CHAPTER 4: FISCAL POLICY

4.1 MEANING OF FISCAL POLICY

Fiscal Policy: Government's spending and taxing policy

4.2 OBJECTIVES

- Efficient resource allocation
- Fair income distribution
- Economic growth
- Economic stability

4.3 FISCAL POLICY TOOLS

- Government Expenditure (G)
- Government transfer payment (R)
- Government Revenue (T)
- Public Debt

4.3.1 GOVERNMENT EXPENDITURE

- Government consumption expenditure
- Government investment expenditure
- Loan and interest payment expenditure

4.3.2 GOVERNMENT TRANSFER PAYMENT

- Social insurance payment
- Unemployment compensation
- Welfare payment
- Veterans' benefits
- Retirement benefits

4.3.3 GOVERNMENT REVENUE

4.3.3 (a) Tax Revenue

Direct Tax: Tax that tax payers are responsible for all or part of tax payment and cannot alter their responsibility to others

For example: personal income tax, corporate income tax inheritance tax, property tax

4.3.3 GOVERNMENT REVENUE

4.3.3 (a) Tax Revenue

Indirect Tax: Tax that tax payers are not responsible for all tax payment and can alter all or part of their responsibility to others.

For example: sales tax, excise tax, custom duty

4.3.3 GOVERNMENT REVENUE

4.3.3 (b) Non Tax Revenue

For example

- State enterprises revenue
- Revenue from selling government's G&S
- Fee and Fine

3 TYPES OF TAX STRUCTURE (PROGRESSIVE TAX RATE)

Level of tax base	Tax Rate	Tax Base (Income) (Y)	Tax payment (T)	Average Tax Rate (T/Y)	Marginal Tax Rate (ΔT/ΔY)
0 – 1,000	10%	1,000	= 1,000*0.1 = 100	= (100/1,000) = 0.1	—
1,001 – 2,000	12%	2,000	= (1,000*0.1) + (1000 * 0.12) = 100+120 = 220	= (220/2,000) = 0.11	= (220 - 100)/1,000 = (120/1,000) = 0.12
2,001 – 3,000	15%	3,000	= (1,000*0.1) + (1000 * 0.12) + (1,000 * 0.15) = 100+120+150 = 370	= (370/3,000) = 0.123	= (370 - 220)/1,000 = (150/1,000) = 0.15

SUMMARIZE (PROGRESSIVE TAX RATE)

- When tax base (in this case income) increases, tax rate ↑……
- When tax base (in this case income) increases, Marginal tax rate > ……. Average tax rate

3 TYPES OF TAX STRUCTURE (CONSTANT TAX RATE)

Level of tax base	Tax Rate	Tax Base (Income) (Y)	Tax payment (T)	Average Tax Rate (T/Y)	Marginal Tax Rate (ΔT/ΔY)
0 – 1,000	10%	1,000	= 1,000*0.1 = 100	= (100/1,000) = 0.1	—
1,001 – 2,000	10%	2,000	= (1,000*0.1) + (1000 * 0.1) = 100+100 = 200	= (200/2,000) = 0.1	= (200 - 100)/1,000 = (100/1,000) = 0.1
2,001 – 3,000	10%	3,000	= (1,000*0.1) + (1000 * 0.1) + (1,000 * 0.1) = 100+100+100 = 300	= (300/3,000) = 0.1	= (300 - 200)/1,000 = (100/1,000) = 0.1

SUMMARIZE (CONSTANT TAX RATE)

- When tax base (in this case income) increases or decrease, tax rate ……Constant……
- When tax base (in this case income) increases, Marginal tax rate ……=…… Average tax rate

3 TYPES OF TAX STRUCTURE (REGRESSIVE TAX RATE)

Level of tax base	Tax Rate	Tax Base (Income) (Y)	Tax payment (T)	Average Tax Rate (T/Y)	Marginal Tax Rate ($\Delta T/\Delta Y$)
0 – 1,000	15%	1,000	= 1,000*0.15 = 150	= (150/1,000) = 0.15	—
1,001 – 2,000	12%	2,000	= (1,000*0.15) + (1000 * 0.12) = 150+120 = 270	= (270/2,000) = 0.135	= (270 - 150)/1,000 = (120/1,000) = 0.12
2,001 – 3,000	10%	3,000	= (1,000*0.15) + (1000 * 0.12) + (1,000 * 0.1) = 150+120+100 = 370	= (370/3,000) = 0.123	= (370 - 270)/1,000 = (100/1,000) = 0.1

SUMMARIZE (REGRESSIVE TAX RATE)

- When tax base (in this case income) increases, tax rate ↓.....
- When tax base (in this case income) increases, Marginal tax rate < ..... Average tax rate

4.3.4 PUBLIC DEBT

Government debt to finance budget deficit, which can be categorized by

Length of time

- Short term debt (payback period less than 1 year)
- Long term debt (payback period more than 5 years)

