



Understanding Economics

2nd edition

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Chapter 14

Monetary Policy

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Chapter Objectives

In this chapter, you will:

- learn about the Bank of Canada and its functions
- analyze the tools the Bank of Canada uses to conduct monetary policy
- examine the tradeoff between inflation and unemployment

The Bank of Canada (a)

- The Bank of Canada performs four basic functions
 - it manages the money supply
 - it acts as the bankers' bank
 - holding deposits of members of the Canadian Payments Association
 - making advances to CPA members at the bank rate

The Bank of Canada (b)

- it acts as the federal government's fiscal agent
 - holding some of the government's bank deposits
 - clearing the government's cheques
 - handling the financing of the government's debt by issuing bonds (including Canada Savings Bonds and treasury bills)
- it helps supervise the operations of financial markets to ensure their stability

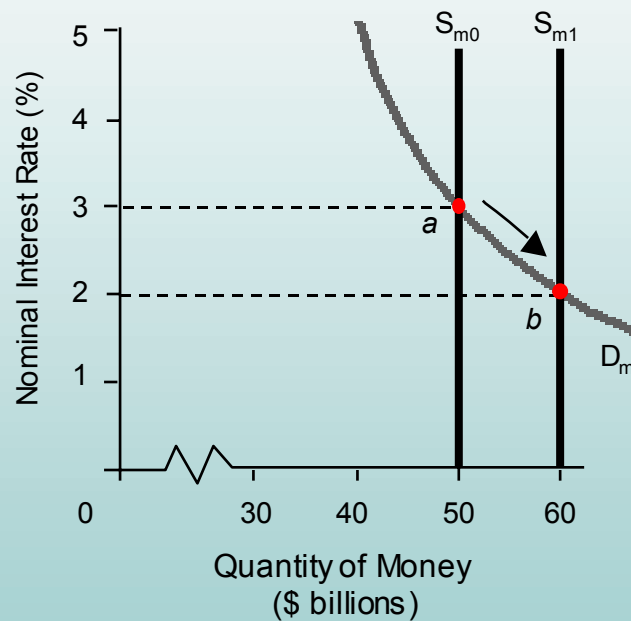
Expansionary Monetary Policy (a)

- Expansionary monetary policy
 - is a policy of increasing the money supply and lowering interest rates, which shifts AD rightward by a magnified amount due to an initial increase in investment and the consumption of durable goods
 - is used to eradicate a recessionary gap

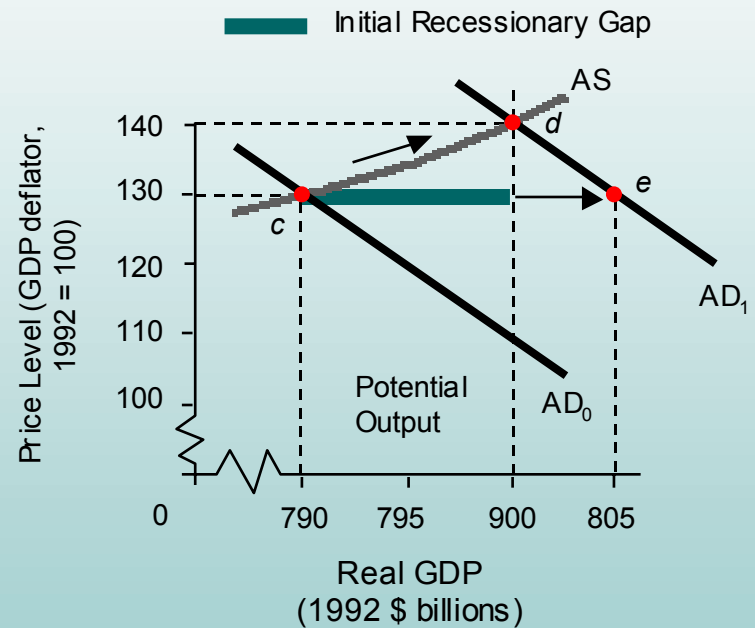
Expansionary Monetary Policy (b)

