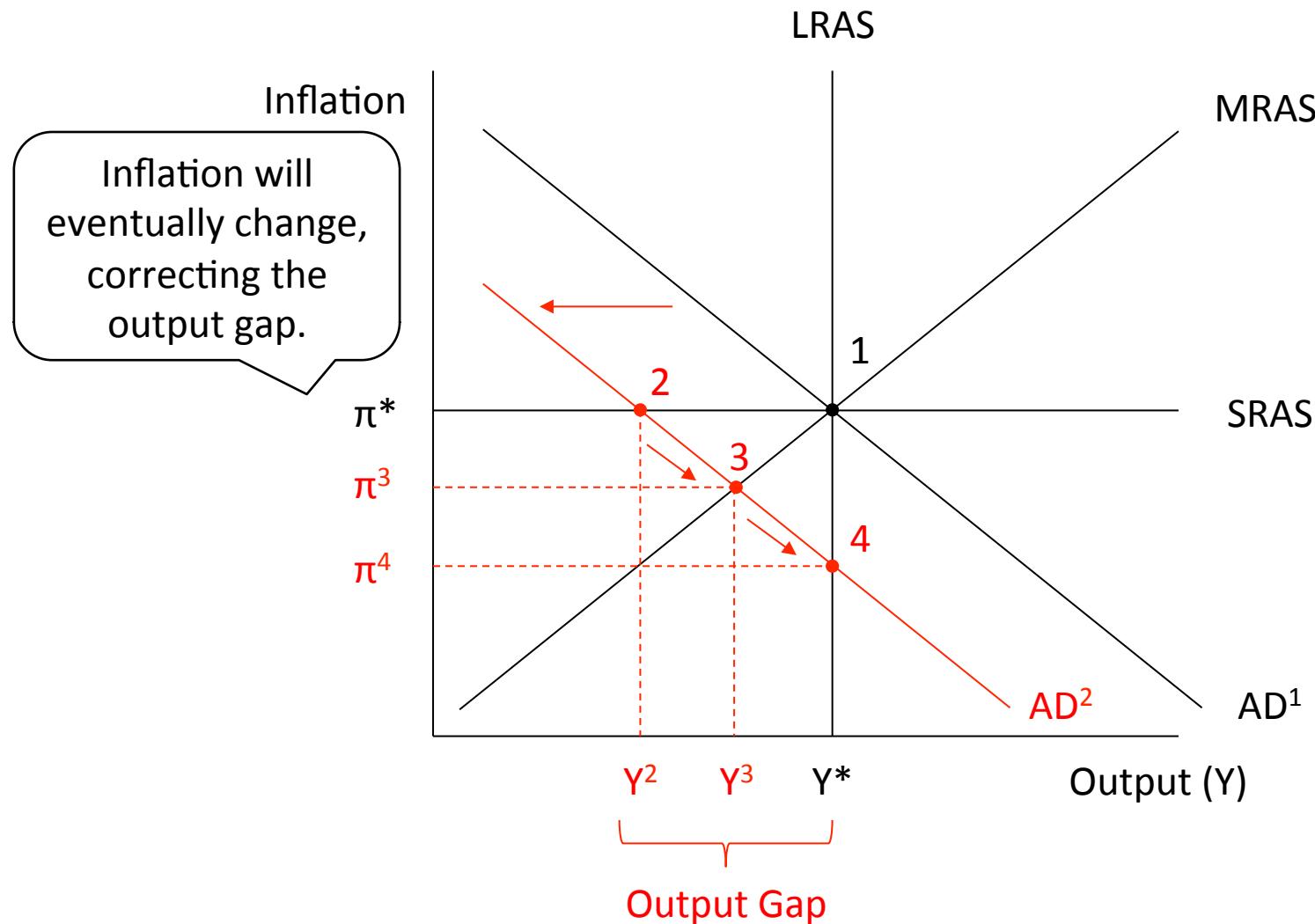
What happens if the government decides to spend less?

Fiscal Balance (Taxes – Spending), % of GDP



Source: www.budget.gov.au

A fall in aggregate demand (PAE from the Keynesian Cross) will create an output gap, which will cause inflation to change

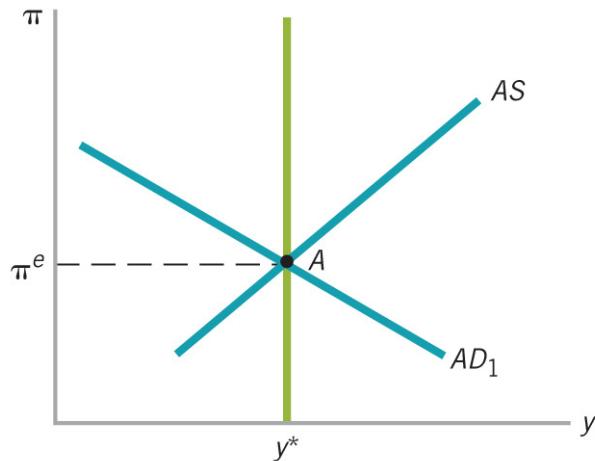


Understanding business cycles

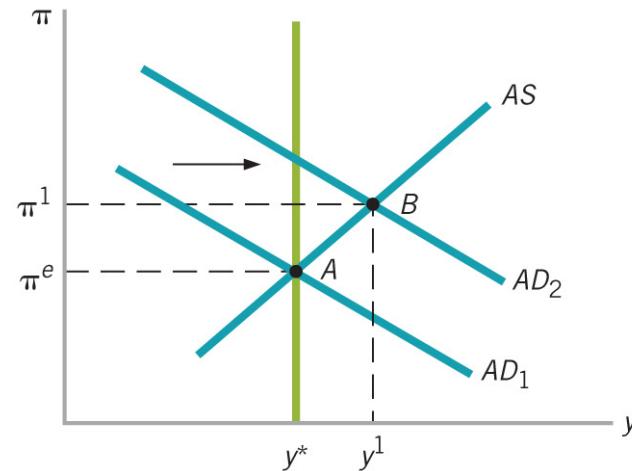
- In the long run, the economy tends to be at potential level of output but, as we saw in the short-run, output might be below or above potential level.
- How can we explain business cycles in the AD-AS framework?
- Different reasons for output gaps:
 - Demand shocks – factors shifting AD. Ex.: Increase in consumer and business confidence resulting in an expansionary output gap.
 - Supply shocks –affect AS. Ex.: Changes in unexpected inflation.

Understanding business cycles

A positive demand shock



(a) Long-run equilibrium

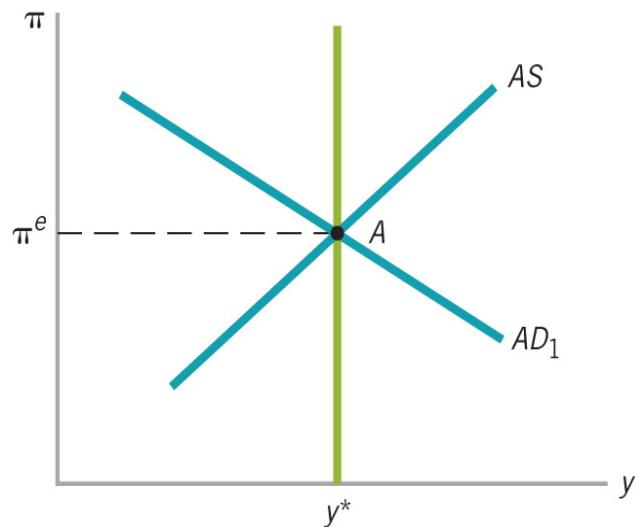


(b) A positive demand shock

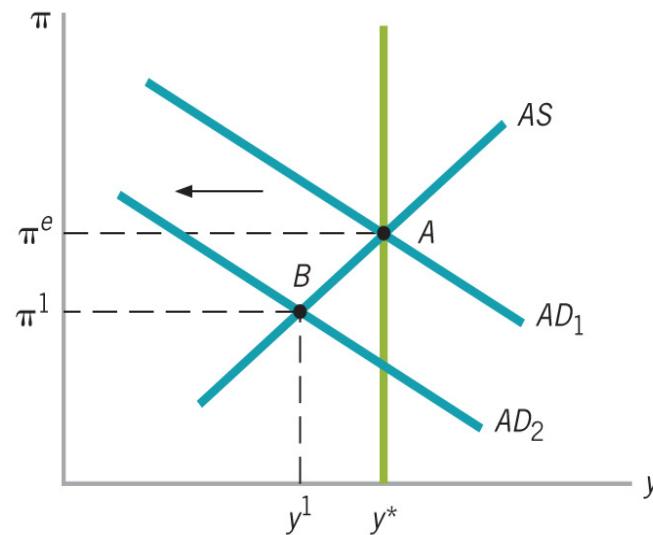
Figure 9.10 Positive demand shocks and expansionary output gaps The economy begins in long-run equilibrium (point A). A positive demand shock shifts the AD curve to the right, increasing output from y^* to y^1 and the inflation rate from π^e to π^1 .

Understanding business cycles

A negative demand shock



(a) Long-run equilibrium

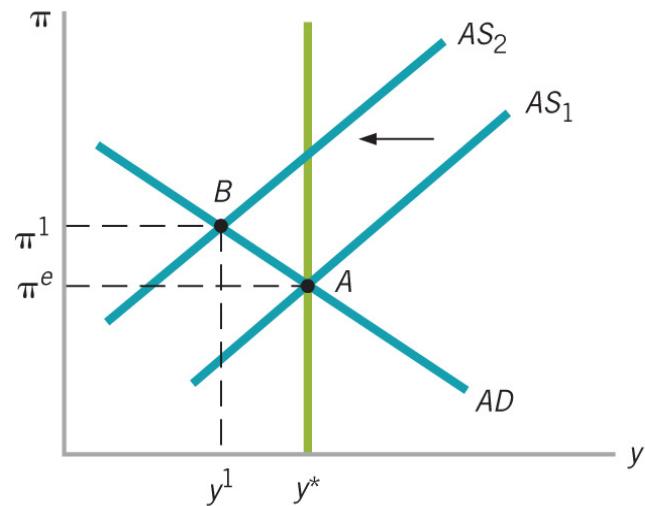


(b) A negative demand shock

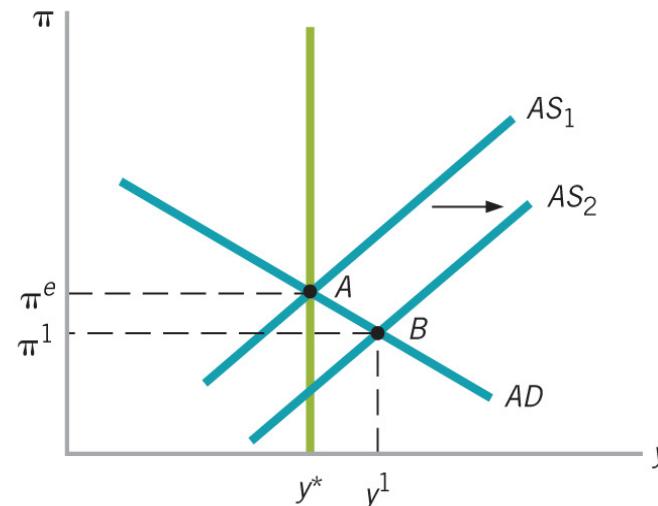
Figure 9.9 Negative demand shocks and contractionary output gaps The economy begins in long-run equilibrium (point A). A negative demand shock shifts the AD curve to the left, reducing output from y^* to y^1 and the inflation rate from π^e to π^1 .

Understanding business cycles

Inflation shocks



(a) A negative inflation shock



(b) A positive inflation shock

Figure 9.11 Inflation shocks and business cycles The economy begins in long-run equilibrium in each panel. Panel (a) shows a contractionary gap: a negative inflation shock shifts the AS curve to the left, reducing output and increasing the inflation rate. Panel (b) shows an expansionary gap: a positive demand shock shifts the AS curve to the right, increasing output and reducing the inflation rate.

