

EE441 Economics of Public Expenditure

1. Introduction

Euamporn Phijaisanit
Faculty of Economics
Thammasat University
1/2017

Outline of Topic 1

- ☞ Overview the course EE441
- ☞ Course outline explanation
- ☞ Public Finance and Ideology
- ☞ Defining the Field of Study
- ☞ General Purposes of Public Finance Study
- ☞ Objectives of Public Finance Policy
- ☞ Four Basic Questions for Public Finance Policy
- ☞ Government at a Glance:
 - ☞ The Legal Framework
 - ☞ The Size of Government
 - ☞ Local and Central Government
 - ☞ Expenditure
 - ☞ Revenue

Defining the Field of Study

- **Public Finance** — Field of economics that analyzes government taxation (revenue) and spending (expenditure) activities.
- **Public Sector Economics or Public Economics**
 - Terms that better capture the fundamental issues of this field of economics - *government's role in the allocation of real resources* - that includes, but is not limited to, government's financial behavior.
- **Focus on microeconomic functions of government.**

Public Finance and Ideology

- **Organic view** of government
 - Society is a natural organism
 - Government is the heart.
 - Individuals are parts of the organism that have significance only as part of the community, which is stressed above the individual.
 - Social (common) well being matters, not individual well being.
 - Government's goal is to guide individuals to accomplish societal goals.
- **Mechanistic view** of government
 - Government is not an organic part of society, but created by individuals for individuals.
 - Social goals not important except as a collection of individual goals.
 - Within the mechanistic view, there can be differences on how to weigh the benefits for different individuals. Question: *When is it correct to transfer property from one person to another?*
 - Role of Government: Libertarians vs. Social Democrats vs Paternalism

Mechanistic View: “Classic Liberal” or “Libertarian”

- Extreme within the mechanistic framework.
- Government’s primary role is “referee”
- Role of Government narrowly defined:
 - Define and enforce property rights and support the efficient functioning of markets.
 - Provide some “public goods.”
 - Correct some “market failures.”
 - When in doubt, do not interfere. “Government failures” might be worse than the “market failures.”
- Skeptical of using government for redistribution.

5

Mechanistic View: “Social Democratic”

- “Substantial government intervention is required for the good of individuals.”
- Agree with libertarians that government should provide public goods and correct market failures.
- In addition, government should do more. It might provide a “social safety net,” guaranteeing availability of certain goods or services.
- Less concerned about “government failure.”
- Supports using government to redistribute wealth.

6

Mechanistic View: “Paternalism”

- Even stronger than the “social democratic” view is the “paternalistic” view.
- The paternalistic view argues that for certain decisions individuals do not maximize their own well being.
- Therefore, for questions related to topics such as environmental planning – in particular with long term consequences, government should decide.
- “Merit goods” are defined as goods that ought to be provided even if people do not demand it.

7

General Purposes of Public Finance Policy

- Expected Impacts on the Economy
 - Change aggregate demand and aggregate supply
 - Solve market failure problems
- To maximize social welfare.
(ultimate goal)

1. Public Goods
2. Monopoly
3. Externalities
4. Imperfect market
5. Disequilibrium

8

Government Failure: Systematic Failure of Government

- Limited Information
 - Eg. Old-age allowance, price/income guarantees for farmers
- Limited control over private market responses
 - Eg. Co-operations in setting up universal healthcare from the private sectors
- Limited control over Bureaucracy
 - Eg. Controls over the illegal access of public areas
- Limitations Imposed by Political Process
 - Eg., Drafting of legislations on land and property taxes

9

Objectives of Public Finance Policy (Former Thoughts)

- Allocation of Resources
 - Public goods
- Macroeconomic Stabilization
 - Full employment
 - Stability
 - Balanced Balance of Payments
- Income Redistribution
- Economic Growth Promotion

Allocation start from Adam Smith that society required production of certain product: public good. Allocate for social consumption. Leads to justification of taxation.

Stabilization: DCs & LDCs: DCs concern short term effects of policy Keynesian approaches adjust in manipulating AD and AS, try to keep actual employment close to potential level, and price stability. LDCs difficult to define what is full employment, mostly under employment; technologically there is no clear correspondence between full employment of labor and capital (in what sense), and price is stable as long as actual gdp < potential gdp is not always true.

Income redistribution: society can exist with any conceivable income equality. But it might be a society which is not considered optimal by the majority of its citizen. In DCs : Income distribution leads to higher consumption → higher employment.

Musgrave, Public Finance, 1959

10

Objectives of Public Finance Policy (Recent Thoughts)

- Maintain of competitive economic environment
- Maintain of economic stability
- Income redistribution
- Environmental protection and preservation

The World Bank, *The State in the Changing World*:1997

11

Two Streams of Recent Thoughts

- Market Based Strategy
 - Government moderates and guides the economy
 - Create market environment
- Total government control
 - Centralized decision-making
 - Rigid planning

12

Public Choice Theory (1)

Credited to **James Buchanan** (Nobel Laureate 1986)

- Believed individuals self-interested in both *private* and *public* economic affairs
- Government is just another venue through which to pursue economic self-interest
- Buchanan's *Public Choice Theory* adds political content to concept of individual decision-making
 - Argues that government is efficient only if it establishes rules that allow people to get what they want from government.

Public Choice Theory (2)

- Therefore, what would be an efficient (*Pareto Optimal*) decision rule?
- **Unanimity:** only way to make at least one person better off without making anyone worse off.
 - **Problem:** Unanimity is *impractical*
 - As number of citizens increases what are chances anything passes?
 - **Solution:** Buchanan argues that unanimity should only be required when government first agrees on its decision-making process.
 - After that, all decisions can be made by different rule (i.e. majority rule)

How do Mainstream and Public Choice Theories Compare?

- **Similarities:** Both argue that democracy is process that is most consistent with decentralized market economy that honors consumer sovereignty
- **Differences:**

Public choice	Mainstream
Adds political content	Ignores political content wherever possible
Focuses on process	Focuses on outcomes
Assumes narrow self-interest in private and public affairs	Assumes narrow self-interest in private affairs only

Pros and Cons of Public Choice Theory

More desirable aspects	Less desirable aspects
Better able to explain and predict actual government behavior	Has a thin normative base which makes correct decisions on government intervention in cases of market failure difficult to determine
Focuses more on process than outcomes	
Belief in self-interest in all aspects of life appealing to economists	Ignores possibility that individuals have sense of community

And Finally...

- Recent experiments (Behavioral Economics) suggest that individual behavior is often more consistent with *Mainstream* view
 - Individuals appear more self-interested in market experiments than in public good experiments

What is the suitable role of the state?

- **Expenditure side:** Which type of public goods should the government produce/provide?
- **Revenue side:** How should the government collect revenue?

18

Four Basic Questions for Public Finance Policy

- **When** should the government intervene in the economy?
- **How** might the government intervene?
- **What** is the effect of those interventions on economic outcomes?
- **Why** do governments choose to intervene in the way that they do?

19

When should the government intervene in the economy?

- Generally, perfectly competitive market will lead to “efficiency” in the economy.
- It is difficult to say that government intervention is right or wrong. We usually consider:
 - Efficiency
 - Equity

20

EFFICIENCY

- In the market economy, the efficient point would be where the demand and supply intersect.
- In terms of public goods: national defense, public cleaning, etc.

21

EFFICIENCY

- Efficiency is mainly a positive concept (more in Topic 2)
- Economists measure efficiency as **Pareto Optimality**
 - Definition: An economy-wide allocation of resources is efficient if in order to increase one person's utility at least one other person's utility must be decreased.

Example

- An allocation in which, originally, I have everything and you have nothing is an 'efficient' allocation (**Pareto Optimal**).
 - The only way to make you better off is to take some away from me.

