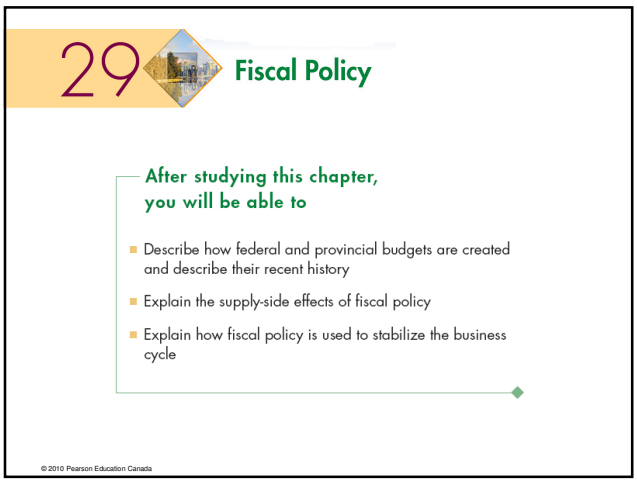


In 2007, the federal government spent 15 cents of each dollar Canadians earned and collected 16 cents of each dollar earned in taxes.

So the government planned a surplus of 1 cent on every dollar earned.

How does the government's planned surplus affect the economy?

For many years the federal government had a large deficit and ran up debt.

What are the effects of an ongoing government deficit and accumulating debt?

Government Budgets

The **federal budget** is the annual statement of the federal government's outlays and tax revenues.

The federal budget has two purposes:

1. To finance the activities of the federal government

2. To achieve macroeconomic objectives

Fiscal policy is the use of the federal budget to achieve macroeconomic objectives, such as full employment, sustained economic growth, and price level stability.

Government Budgets

Budget Making

The federal government and Parliament make fiscal policy.

After a long, draw-out process of consultations, the Minister of Finance presents a budget plan to Parliament.

Parliament debates the plan and enacts the laws necessary to implement it.

Government Budgets

Highlights of the 2008 Budget

The projected fiscal 2008 federal budget has revenues of $242 billion, outlays of $240 billion, and a projected deficit of $2 billion.

Revenues come from personal income taxes, corporate income taxes, indirect taxes, and investment income.

Personal income taxes are the largest revenue source.

Outlays are transfer payments, expenditure on goods and services, and debt interest.

Transfer payments are the largest item of outlays.

TABLE 29.1 The Federal Budget in 2008–09

Item	Projections (billions of dollars)	
Revenues	**242**	
Personal income taxes		119
Corporate income taxes		37
Indirect and other taxes		64
Investment income		22
Outlays	**240**	
Transfer payments		146
Expenditure on goods and services		62
Debt interest		32
Surplus	**2**	

Government Budgets

Budget Balance

The federal government's budget balance equals revenue minus outlays.

If revenues exceed outlays, the government has a **budget surplus**.

If outlays exceed revenues, the government has a **budget deficit**.

If revenues equal outlays, the government has a **balanced budget**.

The projected budget surplus in 2008 of $2 billion.

Government Budgets

The Budget in Historical Perspective

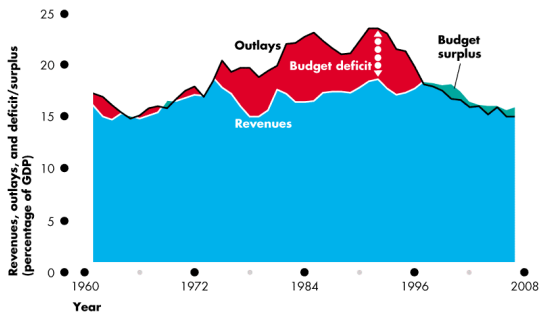
Figure 29.1 shows the government's revenues, outlays, and budget balance as a percentage of GDP for the period 1961 to 2007.

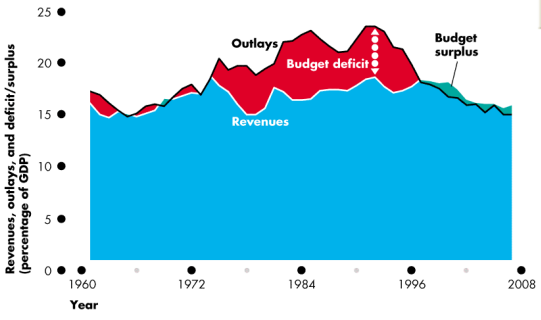
As outlays grew and revenues fell, the government deficit increased and peaked at 6.6 percent of GDP in 1985.

During the 1990s, spending cuts eliminated the busget deficit.