Figure 14.1, page 350

The Money Market



The Economy



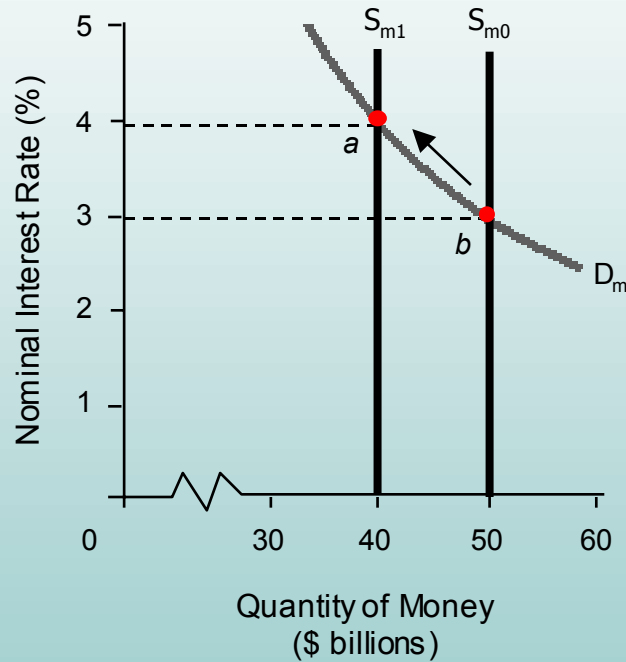
Contractionary Monetary Policy (a)

- Contractionary monetary policy
 - is a policy of decreasing the money supply and raising interest rates, which shifts AD leftward by a magnified amount due to an initial decrease in investment and the consumption of durable goods
 - is used to eradicate an inflationary gap

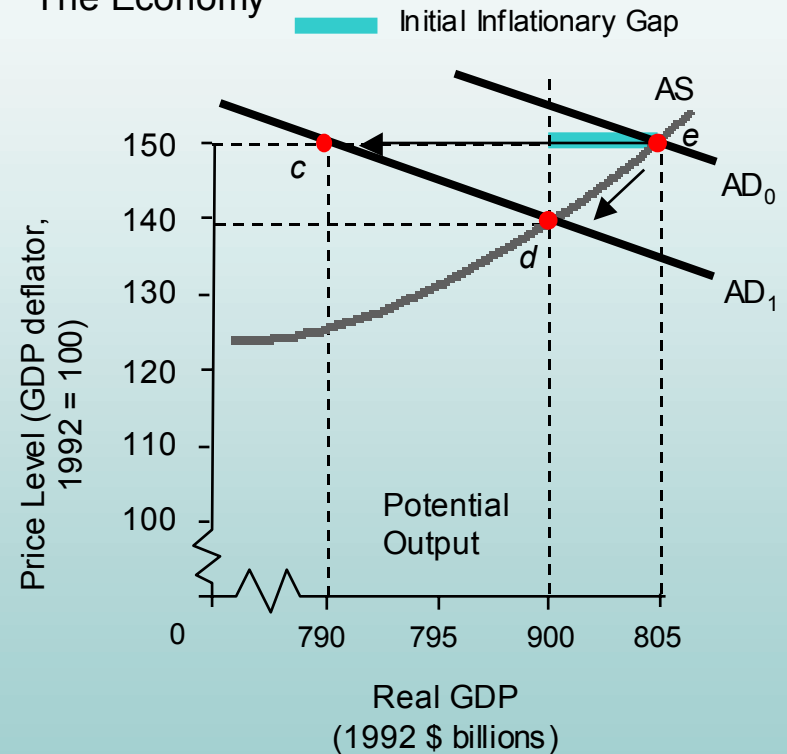
Contractionary Monetary Policy (b)

Figure 14.2, page 351

The Money Market



The Economy



Open Market Operations

- Open market operations are a tool the Bank of Canada uses to conduct monetary policy
 - a sale of bonds lowers a CPA member's deposit liabilities and reserves which causes a magnified decrease in the money supply using the money multiplier
 - a purchase of bonds raises a CPA member's deposit liabilities and reserves which causes a magnified increase in the money supply using the money multiplier