Source of Debt

- Domestic debt
- International debt

4.3.4 PUBLIC DEBT

Effects of public debt

- Price stability
- Resource allocation
- Distribution of income
- Government project operation

4.3.4 PUBLIC DEBT

Regulation on public debt

For example

Ministry of Finance can not borrow more than

20% of government's spending budget +

80% of government spending on principal payback

TYPES OF GOVERNMENT BUDGET

- Budget Deficit: $G + R > T$
- Budget Surplus: $G + R < T$
- Balance Budget: $G + R = T$

In accounting sense

Total government spending = Total government revenue

Total government spending = Government revenue + public debt + treasury reserves

4.4 TYPES OF GOVERNMENT POLICY

Categorized by

Operation

- Nondiscretionary Fiscal Policy (Built-in Stabilizer, automatic stabilizer)
- Discretionary Fiscal Policy

Economic problem

- Expansionary Fiscal Policy
- Contractionary Fiscal Policy

4.4.1 NON-DISCRETIONARY FISCAL POLICY (BUILT-IN STABILIZER, AUTOMATIC STABILIZER)

- Fiscal policy that can be adjusted according to state of economy. That is,
  - When economy expands, this fiscal policy will alleviate economic growth
  - When economy shrinks, this fiscal policy will alleviate the shrink

According to Keynesian theory on equilibrium national income, to keep economy stable, adjustment on fiscal policy and consumer consumption are needed (the adjustment is through multiplier effect).

4.4.1 NON-DISCRETIONARY FISCAL POLICY TOOLS

- Income tax
  - Constant tax rate
  - Progressive tax rate
- Government transfer payment

Income Tax $T = T_a + tY$ ----- constant tax rate

When economy in bad condition (low level of Y)

Small Y ⇨ **T** ↓ ⇨ C ↑ ⇨ DAE ↑ ⇨ Y ↑

$C = C_a + bY^d$

$C = C_a + b(Y - T)$

Can stabilize economy (Automatic stabilizer)

When economy in good condition (high level of Y)

Large Y ⇨ **T** ↑ ⇨ C ↓ ⇨ DAE ↓ ⇨ Y ↓

Can stabilize economy (Automatic stabilizer)

Government transfer payment (R) --- $R = R_a - gY$

$$R = R_a - gY$$

where

R = Government transfer payment

R_a = Transfer payment that does not depend on national income

Y = National income

g = Changes in transfer payment when national income change one unit

Government transfer payment (R) --- $R = R_a - gY$

When economy in bad condition (low level of Y)

Small Y ⇨ **R** ↑ ⇨ More money to spend ⇨ C ↑ ⇨ DAE ↑ ⇨ Y ↑

Can stabilize economy (Automatic stabilizer)

When economy in good condition (high level of Y)

Large Y ⇨ **R** ↓ ⇨ less money to spend ⇨ C ↓ ⇨ DAE ↓ ⇨ Y ↓

Can stabilize economy (Automatic stabilizer)

4.4.2 DISCRETIONARY FISCAL POLICY TOOLS

- In the case that economy fluctuate a lot and occurred for a long time, and non-discretionary fiscal policy (automatic stabilizer) cannot solve the problem, Government needs to use discretionary fiscal policy.

- Discretionary fiscal policy tools: Types of tax, tax rate, and government spending

TAX RATE

When economy in bad condition (low level of Y)

Government needs to **increase** Y to stabilize economy ⇒ Gov't can ↓ **tax rate** ⇒ C ↑ ⇒ DAE ↑ ⇒ Y ↑

Can stabilize economy

When economy in good condition (high level of Y)

Government needs to **decrease** Y to stabilize economy ⇒ Gov't can ↑ **tax rate** ⇒ C ↓ ⇒ DAE ↓ ⇒ Y ↓

Can stabilize economy

Government Spending

When economy in bad condition (low level of Y)

Government needs to **increase** Y to stabilize economy ⇒ Gov't can ↑ **G** ⇒ DAE ↑ ⇒ Y ↑

Can stabilize economy

When economy in good condition (high level of Y)

Government needs to **decrease** Y to stabilize economy ⇒ Gov't can ↓ **G** ⇒ DAE ↓ ⇒ Y ↓