The self-correcting economy

- In the long run the economy tends to be at potential level of output because the price level can vary and inflation can rise or fall to bring the economy back to potential level.
- That is, the economy exhibits a self-correcting property in which output gaps can be closed through rising or falling inflation.
- Self-correcting property refers to the fact that output gaps will not last indefinitely, but will be closed by rising or falling inflation

The self-correcting economy

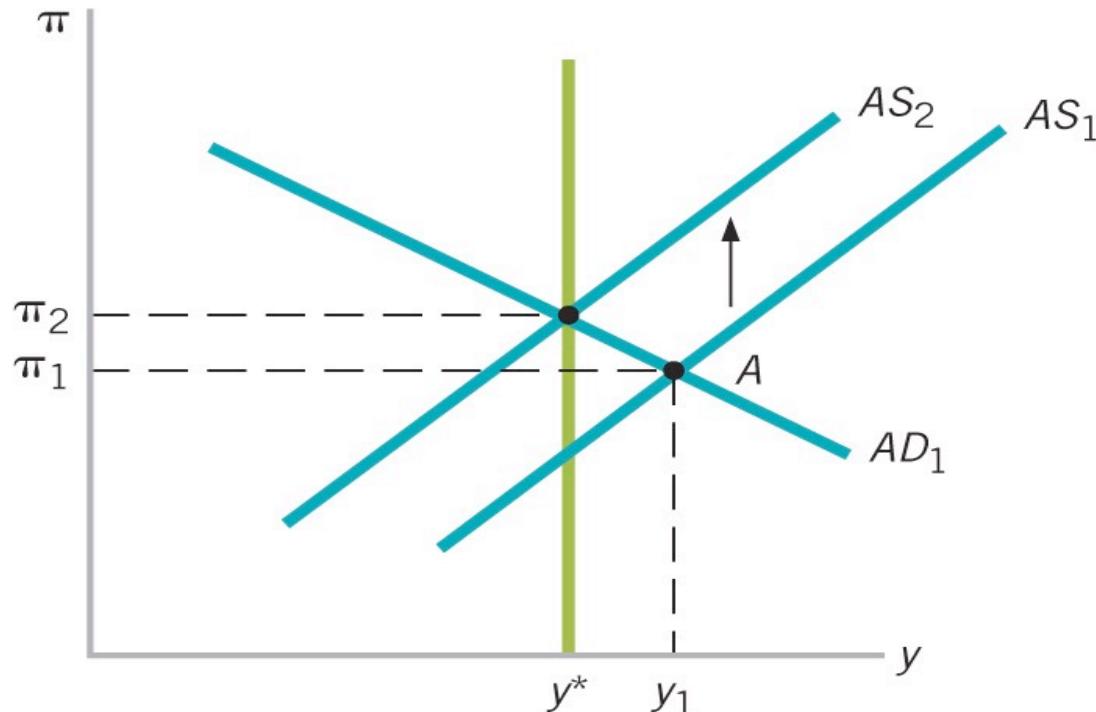


Figure 9.12 An adjustment to an expansionary gap

The self-correcting economy

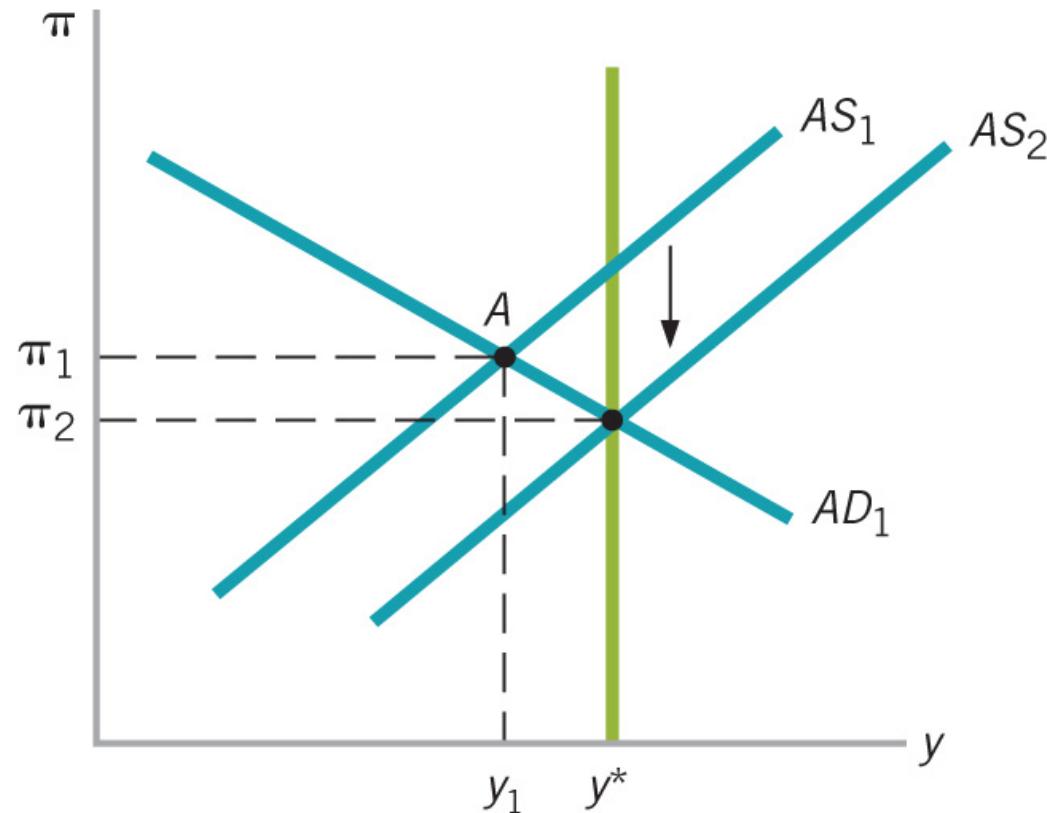


Figure 9.13 An adjustment to a contractionary gap

The self-correcting economy

- AD does not change. Long-run equilibrium is restored thanks to shifts in the AS.
- But *why* does the AS curve shift? What is the economics behind the shift?

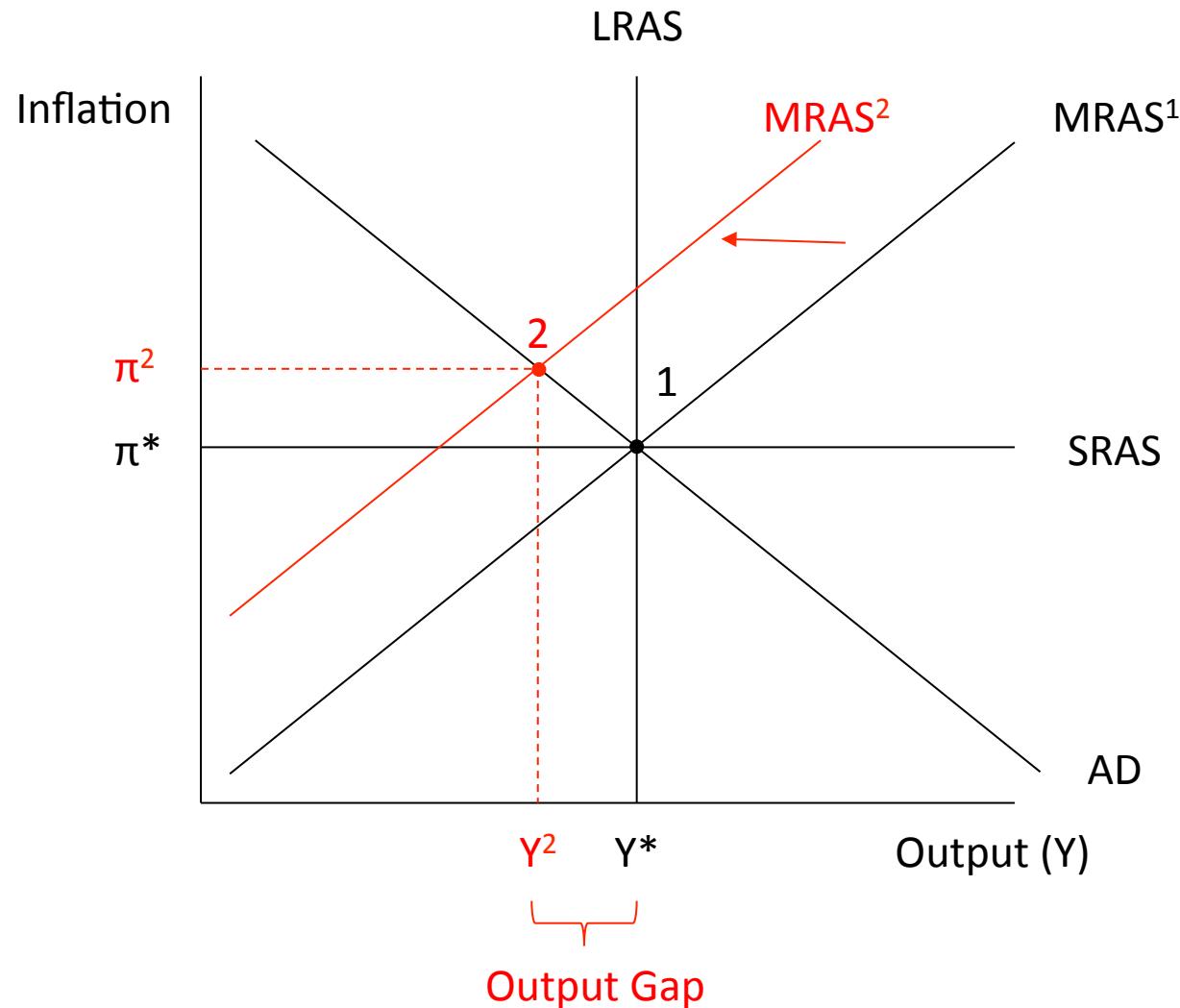
The role for stabilisation policy

- If the economy tends to be self-correcting in the long run, is there a role for stabilisation policy?
- It depends.
 - If the speed of adjustment is fast, then in order to avoid overshooting stabilisation policies should not be pursued.
 - However, if the speed of adjustment is slow, then active stabilisation policies should be pursued.

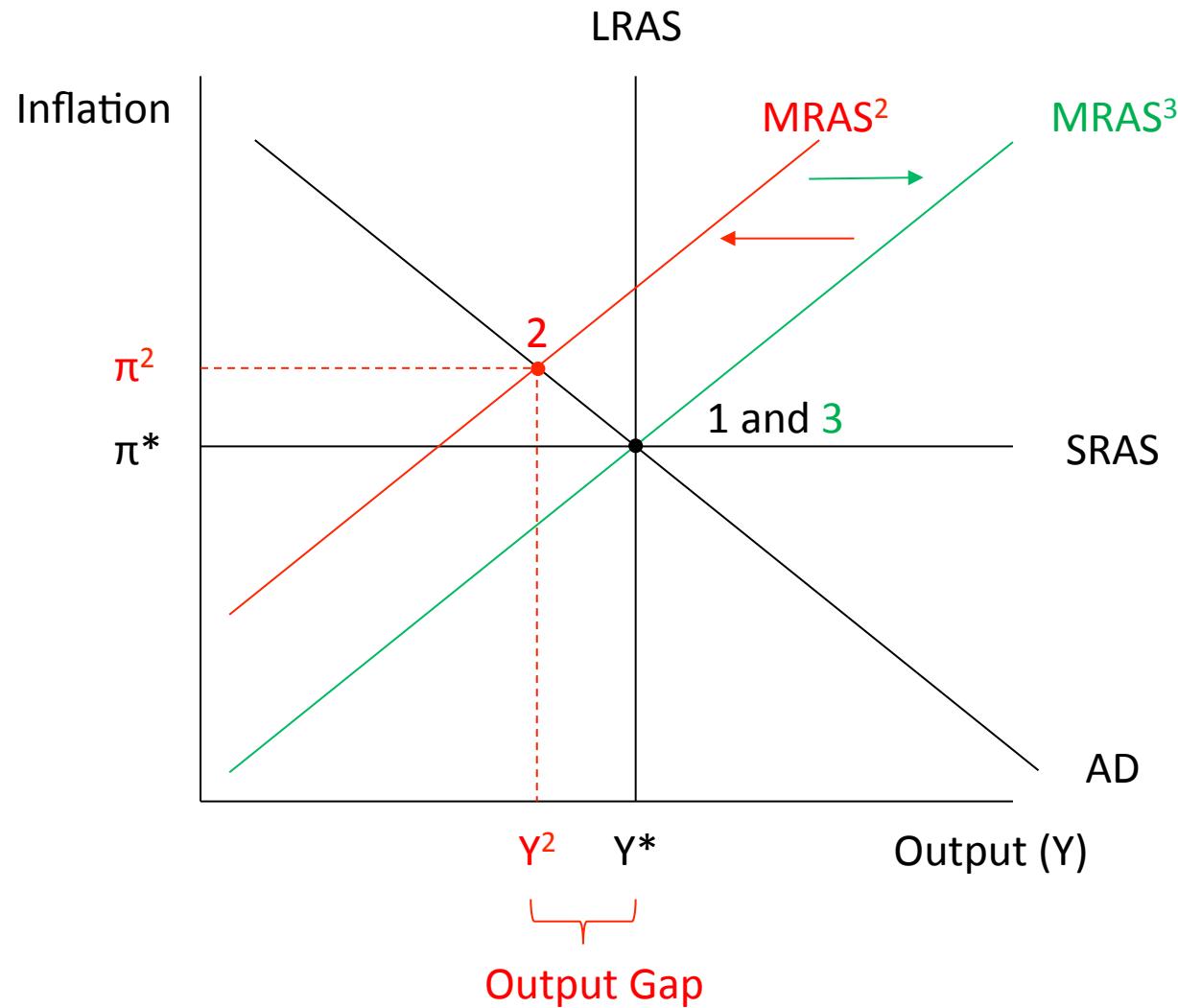
What happens if there is a drought?