A Bond Sale

Figure 14.3, Page 353

Bank of Canada			
Assets		Liabilities	
Bonds	-\$1000	Cartier Bank's Deposit	-\$1000

Cartier Bank			
Assets		Liabilities	
Reserves at Bank of Canada	-\$1000	Bondholder A's Deposit	-\$1000

A Bond Purchase

Figure 14.4, Page 353

Bank of Canada			
Assets		Liabilities	
Bonds	+\$1000	Cartier Bank's Deposit	+\$1000

Cartier Bank			
Assets		Liabilities	
Reserves at Bank of Canada	+\$1000	Bondholder A's Deposit	+\$1000

Moving Government Deposits (a)

- Moving government deposits is another tool the Bank of Canada uses to conduct monetary policy
 - a movement of government deposits from the Bank of Canada to CPA members raises the CPA members' deposit liabilities and reserves which causes a magnified increase in the money supply based on the money multiplier

Moving Government Deposits (b)

- a movement of government deposits from CPA members to the Bank of Canada lowers the CPA members' deposit liabilities and reserves which causes a magnified decrease in the money supply based on the money multiplier

Movements of Government Deposits

Figure 14.5, Page 354

Bank of Canada			
Assets		Liabilities	
		Government Deposit	-\$1000
		Cartier Bank's Deposit	+1000

Cartier Bank			
Assets		Liabilities	
Reserves at Bank of Canada	+\$1000	Government Deposit	+\$1000

Changes in the Bank Rate (a)

- Changing the bank rate is a tool the Bank of Canada uses to signify its monetary policy intentions
 - when the Bank of Canada changes its target band for the overnight rate it also automatically adjusts the bank rate since this rate is at the top end of the target band

Changes in the Bank Rate (b)

- a rise in the bank rate signifies a contractionary policy in the near future while a fall in the bank rate signifies an expansionary policy
- if the change in the bank rate is substantial then deposit-takers also adjust their prime rate which is the lowest possible rate charged on loans to deposit-takers' best corporate customers