EQUITY (FAIRNESS)

Equity is mainly a normative concept (more in Topic 2)

End-results equity

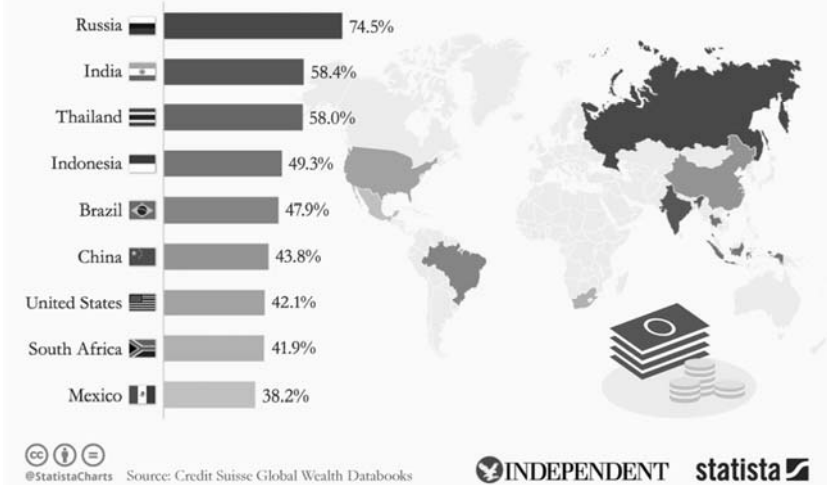
- Asks whether outcomes are fair.
 - For example: Is it fair that over half of income in Thailand goes to 1% of households? If not, what should be done to correct it?

Process equity

- Asks whether rules determining process are fair, regardless of allocation.
 - For example: Do children of wealthy families start with an advantage due to their family's wealth? If so, then what should be done to level the playing field?

The world's most unequal countries

Share of total wealth of richest 1% in selected countries in 2016



24

Equity



- From income distribution statistics in Thailand, less than 20% of the rich owns at least 50% of the nation's income.
- However, redistribution usually causes inefficiency.
 - New laws related to redistribution can change individual's behavior, eg., taxing the rich and giving the poor may cause both groups of people to work less.

25

Redistribution

- The government is concerned about the how much individuals in the society will get.
- When a poor person donates 1 more Baht, there is generally higher social utilities sacrificed by the poor than when a rich person donates 1 more Baht.
- Redistribution is the transfer between one individual or group to the other in the society.

26

Fiscal transfers and inequality in India



7%
total tax
revenue
(% GDP)

2.5%
spending
on social
protection
(% GDP)

12%
population
covered by
healthcare

24%
share of
elderly
receiving
pensions

27

Market Failure

- Market fails to produce the right amount of the product
- Resources may be
 - Over-allocated
 - Under-allocated

LO1

5-28

How might the government intervene?

- Resource Allocation and Growth
 - *Tax structure, price of public goods, public debt management, governmental institutions, efficient allocation of resources, savings, capital accumulation, growth*
- Economic Stability (Short-term and long-term)
 - *Aggregate demand, savings, etc.*
- Equity versus Efficiency
 - *Tax structure, expenditure policy, social safety net*

29

Recall the Objectives

- Moderate the economy;
 - Adjustment of aggregate demand and aggregate supply
 - Correct market failure, eg., universal healthcare project, education reform projects.
- So that social welfare will be maximised

However, the government may be unable to focus on any one particular role.

30

Efficiency of Public Finance Policy

In employing fiscal tool to moderate aggregate demand (in the short-run), the outcomes depend on:

- Private response (consumption, investment, savings, imports, exports)
- Macro policies: Monetary policy, exchange rate policy, international capital flows
- External factors
- Public expectations and credibility of the state.

31

Government at a Glance: The Legal Framework

Compositions of the Public Sector in Thailand

- Central government
- State enterprises
- Local government
- Debts
- Funds in the State Budgets
- Independent Organisations

32

What is the effect of those interventions on economic outcomes?

- Market failure
 - Market fails to produce the right amount of the product
 - Resources may be
 - Over-allocated
 - Under-allocated
 - Effects on consumer surplus, producer surplus, efficiency gain/loss, equity, externalities, net gain/loss (cost-benefit analysis)

Why do governments choose to intervene in the way that they do?

- Legal framework of the nation
- Social value judgment
- Socio-politico-economic circumstances
- Composition of the citizens

Government at a Glance: The Legal Framework (Case of US)

- Federal Government: Constitutional Provisions
 - Article 1, Section 8
 - Congress will “pay the Debts and provide for the common Defense and general Welfare of the United States.”
 - “The Congress shall have Power to lay and collect Taxes, Duties, Imposts and Excises.”
 - Article 1, Section 9
 - “No...direct Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken”.
 - 16th Amendment
 - “Congress shall have power to levy and collect taxes...”
 - 5th Amendment
 - “No person shall be...deprived of life, liberty, or property, without due process of law...”

Government at a Glance: The Legal Framework (Case of US)

- State Governments
 - Federal Constitution gives state governments board autonomy to spend and tax.
 - Federal Constitution 10th Amendment controls states’ international economic policy.
 - States’ Constitutions vary in spending and taxing restrictions and the economic issues with which they deal.
- Local Governments
 - Derive power to tax and spend from the States.
 - Fiscal independence of local governments.

Government at a Glance: The Legal Framework (Thailand)

- 1991 Thai Administration Act
 - The executive branch of the central government is composed of ministries.
 - On the regional level, the heads of provincial and district offices are officials that have been appointed by various ministries of the central government. For example, the Ministry of the Interior appoints staff members from its Department of Local Administration to act as provincial governors and as the heads of districts in 76 regional provinces. Except for the governor of Bangkok (which is not considered a province), who is the only elected governor in Thailand, the provincial governors and district heads are appointed by the Ministry of the Interior.

Government at a Glance: The Legal Framework (Thailand)

- The 76 provinces are subdivided into districts, sub-districts (tambon), and villages. Local governments are responsible for local administration within different areas of geographical coverage. Broadly speaking, local governments in Thailand can be classified into the following five categories:
 - Provincial Administrative Organizations (PAOs) - 76 units
 - Municipalities (MAs) – 2,010 units
 - Tambon Administrative Organizations (TAOs) – 5,765 units
 - Bangkok Metropolitan Administration (BMA) and
 - Pattaya City.

Legal Framework and Guidelines for Thailand's Budget Design

- 1. Ratio of Public Debts to GDP not more than 50%
- 2. Debt service no exceeding 15%
- 3. Budget Deficit not more than 2% of GDP
- 4. Annual borrowing not more than 20% of total annual budget plus not more than 80% of the principle repayment budget
- 5. Capital expenditure no less than 25% of total budget

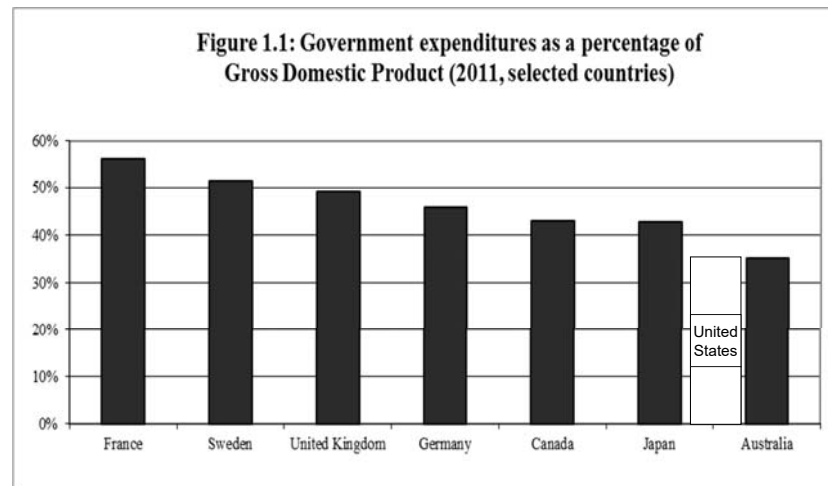
Government at a Glance: The Size of Government

How to measure the extent to which society's resources are subject to control by government.

- Annual expenditures
 - Types of government expenditure
 - Purchases of goods and services
 - Transfers of income
 - Interest payments
 - Budget documents
 - Unified budget: Itemized list of federal government revenues and expenditures.
 - Regulatory budget: Economic costs of government regulations.

The Size of Government

Government Expenditures as a % of GDP (2011)

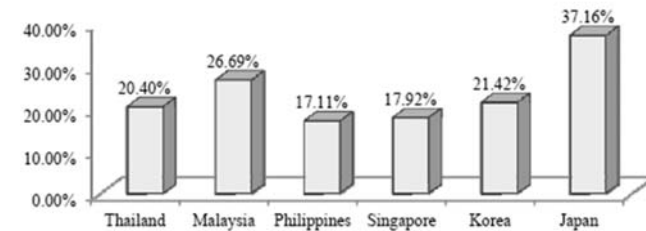


Source: Organization for Economic Cooperation and Development [2011b].

