Objectives

After studying this chapter, you will able to

- Describe the goals of macroeconomic policy
- Describe the main features of fiscal policy and monetary policy since 1971
- Explain how fiscal policy and monetary policy influence long-term economic growth
- Distinguish between and evaluate fixed-rule and feedback-rule policies to stabilize the business cycle
- Evaluate fixed-rule and feedback-rule policies to contain inflation and explain why lowering inflation usually brings recession

What Can Policy Do?

From 1995 through 2000, the Canadian economy performed well, but slowed in 2000, and in 2001 the unemployment started to increase

All major industrial countries had slowing economies in 2001; leaders began to speak of stimulus packages, but not everybody agreed any stimulus was needed

What can and should policy makers do to achieve desirable macroeconomic performance?

Policy Goals

The domestic goals of macroeconomic policy are to

- Achieve the highest sustainable rate of growth of potential GDP.
- Smooth out avoidable business cycle fluctuations.
- Maintain low unemployment.
- Maintain low inflation.

Policy Goals

Potential GDP Growth

Rapid sustained real GDP growth can make a profound contribution to economic well being.

Between 1988 and 2001, potential GDP grew by 2.7 percent a year, the population grew by 1.1 percent a year, and potential GDP per person grew by 1.6 percent a year.

At this growth rate, output per person doubles every 45 years

Growth at 5 percent a year doubles output in 18 years.

Policy Goals

The Business Cycle

Deviations of output from potential GDP are costly.

The extent of these fluctuations is unknown because some fluctuations in real GDP occur because potential GDP fluctuates.

But eliminating deviations of output from potential GDP is desirable.

Policy Goals

Unemployment

High unemployment is wasteful and costly; low unemployment causes bottlenecks and inefficiencies.

Keeping unemployment at the natural rate is desirable; but its level is not known with certainty.

Lowering the natural rate if it is high is also a policy goal.

Policy Goals

Inflation

Predictability of inflation is a consensus goal.

Most economists favour a measured rate of 0 to 3 percent per annum, roughly equivalent to price stability given measurement bias.

Policy Goals

The Two Core Policy Indicators: Real GDP Growth and Inflation

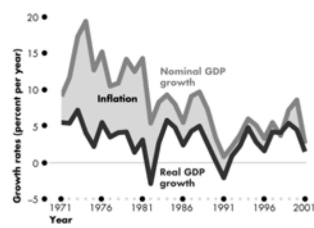
The first three of these goals are linked to the growth rate of real GDP.

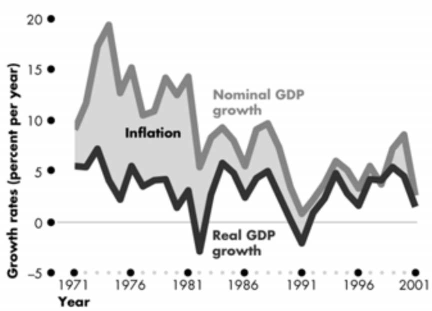
The trend inflation rate is independent of real GDP.

So the core policy targets are the growth rate of real GDP and the inflation rate.

Policy Goals

Figure 32.1 shows the performance of the growth rate of real GDP and the inflation rate from 1971 to 2001.





Policy Tools and Performance

Fiscal policy is the use of the federal budget to achieve macroeconomic objectives.

Monetary policy is the adjustment of the quantity of money in circulation and interest rates by the Bank of Canada to achieve macroeconomic objectives.

Policy Tools and Performance

Fiscal Policy since 1971

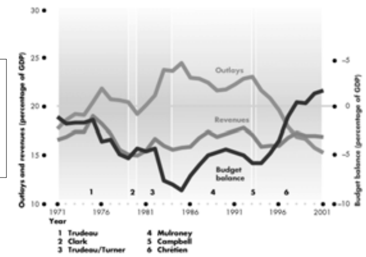
When Pierre Trudeau was prime minister, fiscal policy was expansionary

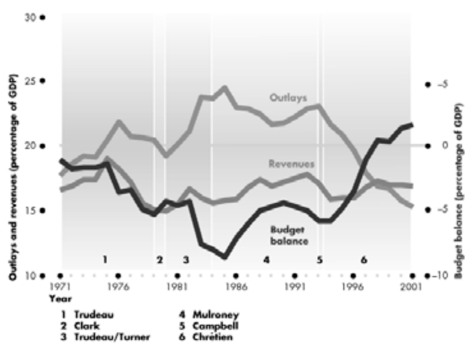
When Brian Mulroney was prime minister, fiscal policy was contractionary

When Jean Chrétien became prime minister, fiscal policy remained contractionary

Policy Tools and Performance

Figure 32.2 summarizes the fiscal policy record for 1971–2001.





