

# FISCAL POLICY AND PUBLIC FINANCE

Kittichai Saelee

EE212

Semester 1/2018



**fiscal policy** The government's spending and taxing policies.



**monetary policy** The behavior of the central bank concerning the nation's money supply.

# WHERE WE ARE HEADED FROM NOW

- Understanding fiscal authority and fiscal policy
  - Chapter 9
- Understanding financial sector and monetary policy
  - Chapter 10
- Develop a model that allows us to see a more detailed interaction in macroeconomy – to understand effects of fiscal and monetary policy

# AGENDA

- Meaning of fiscal policy
- Objectives of fiscal policy
- Fiscal policy tools
- Types of fiscal policy

# MEANING OF FISCAL POLICY

- Government policy involves with
  - Spending
  - Taxation
  - Public debt
- Setting the policy to best “achieve” the goals of government

# GOALS OF THE GOVERNMENT

- Enhance the efficiency of resource allocation
- Improve the outcome of income distribution
- Enhance the long-term economic growth
- Stabilize macroeconomy

# GOALS OF THE GOVERNMENT

- Enhance the efficiency of resource allocation
  - Market allocation can be **inefficient**: *Externality, Monopoly* etc.
  - Government sets some policies to *fix the inefficiency*
  - **Example**: Environmental concerns → Carbon emission and Externality → Global warming → *Carbon tax*

# GOALS OF THE GOVERNMENT

- Improve the outcome of income distribution
  - While the market outcome could be efficient, the allocation may not be fair – **income inequality**
  - Government aims to improve the income distribution by setting policy that generates the so called “**redistributive effect**”
  - **Example: *Income-based Tax and transfer system***
    - Rich pay more; poor pay less
    - Rich receives less; poor receive more

# GOALS OF THE GOVERNMENT

- Enhance the long-term economic growth
  - Aims to increase the growth of long-term GDP level, and hence the income per capita
  - **Example:** Educational policy → Public education → More accessibility and more attainment → *Human capital built up*

# GOALS OF THE GOVERNMENT

- Stabilize macroeconomy
  - Macroeconomy is always hit by *shocks* –
    - e.g. world GDP growth contraction, oil price surges, Flooding situation and weather condition
  - These shocks impact our GDP, and causing the *unstable movements of GDP* – boom and recession
  - Government's role is to “*stabilize*” the impact of shocks
  - **Example:** World GDP growth contraction → Raise G to avoid the recession

# FISCAL POLICY TOOLS

- Fiscal policy tools involve with the management of
  - **Government expenditure** : Outlays
    - What program should the government run?
  - **Government receipts** :
    - Securing financial resource to finance the spending

# FISCAL POLICY TOOLS

- **Government expenditure**
  - *Government purchase of goods and services:*  $(G = GC + GI)$ 
    - Consumption expenditure: GC
    - Investment expenditure: GI
  - *Government transfer payment:* R

# FISCAL POLICY TOOLS

- **Consumption expenditure: GC**
  - Current expenditure: Salary paid to government worker
- **Investment (Capital) expenditure: GI**
  - Infrastructure investment, road maintenance etc.
- **Government transfer payment: R**
  - Child-care support, Pension pay-out, Elderly-care support

# FISCAL POLICY TOOLS

- **Government receipts**
  - *Government revenue*
    - Tax revenue: T
    - Non-tax revenue
  - *Public debt*
  - *Treasury cash balances*

# FISCAL POLICY TOOLS

- Classifications of tax revenue
  - *Income v.s. non-income tax*
  - By the economic burden: **Direct tax v.s. Indirect tax**
    - Legal incidence v.s. Economic incidence
  - By tax rate: *proportion / progressive / regressive*
- Non-tax revenue
  - Transfer of SOE's revenue, Fees, Fines etc.