Can stabilize economy

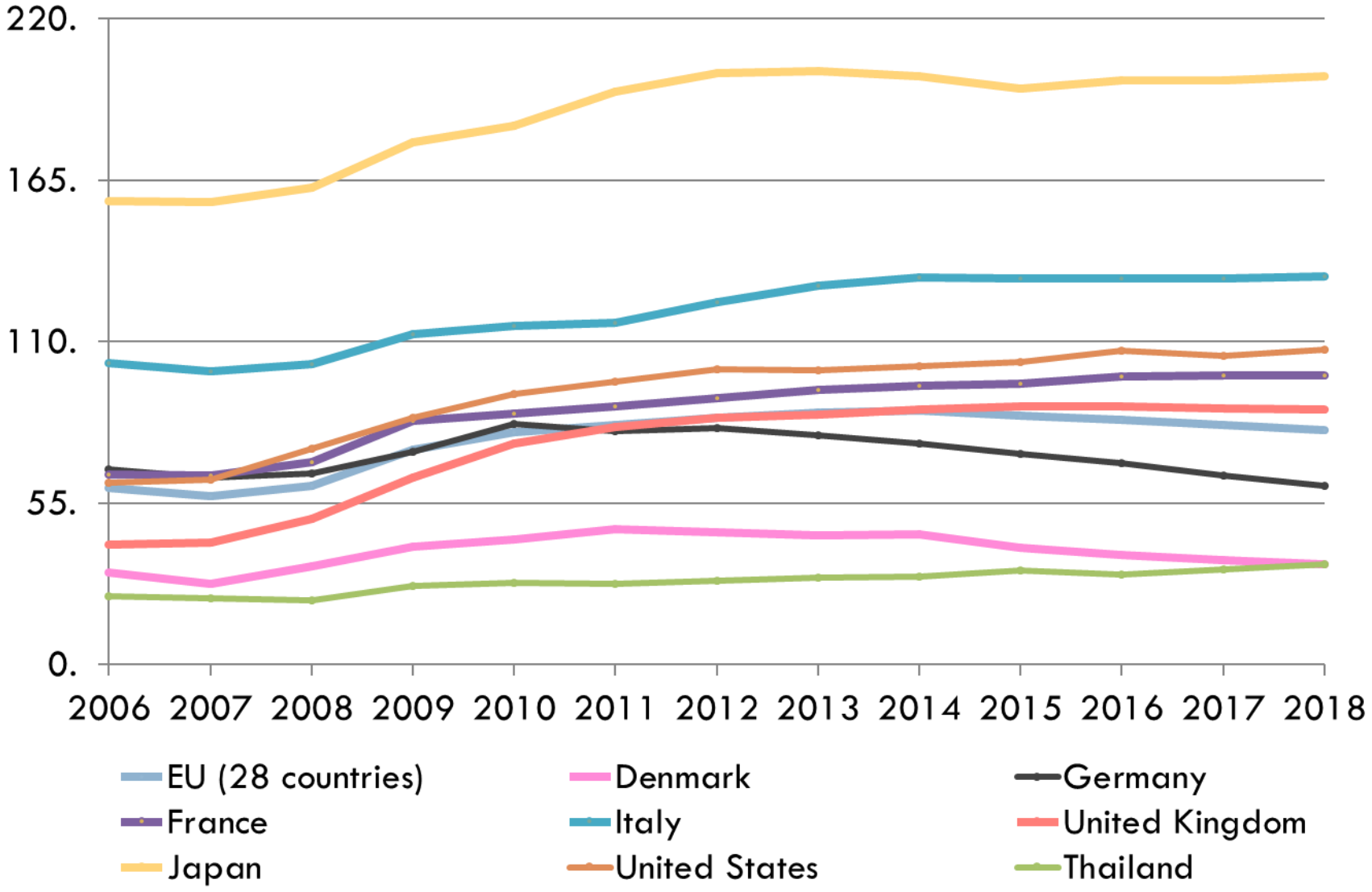
Problems when using discretionary fiscal policy

1. Lag in the system
   - *Recognition Lag*
   - *Decision Lag*
   - *Execution Lag*
   - *Response Lag*
2. Irreversible of the policy after the problem solved

Problems when using discretionary fiscal policy

3. Consumer expectation about the length of policy enforced
4. Political objective contradicts with the economic stability objective
5. Expansion fiscal policy may not stimulate economy if the policy causes households to save more
6. Crowding-out effect

General Government Gross Debt (Unit: % of GDP)
Source: Eurostat, CEIC



Sustainable Fiscal Policy Framework

Goal	Tentative performance 2555-2559
(Public Debt/GDP) < 60%	Can achieve the goal
(Public Debt/Government spending budget) < 15%	Can achieve the goal
Balance budget	Cannot achieve the goal since government plan to stimulate economy
(Government investment spending/Total government spending) > 25%	Cannot achieve the goal

Source: Fiscal Policy Office

Sustainable Fiscal Policy Framework

	2556	2557	2558	2559	2560	2561	2562	2563
Public Debt/GDP	42.19%	43.33%	42.56%	41.75%	41.78%	41.95%	41.04%	49.36%
Public Debt/Government spending budget	7.41%	7.36%	7.12%	7.18%	8.33%	8.99%		
Balance budget	(300,000)	(250,000)	(250,000)	(390,000)	(552,921)	(550,358)	(450,000)	(469,000)
Government investment spending/Total government spending	18.7%	17.5%	17.5%	20.3%	22.5%	22.2%	21.6%	20.1%
Net Government Revenue/GDP	17.6%	18.3%	18.4%	17.0%	15.6%	15.2%	15.1%	17.5%

Source: Fiscal Policy Office