

1. Let's review the contents of the previous class.

Due to two exogenous factors, Japan's economy has been in a depression for 20 years or more. → See the flowchart titled "the lost decades".

We can find several vicious cycles in the chart:

W → C → Y → W → C → Y → W → C → Y → ...

W → P → R → I → Y → W → P → R → ...

W → P → R → e → P → R → e → P → ...

2. Conventional fiscal policy in 1990s

The Japanese government tried to revive the economy with the countercyclical policy (conventional fiscal policy).

The fiscal authority is the Cabinet and the ministry of finance.

A) Increase government expenditure

Instead of private sectors (consumers, companies, and foreign customers), the government spends more money on domestic products.

B) Reduce tax rates

To stimulate consumption and investment, the government reduce the income/corporate tax rates temporarily.

3. Effects of the fiscal policy

Fiscal policy is supposed to have the following effects:

1) Multiplier effect

Classical Keynesian effect:

G → Y → W, π → C → Y → W, π → C → Y → W, π → ...

- But increase in government spending or reduction of taxes needs deficit financing and causes the increase of government debt. Then the supply of government bond increases and its price will go down, which results in the rise in interest rate.

2) Crowding out

If the interest rate rises, investment will decrease.

3) Mundell-Fleming effect

If the interest rate rises, exchange rate will decrease.

Because Yen becomes more expensive, the exports will decrease and the imports will increase.

4) Ricardian equivalence theorem

Government's debt should be cleared off one day in the future,

which mean the government will raise tax rates in the future. If the people are rational enough, they will not increase spending, but save money to prepare the tax payment in the future.

The negative effect 2),3),4) > the positive effect 1) in Japan.

4. Conventional monetary policy until 2012

The monetary authority is the central bank, Bank of Japan (BOJ).

1) Control nominal interest rates

BOJ can control only a short-term interest rate and it has been already "zero". BOJ can not lower it any more.

2) Market operation (Bond market, "Quantitative easing")

BOJ buys much government bond to maintain its price, or to prevent the price from falling.

3) Market operation (Foreign exchange market)

BOJ (actually MOF) tried to buy/sell Japanese Yen to control the exchange rate, but in vain.

5. Effects of the conventional monetary policy

Limited. Only 2) took some effect. So far, a big fall(a great crash) of the bond price has not occurred.

6. Unconventional monetary policy since 2013

1) "Aggressive monetary easing"

Quantitative easing *in an unprecedented scale*.

In March 2013, BOJ declared it will double its purchase amount of bonds.

2) Inflation targeting

BOJ adopted an explicit "inflation-targeting policy" and set the target at 2%.

3) Time axis policy (forward guidance)

BOJ declared it will not stop "Aggressive monetary easing" and "zero-interest policy" until the inflation rate reach 2%.

7. Effects of the unconventional monetary policy

It appealed to people's expectation and the value of Yen decreased, which raised the stock price of big companies (starting with exporting companies) and the profit increased.

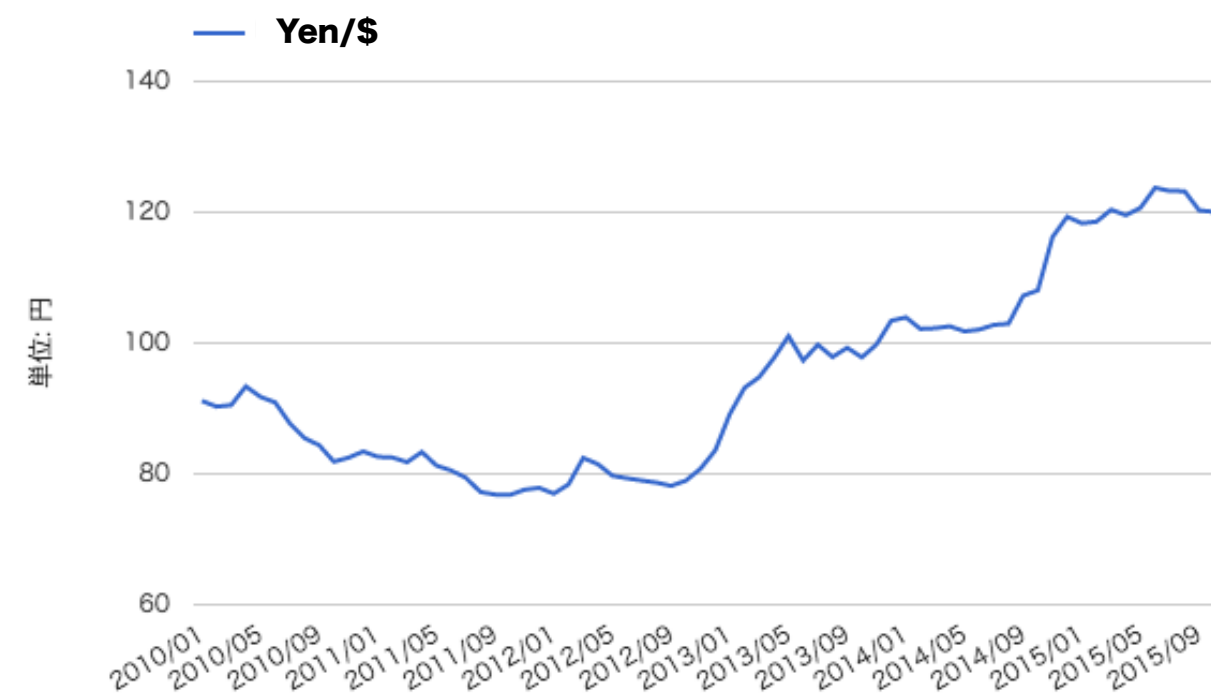
But, inflation has not yet come because wages are still low. And investment has been still small. Far from a full-scale recovery.