# FISCAL POLICY TOOLS

- **Public debt**
  - Government budget: how to finance government spending
  - Government spending  $>$  Government tax  $\rightarrow$  need to fill up the deficits through financial tools
  - Sources of borrowing: Financial markets
    - Issuing “government bond”
    - Domestic and external
- **Treasury cash balance**

# GOVERNMENT BUDGET PLANNING

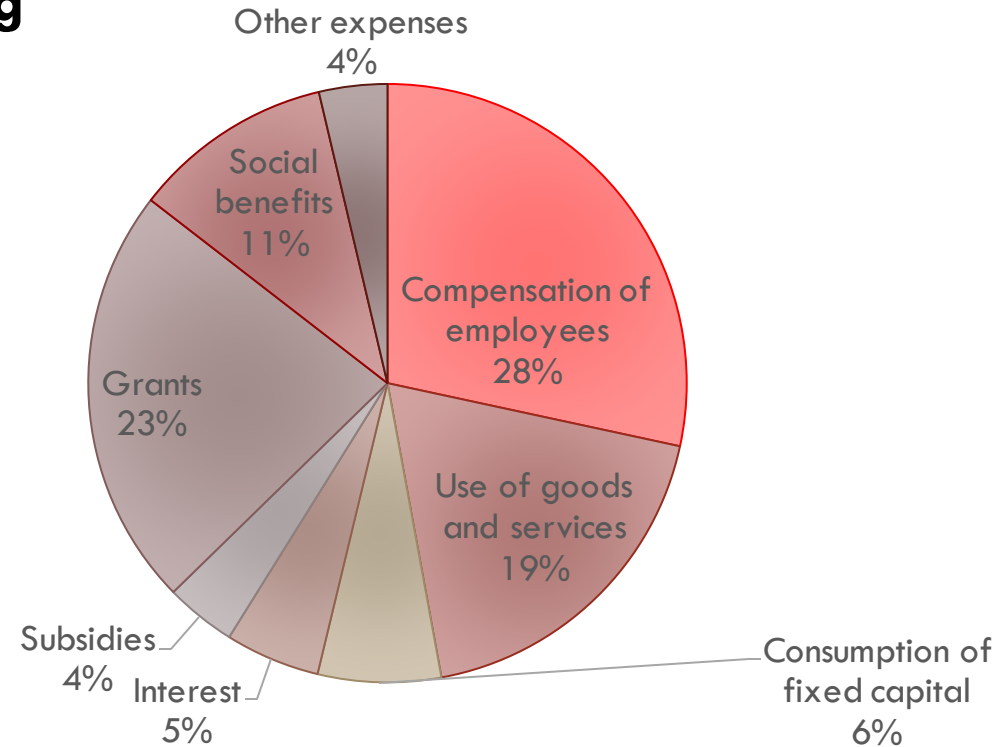
- Typically, fiscal policy is planned one-year ahead of time.
- The process of budget approval will go through the parliament.
- Each ministry will submit their request for budgeting.
- Ministry of finance will do projection on the revenue, review the viability of projects proposed by each ministry, and consider financial planning.

