

EE460: Fiscal Policy

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Lessons from Thailand's Fiscal Policy*

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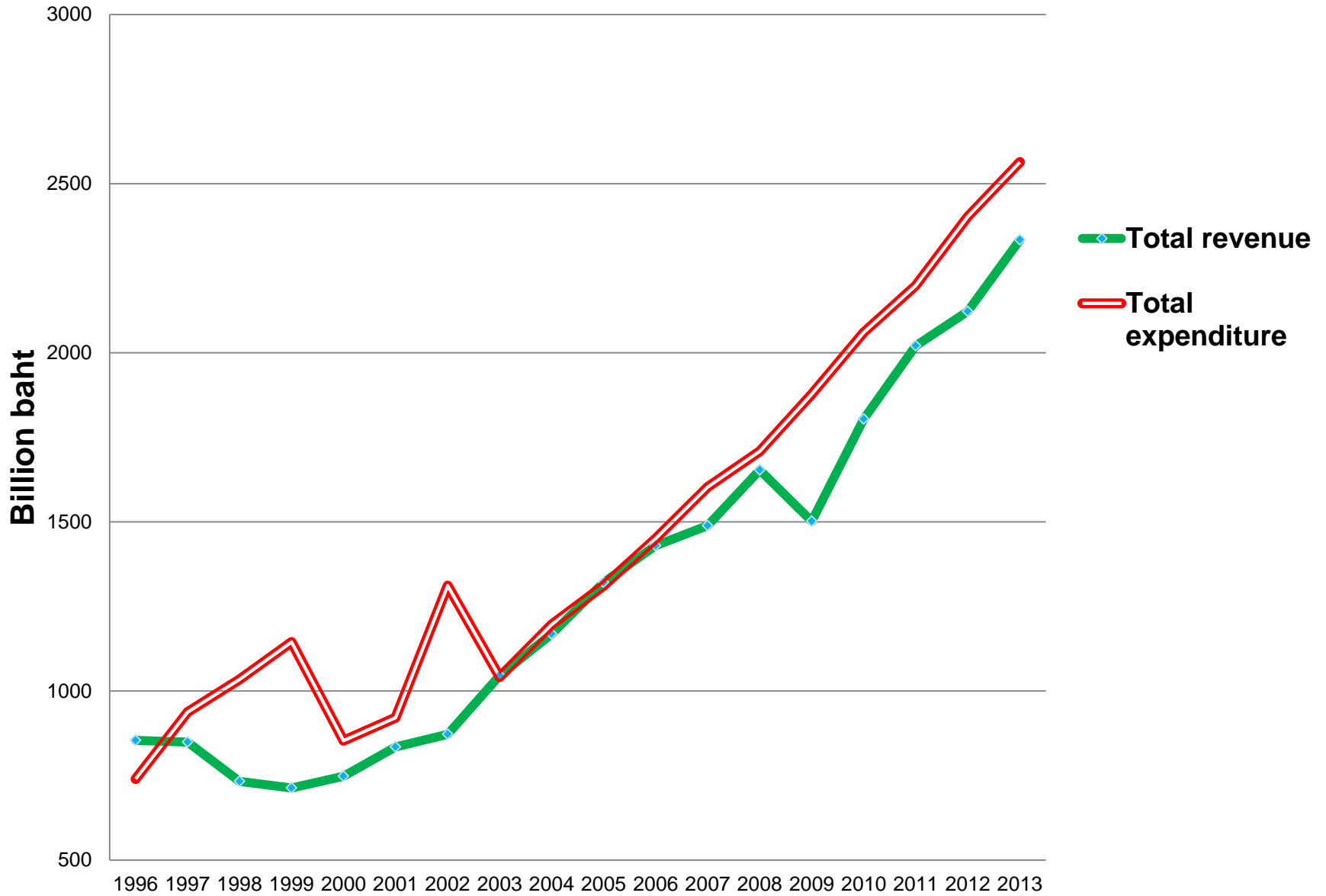
Abstract

If rules of fiscal sustainability are observed, available fiscal space permits effective countercyclical fiscal programs. The importance of automatic fiscal stabilizers should not be underestimated. The discretionary impact of increased public spending and tax cuts can be amplified if implemented when consumer confidence investor sentiments are high. There is no evidence to support non-Keynesian effects of fiscal policy in Thailand. Unwarranted fears of unsustainable public debt and ultra-conservative fiscal policy has cost the country a lost opportunity for achieving high growth. After the military coups in 2006 and 2014, the Thai economy experienced the lowest economic growth among ASEAN countries. The budget spent on economic services was diverted into defense, increases in public sector's wages, and income transfer payments. The opportunistic political budget model predicts higher fiscal spending by incumbent democratic governments before an election to gain votes. In the case of Thailand, such spending comes after military coups, akin to a military business cycle spending.

