

# 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<sup>6</sup>

- ❑ 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:

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## 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:**

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## 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 ( $\Delta T/\Delta Y$ ) |
|-------------------|----------|-----------------------|-----------------|------------------------|---|
| 0 – 1,000         | 10%      | 1,000                 |                 |                        | —   |
| 1,001 – 2,000     | 12%      | 2,000                 |                 |                        |   |
| 2,001 – 3,000     | 15%      | 3,000                 |                 |                        |   |

## 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 ( $\Delta T/\Delta Y$ )           |
|-------------------|----------|-----------------------|--|----------------------------|---|
| 0 – 1,000         | 10%      | 1,000                 | $= 1,000 * 0.1$<br>$= 100$   | $= (100/1,000)$<br>$= 0.1$ | —   |
| 1,001 – 2,000     | 10%      | 2,000                 | $= (1,000 * 0.1) +$<br>$(1000 * 0.1)$<br>$= 100 + 100 = 200$                                 | $= (200/2,000)$<br>$= 0.1$ | $= (200 - 100)/1,000$<br>$= (100/1,000)$<br>$= 0.1$ |
| 2,001 – 3,000     | 10%      | 3,000                 | $= (1,000 * 0.1) +$<br>$(1000 * 0.1) +$<br>$(1,000 * 0.1)$<br>$= 100 + 100 + 100$<br>$= 300$ | $= (300/3,000)$<br>$= 0.1$ | $= (300 - 200)/1,000$<br>$= (100/1,000)$<br>$= 0.1$ |

## SUMMARIZE (CONSTANT TAX RATE)

- ❑ When tax base (in this case income) increases or decrease, tax rate .....
- ❑ 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                 | $= 1,000 * 0.15$<br>$= 150$  | $= (150/1,000)$<br>$= 0.15$  | —  |
| 1,001 – 2,000     | 12%      | 2,000                 | $= (1,000 * 0.15) +$<br>$(1000 * 0.12)$<br>$= 150 + 120 = 270$                                 | $= (270/2,000)$<br>$= 0.135$ | $= (270 - 150)/1,000$<br>$= (120/1,000)$<br>$= 0.12$ |
| 2,001 – 3,000     | 10%      | 3,000                 | $= (1,000 * 0.15) +$<br>$(1000 * 0.12) +$<br>$(1,000 * 0.1)$<br>$= 150 + 120 + 100$<br>$= 370$ | $= (370/3,000)$<br>$= 0.123$ | $= (370 - 270)/1,000$<br>$= (100/1,000)$<br>$= 0.1$  |

## 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

### (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

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**When economy in bad condition (low level of Y)**

Small Y →

**Can stabilize economy  
(Automatic stabilizer)**

**When economy in good condition (high level of Y)**

Large Y →

**Can stabilize economy  
(Automatic stabilizer)**

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

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$$R = R_a - gY$$

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) ---  $R = R_a - gY$

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**When economy in bad condition (low level of Y)**

Small Y →

**Can stabilize economy  
(Automatic stabilizer)**

**When economy in good condition (high level of Y)**

Large 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


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## When economy in bad condition (low level of Y)

Government needs  
to **increase** Y to  Gov't can  
stabilize economy

**Can stabilize  
economy**

## When economy in good condition (high level of Y)

Government needs  
to **decrease** Y to  Gov't can  
stabilize economy

**Can stabilize  
economy**

# Government Spending

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## When economy in bad condition (low level of Y)

Government needs to **increase** Y to stabilize economy → Gov't can stabilize economy

**Can stabilize economy**

## When economy in good condition (high level of Y)

Government needs to **decrease** Y to stabilize economy → Gov't can stabilize economy