# GOVERNMENT BUDGET PLANNING

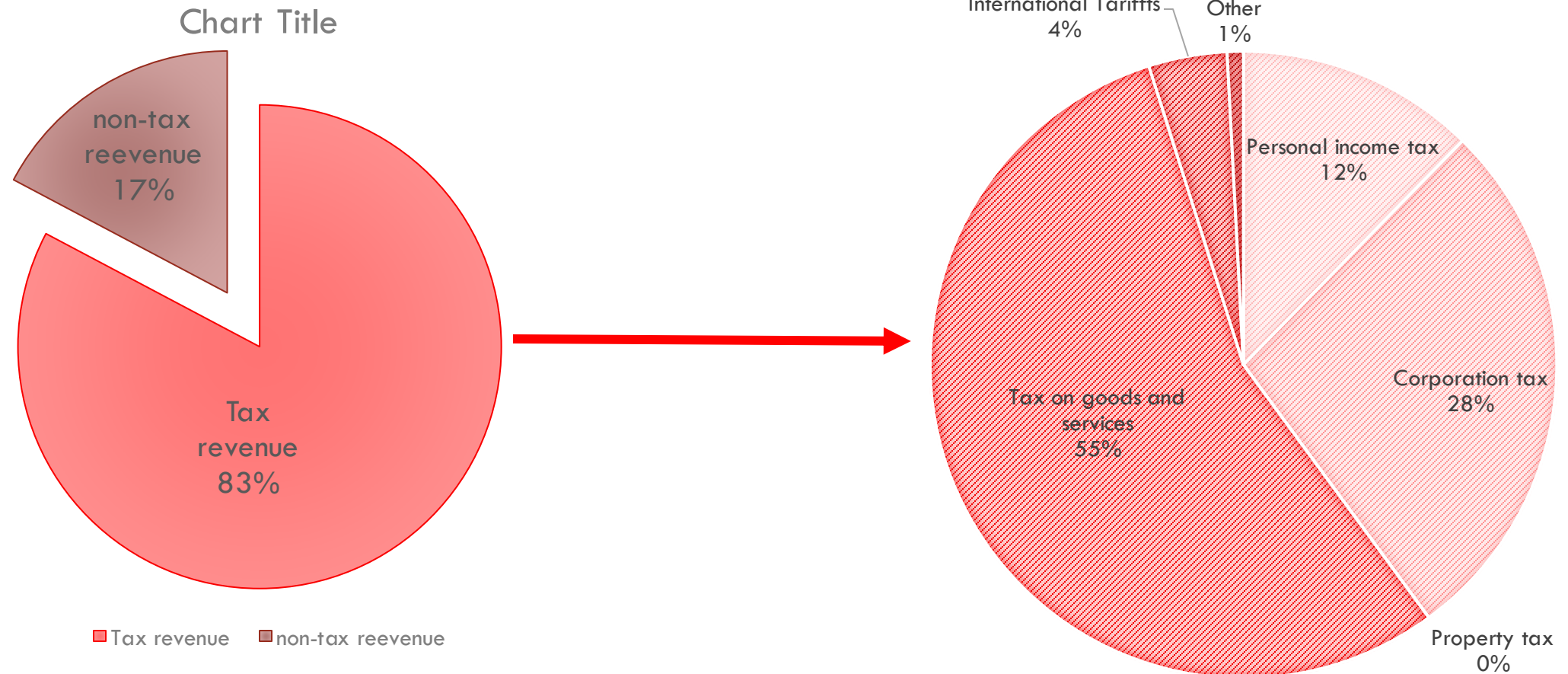
- Types of government budget
  - Balanced budget:  $G + R = T$
  - Budget deficit:  $G + R > T$
  - Budget surplus:  $G + R < T$

