



# Introdução à Economia/Introductory Economics

## 5. Economic Policy

(adapted from CORE, The Economy.

Based on Units 14, 15, 22)

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# The Context for This Unit

GDP can fluctuate due to consumption and investment decisions.

Sometimes the aggregate decisions of households and firms can destabilize the economy.

- How can the Government stabilize the economy? Through
  - Fiscal policy
  - Monetary policy
  - (Exchange rate policy)

# Consumption

Marginal propensity to consume (MPC) is the change in consumption because of an extra unit of current income.

It varies across people:

poor households react a lot to variation in current income, so their MPC is large; the opposite for wealthy households.

# The multiplier effect

When a change in consumption occurs, the total change in output can be greater than the initial change in this component, because of the circular flow of expenditure, income, and output (multiplier effect).

Example: a fall in house prices will be bad news for a household with a mortgage. They may choose to save more and hence their consumption would fall.

When consumers consume less, the circular flow implies that production will fall, unemployment may rise, consumption falls even more, ...

# Investment spending

A lower interest rate makes investment more likely.

Higher expected rate of profit increases investment.

Improvement in business environment (such as fall in the risk of expropriation by the Government) also increases investment.

In practice, investment is not very sensitive to the interest rate.  
Instead, the shift factors are much more important.

# Adding Government

Government enters via:

- Government spending: exogenous
- Consumption: households' MPC is out of disposable income, that is, after taxes
- Investment: depends on the interest rate and after-tax rate of profit

# Adding exports and imports

The amount of exports is taken as exogenous, because it depends on importers' income.

The amount of imports depends on domestic income.

Marginal propensity to import = The fraction of each additional unit of income that is spent on imports

Savings, taxation and imports reduce the size of the multiplier because

- some household income is saved instead of being consumed
- some household income goes directly to the Government as taxes
- and some income is used to buy goods abroad

# Stabilising the economy

The Government stabilizes economic fluctuations in several ways (deliberate intervention via fiscal policy):

1. Government spending is large and exogenous
2. Higher tax rate lowers the multiplier
3. Unemployment insurance helps households smoothing consumption

The unemployment benefit scheme and proportional tax rate are **automatic stabilizers** = they automatically offset an expansion or contraction of the economy.



# The paradox of thrift

In a recession, faced with a household budget deficit, a family worried about its falling wealth cuts spending and saves more. This has an extra adverse effect on GDP.

**The paradox of thrift** = the aggregate attempt to increase savings leads to a fall in aggregate income (*recall chapter 2 and consumption smoothing*).

The Government can counteract the fall in consumption or investment from the private sector via **fiscal stimulus**:

- cut taxes to encourage the private sector to spend more
- increase spending (G), which directly increases the aggregate demand

# Financing fiscal stimulus

**Austerity policy** may reinforce a recession by further reducing aggregate demand.

Fiscal stimulus will result in a negative budget balance (**government budget deficit**). If it is not reversed after the recession, it will increase Government debt.  
(deficit is a flow variable; debt is a stock variable)

# The multiplier in practice

As we saw before, the multiplier effect depends on the marginal propensity to consume, the marginal propensity to import, and the tax rate.

In reality, it also depends on:

- expectations of the private sector: the multiplier could be negative if rising fiscal deficit erodes consumer confidence
- rate of capacity utilisation (the phase of the business cycle): with fully employed resources, an increase in government spending would **crowd out** private spending

# The Government's finances

**Primary budget deficit** =  $G - T$

- it is procyclical
- the government must borrow to cover the gap between spending (G) and revenue (T), by issuing bonds

**Government debt** = sum of all the bonds sold over time to finance budget deficit – matured bonds (repaid debt).

**Sovereign debt crisis** = a situation in which government bonds come to be considered risky (default risk).

# Government debt

- A large stock of debt relative to GDP can be a problem because the Government has to pay interest on its debt.
- There is no point at which the Government has to pay off all its stock of debt—it can roll it over instead, by issuing new bonds.
- An ever-increasing debt ratio is unsustainable.

## Debt-to-GDP ratio

The level of indebtedness of a government is measured relative to the size of the economy (**debt-to-GDP** ratio).

Indebtedness can fall

- if the primary budget balance is positive (primary budget balance=current year's fiscal deficit minus interest payment on previous borrowings)
- if GDP is growing faster than government debt

# The role of foreign markets

1. Fluctuations in the growth rate of important markets abroad influence the domestic economy via demand for exports.
2. Demand for imports dampens domestic fluctuations.
3. **Foreign trade limits the use of fiscal stimulus if the marginal propensity to import is large.**

# Monetary policy

The Central Bank sets an inflation target (usually 2%).