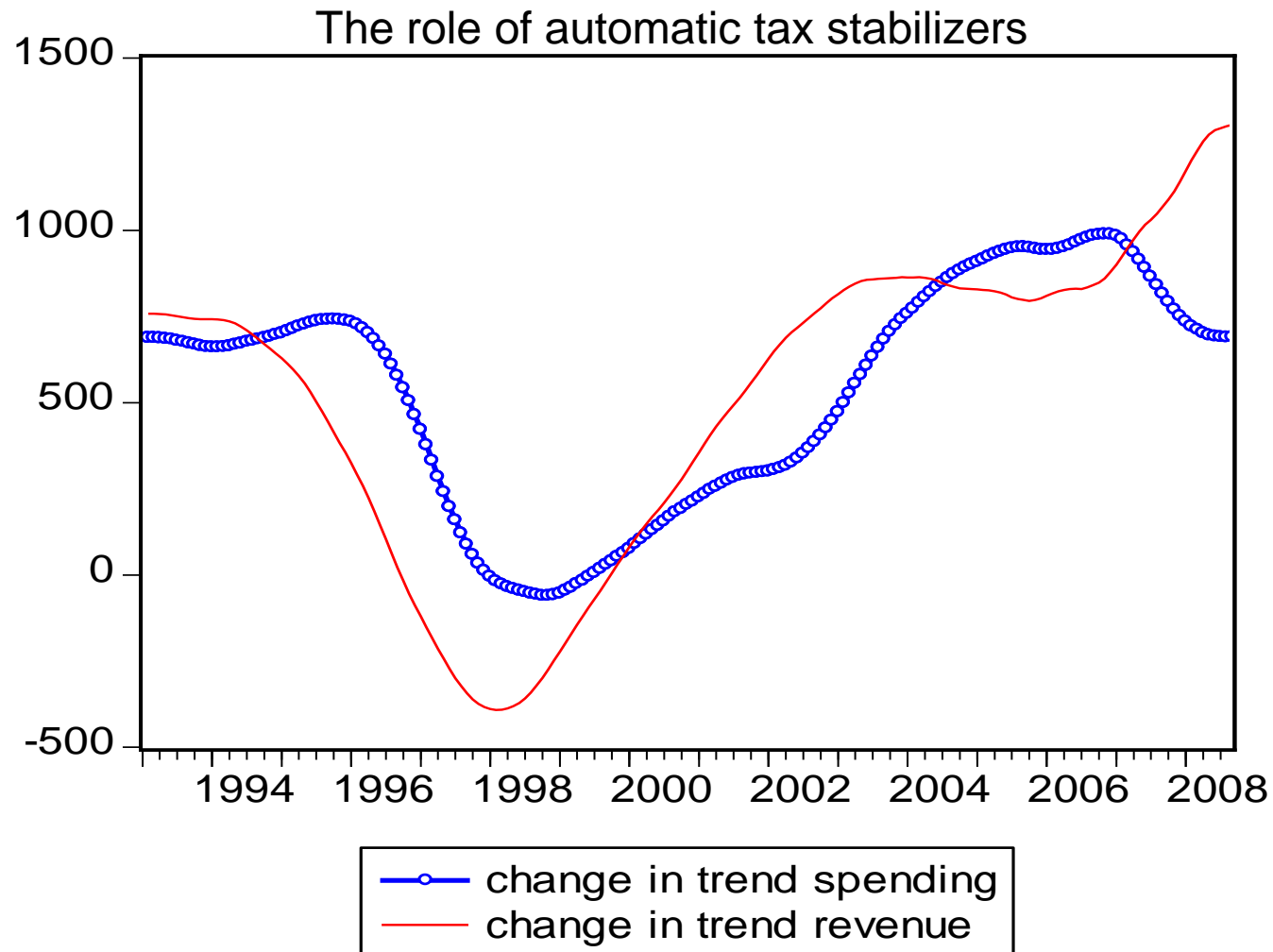
Outline

- Fiscal stimulus and recession
- Spending and taxation: long-term relationship
- Rules for fiscal sustainability
- Automatic fiscal stabilizers
- Fiscal policy and economic growth
- Lesson from Thailand's fiscal policy
- Tax avoidance and tax evasion

Central Government Finance



Fiscal stance shown by structural budget deficit



Budget deficit and economic growth

- High deficits are associated with periods of low growth.
- High deficits are proxies for high public debt which imply **higher** taxes and **lower** public capital spending in the future.
- Large deficits are a symptom of macroeconomic **instability** which is detrimental to growth.