# STRUCTURE OF GOVERNMENT SPENDING

## Government spending

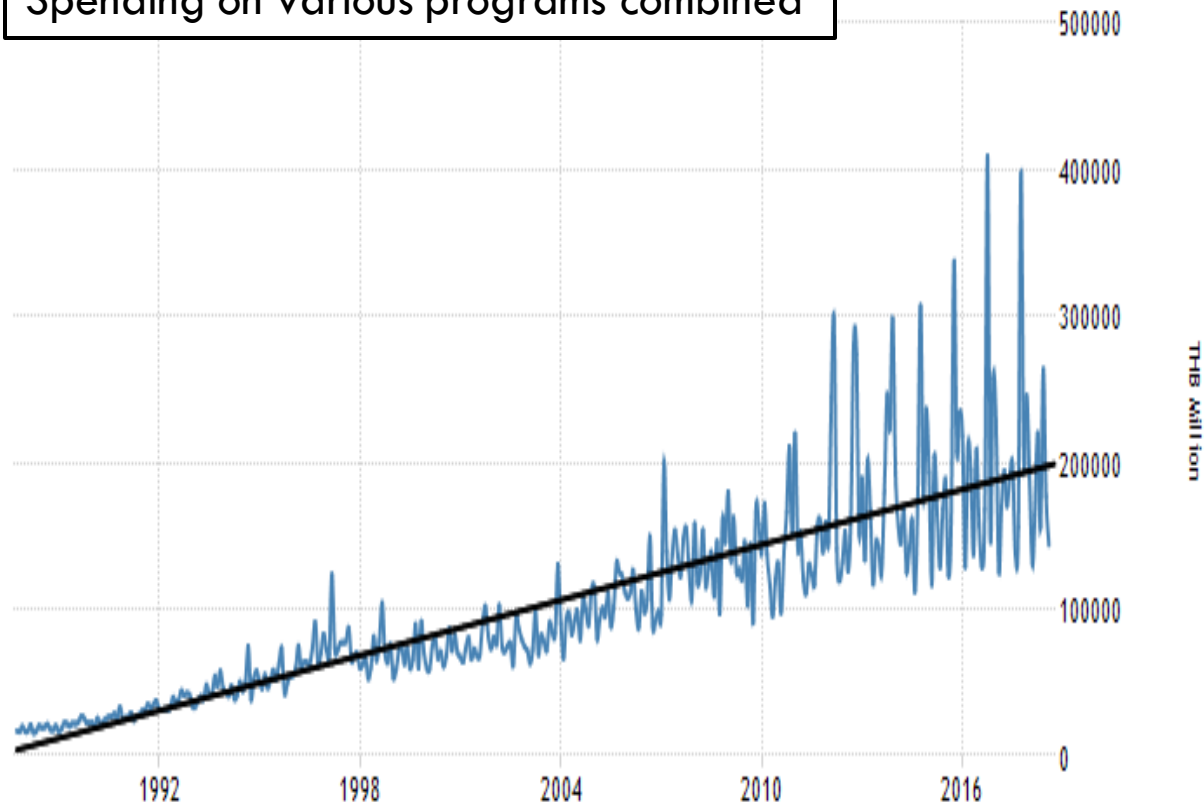


# STRUCTURE OF GOVERNMENT REVENUE

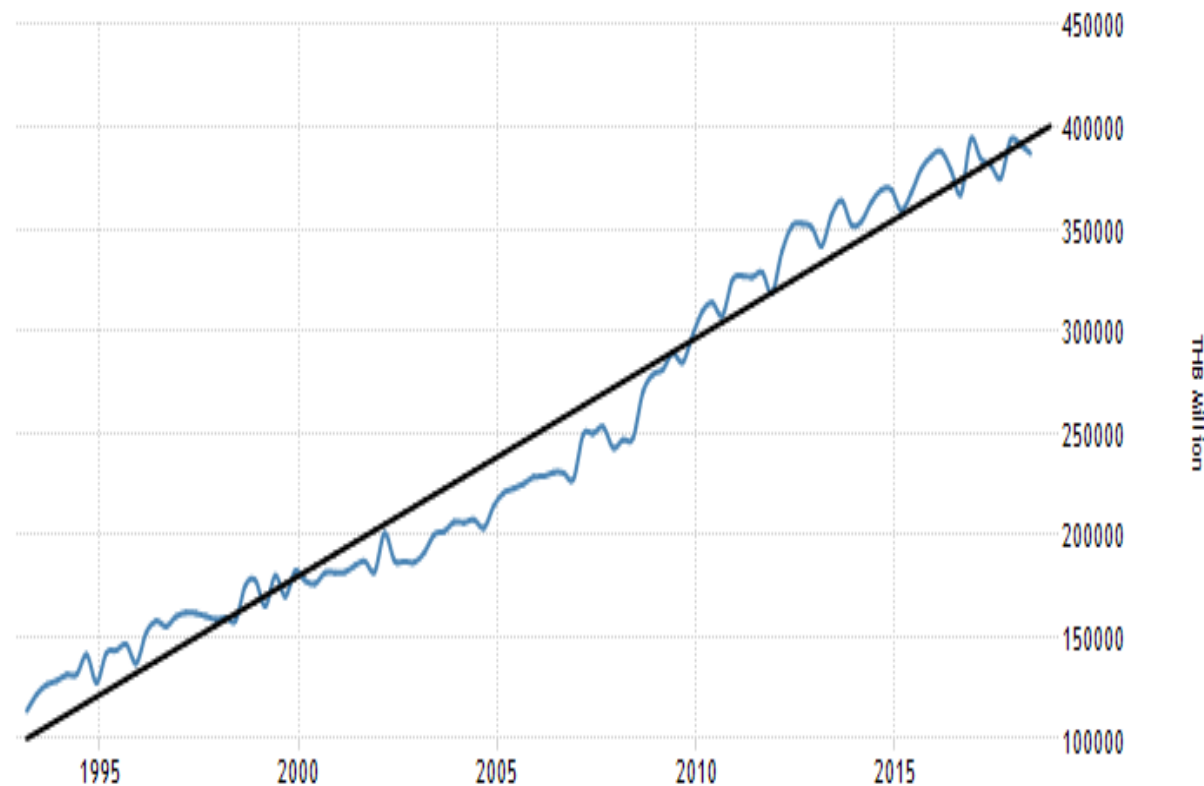