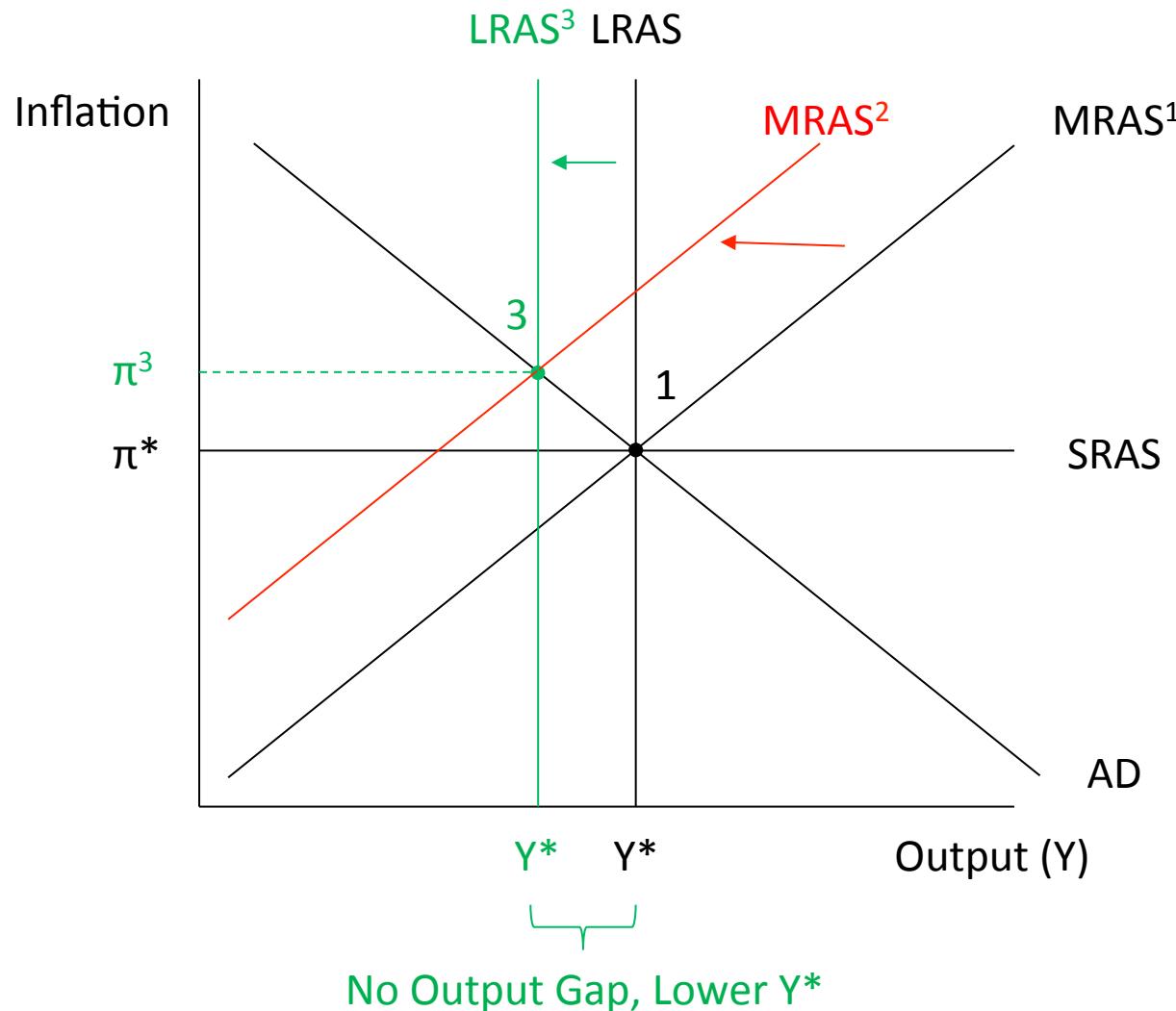
A drought will cause medium run aggregate supply to fall, and inflation to jump in the medium term



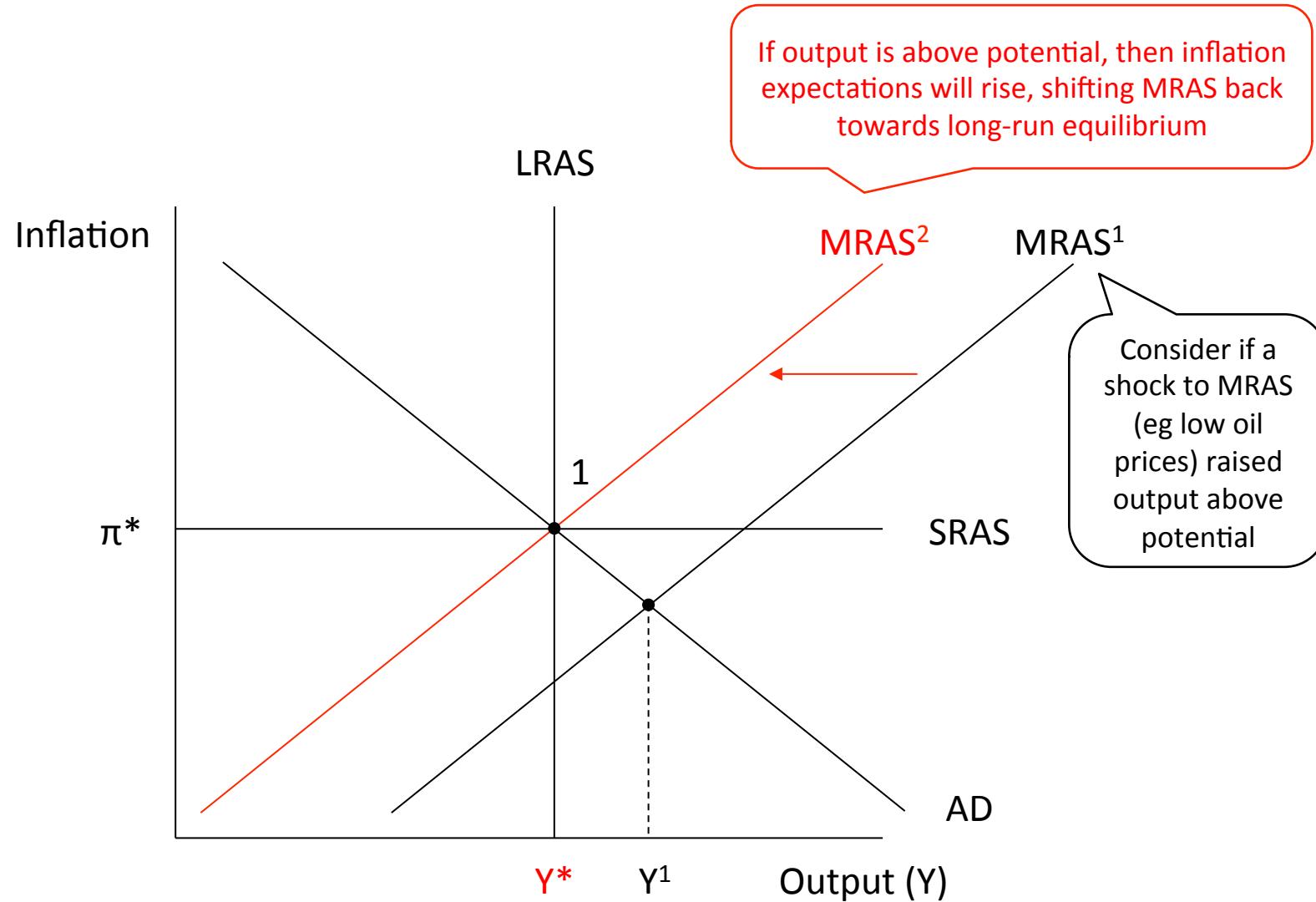
If the drought ends then aggregate supply will return to where it was



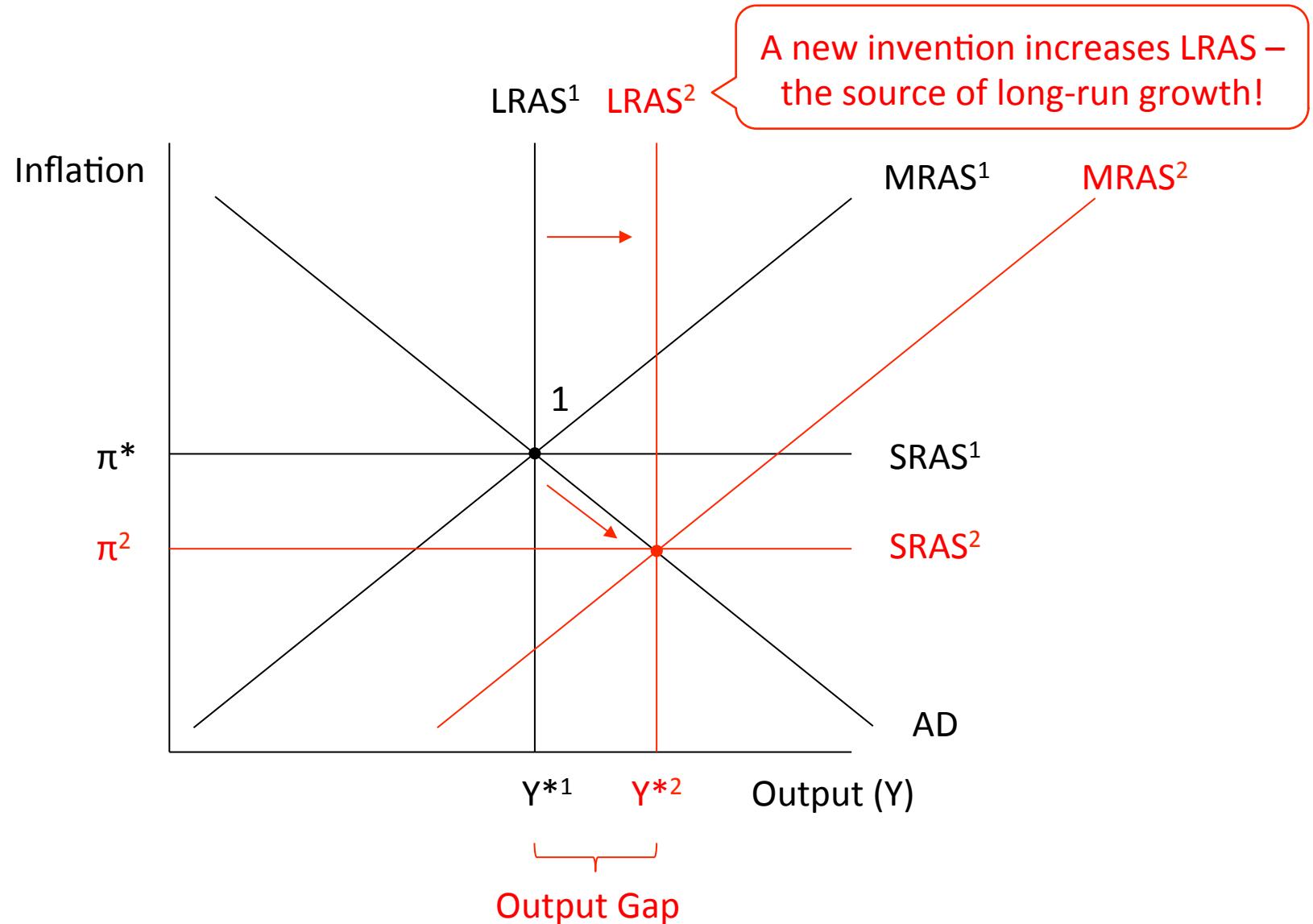
If the drought becomes permanent (or lasts for years), potential output will change and inflation expectations will update