In 1997, a budget surplus emerged.

Government Budgets

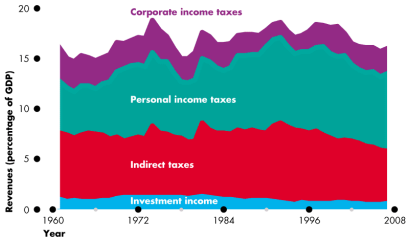


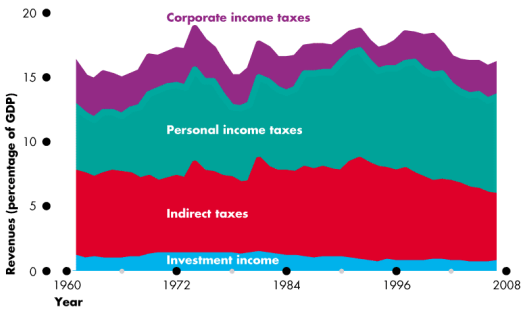


Government Budgets

Revenues

Figure 29.2 shows revenues as a percentage of GDP.

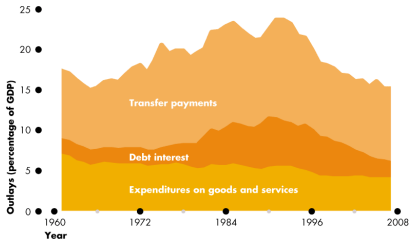


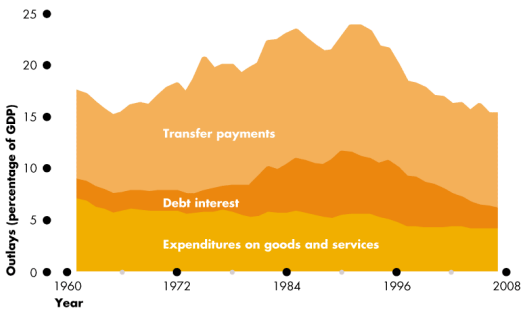


Government Budgets

Outlays

Figure 29.3 shows outlays as a percentage of GDP.



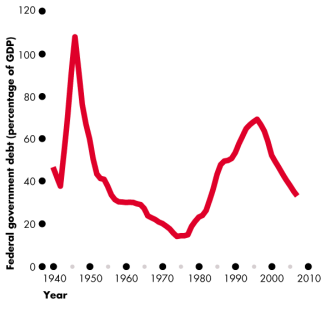


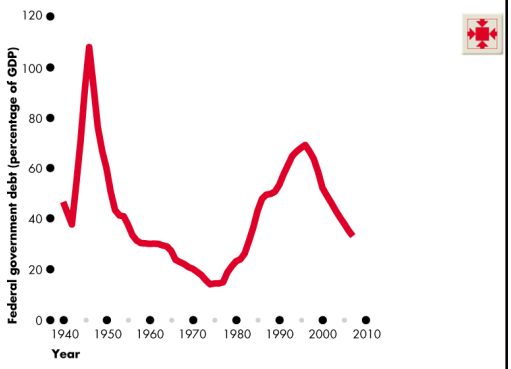
Government Budgets

Deficit and Debt

Government debt is the total amount that the government borrowing. It is the sum of past deficits minus past surpluses.

Figure 29.4 shows the federal government's debt as a percentage of GDP.





The Supply-Side Effects of Fiscal Policy

Fiscal policy has important effects on employment, potential GDP, and aggregate supply—called **supply-side effects**.

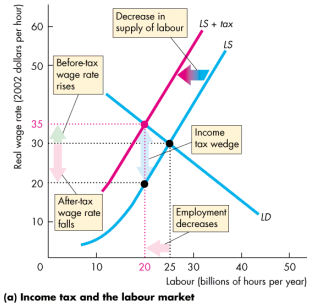
An income tax changes full employment and potential GDP.

The Supply-Side Effects of Fiscal Policy

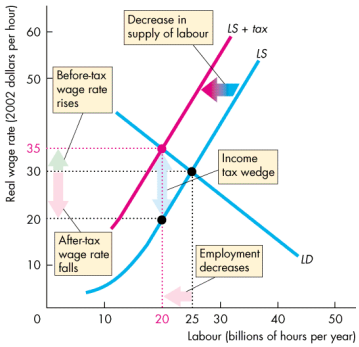
Full Employment and Potential GDP

Figure 29.5(a) illustrates the effects of an income tax in the labour market.

The supply of labour decreases because the tax decreases the after-tax wage rate.