# GOVERNMENT INDICATORS OVER TIME

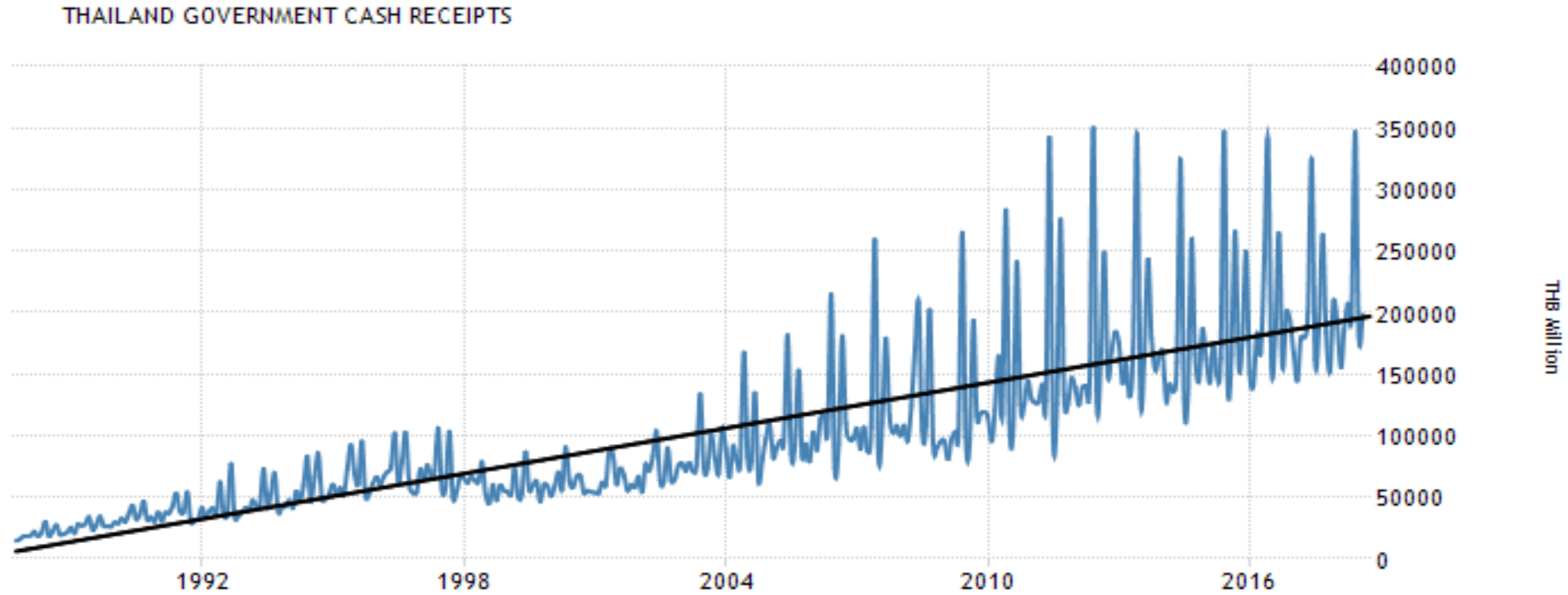
Total government spending  
Spending on various programs combined