Table 1: Correlation coefficients of fiscal surplus (% GDP)

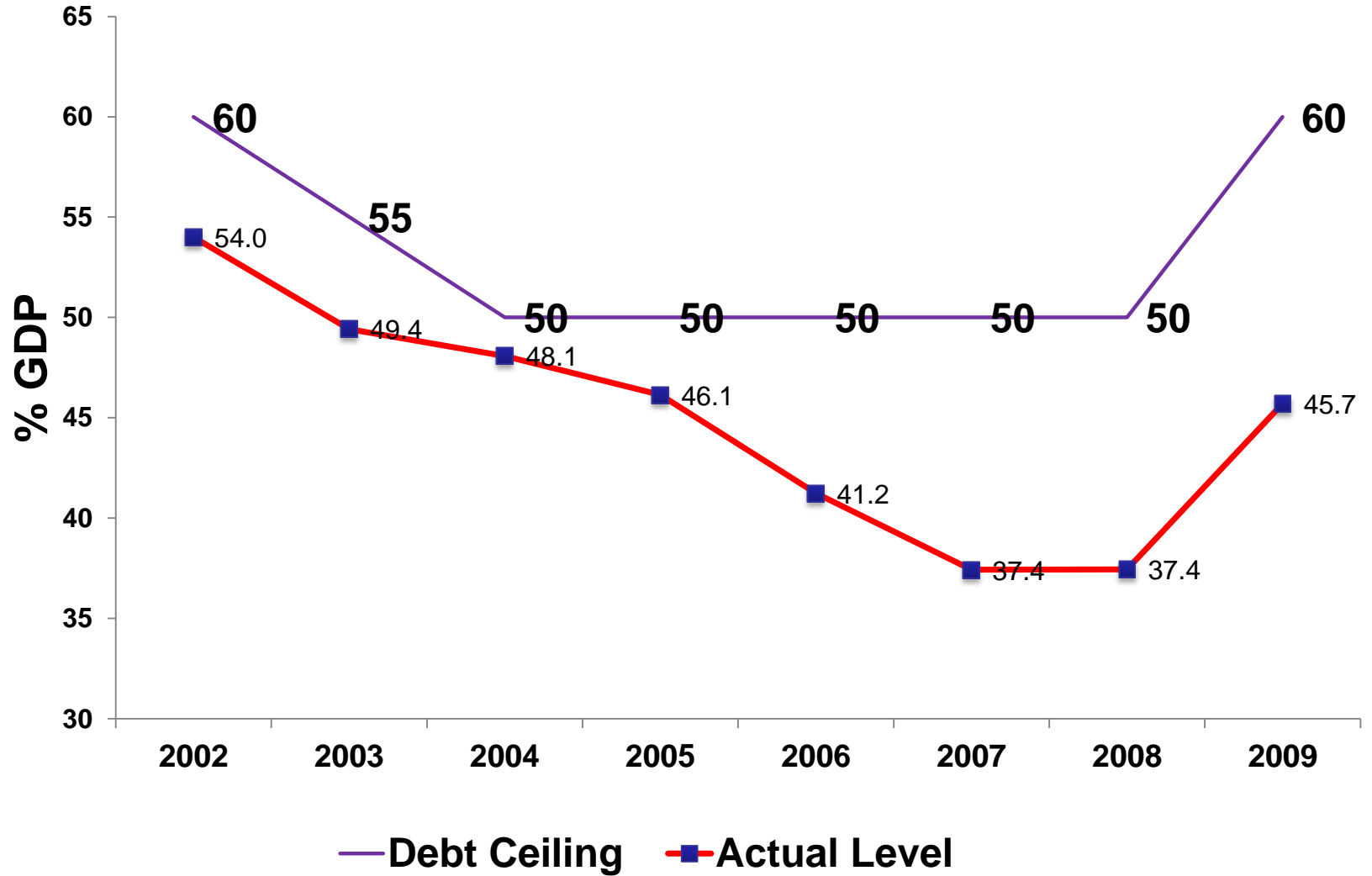
| | Growth | inflation | Current Account surplus |
|-----------|--------|-----------|-------------------------|
| 1990-2012 | 0.66 | 0.55 | -0.83 |
| 1990-1999 | 0.81 | 0.21 | -0.87 |
| 2000-2012 | 0.44 | 0.65 | -0.53 |