To set the policy rate, the central bank will work backwards:

1. Choose the desired level of aggregate demand, based on the labour market equilibrium and the Phillips curve
2. Estimate the real interest rate which will produce this level of aggregate demand (using the multiplier model)
3. Calculate the **nominal policy rate** that will produce the appropriate **market interest rate**.

A change in the policy rate has a ripple effect through all the interest rates in the economy.

# Profit expectations

Consistent policymaking and good communication with the public build confidence in the Central Bank.

This can lead firms to expect higher demand and therefore increase investment.

Households may be confident that they will not lose their jobs, and they may increase consumption.



# Exchange rate

**Exchange rate** = number of units of home currency that can be exchanged for one unit of foreign currency.

Interest rates affect demand for home currency in the foreign exchange market, so affect the exchange rate (**appreciation/depreciation**).

The exchange rate affects relative demand for home-produced goods, so affects net exports (exports-imports).

# Monetary policy in the multiplier model

To stimulate the economy, the central bank stimulates investment and consumption by lowering the real interest rate, and/or through liquidity injections.

## Monetary Policy: Limitations

1. The short-term nominal interest rate (policy rate) cannot go below zero (**“zero lower bound”**)
  - when the economy is in a slump, a nominal interest rate of zero may not be low enough to stabilize the economy (liquidity trap)
  - **Quantitative easing** = Central Bank purchases of financial assets aimed at increasing investment by reducing yields.
2. A country without its own currency does not have its own monetary policy
  - E.g. countries of the Eurozone

# Demand shocks

**Demand shock** = An unexpected change in aggregate demand

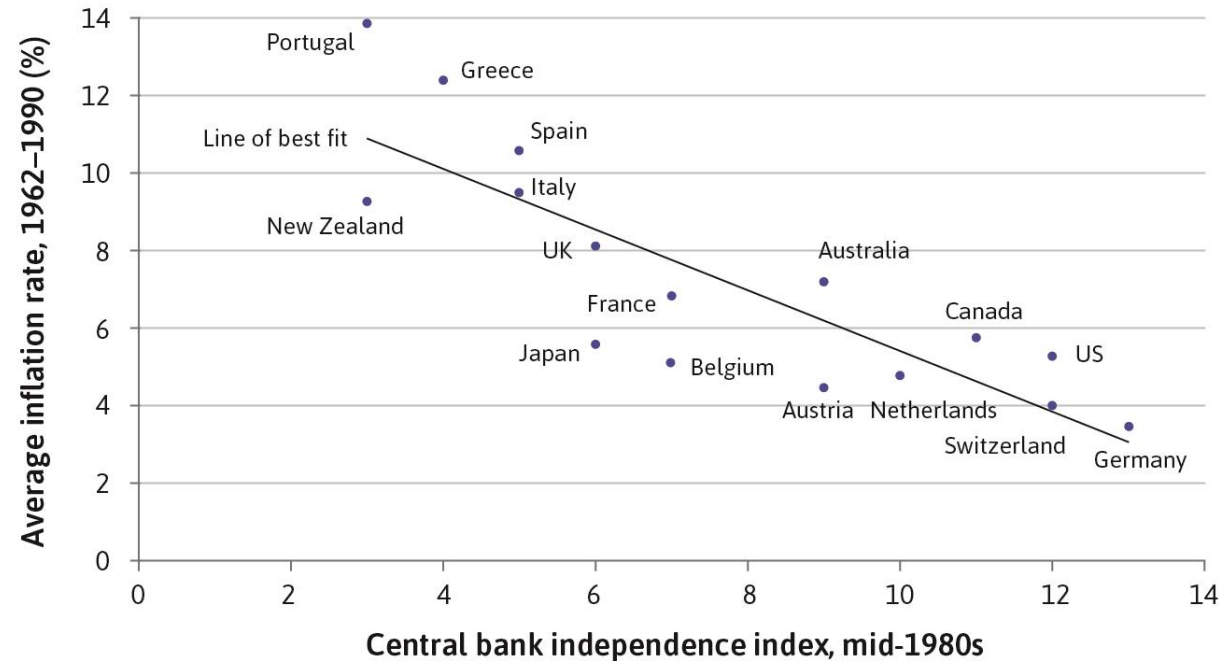
Governments can use both fiscal and monetary policy to stabilize the economy:

- through monetary policy, decreasing the nominal interest rate and/or injecting liquidity in the economy
- through fiscal policy, with tax cuts and/or increased Government spending

# Inflation targeting

**Inflation targeting** = monetary policy regime where the central bank uses policy instruments to keep the economy close to an inflation target

Making the Central Bank independent from the Government gives inflation targets credibility and prevents an inflation spiral by setting expectations.