GC + GI



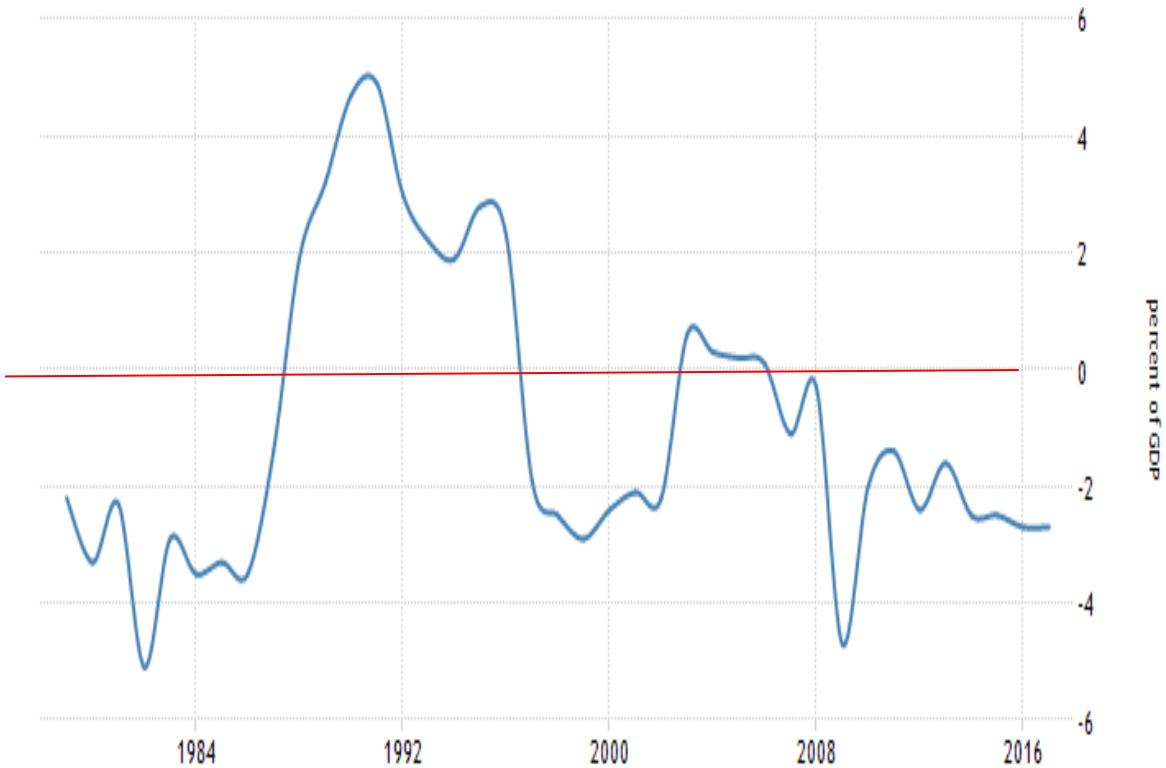
# GOVERNMENT INDICATORS OVER TIME



SOURCE: TRADINGECONOMICS.COM | BANK OF THAILAND

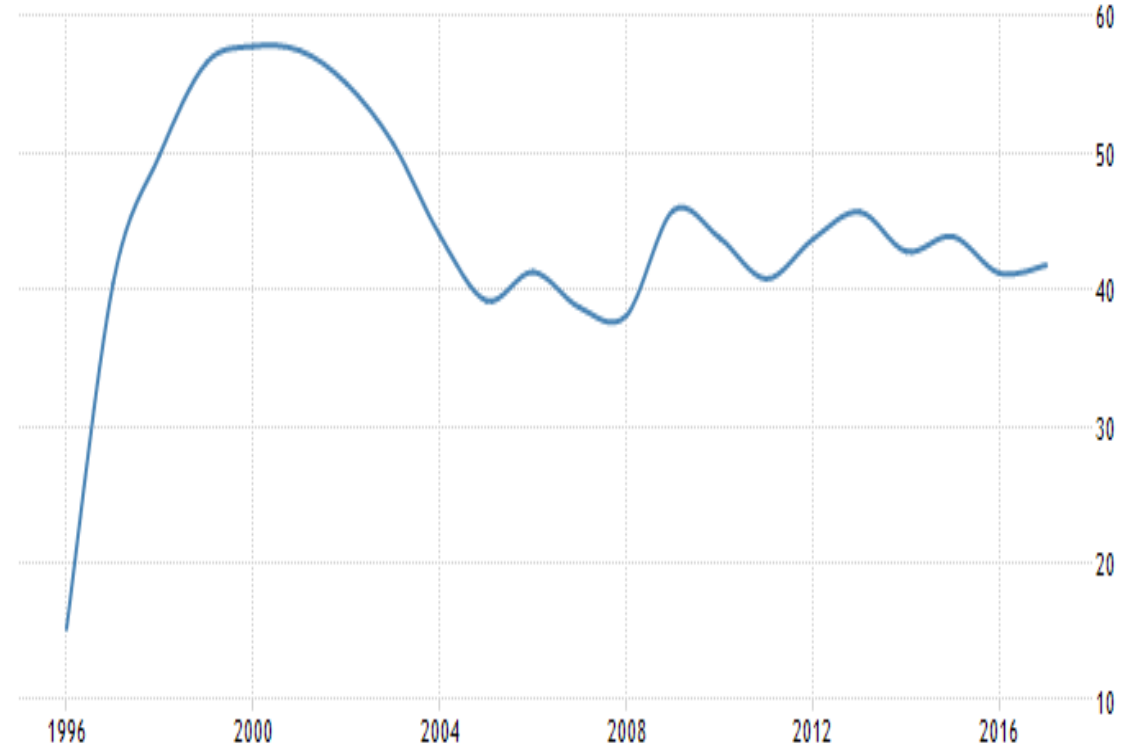
# GOVERNMENT INDICATORS

Budget: Deficit v.s. Surplus



SOURCE: TRADINGECONOMICS.COM | MINISTRY OF FINANCE, THAILAND

Debt-to-GDP ratio



SOURCE: TRADINGECONOMICS.COM | MINISTRY OF FINANCE, THAILAND

# TYPES OF FISCAL POLICY 1

- Classifications linked by the types of economic problem
  - **Expansionary fiscal policy:** used to resolve/fix *the deflation gap problem (recession)*
  - **Contractionary fiscal policy:** used to resolve/fix *the inflation gap problem (boom)*

# TYPES OF FISCAL POLICY 1

- To implement the **expansionary fiscal policy**, government may choose one of the followings (or the combination of)
  - Increase in  $G$
  - Decrease in Tax  $\rightarrow$  lower tax rate; lower lump-sum tax
  - Increase Transfer  $\rightarrow$  Adding more programs, making the existing one more generous
- To implement the **contractionary fiscal policy**, government may choose one of the followings (or the combination of)
  - Decrease in  $G$
  - Increase in Tax  $\rightarrow$  lower tax rate; lower lump-sum tax
  - Decrease Transfer  $\rightarrow$  Terminate existing programs, making the existing less generous

# TYPES OF FISCAL POLICY 2

- **Discretionary fiscal policy**
  - Management of  $G$ ,  $T$ , Public debt made upon the *judgments or discretion* of government – require passing a new law.
  - Eg. Road-improving expenditure program, the adjustment of income tax rate etc.
- **Non-discretionary fiscal policy / Automatic-stabilizer fiscal policy**
  - Rule-based fiscal policy; *pre-commitment*
  - Eg. Social insurance program, Transfers program linked to income, income tax system