1-41

Comparative Overview of Budget Allocation among Selected Asian Countries

Figure 1 Percentage of Expenditure over GDP in some Asian Countries

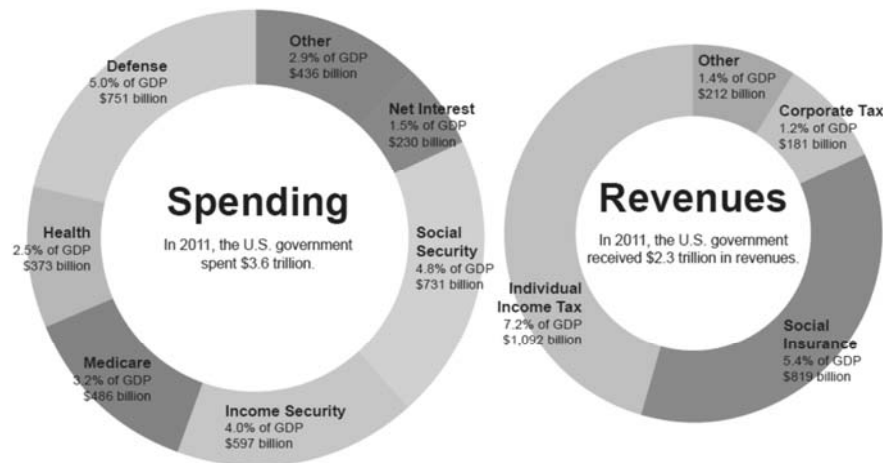


Source: *Key Indicators for Asia and the Pacific 2011*, Asian Development Bank
 Note: Japan's and Singapore's figures are in 2009 while other countries' are in 2010.

42

The Size of Government

Composition: 2011 Federal Expenditures & Revenues

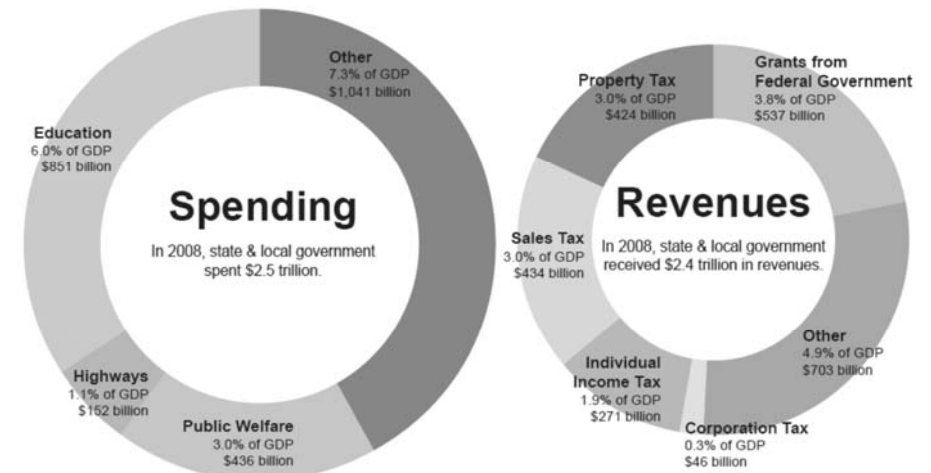


Source: *Economic Report of the President, 2012* [p. 413].

1-43

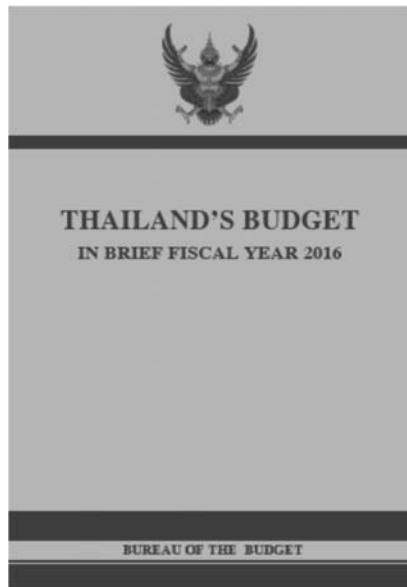
The Size of Government

Composition: 2011 State & Local Expenditures & Revenues



Source: *Economic Report of the President 2012* [p. 419].

1-44



CONTENTS		Page
PART I	HIGHLIGHTS OF THE FY 2016 BUDGET	1
	1. Economic outlook for FY 2016	1
	2. The FY 2016 Budget Policy	2
	3. Budget Structure	3
	4. Strategy for the FY 2016 budget allocation	5
	5. Budget appropriations classified by objects of expenditures	30
PART II	ESTIMATED RECEIPTS	32
	1. Revenue	32
	2. Borrowings	33
PART III	BUDGET EXPENDITURES	52
	1. The Functional and Economic Classification of Expenditures	52
	2. Expenditures classified by Budget Structure	67
	3. Expenditures classified by Ministry and Organization	71
	4. Budget Allocation for the Local Administrative Organization	95
	5. Multi-Year Commitment Budget	97
PART IV	GOVERNMENT FINANCE	104
	1. Financial Outlook	104
	2. Public Debt	106
	3. Foreign Aid	117
	4. Private Donations	119

45

Thailand's Budget Allocation

Table I-3
Budget Allocation Strategy
FY 2017

(in million baht)

Budget Allocation Strategy	Budget	
	Amount	%
Total	2,733,000.0	100.0
1. National security and foreign affairs	156,193.7	5.7
2. Development of the country's competitiveness	316,741.6	11.6
3. Development and strengthening potentials of human	229,161.7	8.4
4. Rectifying problems on poverty, lessening inequality and creating growth from the inside	239,783.0	8.8
5. Management of water and creation of growth on quality of life friendly to environment with sustainability	107,799.6	3.9
6. Realignment for balance and development of administrative system of the public sector	338,845.4	12.4
7. Expenditures on general administration	1,344,475.0	49.2

Table I-1
Budget Structure
FY 2016 - 2017

(in million baht)

Budget Structure	FY 2016		FY 2017	
	Amount	+ / - %	Amount	+ / - %
1. Expenditures	2,776,000.0	7.8	2,733,000.0	-1.5
(% GDP)	19.8		18.4	
- Current expenditures	2,127,778.9	4.9	2,102,941.3	-1.2
(% of the total budget)	76.7		76.9	
- Expenditures for replenishment of treasury account balance	21,875.1	-47.9	-	-100.0
(% of the total budget)	0.8		-	
- Capital expenditures	564,354.3	25.6	548,871.9	-2.7
(% of the total budget)	20.3		20.1	
- Principal repayment	61,991.7	11.3	81,186.8	31.0
(% of the total budget)	2.2		3.0	
2. Receipts	2,776,000.0	7.8	2,733,000.0	-1.5
(% GDP)	19.8		18.4	
- Revenues	2,386,000.0	2.6	2,343,000.0	-1.8
- Domestic borrowings	390,000.0	56.0	390,000.0	-
3. Gross Domestic Product (GDP)	14,034,300.0	3.7	14,876,300.0	6.0

N.B. : 1. Gross Domestic Product (GDP) according to the National Economic and Social Development Board's announcement on Thai Economic Performance in Second Quarter and Economic Outlook for 2016 as of August 15, 2016
2. Budget expenditures for FY 2016 include additional budget of 56,000 million baht.
 Sources : 1. Bureau of the Budget
 2. Ministry of Finance
 3. Office of the National Economic and Social Development Board

47

Table I-1
Budget Structure (FY 2015-2016)

(in million baht)

Budget Structure	FY 2015		FY 2016	
	Amount	+ / - %	Amount	+ / - %
1. Expenditures	2,575,000.0	2.0	2,730,000.0	5.6
(% GDP)	20.4		20.4	
- Current expenditures	2,027,858.8	0.5	2,100,117.9	3.6
(% of the total budget)	78.7		77.2	
- Expenditures for replenishment of treasury account balance	41,965.4	212.6	13,536.1	-67.7
(% of the total budget)	1.6		0.5	
- Capital expenditures	449,475.8	1.9	544,354.3	21.1
(% of the total budget)	17.5		20.0	
- Principal repayment	55,700.0	5.4	61,991.7	11.3
(% of the total budget)	2.2		2.3	
2. Receipts	2,575,000.0	2.0	2,730,000.0	5.6
(% GDP)	20.4		20.4	
- Revenues	2,325,000.0	2.2	2,330,000.0	0.2
- Domestic borrowings	250,000.0	-	390,000.0	56.0
3. Gross Domestic Product (GDP)	12,627,000.0	4.0	13,359,000.0	5.8
4. Gross Domestic Product (GDP)	13,451,000.0	2.3	14,123,400.0	5.0