(a) Income tax and the labour market



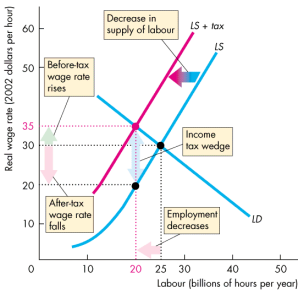
(a) Income tax and the labour market

The Supply-Side Effects of Fiscal Policy

The before-tax real wage rate rises but the after-tax real wage rate falls.

The gap created between the before-tax and after-tax wage rates is called the **tax wedge**.

The quantity of labour employed decreases.



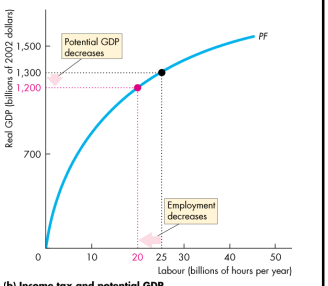
(a) Income tax and the labour market

The Supply-Side Effects of Fiscal Policy

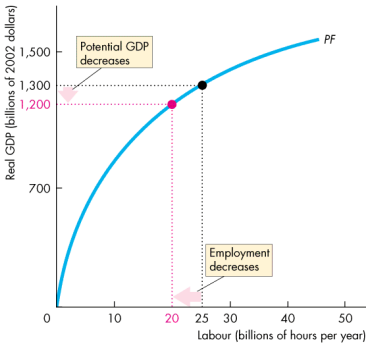
When the quantity of labour employed decreases, …

potential GDP decreases.

The supply-side effect of a rise in the income tax decreases potential GDP and decreases aggregate supply.



(b) Income tax and potential GDP



(b) Income tax and potential GDP

The Supply-Side Effects of Fiscal Policy

Taxes on Expenditure and the Tax Wedge

Taxes on consumption expenditure add to the tax wedge.

The reason is that a tax on consumption raises the prices paid for consumption goods and services and is equivalent to a cut in the real wage rate.

If the income tax rate is 25 percent and the tax rate on consumption expenditure is 10 percent, a dollar earned buys only 65 cents worth of goods and services.

The tax wedge is 35 percent.

The Supply-Side Effects of Fiscal Policy

Taxes and the Incentive to Save

A tax on capital income lowers the quantity of saving and investment and *slows the growth rate of real GDP*.

The interest rate that influence saving and investment is the *real after-tax* interest rate.

The real after-tax interest rate subtracts the income tax paid on interest income from the real interest.

Taxes depend on the nominal interest rate. So the true tax on interest income depends on the inflation rate.

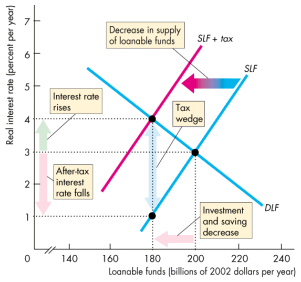
The Supply-Side Effects of Fiscal Policy

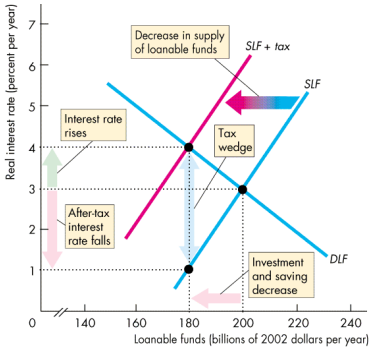
Figure 29.6 illustrates the effects of a tax on capital income.

A tax decreases the supply of loanable funds …

a tax wedge is driven between the real interest rate and the real after-tax interest rate.

Investment and saving decrease.



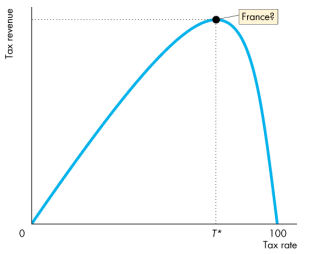


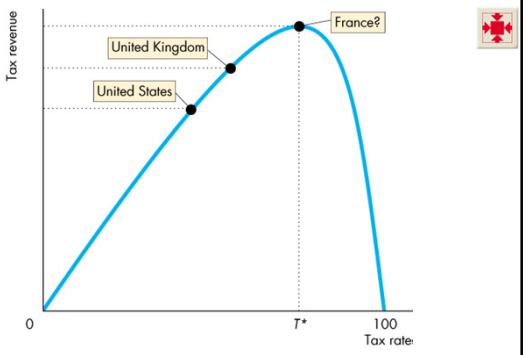
The Supply-Side Effects of Fiscal Policy

Tax Revenues and the Laffer Curve

The relationship between the tax rate and the amount of tax revenue collected is called the **Laffer curve**.