Policy Tools and Performance

Monetary Policy since 1971

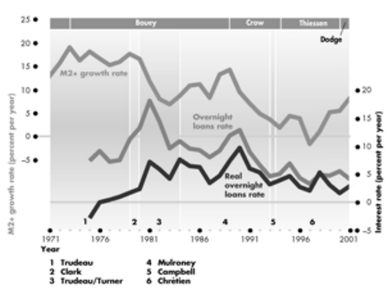
Money growth was highest in the 1970s, when inflation was highest.

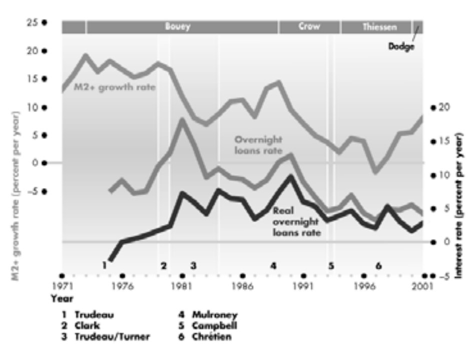
Monetary policy was tightened during the 1980s and again during the 1990s as the Bank of Canada brought the inflation rate down.

M2 growth increased during the late 1990s and remained high through 2002.

Policy Tools and Performance

Figure 32.3 summarizes the monetary policy record for 1971–2001.





Long-Term Growth Policy

Policies that aim at increasing long-term growth must increase

- National saving
- Investment in human capital
- Investment in new technologies

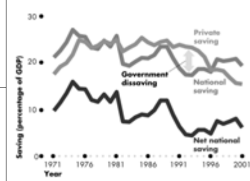
Long-Term Growth Policy

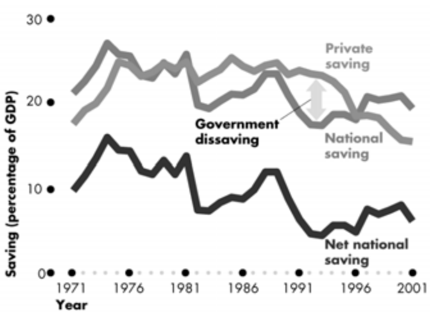
National Saving

Figure 32.4 shows national saving, government saving, and net national saving for 1971–2001.

Gross national saving and private saving has fluctuated between 17 percent and 27 percent of GDP.

Net national saving has been on a downward trend.





Long-Term Growth Policy

Increasing the government's surplus would increase the government saving component of national saving.

Tax policies that increase the after-tax rate of return on saving would boost the private saving part of national saving.

Monetary policy that preserves stable prices and minimizes uncertainty about the future price level also increases private saving.

Long-Term Growth Policy

Investment in Human Capital

Human capital can be obtained through formal schooling and through on-the-job experience.

Improving the quality of schooling and enlarging access to advanced training are policies the government can undertake to spur the formation of human capital.

Long-Term Growth Policy

Investment in New Technologies

Investment in new technologies benefits the nation because new technologies are not subject to diminishing returns and because they can spill over to benefit all sectors of the economy.

The government's research and experiment tax credit reduces the taxes of firms that conduct research and development and helps generate new technologies.

Business Cycle and Unemployment Policy

Stabilization policies fall into three broad categories:

- Fixed-rule policies
- Feedback-rule policies
- Discretionary policies

Business Cycle and Unemployment Policy

Fixed-Rule Policies

A fixed-rule policy specifies an action to be pursued independently of the state of the economy.

Milton Friedman proposed a fixed rule that sets the monetary growth rate at a level to achieve zero average inflation.

Business Cycle and Unemployment Policy

Feedback-Rule Policies

A feedback-rule policy specifies how policy actions respond to changes in the state of the economy.

The Bank of Canada's policy of raising the interest rate in response to a falling unemployment rate and lowering the interest rate in response to a rising unemployment rate is an example of a feedback-rule policy.

Business Cycle and Unemployment Policy

Discretionary Policies

A discretionary policy responds to the economy in a possibly unique way that uses all available information including perceived lessons from past “mistakes.”

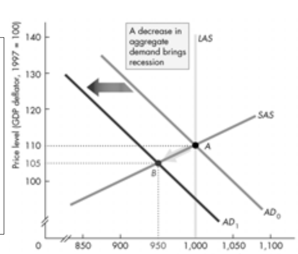
Though all policies have some element of discretion, for the most part discretionary policy is a form of sophisticated feedback rule policy.