N.B. : 1. Gross Domestic Product (GDP) in No. 3, based on the former series of national income account as current market prices according to the Office of the National Economic and Social Development Board's announcement on Thai Economic Performance in Fourth Quarter and 2014 and Economic Outlook for 2015, as of February 16, 2015
2. Gross Domestic Product (GDP) in No. 4, based on the new series of national income account as current market prices according to the National Economic and Social Development Board's announcement on Thai Economic Performance in Third Quarter and Economic Outlook for 2015-2016 as of November 16, 2015
3. % of GDP 1 is calculated using Gross Domestic Product (GDP 1) in No. 3
4. % of GDP 2 is calculated using Gross Domestic Product (GDP 2) in No. 4
 Sources : 1. Bureau of the Budget
 2. Ministry of Finance
 3. Office of the National Economic and Social Development Board

48

Table II-1
Receipt Estimates

(in million baht)

Receipts	FY 2015		FY 2016		Change over the FY 2015	
	Amount	%	Amount	%	Amount	%
Revenue						
1. Taxes (Gross)	2,582,242.4	100.3	2,590,267.9	95.2	8,025.5	0.3
2. Sales of Assets and Services	27,720.5	1.1	22,215.3	0.8	-5,505.2	-19.9
3. State Enterprises	120,000.0	4.6	120,000.0	4.4	-	-
4. Others	35,537.1	1.4	37,616.8	1.4	2,079.7	5.9
Total (Gross)	2,765,500.0	107.4	2,770,100.0	101.8	4,600.0	0.2
Deductions						
1. Tax Rebates of the Revenue Department	295,700.0	11.5	295,100.0	10.8	-600.0	-0.2
2. Allocation of Value Added Tax to Provincial Administrative Organizations	17,100.0	0.7	17,200.0	0.6	100.0	0.6
3. Export Duties Compensation	18,700.0	0.7	18,800.0	0.7	100.0	0.5
Total (Net)	2,434,000.0	94.5	2,439,000.0	89.7	5,000.0	0.2
Allocation of Value Added Tax to Local Administrative Organizations	109,000.0	4.2	109,000.0	4.0	-	-
Total revenue (Net)	2,325,000.0	90.3	2,330,000.0	85.7	5,000.0	0.2
Domestic Borrowings	250,000.0	9.7	390,000.0	14.3	140,000.0	56.0
Total receipts	2,575,000.0	100.0	2,720,000.0	100.0	145,000.0	5.6

49

(in million baht)

Ministry/Department	Appropriation	
	FY 2015	FY 2016
6. Buddhapasantsipa Institute	977.2	1,135.6
7. Princess Maha Chakri Sirindhorn Astrophysics Centre (Public Organization)	117.0	210.3
8. Film Archive (Public Organization)	118.3	174.0
9. Mural Preservation Center (Public Organization)	65.6	43.5
Ministry of Science and Technology	8,894.4	9,728.7
1. Office of the Permanent Secretary	2,600.0	2,849.3
2. Department of Science Service	455.8	450.3
3. Office of Atomic for Peace	244.2	284.3
4. National Science and Technology Development Agency	2,952.7	3,081.1
5. National Science, Technology and Innovation Policy Office	274.1	275.3
6. Geo-Informatics and Space Technology Development Agency (Public Organization)	478.7	568.6
7. Thailand Institute of Nuclear Technology (Public Organization)	366.3	538.1
8. Synchrotron Light Research Institute (Public Organization)	386.4	403.7
9. National Astronomical Research Institute of Thailand (Public Organization)	262.5	489.9
10. Hybris and Agro Informatics Institute (Public Organization)	361.3	328.5
11. National Innovation Agency (Public Organization)	316.8	270.6
12. Thailand Centre of Excellence for Life Sciences (Public Organization)	197.8	183.0
Ministry of Education	801,326.1	817,076.7
1. Office of the Permanent Secretary	54,087.3	53,048.4
2. Office of the Education Council	249.7	235.8
3. Office of the Basic Education Commission	315,088.3	319,321.0
4. Office of the Vocational Education Commission	20,942.0	22,289.8
5. Office of the Higher Education Commission	6,443.5	6,915.4
6. Kasetsart University	4,132.5	4,987.2
7. Khon Kaen University	4,613.8	4,847.1
8. Thammasat University	3,289.9	3,459.4
9. Naresuan University	2,084.6	2,302.3
10. Mahasarakham University	1,041.5	1,105.3

50

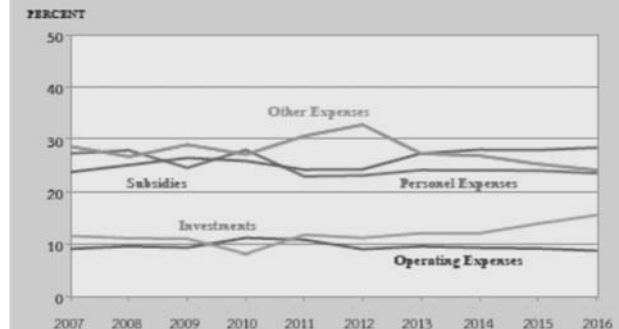
Table I-2
Budget Allocation Strategy FY 2016

(in million baht)

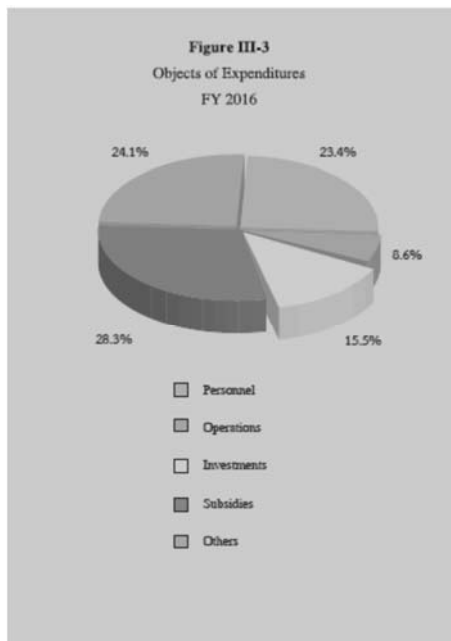
Budget Allocation Strategy	Budget	
	Amount	%
Total	2,720,000.0	100.0
1. Expediting the establishment of foundation for the country's sustainable development	241,478.8	8.9
2. National security	239,034.3	8.8
3. Development of economic growth with stability and sustainability	218,572.1	8.0
4. Education, health, virtue, ethics and quality of life	989,295.0	36.4
5. Management of natural resources and environment	69,931.6	2.6
6. Development of science, technology and innovation	26,856.8	1.0
7. Management of foreign policy and international economic affairs	9,071.5	0.3
8. Management with efficiency and good governance	361,878.1	13.3
9. Expenditures on general administration	563,881.8	20.7

51

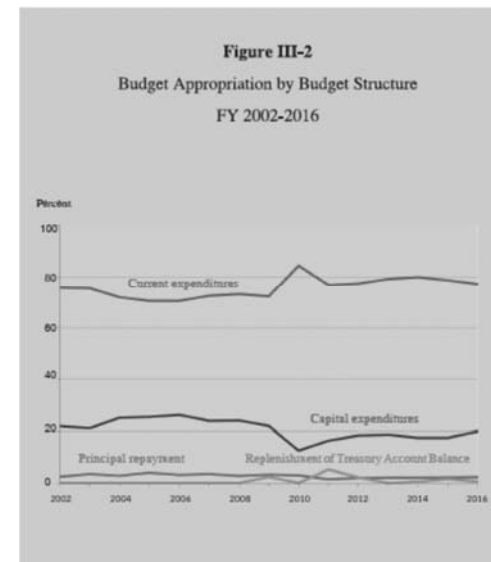
Figure I-2
Budget Appropriation by Objects of Expenditures
FY 2007-2016



52



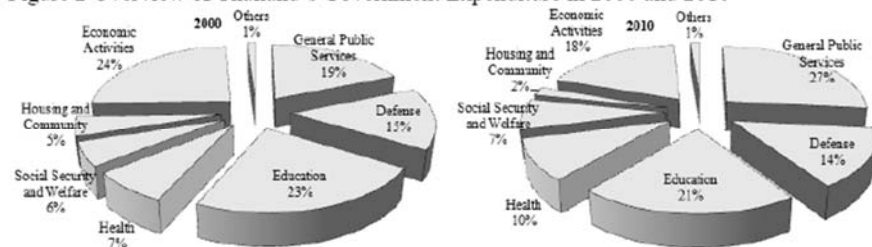
53



54

Comparative Overview of Budget Allocation among Selected Asian Countries

Figure 2 Overview of Thailand's Government Expenditure in 2000 and 2010



55

Comparative Overview of Budget Allocation among Selected Asian Countries

Table 1 Comparison of Government Expenditure by Activities in some Asian Countries (as Percentage of Total Expenditure)