At the tax rate T^*, tax revenue is maximized.

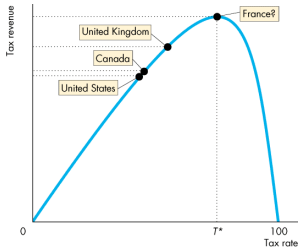




The Supply-Side Effects of Fiscal Policy

For a tax rate below T^*, a rise in the tax rate increases tax revenue.

For a tax rate above T^*, a rise in the tax rate decreases tax revenue.



Stabilizing the Business Cycle

Fiscal policy actions that seek to stabilize the business cycle work by changing aggregate demand.

- Discretionary or
- Automatic

Discretionary fiscal policy is a policy action that is initiated by an act of Parliament.

Automatic fiscal policy is a change in fiscal policy triggered by the state of the economy.

Stabilizing the Business Cycle

The Government Expenditure Multiplier

The **government expenditure multiplier** is the magnification effect of a change in government expenditure on goods and services on aggregate demand.

A multiplier exists because government expenditure is a component of aggregate expenditure.

An increase in government expenditure increases income, which induces additional consumption expenditure and which in turn increases aggregate demand.

Stabilizing the Business Cycle

The Autonomous Tax Multiplier

The **autonomous tax multiplier** is the magnification effect a change in autonomous taxes on aggregate demand.

A *decrease* in autonomous taxes *increases* disposable income, which increases consumption expenditure and increases aggregate demand.

The magnitude of the autonomous tax multiplier is *smaller* than the government expenditure multiplier because the a $1 tax cut induces *less than* a $1 increase in consumption expenditure.

Stabilizing the Business Cycle

The Balanced Budget Multiplier

The **balanced tax multiplier** is the magnification effect on aggregate demand of a *simultaneous* change in government expenditure and taxes that leaves the budget balance unchanged.

The balanced budget multiplier is positive because a $1 increase in government expenditure increases aggregate demand by more than a $1 increase in taxes decreases aggregate demand.

So when both government expenditure and taxes increase by $1, aggregate demand increases.

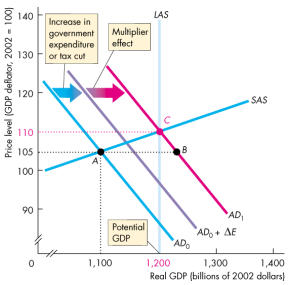
Stabilizing the Business Cycle

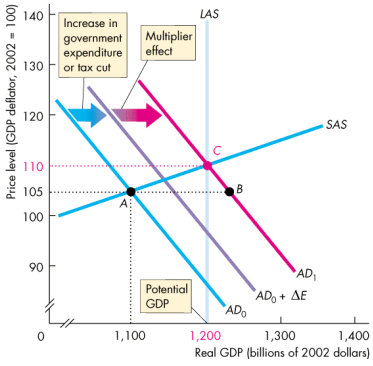
Discretionary Fiscal Stabilization

Figure 29.8 shows how fiscal policy might close a recessionary gap.

An increase in government expenditure or a tax cut increases aggregate demand.

The multiplier process increases aggregate demand further.



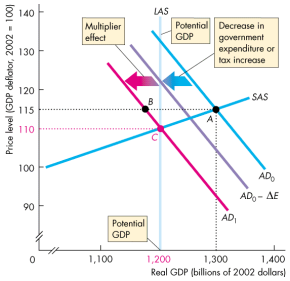


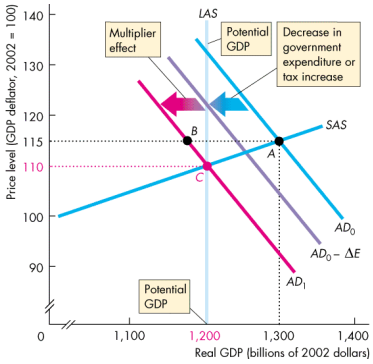
Stabilizing the Business Cycle

Figure 29.9 shows how fiscal policy might close an inflationary gap.

A decrease in government expenditure or a tax increase decreases aggregate demand.

The multiplier process decreases aggregate demand further.





Stabilizing the Business Cycle

Limitations of Discretionary Fiscal Policy

The use of discretionary fiscal policy is seriously hampered by three time lags:

- Recognition lag—the time it takes to figure out that fiscal policy action is needed.
- Law-making lag—the time it takes Parliament to pass the laws needed to change taxes or spending.
- Impact lag—the time it takes from passing a tax or spending change to its effect on real GDP being felt.