Source: Calculation is based on data from the Bank of Thailand.

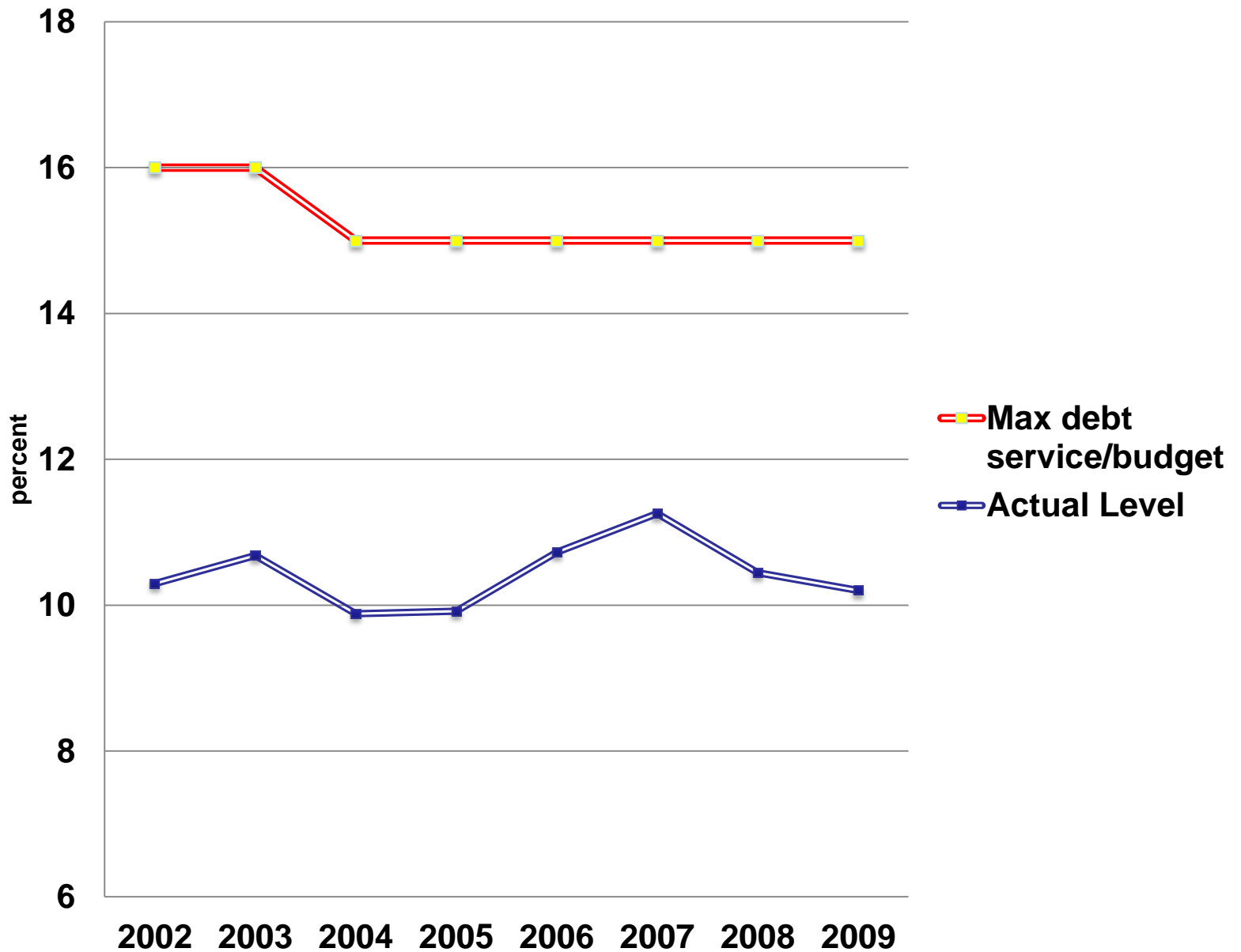
Rules of fiscal sustainability

- Size of public debt (below 60% of GDP)
- Size of debt service (below 15% of total budget)
- Public capital spending (above 25% of total budget)
- Ratio of foreign debt-service to exports (below 5 %)