The Benefits and Drawbacks of Monetary Policy

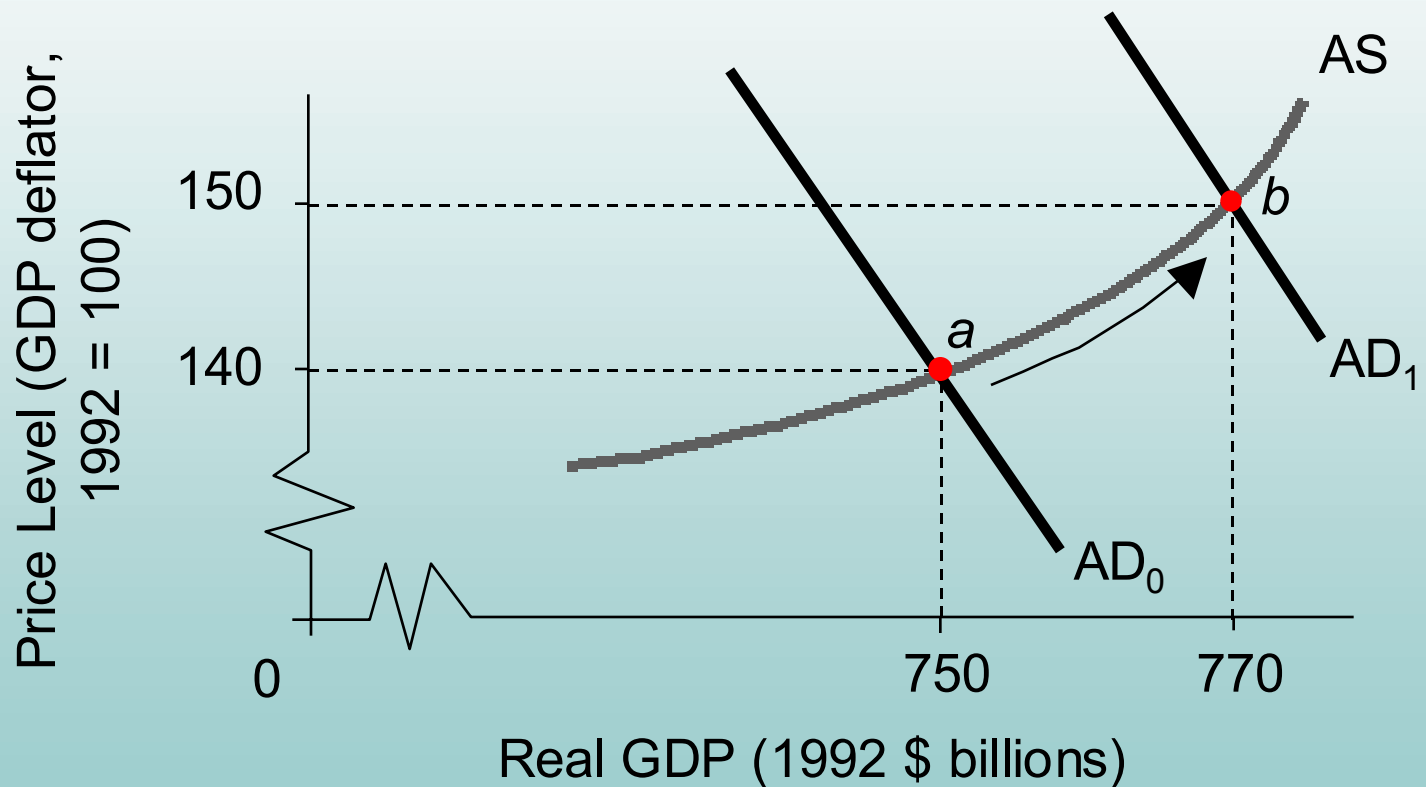
- Monetary policy has two main benefits
 - it is separated from day-to-day politics
 - decisions regarding monetary policy can be made quickly
- Monetary policy has two main drawbacks
 - it is less effective as an expansionary tool than as a contractionary tool
 - it cannot be focused on particular regions

Types of Inflation

- There are two main types of inflation
 - demand-pull inflation occurs as rightward shifts in the AD curve pull up prices
 - cost-push inflation occurs as leftward shifts in the AS curve push up prices