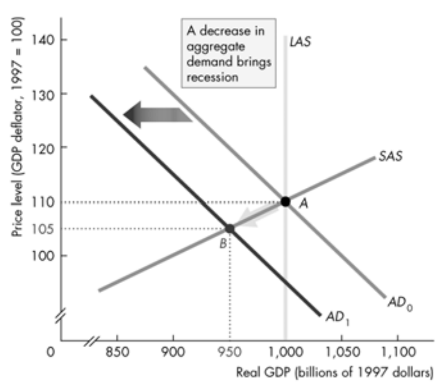
Business Cycle and Unemployment Policy

Stabilizing Aggregate Demand Shocks

Figure 32.5 illustrates the economy in a recession.

In this situation, either a fixed rule or a feedback rule might be used.





Business Cycle and Unemployment Policy

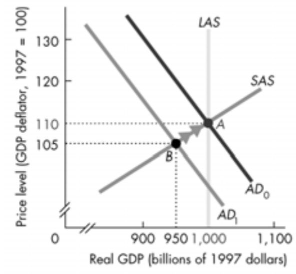
Fixed-Rule: Monetarism

A **monetarist** is an economist who believes that fluctuations in the quantity of money are the main source of economic fluctuations.

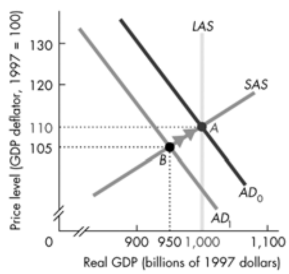
A monetarist advocates a fixed rule in which neither fiscal policy nor monetary policy respond to the depressed state of the economy.

Business Cycle and Unemployment Policy

Figure 32.6(a) shows that under a fixed rule, if the decrease in aggregate demand is temporary, the economy returns to potential GDP and full employment when aggregate demand recovers.



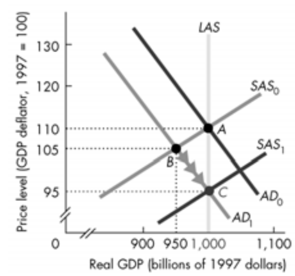
(a) Fixed rule: temporary demand shock



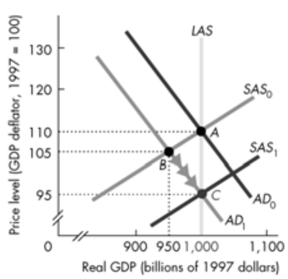
(a) Fixed rule: temporary demand shock

Business Cycle and Unemployment Policy

Figure 32.6(b) shows that under a fixed rule, if the decrease in aggregate demand is permanent, the economy returns to potential GDP and full employment when the money wage rate falls and the *SAS* curve shifts rightward.



(b) Fixed rule: permanent demand shock



(b) Fixed rule: permanent demand shock

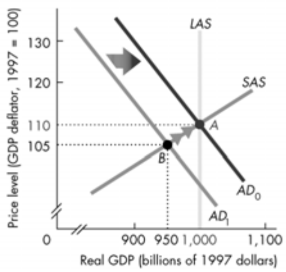
Business Cycle and Unemployment Policy

Feedback Rule: Keynesian Activism

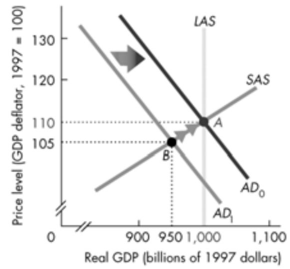
A **Keynesian activist** is an economist who believes that fluctuations in aggregate demand combined with sticky wages (and/or sticky prices) are the main source of economic fluctuations.

Business Cycle and Unemployment Policy

Figure 32.6(c) shows that under a feedback rule that uses fiscal or monetary stimulation of aggregate demand, the *AD* curve shifts rightward and real GDP increases to restore full employment.



(c) Feedback rule



(c) Feedback rule

Business Cycle and Unemployment Policy

The Two Rules Compared

Under a fixed rule, the economy goes into recession and remains there for as long as it takes the economy under its own steam to return to full employment.

Under a feedback rule, the policy action pulls the economy out of recession.

Business Cycle and Unemployment Policy

So Feedback Rules are Better?