Stabilizing the Business Cycle

Automatic Stabilizers

Automatic stabilizers are mechanisms that stabilize real GDP without explicit action by the government.

Induced taxes and needs-tested spending are automatic stabilizers.

Taxes that vary with real GDP are called **induced taxes**.

In an expansion, real GDP rises, and wages and profits rise, so the taxes on these incomes—induced taxes—rise.

In a recession, real GDP decreases, wages and profits fall, so the induced taxes on these incomes fall.

Stabilizing the Business Cycle

The spending on programs that pay benefits to suitably qualified people and businesses are called *transfer payments*.

When the economy is in a recession, unemployment is high and transfer payments increase.

When the economy expands, unemployment falls and transfer payments decrease.

Induced taxes and transfer payments decrease the multiplier effects of changes in autonomous expenditure.

So they moderate both expansions and recessions and make real GDP more stable.

Stabilizing the Business Cycle

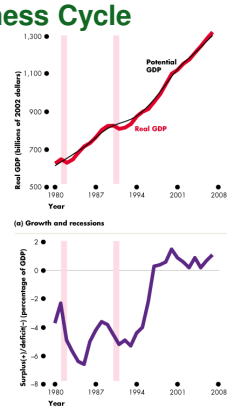
Budget Deficit Over the Business Cycle

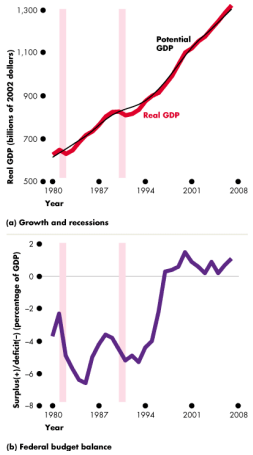
Figure 29.10(a) shows business cycle and

Fig. 29.10(b) shows the budget balance.

The recessions are highlighted.

During a recession, the budget deficit increases.





Stabilizing the Business Cycle

Cyclical and Structural Balances

The **structural surplus or deficit** is the budget balance that would occur if the economy were at full employment and real GDP were equal to potential GDP.

The **cyclical surplus or deficit** is the actual surplus or deficit minus the structural surplus or deficit.

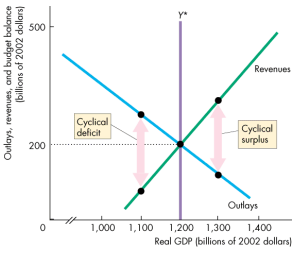
That is, a cyclical surplus or deficit is the surplus or deficit that occurs purely because real GDP does *not* equal potential GDP.

Stabilizing the Business Cycle

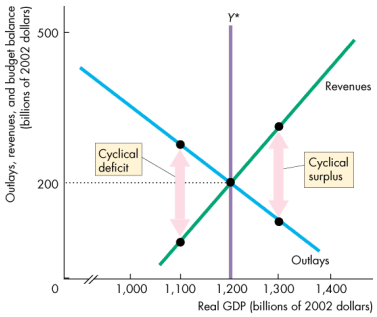
Figure 29.11 illustrates the distinction between a structural and cyclical surplus and deficit.

In part (a), potential GDP is $1,200 billion.

As real GDP fluctuates around potential GDP, a cyclical deficit or cyclical surplus arises.



(a) Cyclical deficit and cyclical surplus



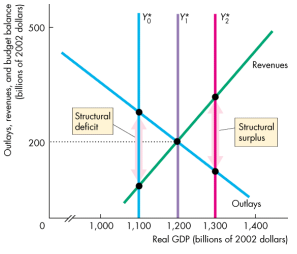
(a) Cyclical deficit and cyclical surplus

Stabilizing the Business Cycle

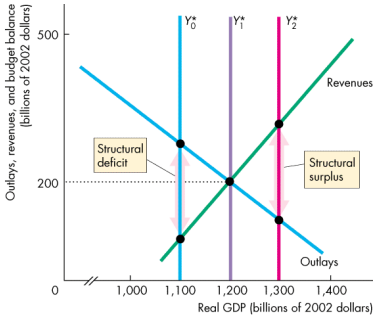
In part (b), if real GDP and potential GDP are $1,100 billion, the budget deficit is a structural deficit.

If real GDP and potential GDP are $1,200 billion, the budget is balanced.

If real GDP and potential GDP are $1,300 billion, the budget surplus is a structural surplus.



(b) Structural deficit and structural surplus



(b) Structural deficit and structural surplus