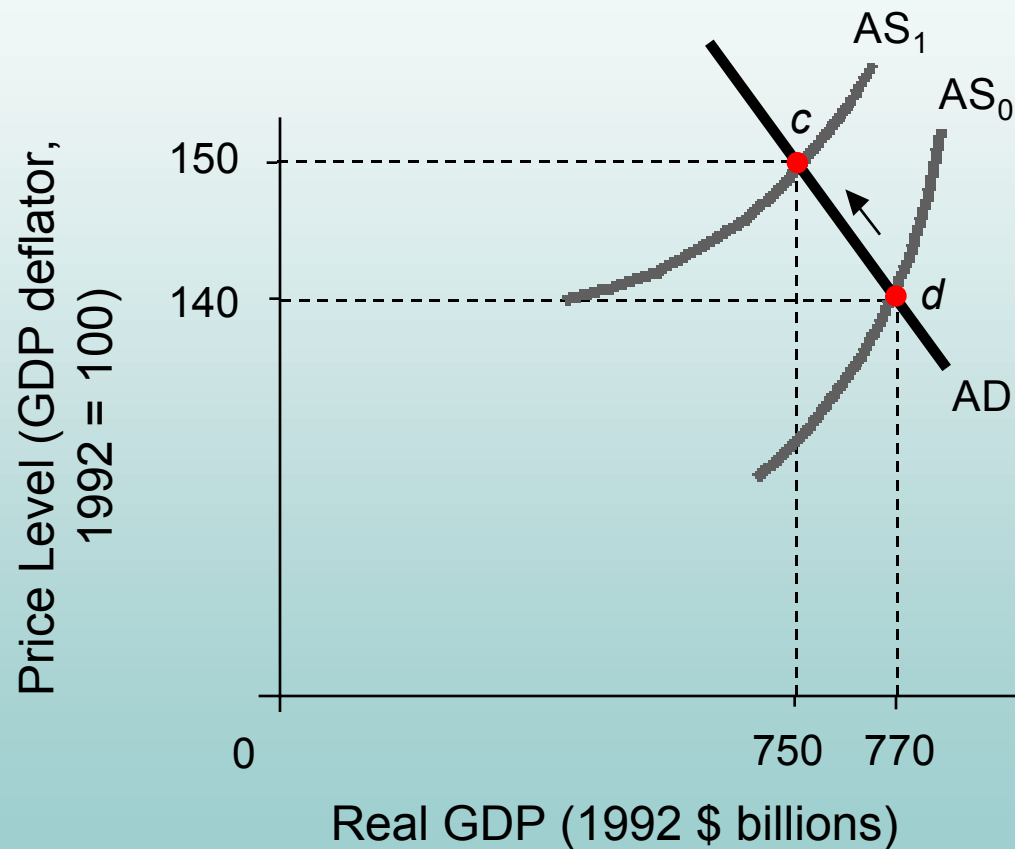
Demand-Pull Inflation

Figure 14.6, Page 357



Cost-Push Inflation

Figure 14.9, Page 359

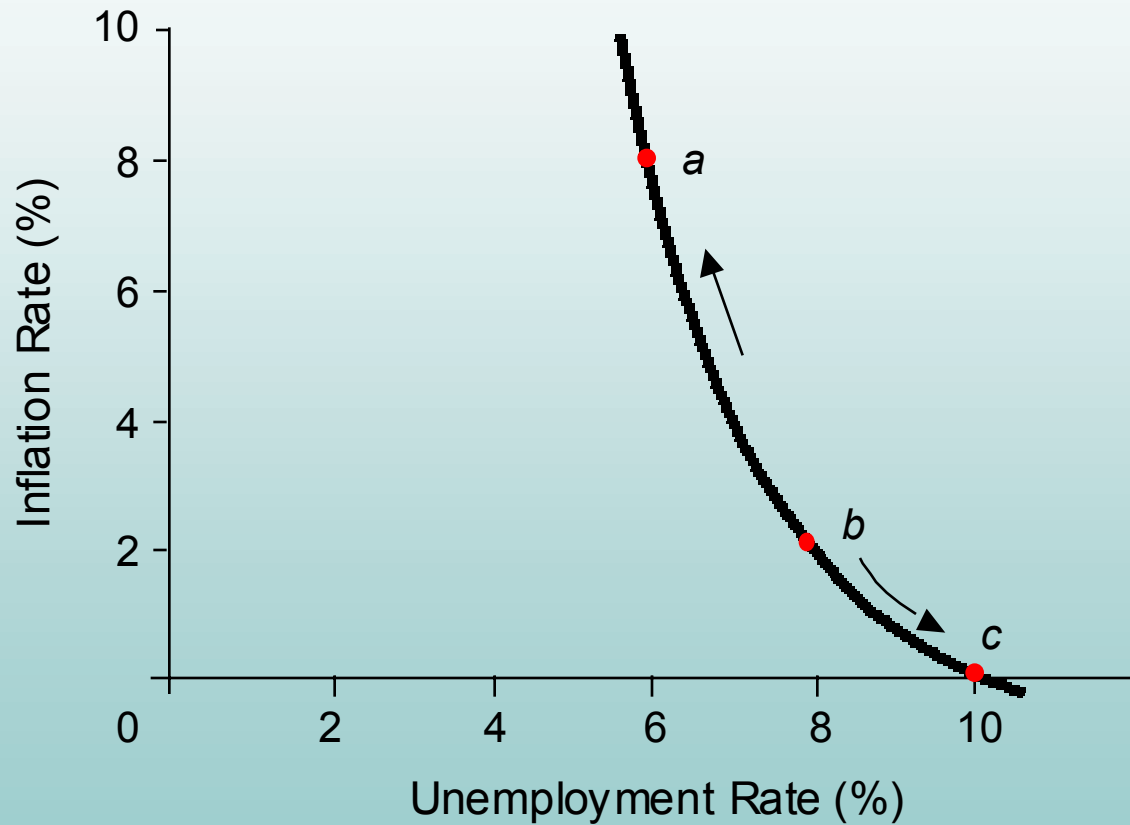


The Phillips Curve (a)