Despite the apparent superiority of feedback rules many economists say that fixed rules do a better job of stabilizing aggregate demand because

- Potential GDP is not known
- Policy lags are longer than the forecast horizon
- Feedback rule policies are less predictable than fixed rule policies

Business Cycle and Unemployment Policy

Knowledge of Potential GDP

Proper use of feedback rules requires that policymakers know whether policy should be expansionary or contractionary.

But that requires knowledge of what is the potential level of real GDP, which no one knows with certainty.

Business Cycle and Unemployment Policy

Policy Lags and the Forecast Horizon

The effects of policy actions operate with lags.

These lags may be longer than policymakers can forecast so that actions taken in response to actual or forecasted events may have their maximum effects only when the economy faces new problems.

Business Cycle and Unemployment Policy

Predictability of Policies

Fixed rules are more predictable; feedback rules inflict more uncertainty on the economy.

When determining interest rates and wage contracts, people need to forecast future inflation rates.

They can do so more easily and accurately when policies are predictable.

Business Cycle and Unemployment Policy

Stabilizing Aggregate Supply Shocks

Real business cycle economists suggest another reason for the failure of feedback rules: Fluctuations in GDP are caused by fluctuations in productivity growth, that is, by shifts in the aggregate supply curve.

According to this view, the short-run and long-run aggregate supply curves are identical.

A slowdown in productivity growth shifts the aggregate supply curve leftward.

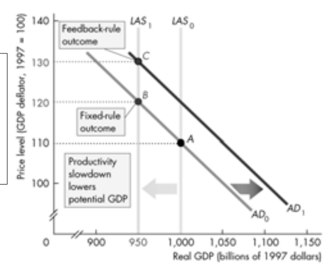
Business Cycle and Unemployment Policy

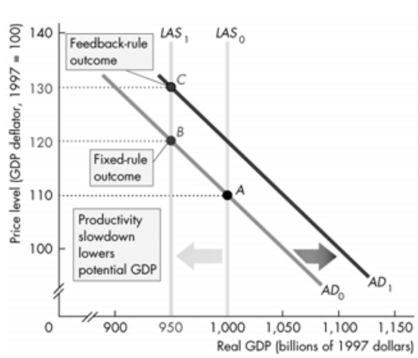
With a fixed rule, a decrease in *LAS* has no effect on policy, so *AD* does not change, and the result of the decrease in *LAS* is a fall in real GDP and an increase in the price level.

Because the aggregate supply curve is vertical, changes in aggregate demand do not change the level of GDP, so policy changes in aggregate demand have no useful effect on real GDP.

Business Cycle and Unemployment Policy

Figure 32.7 illustrates the effects of a feedback response to a decrease in aggregate supply.





Business Cycle and Unemployment Policy

Natural Rate Policies

There is no costless way to lower the natural unemployment rate.

Two possibilities (both costly and involving tradeoffs) are

- Decrease unemployment compensation
- Lower the minimum real wage rate

Anti-Inflation Policy

Avoiding demand-pull inflation is like to avoiding demand-deficiency recession and is achieved by stabilizing aggregate demand.

Avoiding cost-push inflation and slowing inflation if it occurs raises special problems.

Avoiding Cost-Push Inflation

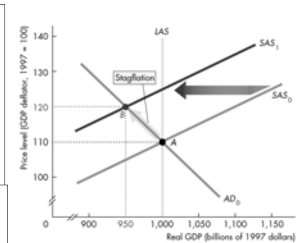
Cost-push inflation originates when cost increases decrease short-run aggregate supply and shift the *SAS* curve leftward.

Anti-Inflation Policy

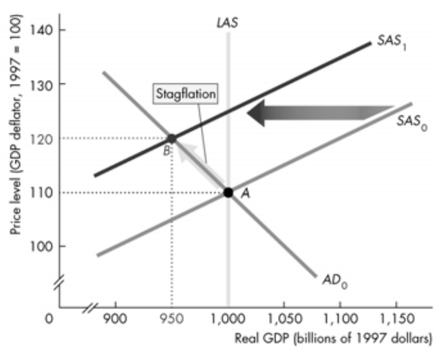
Monetarist Fixed Rule

Figure 32.8(a) illustrates the use of a monetarist fixed rule in the face of an OPEC oil price increase that shifts the *SAS* curve leftward.

Real GDP falls and the price level rises—*stagflation*.