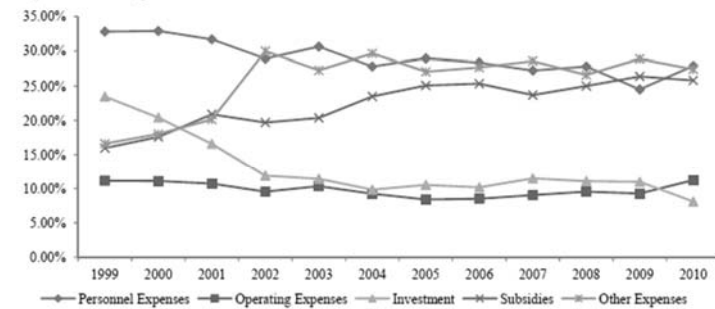
Activities	Thailand	Malaysia	Philippines	Singapore	Korea	Japan
General Public Services	26.68%	8.13%	18.54%	12.49%	10.31%	5.30%
Defense	14.00%	11.08%	4.76%	23.82%	11.06%	6.10%
Education	20.55%	24.39%	15.62%	18.33%	15.00%	10.74%
Health	9.70%	8.07%	2.60%	7.72%	1.18%	22.61%
Social Security and Welfare	7.35%	4.76%	6.72%	12.49%	22.44%	39.47%
Housing and Community	2.07%	1.20%	0.36%	6.76%	4.91%	1.13%
Economic Activities	18.44%	19.88%	25.89%	16.31%	18.96%	10.43%
Others	1.20%	22.48%	25.52%	2.08%	16.15%	4.22%

Source: *Key Indicators for Asia and the Pacific 2011*, Asian Development Bank
Note: Japan's and Singapore's figures are in 2009 while other countries' are in 2010.

56

Comparative Overview of Budget Allocation among Selected Asian Countries

Figure 3 Thailand's Budget Appropriation by Type of Expenses as Percentage of Total Expenses during 1999-2010

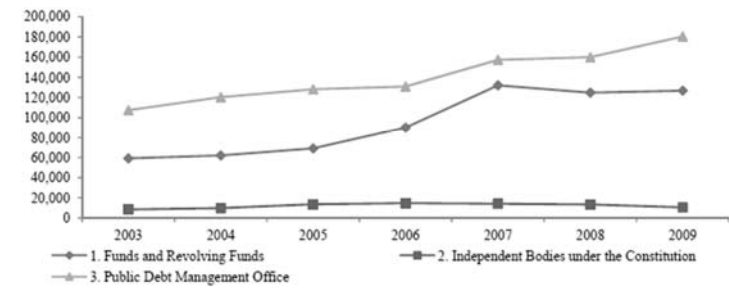


Source: Thailand's Budget in Brief, Bureau of the Budget of Thailand

57

Comparative Overview of Budget Allocation among Selected Asian Countries

Figure 4 Other Major Expenses Appropriation by Organisation during 2003-2009 (in million Baht)

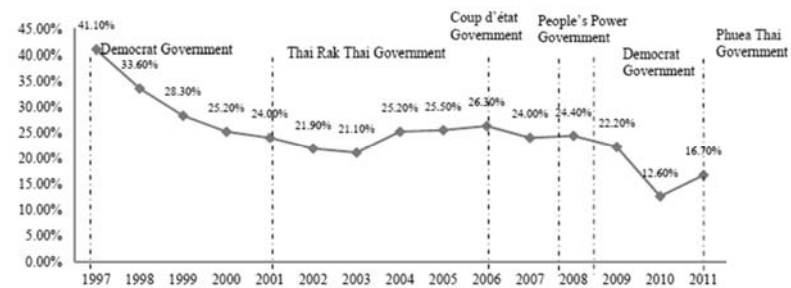


Source: Thailand's Budget in Brief, Bureau of the Budget of Thailand

58

Thailand's Post-1997 Crisis Government Spending Pattern

Figure 5 Percentage of Capital Expenditure over Total Expenditure during 1997-2011

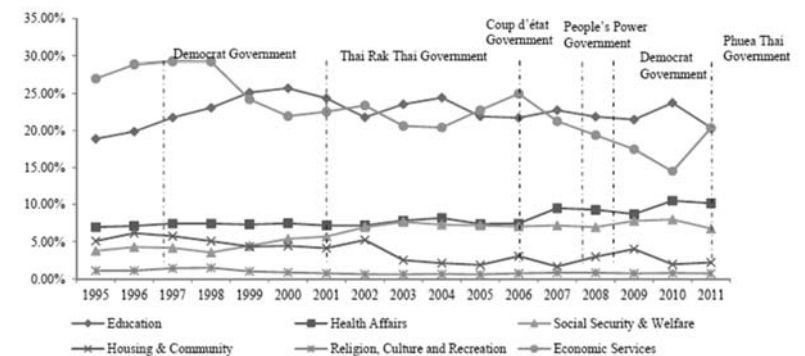


Source: Thailand's Budget in Brief, Bureau of the Budget of Thailand

59

Thailand's Post-1997 Crisis Government Spending Pattern

Figure 6 Percentage of Productive Expenditure over Total Expenditure during 1995-2011

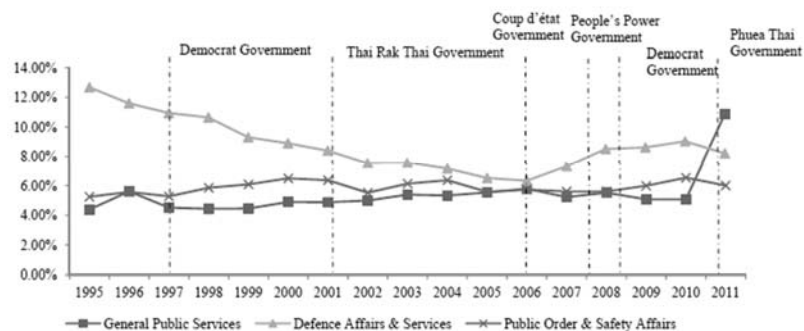


Source: Thailand's Budget in Brief, Bureau of the Budget of Thailand

60

Thailand's Post-1997 Crisis Government Spending Pattern

Figure 7 Percentage of Unproductive Expenditures over Total Expenditure during 1995-2011

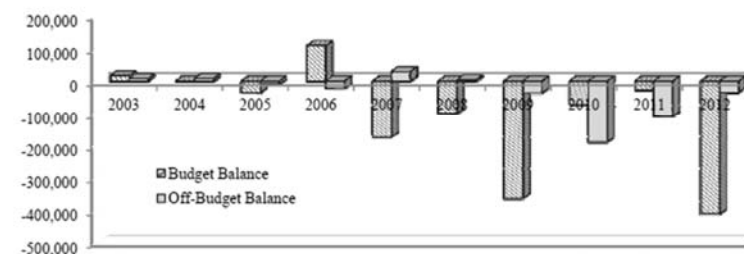


Source: *Thailand's Budget in Brief*, Bureau of the Budget of Thailand

61

Thailand's Post-1997 Crisis Government Spending Pattern

Figure 8 Budget and Off-Budget Balance during 2003-2012 (in million Baht)



Source: Bank of Thailand

62

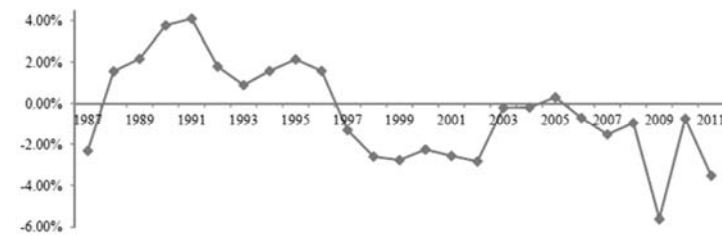
“Six Months Six Policies” Program during Samak Sundaravej's Government

1. Reduction of excise tax on gasohol 91 and 95 from 3.30 Baht per litre to 0.0165 baht per litre; and reduction of excise tax from diesel from 2.30 baht per litre to 0.005 baht per litre
2. Postponement of the increase in household cooking gas price
3. Reduction of water supply fee through government subsidy for households consuming 0 - 50 cubic litre of water per month
4. Reduction to electricity charges for households consuming 80-150 units per month through government subsidy of half the expenditure
5. Free bus services for 800 buses running 73 routes
6. Free train services for the people