- The Phillips curve is a graph showing the assumed inverse relationship between unemployment and inflation
 - from 1960 to 1972 the Canadian Phillips curve was relatively stable
 - from 1973 to 1982 the Canadian Phillips curve shifted rightward resulting in stagflation
 - from 1983 to 1996 stagflation was reversed but no constant Phillips curve emerged

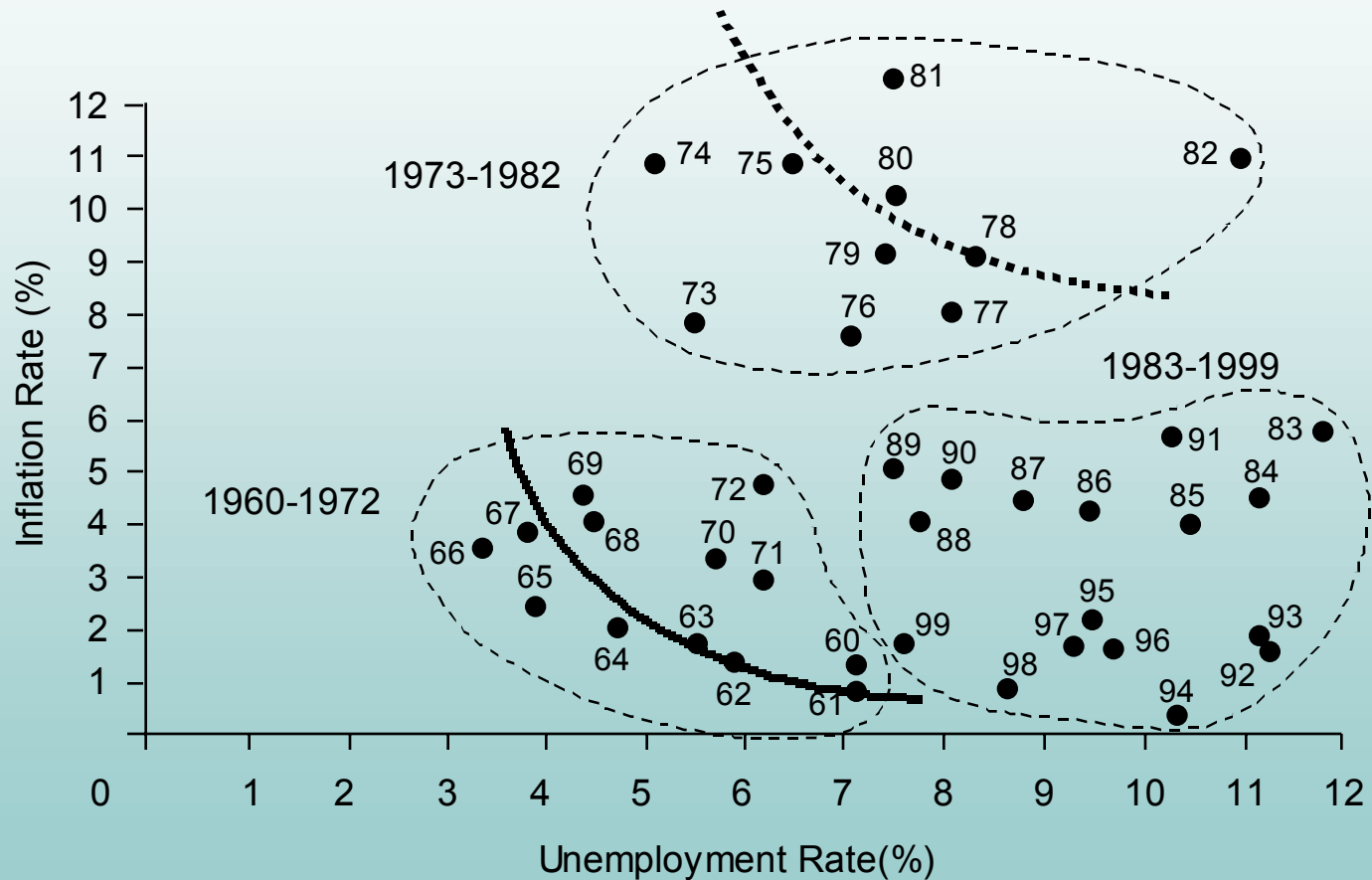
The Philips Curve

Figure 14.7, Page 357



Shifts in the Phillips Curve

Figure 14.8, page 358

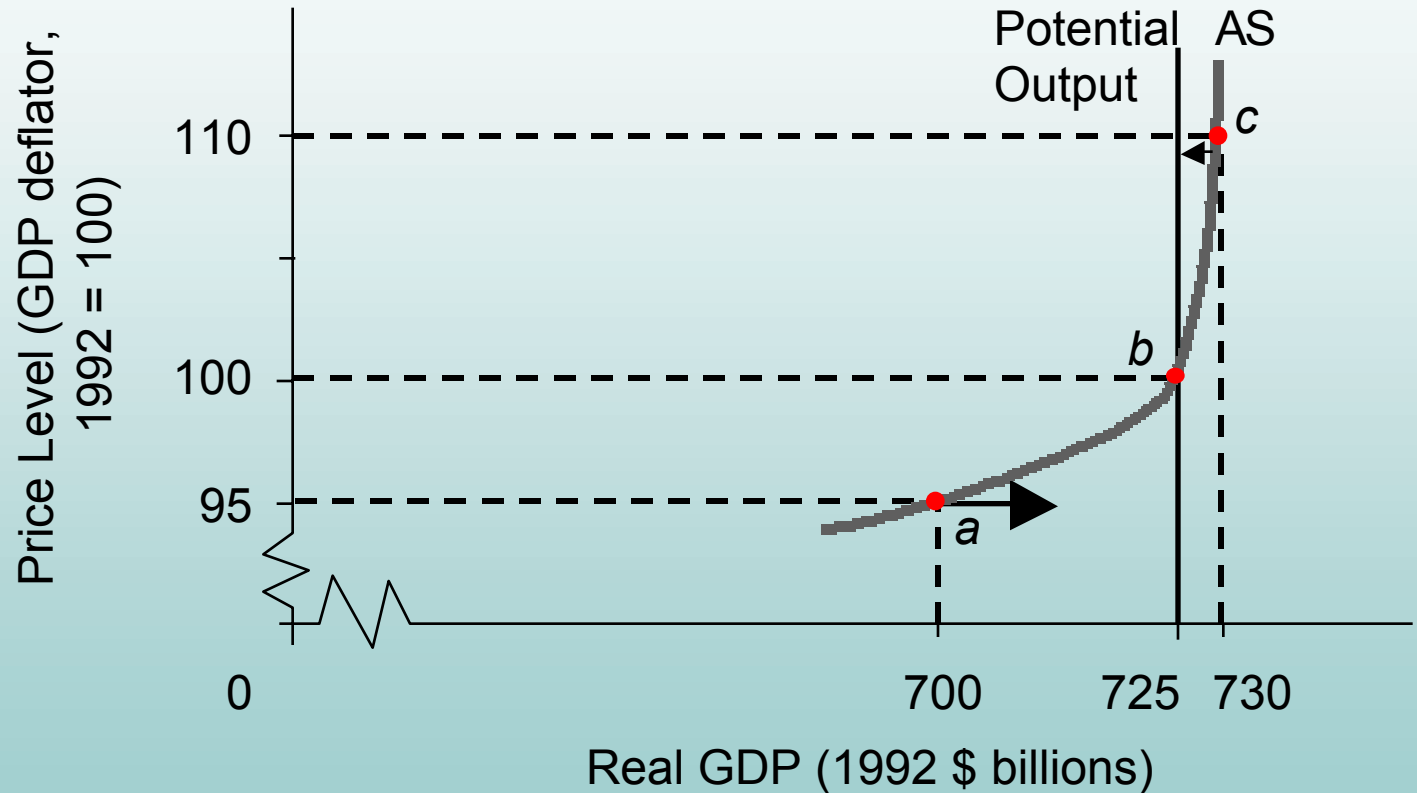


The Economy's Self-Stabilizing Tendency (a)