**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

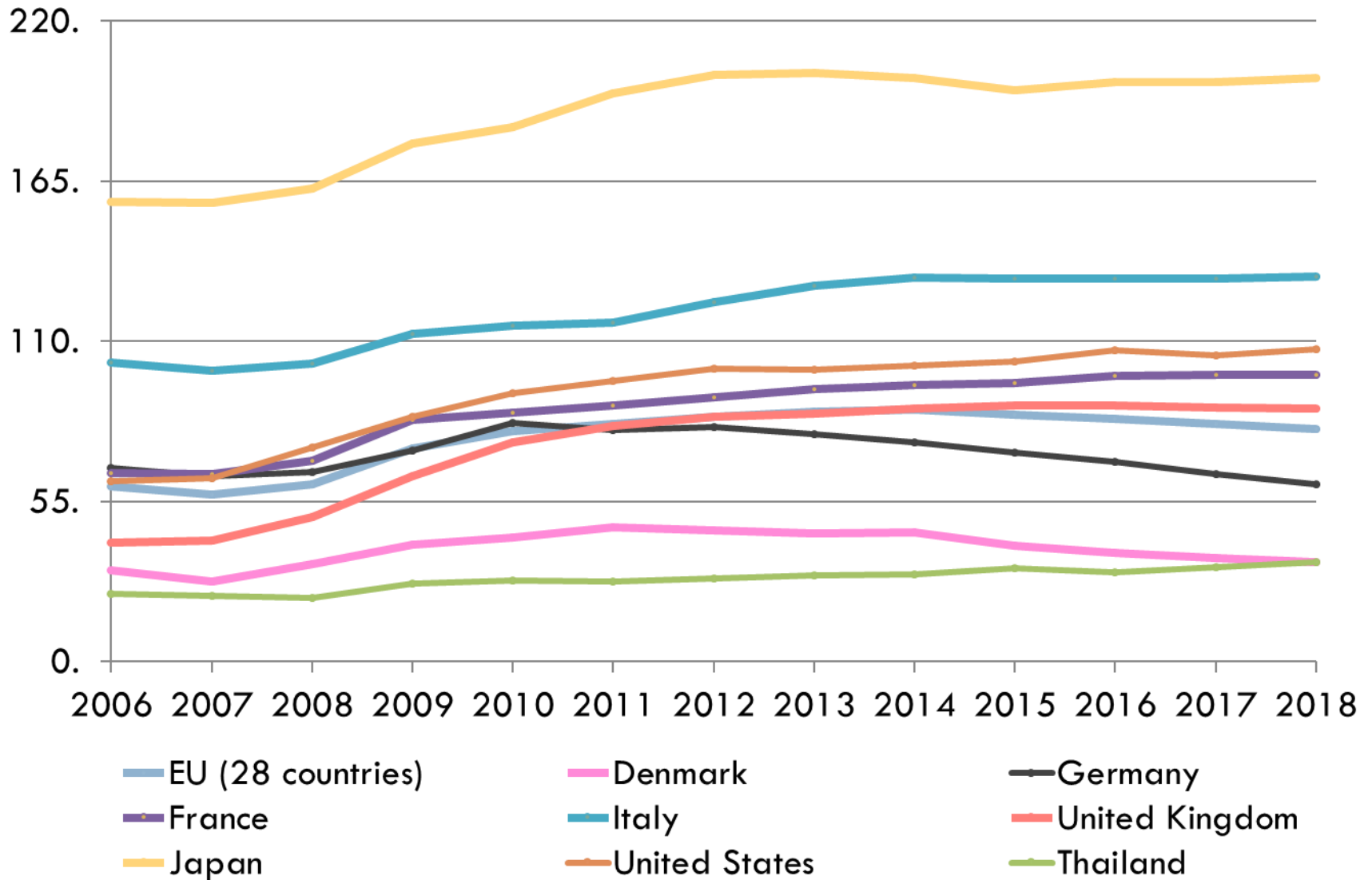
# Problems when using discretionary fiscal policy

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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   | <b>Cannot</b> achieve the goal since government plan to stimulate economy |
| (Government investment spending/Total government spending) > 25% | <b>Cannot</b> achieve the goal  |

# Sustainable Fiscal Policy Framework

|  | 2555    | 2556    | 2557    | 2558    | 2559    | 2560    | 2561    |
|--|---------|---------|---------|---------|---------|---------|---------|
| Public Debt/GDP  | 41.93%  | 42.19%  | 43.33%  | 42.56%  | 41.79%  | 41.87%  | 42.07%  |
| Public Debt/Government spending budget                   | 9.33%   | 7.41%   | 7.36%   | 7.12%   | 7.18%   | 8.33%   | 8.99%   |
| Balance budget   | 400,000 | 300,000 | 250,000 | 250,000 | 390,000 | 552,921 | 550,358 |
| Government investment spending/Total government spending | 18.4%   | 18.7%   | 17.5%   | 17.5%   | 20.3%   | 22.5%   | 22.8%   |

Source: Fiscal Policy Office, Public Debt Management Office