63

Thailand's Post-1997 Crisis Government Spending Pattern

Figure 9 Fiscal Balance as Percentage of GDP during 1987-2011



Source: Bank of Thailand

64

Thailand's Post-1997 Crisis Government Spending Pattern

Table 2 "Thai Kem Kang" Strategic Plan and Approved Budget (in Million Baht)

Plan-Project	Approved Budget
1. Water management	238,515
2. Transportation	571,523
3. Energy	205,805
4. Communication	24,811
5. Basic Infrastructure for Tourism	10,031
6. Education	137,975
7. Health	99,399
8. Basic Infrastructure for Well-being of the population	8,482
9. Basic Infrastructure for Science and Technology	12,130
10. Basic Infrastructure for Natural Resources and Environment	4,860
11. Tourism Development	8,506
12. Creative Economy	17,585
13. Community-level Investment	91,708
Total	1,431,330

Source: Chatameena (2009; 30-32)

65

Table II-13
Actual Domestic Borrowing and Principal Repayment

(in million baht)

Fiscal Year	Domestic Borrowings (1)	Principal Repayment (2)	Net Borrowings (1) - (2)
1999	40,000.0	6,738.7	33,261.3
2000	107,925.0	6,564.2	101,360.8
2001	104,797.3	12,403.3	92,394.0
2002	170,000.0	3,312.7	166,687.3
2003	76,000.0	18.3	75,981.7
2004	90,000.0	5,354.1	84,645.9
2005	-	20,017.7	-20,017.7
2006	-	24,140.0	-24,140.0
2007	146,200.0	10,015.1	136,184.9
2008	165,000.0	18,014.5	146,985.5
2009	441,060.5	55,606.0	385,454.5
2010	232,575.5	68,764.9	163,810.6
2011	200,666.0	53,879.2	146,786.8
2012	344,084.3	18,367.8	325,716.5
2013	281,948.8	47,586.5	234,362.3
2014	250,000.0	31,318.4	218,681.6

Source : Public Debt Management Office, Ministry of Finance.

66

Table IV-1
Treasury Account Balances

(in million baht)

Item	Fiscal Year	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Revenues		1,692,432.5	2,037,057.9	1,951,084.9	2,164,882.1	2,068,482.2
Expenditures		1,819,620.4	2,183,707.4	2,242,270.2	2,430,342.7	2,446,162.9
Budget cash balances		-127,187.9	-146,649.5	-291,185.3	-265,460.6	-377,680.7
Non-budget cash balances		15,267.1	31,206.9	-8,481.8	1,047.9	21,383.4
Overall cash balances		-111,920.8	-115,442.6	-299,667.1	-264,412.7	-356,297.3
Domestic borrowing		232,575.5	200,666.0	344,084.3	281,948.8	250,000.0
Treasury cash balances		120,654.7	85,223.4	44,417.2	17,536.1	-106,297.3
Treasury account balances		429,026.4	521,293.5	561,269.7	605,051.8	495,747.0

Source : Comptroller General's Department

Monthly treasury account balances for the fiscal years 2010 to 2014 are exhibited in the following Figure IV-1.

67

2. Public Debt

Public debt is the financial obligation of the government arising from direct borrowing or guarantees of debts. It can be separated into internal and external debts.

Table IV-2
Principal Outstanding Debt as of July 31, 2015

(in million baht)

Type of Loans	Direct Government Loans	Debt Guaranteed	Total
Internal Debt	4,011,273.0	878,343.5	4,889,616.5
Growth rate : increase / (decrease)	4.2	(6.1)	2.2
% of budget	155.8	34.1	189.9
% of GDP ¹	31.8	7.0	38.7
% of GDP ²	29.8	6.5	36.4
External Debt	80,105.6	102,040.0	182,145.6
Growth rate : increase / (decrease)	6.0	(10.4)	(3.9)
% of budget	3.1	4.0	7.1
% of GDP ¹	0.6	0.8	1.4
% of GDP ²	0.6	0.8	1.4
Total	4,091,378.6	980,383.5	5,071,762.1
Growth rate : increase / (decrease)	4.2	(6.5)	2.0
% of budget	158.9	38.1	197.0
% of GDP ¹	32.4	7.8	40.2
% of GDP ²	30.4	7.3	37.7

68

Why Are Large Deficits Bad?

- Large deficits raise interest rates, which, in turn, discourages investment
 - For US, the real interest rate (the nominal interest rate less the rate of inflation) during the latter half of the 1980s and all of the 1990s was three times as high as the real interest rate in Japan and it was much higher than those in most Western European countries as well
- What are the negative sides of having deficits?

69

Why Are Large Deficits So Good?

- On the positive side, budget deficits stimulate the economy
 - We would do well to remember that John Maynard Keynes would have advocated running surpluses and paying off the debt during periods of prosperity

70

Will We Be Able to Balance Future Budgets?

- A recession, a decline in stock prices, a tax cut, or an increase in government spending programs can easily eliminate any surpluses and replace them with deficits
- After the year 2015, as the baby boom generation attains senior citizenship, the Social Security Trust Funds in many developed countries (and for Thailand which will become Ageing society as well) will be quickly depleted
 - Unless the government has already raised Social Security taxes or cut benefits, the federal budget surplus will quickly become a large and growing deficit

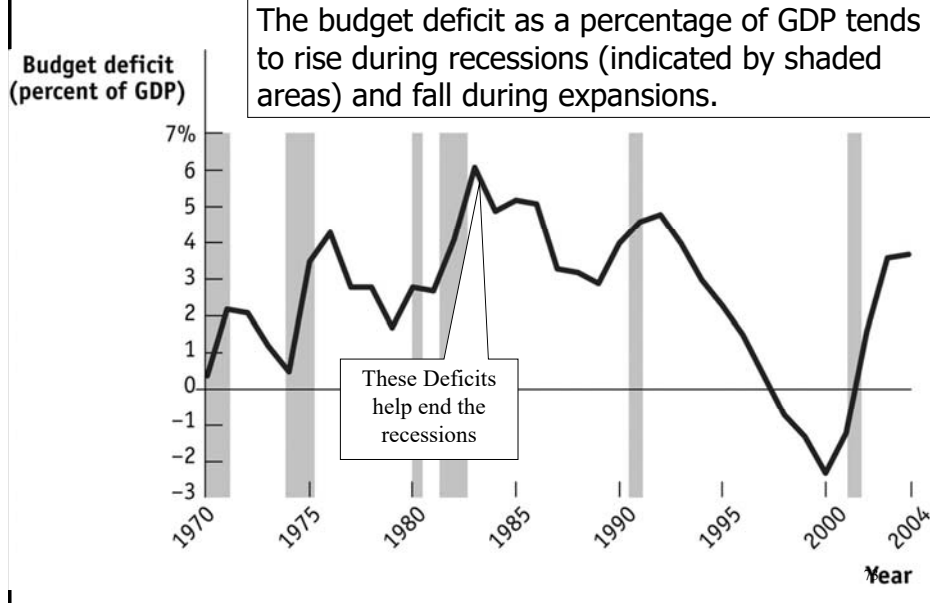
71

Should the Budget be Balanced?

- Most economists don't believe the government should be forced to run a balanced budget *every year* because this would undermine the role of taxes and transfers as automatic stabilizers.
- Yet policy makers concerned about excessive deficits sometimes feel that rigid rules prohibiting—or at least setting an upper limit on—deficits are necessary.