Now the government urges many companies to raise wages and to make more investment, in exchange for reducing the corporate tax rate.

If the government continues to increase public spending by 1% of GDP, ...

	ΔY (%)	$\Delta Y/Y$ (% pt.)	ΔC (%)	ΔI (%)	住宅投資 (%)	ΔX (%)	ΔM (%)	GDPGAP (%ポイント)
1年目	1.07	1.19	0.15	-0.72	0.17	-0.04	1.03	1.04
2年目	1.14	-0.09	0.40	-0.90	0.65	-0.21	1.59	1.10
3年目	0.95	-0.17	0.32	-1.54	1.13	-0.45	1.74	0.99
	名目GDP (%)	民間消費 デフレーター (%)	単位時間 あたり賃金 (%)	失業率 (%ポイント)	財政収支対 名目GDP比 (%ポイント)	ΔR (% pt.)	経常収支対 名目GDP比 (%ポイント)	Δe (%)
1年目	1.28	0.18	0.64	-0.08	-0.67	0.13	-0.18	-0.07
2年目	1.88	0.69	1.25	-0.07	-0.52	0.20	-0.34	-0.76
3年目	2.31	1.24	1.88	-0.02	-0.63	0.25	-0.50	-1.72

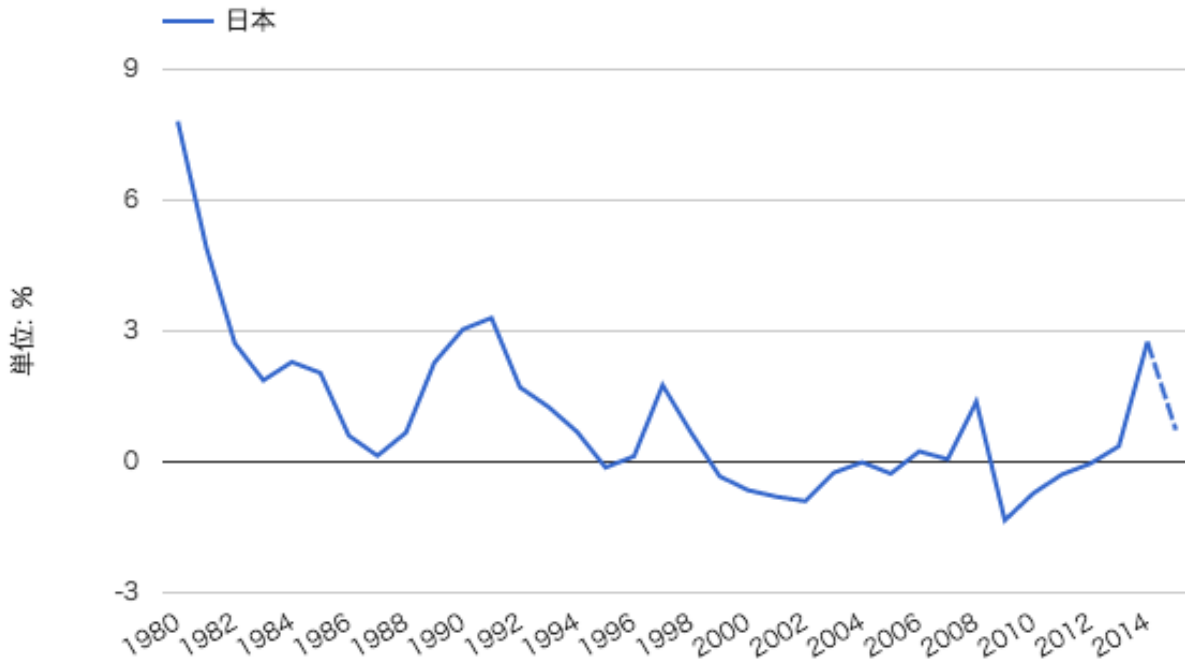
A simulation by ESRI(the governmental think tank).



Nikkei225 (2010年1月~2015年10月)



Inflation rate (1980~2015年)



Economic growth rate