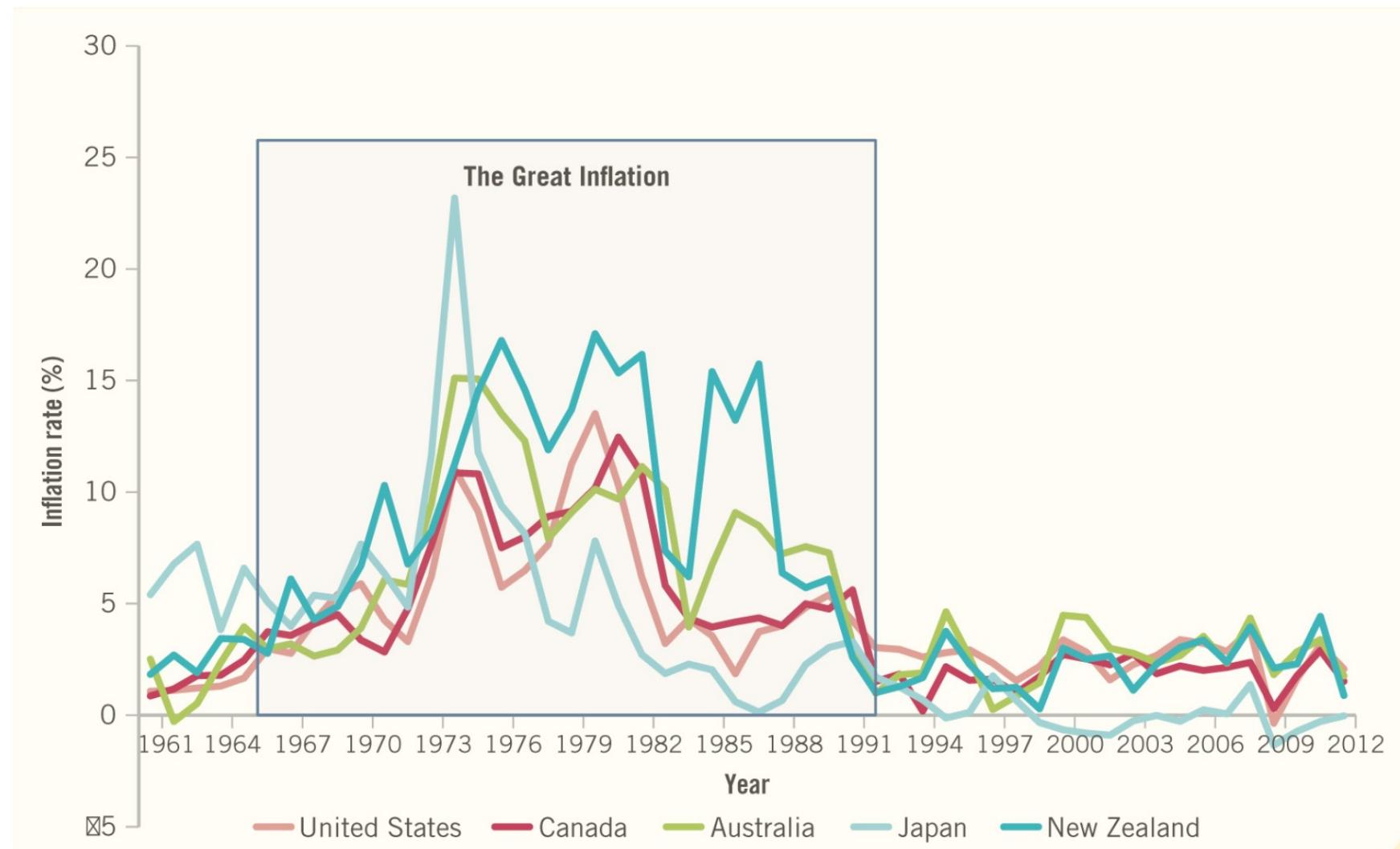
Movements in aggregate supply also self-correct because of changing inflation expectations



Potential output (LRAS) is also subject to shocks, like natural disasters, wars, changes in technology and population growth

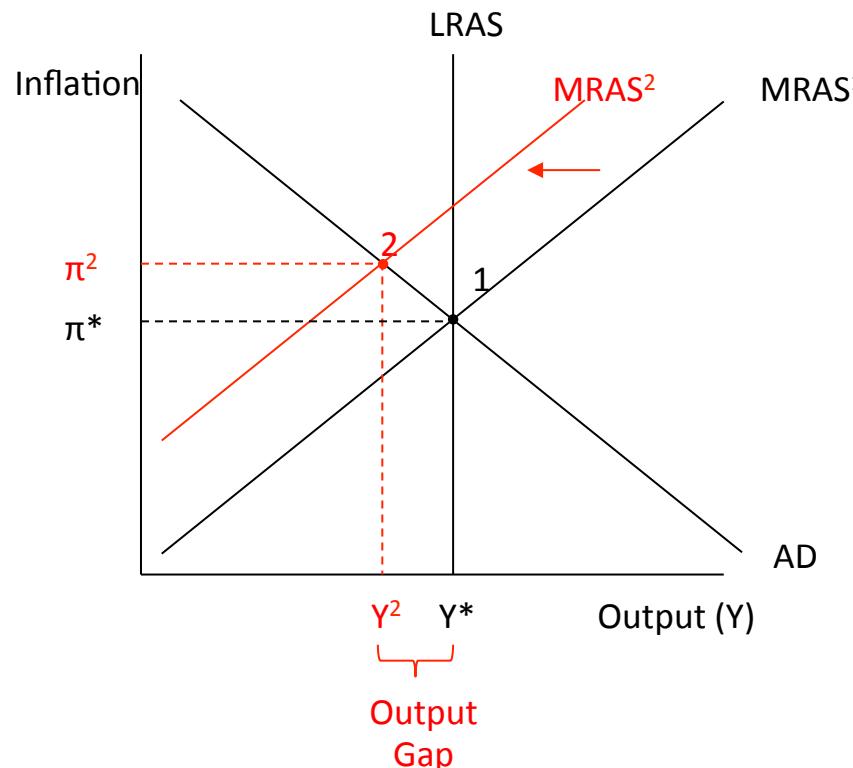


Movements in LRAS can be used to understand the period of high inflation and low output growth (“stagflation”) during the 1970s and 80s.



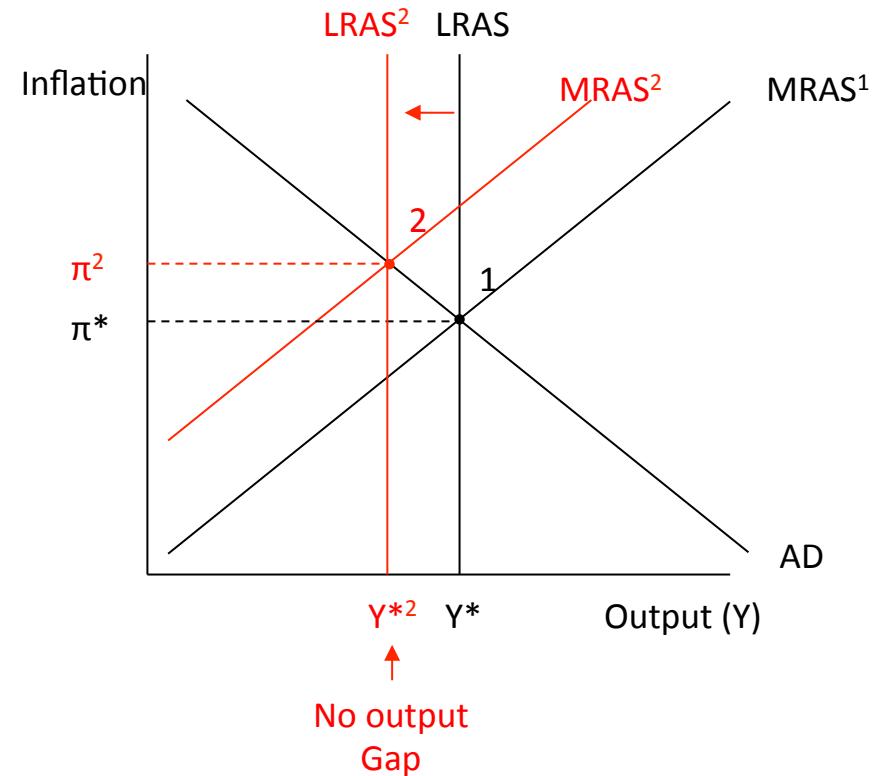
Part of the problem might have been that policymakers saw the fall in GDP and high inflation as a shift in MRAS, not LRAS

What policymakers thought:



- Policymakers thought that the spike in oil prices was temporary, but potential output hadn't changed

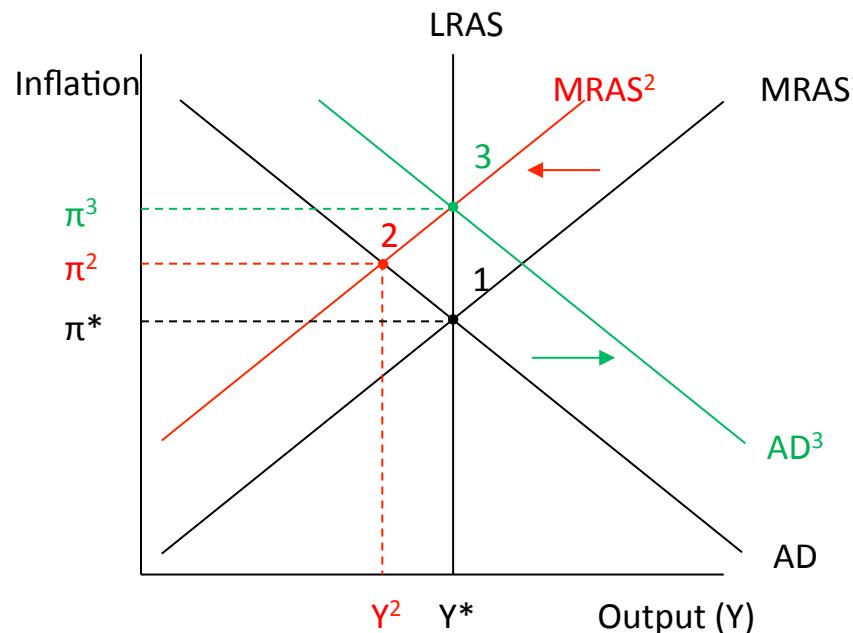
What actually happened:



- In actual fact, high oil prices affected long run output

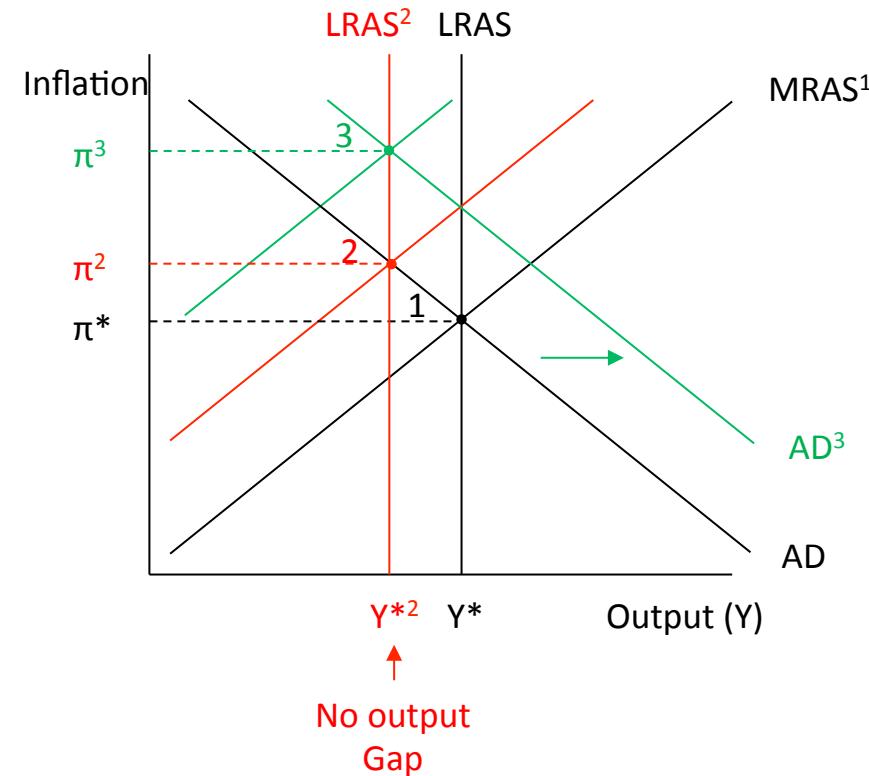
Policymakers responded with stimulatory monetary and fiscal policy, to close the perceived output gap

What policymakers thought:



- Policymakers thought that stimulatory policy would raise AD, and close an output gap

What actually happened:



- In practice, stimulatory policy just raised inflation. Instead they should have focused on raising LRAS

High inflation in Australia continued into the late 1980s

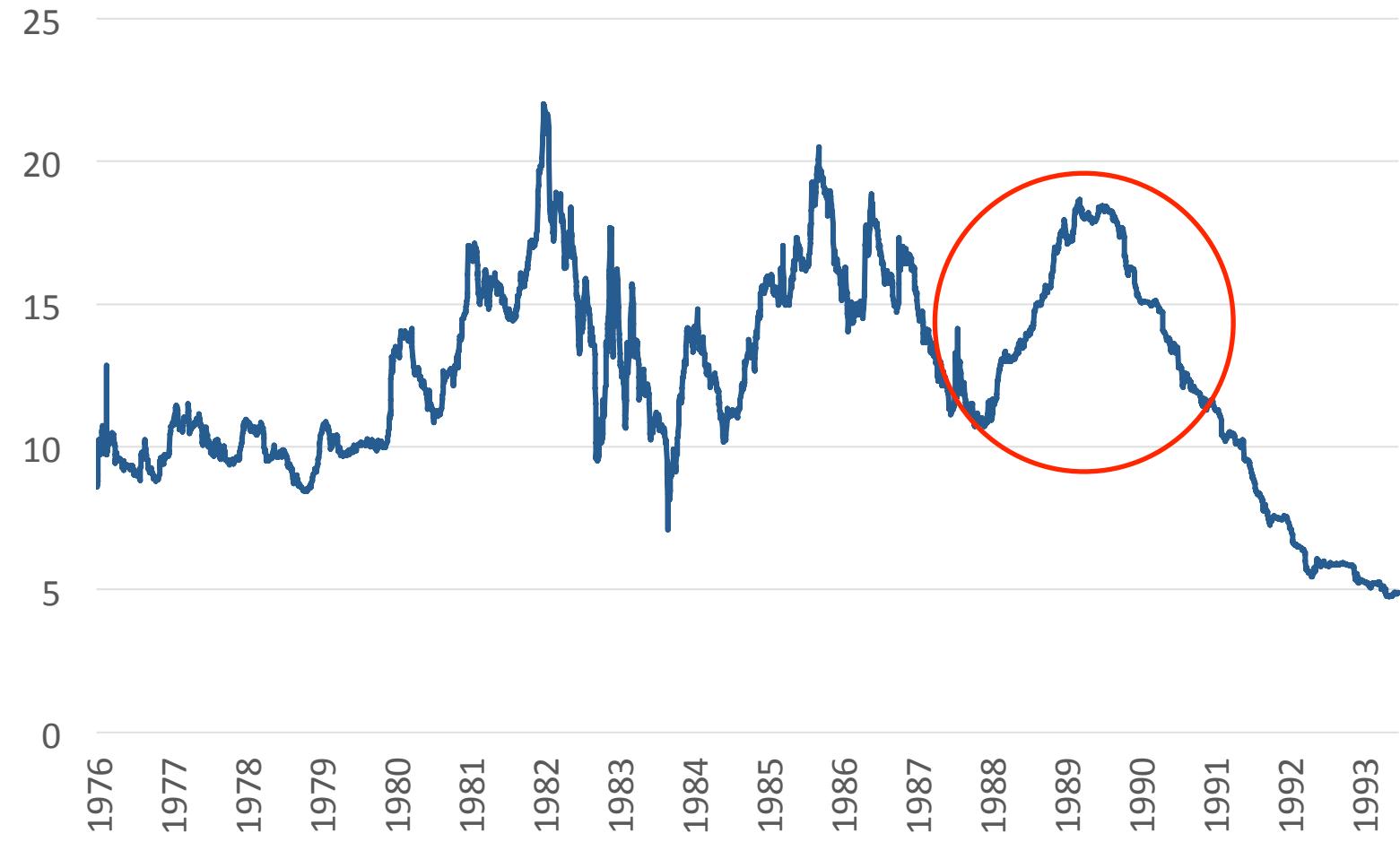
Australian annualized CPI inflation, %



Source: RBA

The RBA raised the cash rate (and therefore other interest rates) to get inflation under control

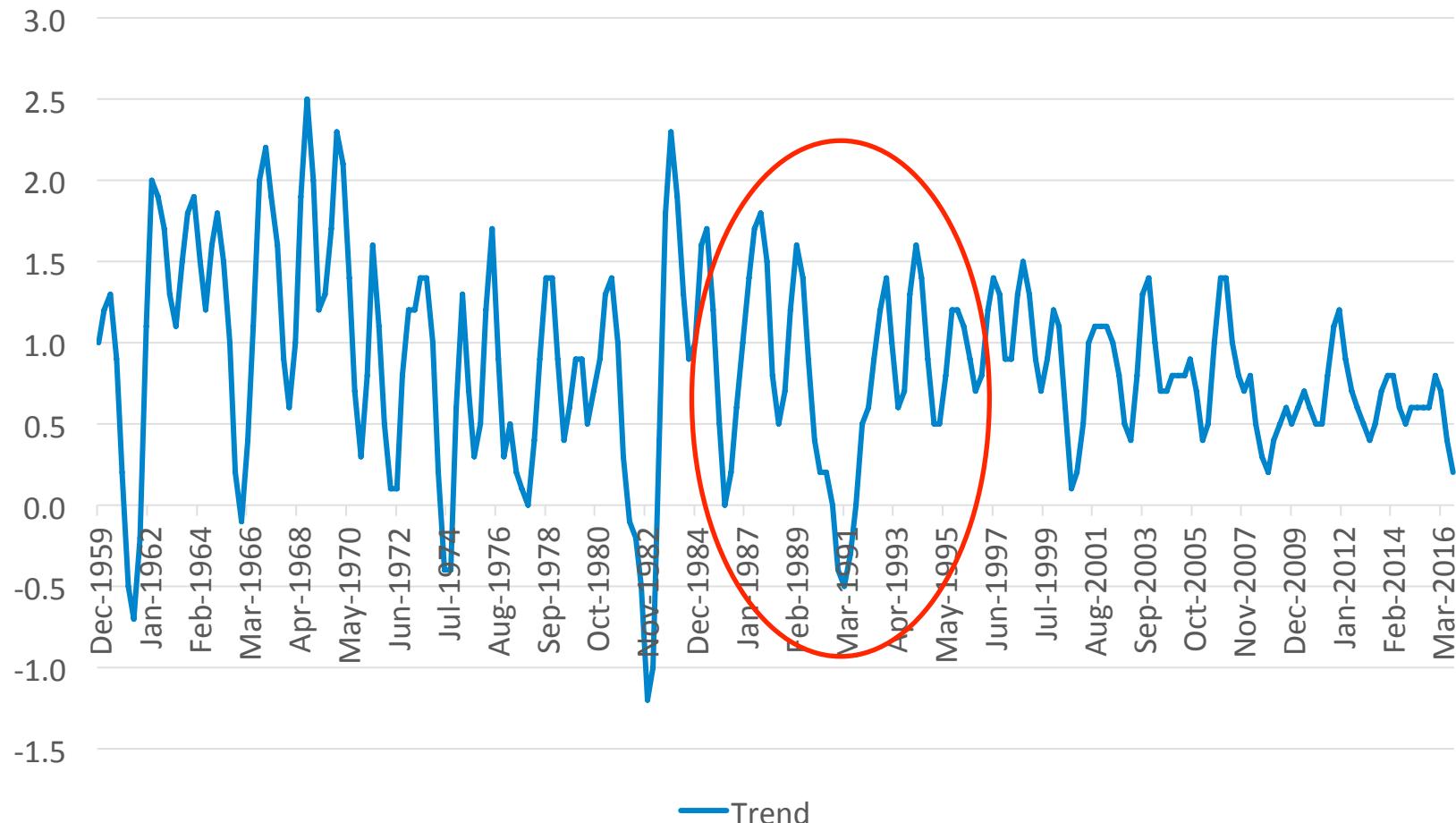
3 month bank bill yield, %



Source: RBA

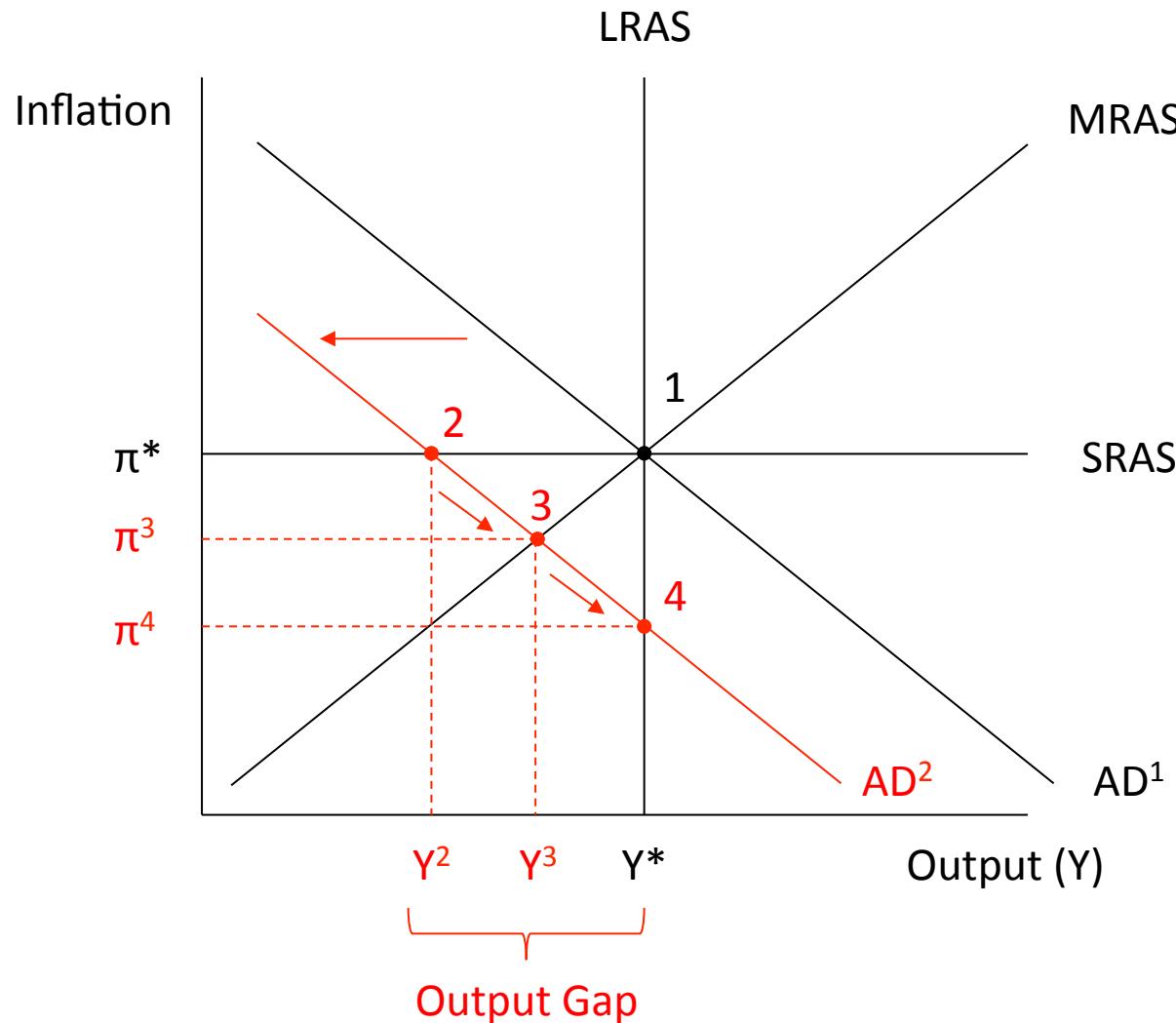
This reduced inflation and inflation expectations, solving the problem, but led to the “recession we had to have”