# BUILT-IN AUTOMATIC STABILIZER

- **Some non-discretionary fiscal policies have the automatic stabilizing features**
  - To reduce the impact of shocks on Thai GDP
- The payouts or receipts of some government programs are directly tied to the economic conditions.
  - Pay more under recession; pay less under boom
  - Receiving more under boom; receiving less under recession

# BUILT-IN AUTOMATIC STABILIZER

- **Example:** Income-tax system and Income-linked transfer program
- **Consider a scenario:**
  - Rising world GDP growth might impact Thai economy – causing an upswing of Thai GDP, and hence resulting in an inflation GAP or economic boom.
  - Non-discretionary fiscal policies can help stabilizing the impact on Thai economy.

# BUILT-IN AUTOMATIC STABILIZER

- Income tax system
  - Rising GDP growth tends to raise the Thai GDP
  - Under the income tax system, tax revenue will rise
  - Households cannot increase their spending as much as when there is not income tax system.
  - GDP will not sizably increase – self-stabilizing effect.

# BUILT-IN AUTOMATIC STABILIZER

- Income-linked transfer system
  - Rising GDP growth tends to raise the Thai GDP
  - Under the Income-linked transfer, transfer will fall
  - Households cannot increase their spending as much as when there is only lump-sum transfer program.
  - GDP will not sizably increase – self-stabilizing effect.

# BUILT-IN AUTOMATIC STABILIZER: MULTIPLIER

$$Y = C + X$$

$$C = \bar{C} + C_1 Y_d$$

$$X = \bar{X}$$

$$T = \bar{T}$$

$$Y = C + X$$

$$C = \bar{C} + C_1 Y_d$$

$$X = \bar{X}$$

$$T = \bar{T} + T_1 Y$$

## BUILT-IN AUTOMATIC STABILIZER: MULTIPLIER

$$Y = C + X$$

$$C = \bar{C} + C_1 Y_d$$

$$X = \bar{X}$$

$$R = \bar{R}$$

$$Y = C + X$$

$$C = \bar{C} + C_1 Y_d$$

$$X = \bar{X}$$

$$R = \bar{R} - R_1 Y$$

## BUILT-IN AUTOMATIC STABILIZER: MULTIPLIER

- Under the built-in automatic stabilizer system, multiplier is smaller
- Shocks generate smaller impact -- *more stabilizing outcome*

# TYPES OF FISCAL POLICY 3

- Fiscal policy also concerns with the public debt management
  - public debt = Government borrowing, used to finance the public spending
- Objective of public debt creation
  - Long-term government investment project
  - Finance budget deficit
  - Stabilizing the macroeconomy

# TYPES OF FISCAL POLICY 3

- Negative effects of public debt creation
  - Crowding-out private spending
  - Rising borrowing cost: high debt is considered risky
- Excessive debt creation
  - Credibility of government to honor debt
  - Exclusion from global financial markets
  - Inflation

# LIMITATIONS OF FISCAL POLICY

- Automatic-stabilizer fiscal policy
  - Advantages:
    - Timely respond to the economic situation (need no government monetary; problem is self-mitigating)
  - Drawbacks:
    - Does not resolve the problem; reduce the severity of the problem.
    - Incentive distortion; fiscal drag

# LIMITATIONS OF FISCAL POLICY

- Discretionary fiscal policy
  - Advantages:
    - When the scale of problem is too big, discretionary fiscal policy might be more effective
  - Drawbacks:
    - To properly conduct, government needs to know the size of multiplier
    - A lot of operational concerns: *the Lag problems*

# LIMITATIONS OF FISCAL POLICY

- The lag problems
  - *Recognition lag*: identify when the problem exists
  - *Implementation lag*:
    - Decision lag: legislative work required
    - Execution lag: Delay in procurement process; delay in payments
  - *Response lag*: Injected cash program might take some times before it can generate the intended outcome.