- The economy has a self-stabilizing tendency due to long-run movements in the AS curve
 - if equilibrium real output is above potential output then higher wages gradually push the AS curve leftward and decrease equilibrium output
 - if equilibrium real output is below potential output then lower wages gradually push the AS curve rightward and increase equilibrium output

The Self-Stabilizing Economy (b)

Figure 14.10, Page 360



The Self-Stabilizing Economy (c)

- These movements mean that the vertical line on the graph at the potential output level can be interpreted as the economy's long-run aggregate supply curve, since it shows all points consistent with stable equilibrium in the long run

Money Matters (a)

- Milton Friedman is a leading supporter of monetarism, which stresses the influence of money in the economy
 - Central to monetarism is the velocity of money (V), which is the number of times money is spent on final goods and services during a given year.
 - V is found by dividing nominal GDP by the money supply (M)

Money Matters (b)

- These calculations lead to the equation of exchange, $M \times V = P \times Q$, where P is the price level and Q is the level of real output.
- According to the quantity theory of money, accepted by monetarists, both V and Q are relatively stable, which means that adjustments in P are due to changes in M .

Money Matters (c)

- Friedman and other monetarists consider variations in the money supply to be the most significant factor in the economy, with changes in M translating immediately into changes in nominal GDP and the price level.
- According to monetarists, central banks should not use discretionary policy, but adopt a set monetary rule.

Canadian Monetary Policy

- The Bank of Canada believes that its major role is minimizing inflation, since they do not believe that there is a long run tradeoff between inflation and unemployment.
- The Bank also believes that long-term interest rates are increasingly determined by global forces

Long-Term Interest Rates (a)

- Based on the Bank's theory, two factors help set long term interest rates within Canada
 - the global demand and supply for loanable funds, which set a global equilibrium interest rate
 - a Canadian risk premium, determined by fiscal policy, and inflation

Long-Term Interest Rates (b)

- According to the Bank, lower inflation means that lenders will accept a lower inflation premium not just on nominal interest rates but real interest rates as well, since low inflation enhances stability in financial markets.
- Therefore the main way the Bank believes it can reduce long-term real interest rates is by reducing inflation.

Zero-Inflation Policy (a)

- Since 1995, the Bank's zero-inflation policy
 - has kept inflation between 1% and 3%
- Opponents
 - argue that the Bank has been too focused on minimizing inflation
 - criticize the Bank for introducing the policy during the recession of the early 1990s
 - argue that higher interest rates in the early 1990s raised government debt

Zero-Inflation Policy (b)

○ Supporters

- argue that short-term unemployment was necessary to reduce inflation
- say the Bank has promoted the Canada's economic stability and competitiveness
- suggest that, in the long run, this policy has lowered interest rates and thereby raised employment and output
- argue that government debt is lower in the long run due to the policy

The Monetary Condition Index (a)

- The Monetary Conditions Index (MCI) is the tool the Bank of Canada uses to react to trends in financial markets
- It incorporates both the Canadian short term interest rate and the exchange rate, since both affect aggregate demand
 - a lower interest rate or a lower exchange rate shift aggregate demand to the right
 - a higher interest rate or a higher exchange rate shift aggregate demand to the left

The Monetary Conditions Index (b)

- The MCI includes the interest rate on three-month corporate paper and the Canadian dollar's value using a trade-weighted index against the G10 currencies
- A change in the MCI is found by calculating changes in the corporate paper rate (weighted at 1) and the G10 exchange rate index (weighted at 1/3)
- Changes in the MCI are similar to changes in interest rates, with a drop being expansionary and a rise being contractionary



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Chapter 14 **The End**

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