Real GDP (chain volume measure), trend, %



Source: ABS

This can be explained using an AS-AD diagram, where tight monetary policy reduced aggregate demand



Summary

- The *AD–AS* diagram has three components: a horizontal SRAS curve, a vertical LRAS curve and a downward-sloping *AD* curve.
- Short-run equilibrium occurs at the point where the *AD* curve intersects the SRAS curve.
- Long-run equilibrium occurs at the point where the *AD* curve intersects the LRAS curve.
- The economy has the tendency to correct itself back to its long-run equilibrium.
- The *AD–AS* diagram showcases the dilemma facing the Reserve Bank: the trade-off between inflation and output.
- Disinflation has serious consequences for the economy in the long run.

Chapter 10

Macroeconomic Policy

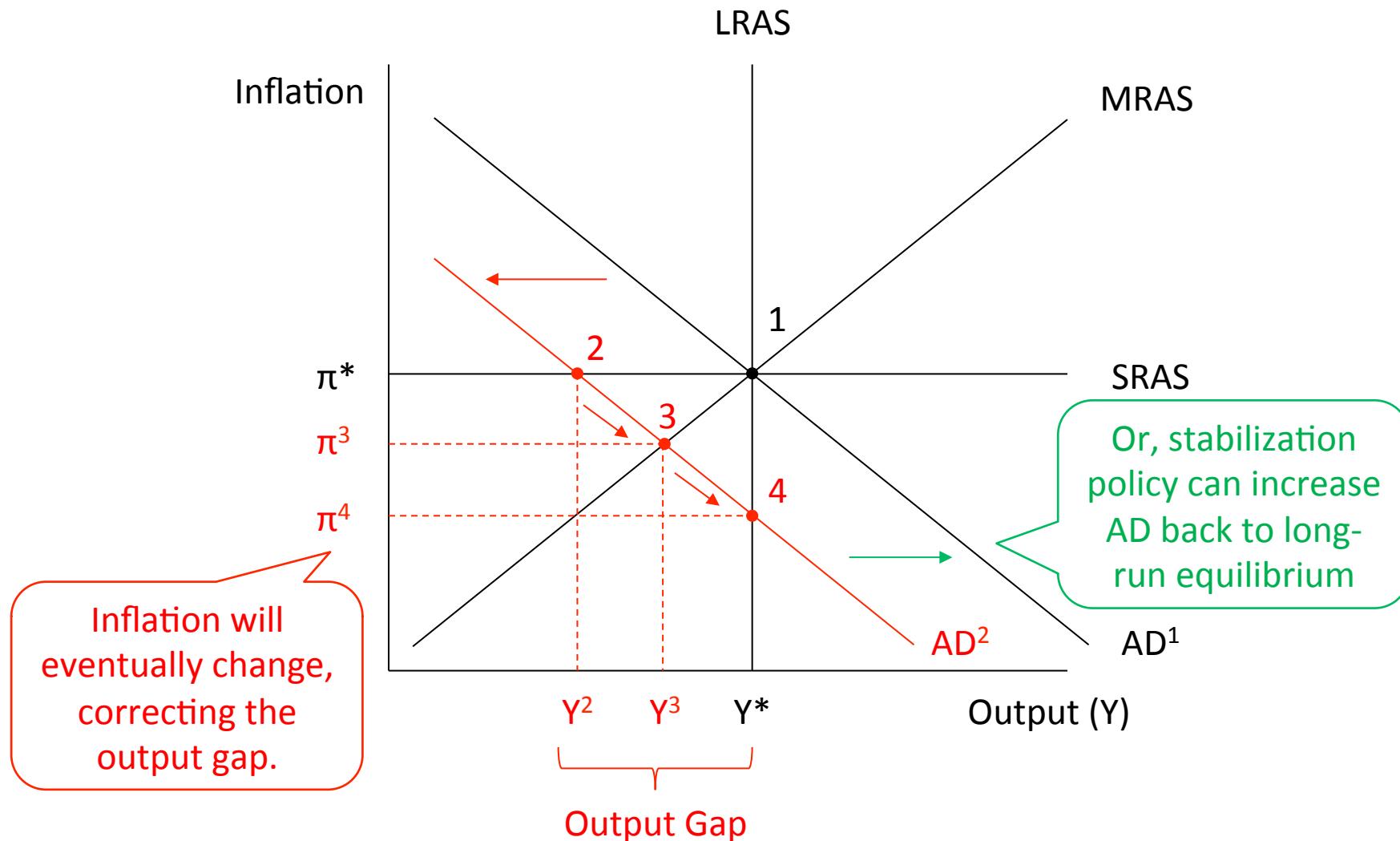
Learning Objectives

- 10.1 What are the policy options available to a central bank in response to demand shocks and inflation shocks?
- 10.2 What are the roles played by the anchored inflationary expectations and central bank credibility in keeping inflation low?
- 10.3 How does fiscal policy affect both aggregate demand and aggregate supply?
- 10.4 Why is macroeconomic policy as much an art as a science?

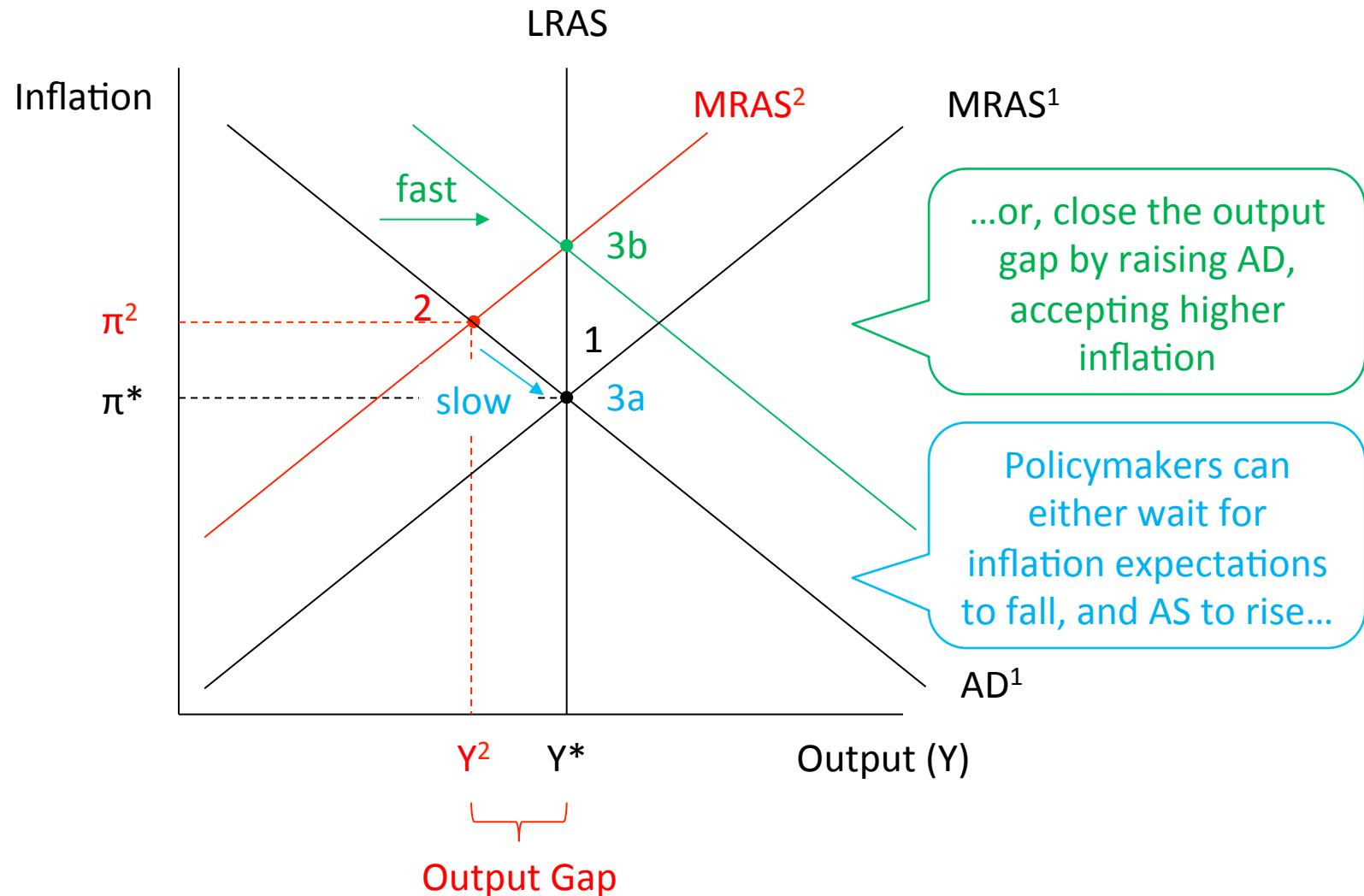
Chapter 10: Macroeconomic policy

- Macroeconomic policy and the role for stabilisation.
 - Demand shocks
 - Supply shocks
- Monetary policy and the central bank's credibility.
- Fiscal policy and the supply side.