# Government - Part of the solution

Governments adopt policies to address the inefficiency and unfairness that sometimes result from private economic interactions.

They pursue this objective by a combination of methods:

- Incentives – altering the costs/benefits of activities through taxes, subsidies, and other expenditures
- Regulation (e.g., antitrust policy)
- Persuasion or information - altering available information or expectations
- Public provision – includes goods and transfers

# Government - Part of the problem

Any organization with enough power to address the problems of efficiency and fairness also has the power to do great harm.

Examples include using force to silence opponents and acquiring huge incomes for officials and leaders to use privately.

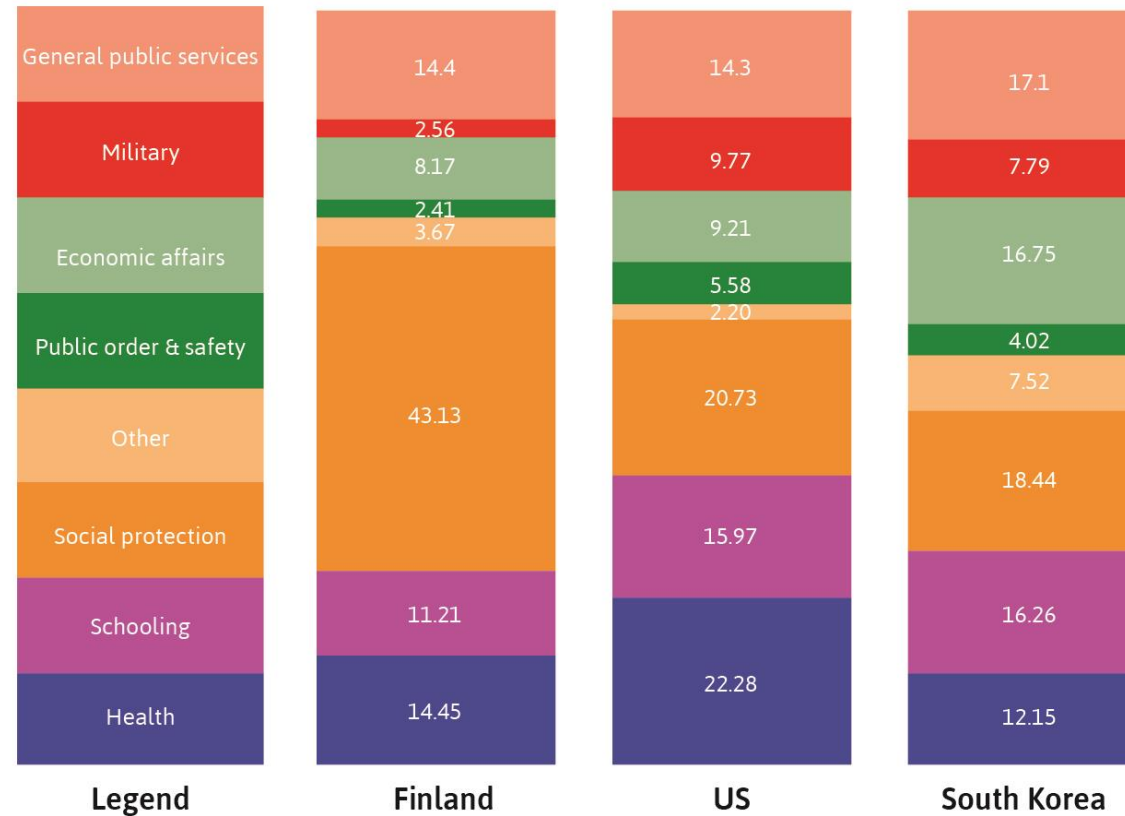
Well-governed societies place limits on Government power:

- Democratic elections – bad Governments can be dismissed
- Constitutional restrictions on what the Government can do

Governments therefore operate within constraints, like other economic actors.

**Political competition** makes the likelihood of losing an election more dependent on the Government's performance.

# Democratic spending priorities (% of GDP)



Democratic governments differ in their spending patterns.

# Example: Inequality

Countries that were the first to extend the vote to all have more equal disposable incomes.

In many cases, reduced inequality in disposable income was due to Government programs that benefitted less-well-off voters (e.g., women and workers), who had previously been excluded from voting.