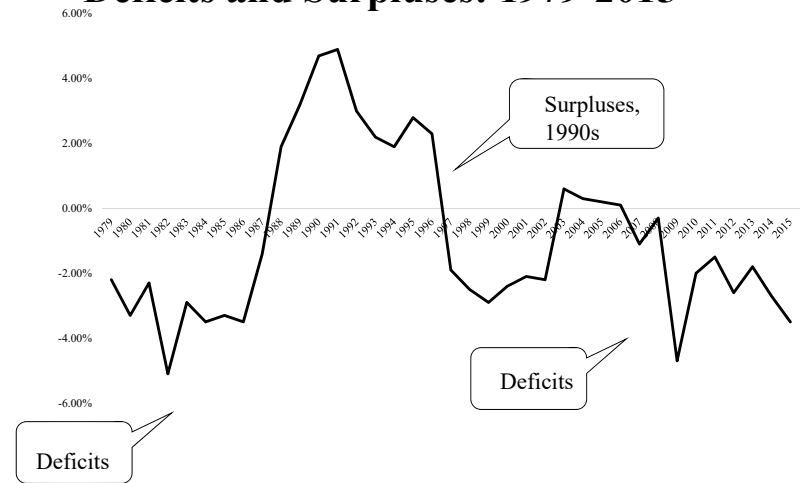
72

Example: The US Federal Budget Deficit & The Business Cycle



Thailand's Budget Balance (% GDP)

Deficits and Surpluses: 1979-2015



รัฐกิจงบประมาณขาดดุลต่อเนื่อง 10 ปี

หน่วย : ล้านบาท

ปีงบประมาณ	2552	2552 รวมงบพิเศษ	2553	2554	2554 รวมงบพิเศษ	2555	2556	2557	2558	2559
1. งบรวมงบประมาณ	1,835,000	1,951,700	1,700,000	2,070,000	2,169,967.5	2,380,000	2,400,000	2,525,000	2,575,000	2,720,000
1.1 งบทำงบบุคลากร	1,336,269.2	1,411,382.4	1,434,710.1	1,662,604.2	1,667,439.7	1,840,672.6	1,900,476.7	2,017,625.8	2,027,858.8	2,100,836.3
1.2 งบทำงบบุคลากร	407,514.5	429,961.8	214,369	344,495.1	355,484.6	438,555.4	450,373.8	441,128.6	449,475.8	543,635.9
1.3 งบทำงบบุคลากร	63,676.1	63,676.1	50,920.9	32,554.6	32,554.6	46,854	49,149.5	52,821.9	55,700	61,991.7
1.4 งบทำงบบุคลากร	27,540.2	46,679.7	0	30,346.1	114,488.6	53,918	-	13,423.7	41,965.4	13,536.1
2. งบรวมงบรายได้	1,585,500	1,604,639.5	1,350,000	1,650,000	1,770,000	1,980,000	2,100,000	2,275,000	2,325,000	2,330,000
3. งบรวมงบขาดดุล (+/ลบ)	(249,500)	(347,060.5)	(350,000)	(420,000)	(399,967.5)	(400,000)	(300,000)	(250,000)	(250,000)	(390,000)

ที่มา : งบรวมงบรายจ่ายประจำปีงบประมาณ 2557
 วัตถุประสงค์ : ศึกษาแนวโน้มการขาดดุล 5 ปีงบประมาณรายจ่ายประจำปี
 ผู้รับผิดชอบ : นายแพทย์ เกตุศักดิ์

วันที่ 26 ตุลาคม 2558

หมายเหตุ : 1. งบประมาณ พ.ศ. 2540 เป็นปีงบประมาณที่ขาดดุล 984,000 ล้านบาท

2. งบประมาณ พ.ศ. 2541 เป็นปีงบประมาณที่ขาดดุล 923,000 ล้านบาท

3. งบประมาณ พ.ศ. 2547 เป็นปีงบประมาณที่ขาดดุล 1,028,000 ล้านบาท

4. งบประมาณ พ.ศ. 2552 เป็นปีงบประมาณที่ขาดดุล 27,540.2 ล้านบาท ซึ่งเป็นปีงบประมาณที่ขาดดุลมากที่สุด

Long-Run Implications

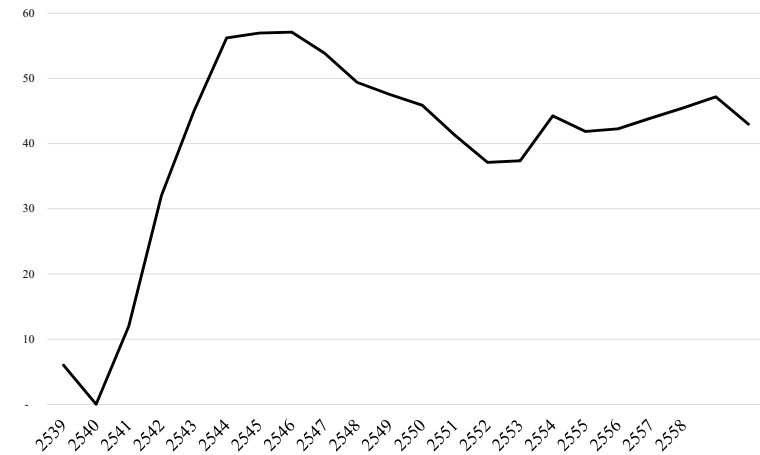
- The government budget accounting is usually calculated on the basis of **fiscal years**.
- Persistent budget deficits have long-run consequences because they lead to an increase in **public debt**.

The Public Debt

- Differentiating between the Deficit and the Debt
 - The *deficit* occurs when government spending is greater than tax revenue
 - The *debt* is the cumulative total of all the government budget deficits less any surpluses
 - Suppose that our deficit declined one year from 200 billion Baht to 150 billion Baht
 - The national debt would still go up by 150 billion Baht
 - So every year that we have a deficit – even a declining one – the national debt will go up

77

Thailand's Public Debt as % of GDP, 1996-2015



78

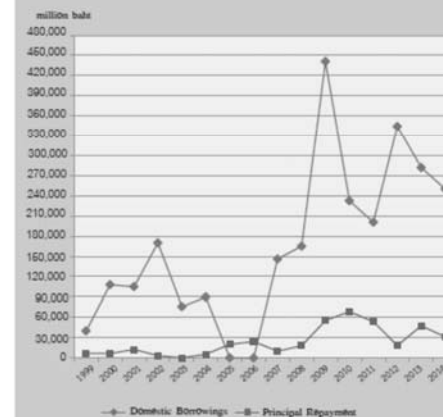
Debt Burden

- Is the national debt a burden that will have to be borne by future generations?
 - As long as we owe it to ourselves, the answer is no.
 - *If we did owe it mainly to foreigners, and if they wanted it paid off, it could be a great burden.*

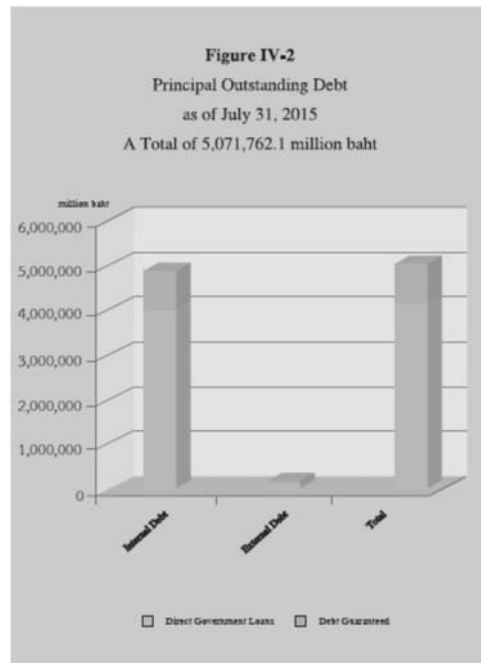
79

Figure II-4

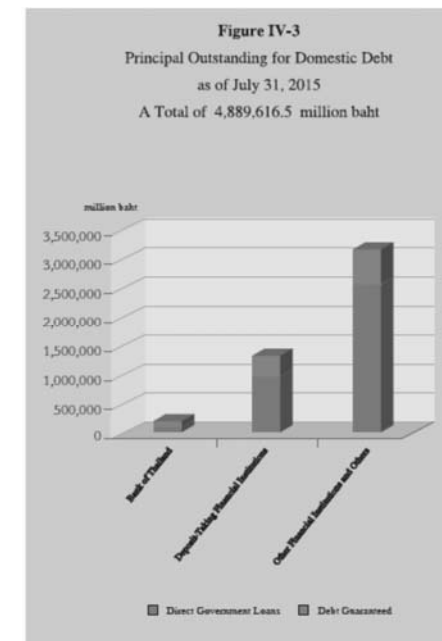
Actual Domestic Borrowings and Principal Repayment
FY 1999-2014



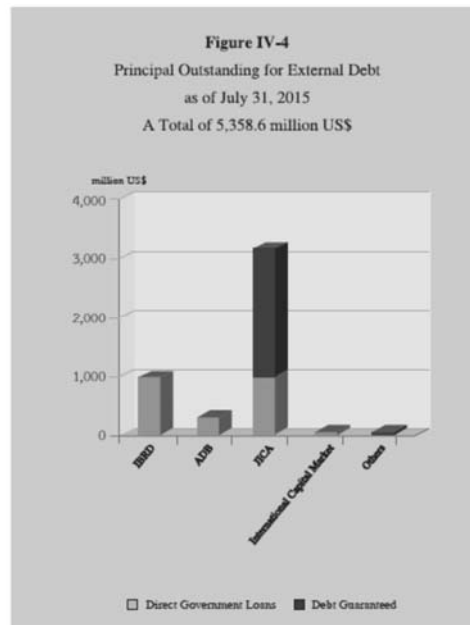
80



81



82



83

Difference Between Individual and Government Debt

- Paying interest on the internal debt involves a redistribution among citizens of the country.
 - It does **not** involve a net reduction in income of the average citizen.
 - **External debt** – government debt owed to individuals in foreign countries.