Stabilization (monetary or fiscal) policy should be used if there is a large, protracted output gap caused by low aggregate demand

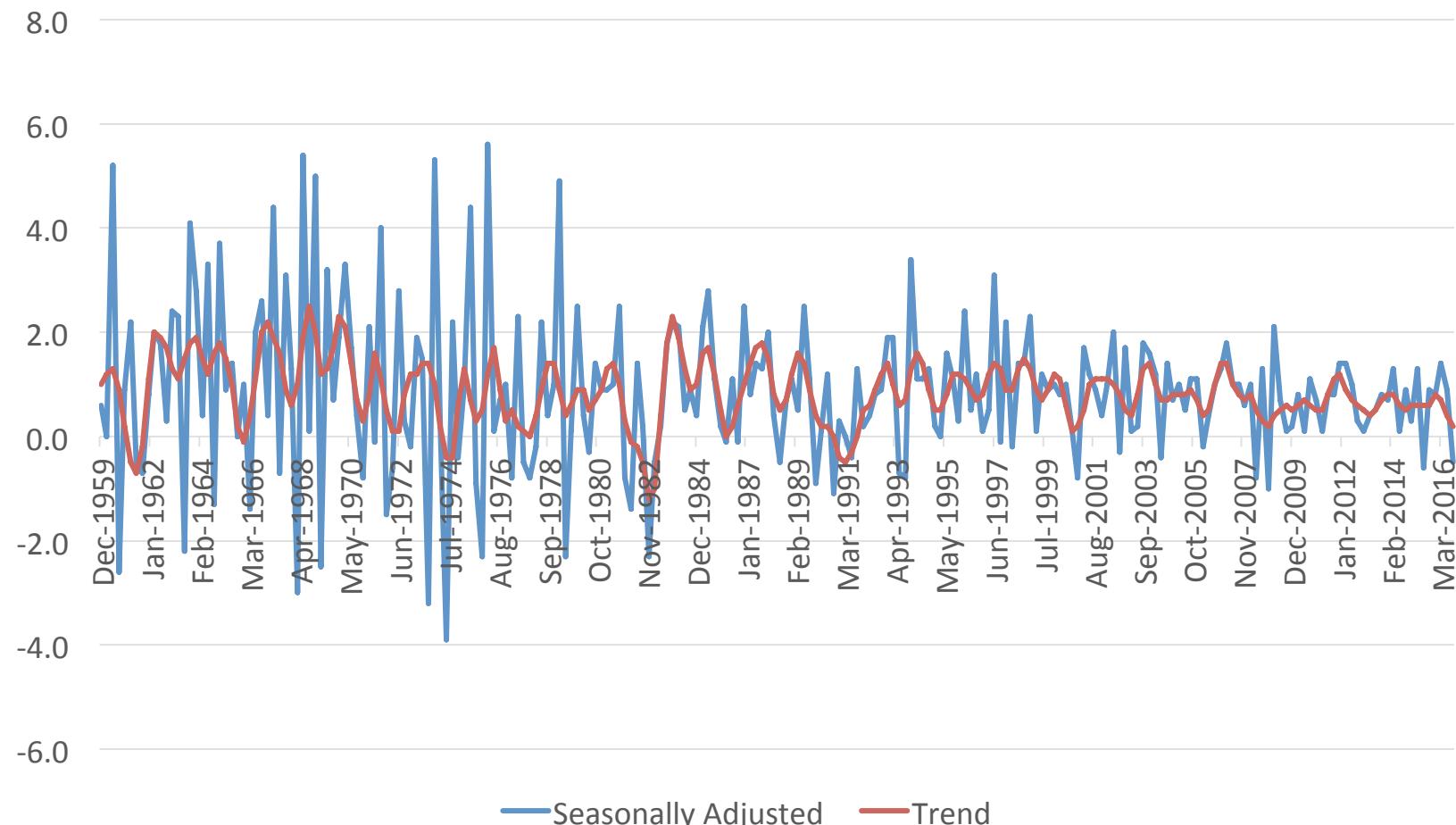


If the output gap is caused by a fall in aggregate supply then there will be a tradeoff between output and inflation



Better understanding of stabilization policy has reduced GDP volatility a lot in most developed countries, including Australia

Real GDP (chain volume measure), seasonally adjusted and trend, %

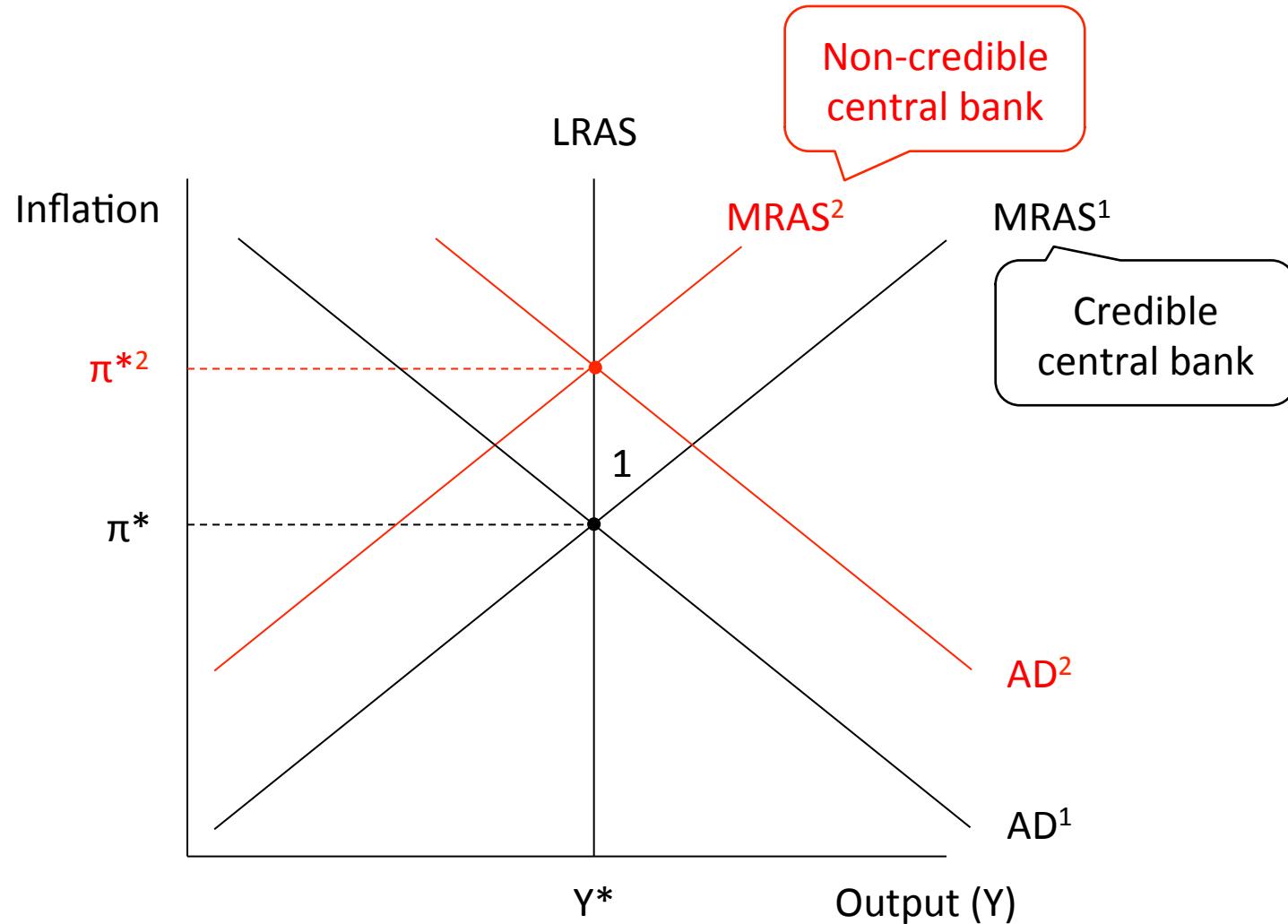


Source: ABS

A number of other factors have also helped reduce volatility

- Structural changes in the economy may have made it more adept at absorbing changes
 - Changes in technology
 - Business practices
 - Better management of inventories
 - Deregulation
 - Shift toward services and away from manufacturing
 - Increased openness to trade
 - Freeer international capital flows

Central bank credibility is very important because it anchors inflation expectations, preventing the MRAS and AD curves shifting up



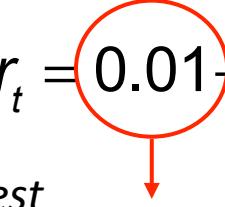
This can also be seen mathematically in the Taylor Rule and the Phillips Curve

Taylor Rule

$$r_t = 0.01 + 0.5 \left(\frac{y - y^*}{y^*} \right) + 0.5\pi$$

Inflation
Output gap

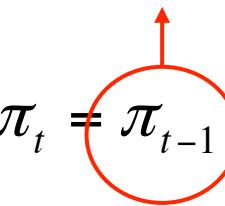
Real interest rate



Phillips Curve

$$\pi_t = \pi_{t-1} + \gamma \left(\frac{y_t - y^*}{y^*} \right) + \varepsilon_t$$

Inflation this quarter *Expected inflation (equal to last quarter)* *Output gap* *Shock*



Credibility can be improved by an independent central bank, with an explicit π target and a reputation of fighting inflation

Central Bank Independence

- Won't lower rates for a short-term “sugar hit” of GDP, eg during elections
- RBA very independent: own budget, long-term appointments, statutory independence

Explicit inflation targets

- Reduces uncertainty in financial markets
- Targets >0 because deflation is costly, and small +ve inflation allows real wages to fall if needed
- Used around the world, including emerging markets like Brazil, Chile, Mexico and Peru

Established reputation

- Targets must consistently been met
- Better to be more aggressive on inflation to anchor expectations, which improves the tradeoff between output and inflation

Macroeconomic policy isn't perfect: it has aspects of both art and science

- Data is imperfect
- Models are approximations of reality and may miss important things (remember the London Tube map)
- Forecasts are probabilistic
- Counterfactuals are difficult to know

The role for stabilisation

- Recall the **self-correcting mechanism**: In the short-run there might be output gaps, however in the long run the economy will go back to potential level of output ***because changes in inflation change expected inflation and this shifts the AS.***
That is,
 - If there is a contractionary gap, prices will start falling resulting in falling inflation and falling expected inflation --changes in expected inflation will shift down the AS. In addition, central bank will react to falling inflation by dropping interest rates, which will increase PAE, causing a movement along the AD.
 - Similarly, if there is an expansionary gap, inflation will rise, rising expected inflation and shifting up the AS. The central bank will also react by increasing interest rates and we'll move along the AD.

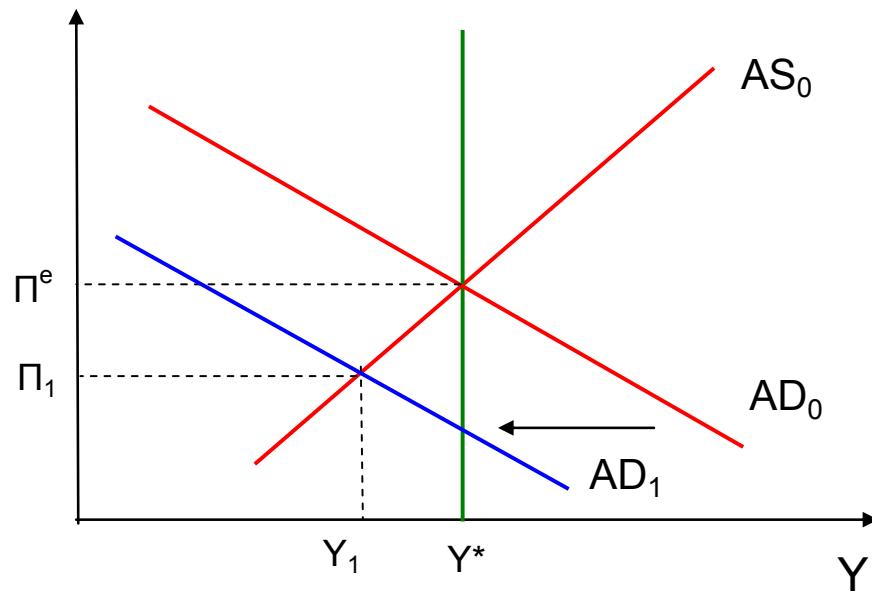
The role for stabilisation

- However, the speed with which the self-correction mechanism takes place can be very slow due to long-term contracts and imperfections in the product and labour markets.
 - I.e., wages and prices might take a long time to adjust.
- In this case, there is still role for macroeconomic policy!
 - Stabilisation policy should be used if there are large and prolonged output gaps.

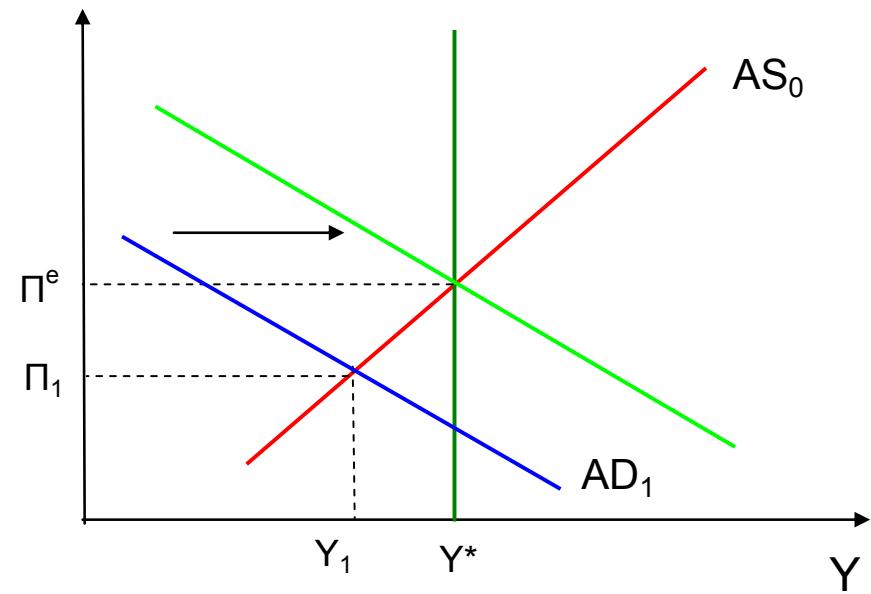
The role for stabilisation

- How to intervene?
- F. ex., if the economy experiences a negative demand shock, then use either expansionary fiscal policy or expansionary monetary policy.