(a) Fixed rule



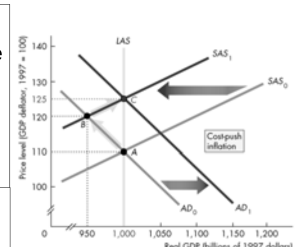
(a) Fixed rule

Anti-Inflation Policy

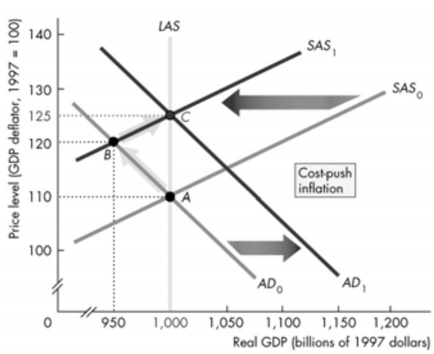
Keynesian Feedback Rule

Figure 32.8(b) illustrates the use of a Keynesian feedback rule in the face of an OPEC oil price increase that shifts the *SAS* curve leftward.

The policy shifts the *AD* curve rightward, real GDP increases and the price level rises.



(b) Feedback rule



(b) Feedback rule

Anti-Inflation Policy

Incentives to push up costs

With a fixed rule, a boost in the price of oil or the money wage rate results in unemployment.

With a feedback rule, unemployment is temporary and the price level rises by more.

The OPEC oil cartel (and possibly unionized workers) have a greater incentive to demand a higher price (money wage rate) under a feedback rule.

This incentive is a disadvantage of a feedback rule.

Anti-Inflation Policy

Slowing Inflation

Policy might attempt to slow inflation either with

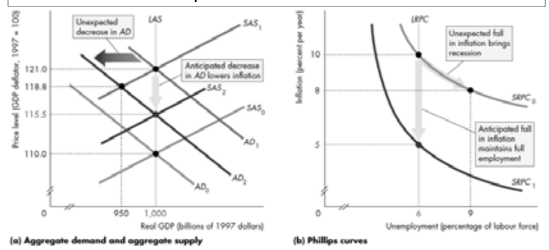
- A surprise inflation reduction
- A credible announced inflation reduction

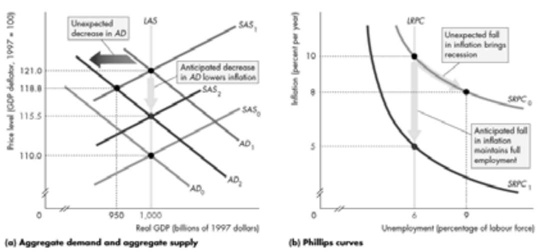
A surprise inflation reduction brings recession.

A credible announced inflation reduction occurs at full employment.

Anti-Inflation Policy

Figure 32.9 contrasts these two cases using the *AS-AD* model and the Phillips curve.





Anti-Inflation Policy

Inflation Reduction in Practice

In practice, most reductions in inflation cause recessions because people do not believe Bank of Canada announcements; rather they base their expectations on Bank of Canada actions.

Anti-Inflation Policy

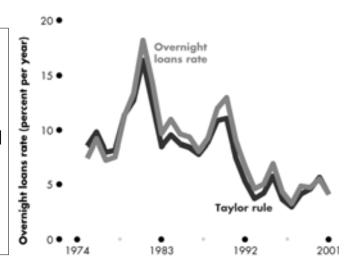
Balancing the Inflation and Real GDP Objective: The Taylor Rule

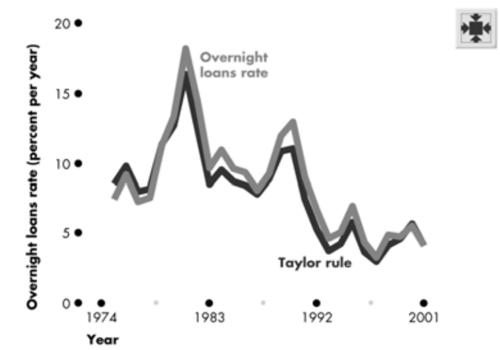
The **Taylor Rule** sets a target inflation rate of 2 percent inflation a year and a target output gap of zero.

The federal funds rate is adjusted toward a rate that equals 2 percent plus one half of the amount by which inflation exceeds its target plus one half the output gap.

Anti-Inflation Policy

Figure 32.10 compares actual federal funds rate to the Taylor rule rate for 1975 to 2001, and shows that the Bank of Canada almost follows the Taylor rule.





Overnight loans rate (percent per year)
20
15
10
5
0
Overnight loans rate
Taylor rule
1974
1983
1992
2001
Year

MACROECONOMIC POLICY CHALLENGES
CHAPTER
32
THE END