84

The Public Debt

- When do we have to pay off the debt?
 - We don't. All we have to do is roll it over, or refinance it, as it falls due
 - Each year several hundred billion baht worth of government securities fall due
 - By selling new ones, the Ministry of Finance keeps us going
 - In the future, even if we never pay back one baht of the debt, our children and our grandchildren will have to pay hundreds of billions of baht in interest
 - At least to that degree, the public debt will be a burden to future generations

85

Interest Rates and Debt Burden

- The interest rate determines annual debt service.
- The annual *debt service* is the interest rate on debt times the total debt.

Interest payments on the debt is government revenue that cannot be spent on social security or welfare.

- That is what people mean when they say a deficit is burdening future generations.

86

The Public Debt

- Why not go ahead and just pay off the debt?
 - Economists predict that following this course would have catastrophic consequences
 - If we tried to pay off the debt too quickly, it might even send us into a deep depression
 - If we keep running large surpluses and pay down the national debt, this will cause a problem for both the Fiscal and Monetary Sectors
 - As the national debt goes down, eventually there would be no securities for them to buy
 - Still, it is a whole lot better to have problems like these than those caused by running huge budget deficits every year

87

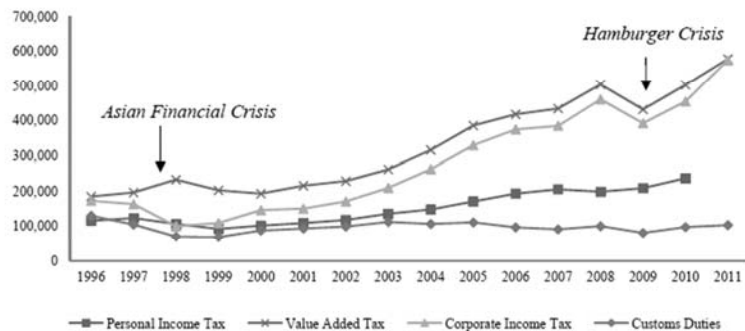
The Size of Government Revenues

- At the Federal level, the personal income tax is the single most important source of revenue.
- At the State and Local levels:
 - Grants from the federal government are over 20% of revenues
 - Sales taxes and Property taxes are each about 18% of revenues.
- Changes in the Real Value of Debt is also an important source of government revenue.

1-88

Thailand's Post-1997 Crisis Government Revenue Structure

Figure 10 Revenues from Personal Income Tax, Corporate Income Tax, Customs Duties and Value-Added Tax during 1996-2011 (in Million Baht)



Source: Fiscal Policy Office

89

Thailand's Post-1997 Crisis Government Revenue Structure

Table 3 Number of Taxpayers in Thailand 2001-2006

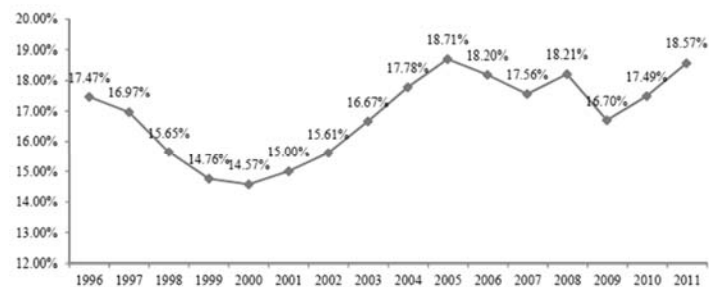
Type of Taxes	2001	2002	2003	2004	2005	2006
Personal Income Tax						
Percentage of Taxpayers over Total Workforce	18%	18%	20%	21%	19%	16%
Percentage of Tax Exemptions over Taxable Income	20%	19%	19%	19%	18%	23%
Corporate Income Tax						
Percentage of Corporate paying tax over Total registered corporate	23%	23%	28%	28%	30%	n.a.

Source: Pinto et al (2007)

90

Thailand's Post-1997 Crisis Government Revenue Structure

Figure 11 Percentage of Total Tax Revenue over GDP during 1996-2011

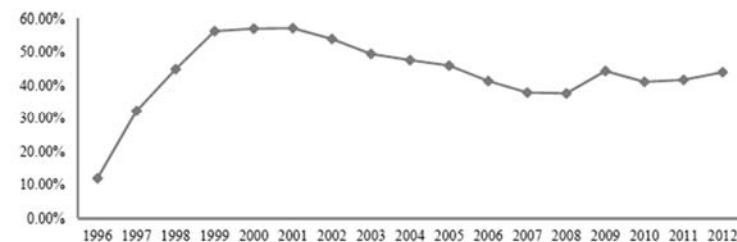


Source: Fiscal Policy Office

91

Politics and Prospects of Thailand's Public Finance

Figure 12 Percentage of Public Debt over GDP during 1996-2012

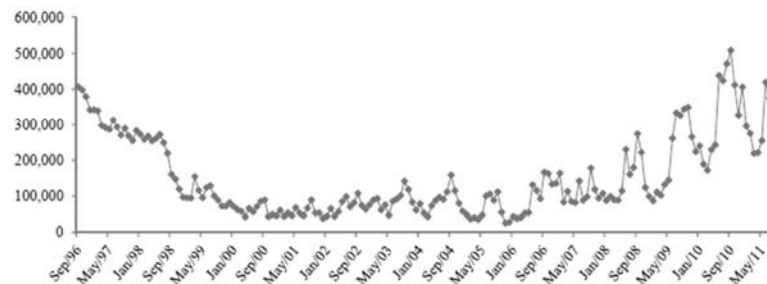


Source: Public Debt Management Office, Ministry of Finance

92

Politics and Prospects of Thailand's Public Finance

Figure 13 Fiscal Reserves during 1996- 2011 (in million Baht)



Source: *Thailand's Budget in Brief*, Bureau of the Budget of Thailand and *Monetary Authority Survey*, Bank of Thailand

93

Topic 1 Summary

- Public Finance/Public Sector Economics focuses on **government's role in the allocation of real resources** - that includes, but is not limited to, taxing and govt spending.
- The Mechanistic view vs. Organic view of government.
- The legal framework and fiscal rules/guidelines in each country outlines the roles of and constraints placed on state, and federal government economic activity.
- The expenditure and revenue structure of the public sector determine the impacts on public debts and fiscal policy implications in the future.

1-94

Appendix: Doing Research in Public Finance

- Public Finance journals
 - *International Tax and Public Finance*
 - *Journal of Public Economics*
 - *National Tax Journal*
 - *Public Finance*
 - *Public Finance Quarterly*
- General-interest journals
 - *American Economic Review*
 - *Journal of Economic Perspectives*
 - *Journal of Political Economy*
 - *Quarterly Journal of Economics*
 - *Review of Economics and Statistics*

1-95

Doing Research in Public Finance

- Other sources
 - *Journal of Economic Literature*
 - Brookings Institution's *Studies of Government Finance*
 - Congressional Budget Office reports
 - National Bureau of Economic Research working papers
 - Tax Foundation's *Facts and Figures on Government Finance*
- U.S. Government Printing Office publications
 - *Statistical Abstract of the United States*
 - *Economic Report of the President*
 - *Budget of the United States*
 - *U.S. Census of Governments*
 - *Historical Statistics of the United States from Colonial Times to 1970*

1-96

Doing Research in Public Finance

- Public Finance data available on Internet
 - *Resources for Economists on the Internet* (www.rfe.org)
 - U.S. Census Bureau (www.census.gov)
 - University of Michigan's Office of Tax Policy Research (www.otpr.org)
 - Urban-Brookings Tax Policy Center (www.taxpolicycenter.org)

1-97

Homework

(Students are expected to prepare to discuss their answers in the next class- participation scores will be noted.)

- Explain how you would expect a libertarian, a social democrat and someone with an organic conception of the state to react to the following laws:
 - a) A law prohibiting receiving compensation for organ donation
 - b) A law mandating helmet use for motorcyclists.
 - c) A law mandating child safety seats.
 - d) A law prohibiting prostitution.

Phijaisanit (2017)

98