The role for stabilisation



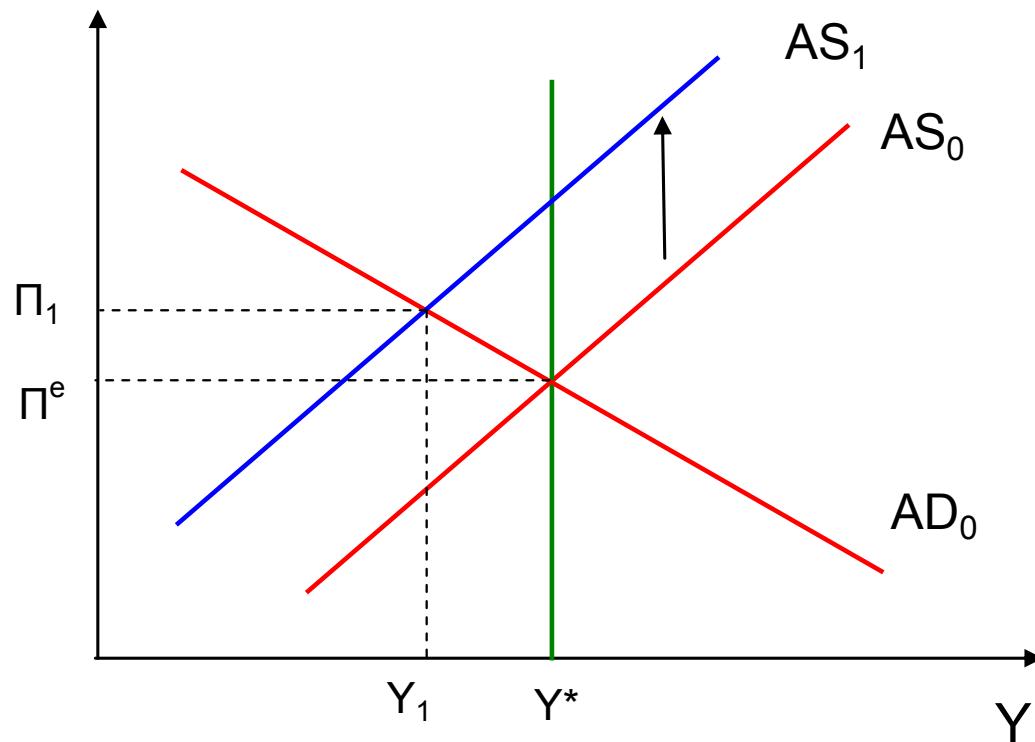
Negative demand shock



Effect of expansionary
fiscal or monetary policy

The role for stabilisation

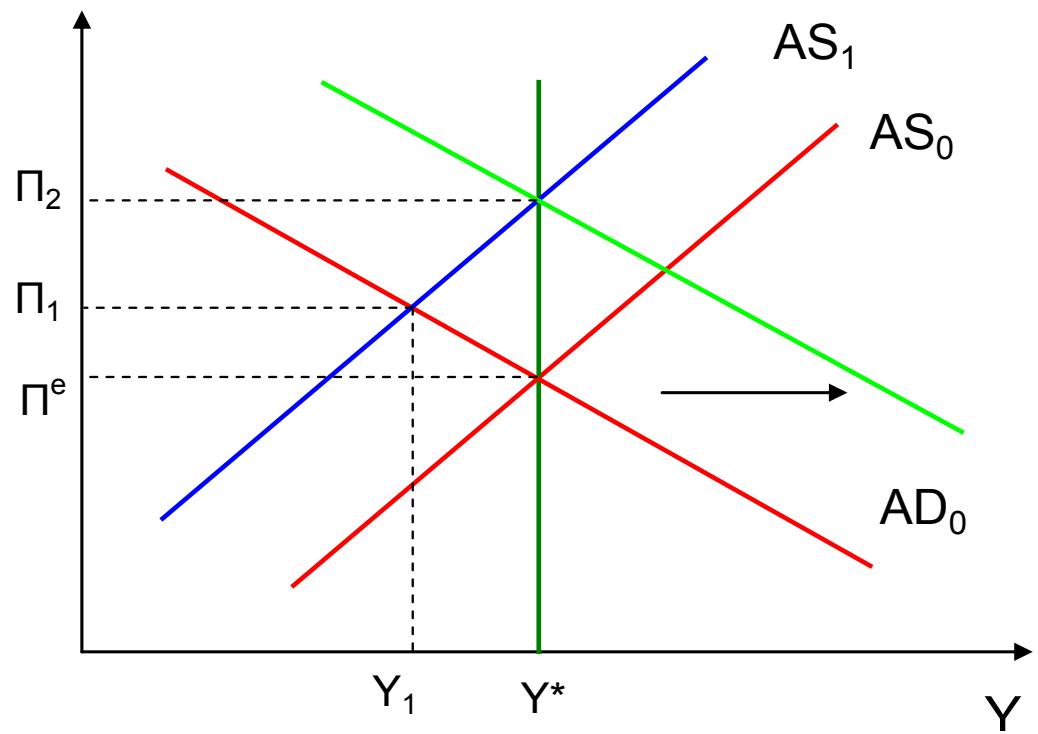
- What if the economy experiences a negative supply shock?



The role for stabilisation

Policy dilemma:

If use expansionary fiscal or monetary policy, it will work towards closing the output gap but inflation will be even higher.
(Particularly a problem if central bank does “inflation targeting”).



Thus, what to do?

Use macroeconomic policy to close the output gap? Wait for the economy to “self-correct”? Fight inflation with monetary policy?

Accommodating policy

- Accommodating policy describes a policy that allows the effects of a shock to remain.
- Two important implications:
 - In the short run, the economy experiences a period of contraction and higher inflation caused by the inflation shock, followed by an increase in output with inflation rising even higher.
 - In the long run, the economy returns to potential output, where it began, but now has a higher inflation rate. A possibly shorter and shallower recession is paid for with a higher long-run inflation

Anchored inflationary expectations

- Anchored inflationary expectations means people's expectations of future inflation do not change even if inflation rises temporarily:
 - Inflation anchoring dampens response to an aggregate inflation shock.
 - Businesses and consumers believe the Reserve Bank will reestablish its target inflation rate.
 - This shortens the time required to close the recessionary gap from the shock, encouraging the Reserve Bank to maintain its original inflation target.

Maintaining low inflation after an adverse inflation shock

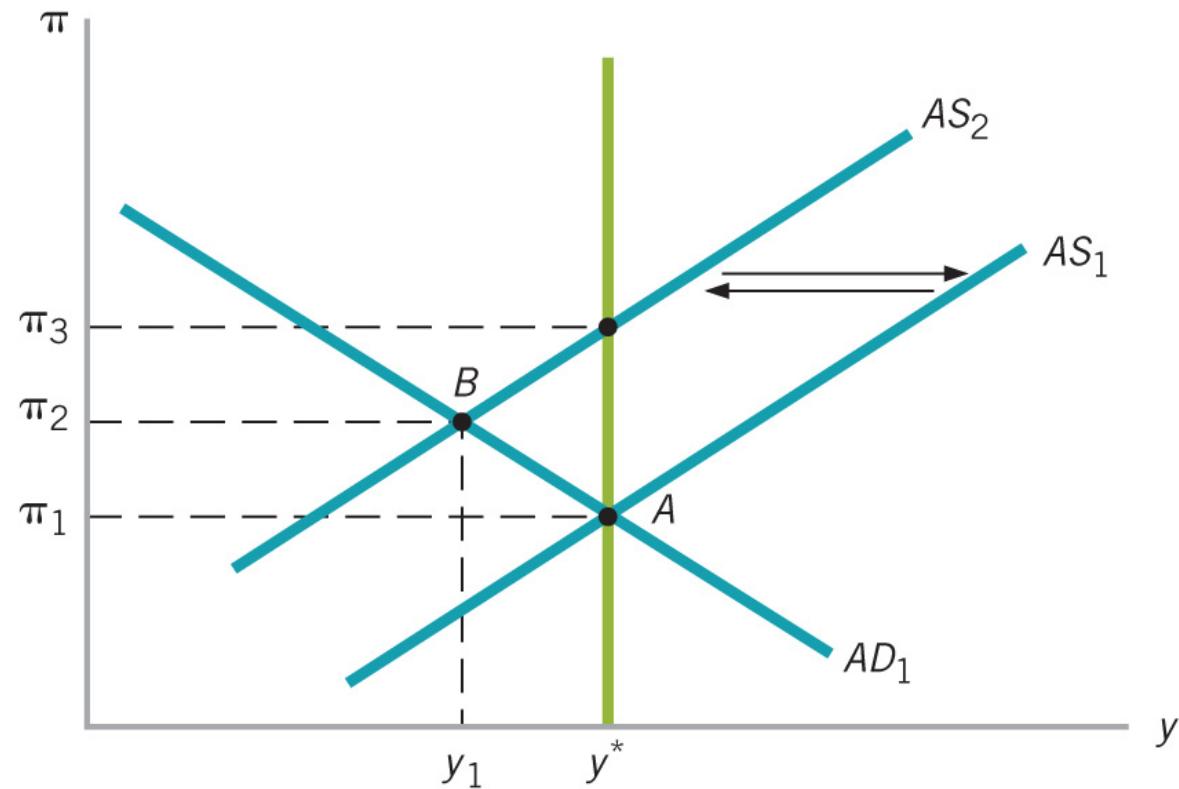


Figure 10.3 Maintaining low inflation after an adverse inflation shock

Monetary policy and central bank credibility

- Many central banks do “inflation targeting” – primary objective is to meet certain inflation target.
 - Clearly reflected on central bank’s policy reaction function.
- People’s expectations very important for what actual inflation is. Thus monetary policy will be more successful, the more credible central bank is.
- Central bank credibility depends on:
 - Independence of central bank from government (avoid older problem of “monetarizing” public deficits).
 - Announcements of explicit inflation targets.
 - Established reputation for fighting inflation (“doves” and “hawks”).

Central bank reputation

- A central bank's success at stabilising the economy depends on whether its acts align with its reputation.
 - An inflation hawk is committed to achieving and maintaining low inflation and accepts some short-run cost in reduced output and employment.
 - An inflation dove is not strongly committed to achieving and maintaining low inflation.
- Inflation hawks are more successful in maintaining stable output and employment, even in the short run.
 - Stronger anchoring of inflation expectations.

Why shouldn't the inflation target be zero?

- Zero inflation has several undesirable consequences:
 - Imperfect control over inflation means periods of deflation are possible.
 - The Reserve Bank may use negative real interest rates at times, which can only be achieved if nominal rates are less than inflation, so nominal rates would be negative.
 - Measured inflation overstates actual inflation, i.e. a true inflation of zero means measured inflation of about 1%.
 - A small amount of inflation makes labour markets work better.

Fiscal policy and the supply side

- Certain fiscal policies might affect the economy's productive capacity, or potential output, as well as aggregate demand.

For example:

- Public spending on infrastructure, education, etc –shifts AD outward but also increases potential output in long-run.
- Taxes and transfer payments:
 - More generous unemployment schemes associated to higher structural unemployment.
 - Drop in marginal tax rates?

Summary

- Stabilisation policy should only be used for a large and persistent output gap.
- Anchored inflationary expectations occur when people's expectations of future inflation do not change even if inflation rises temporarily.
- An independent Reserve Bank is associated with a low inflation rate.
- Fiscal policy is considered as supply-side because it affects potential output.
- Monetary policy has a shorter inside lag but a longer outside lag.