Ceiling on Public Debt

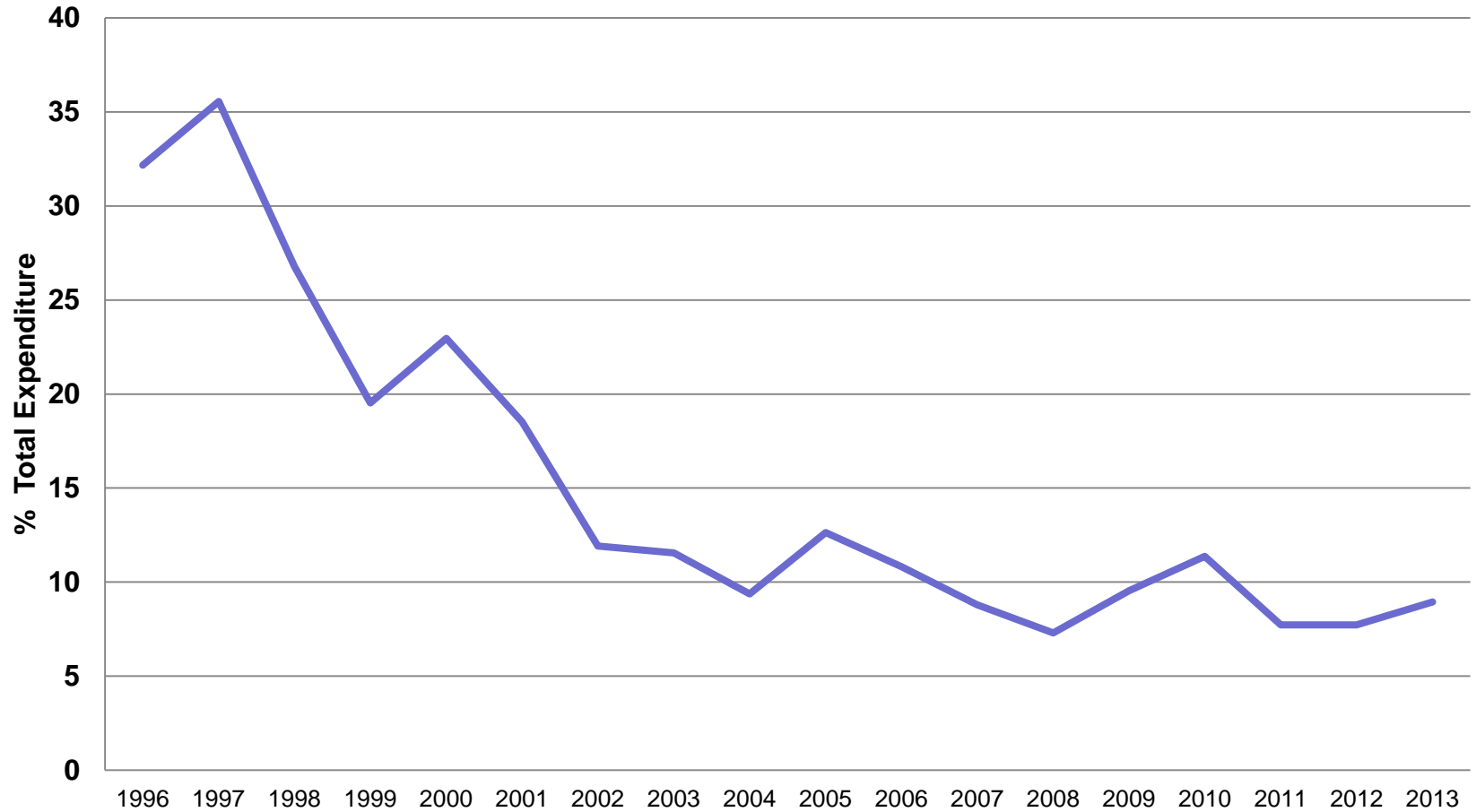


Debt Service to Total Planned Spending

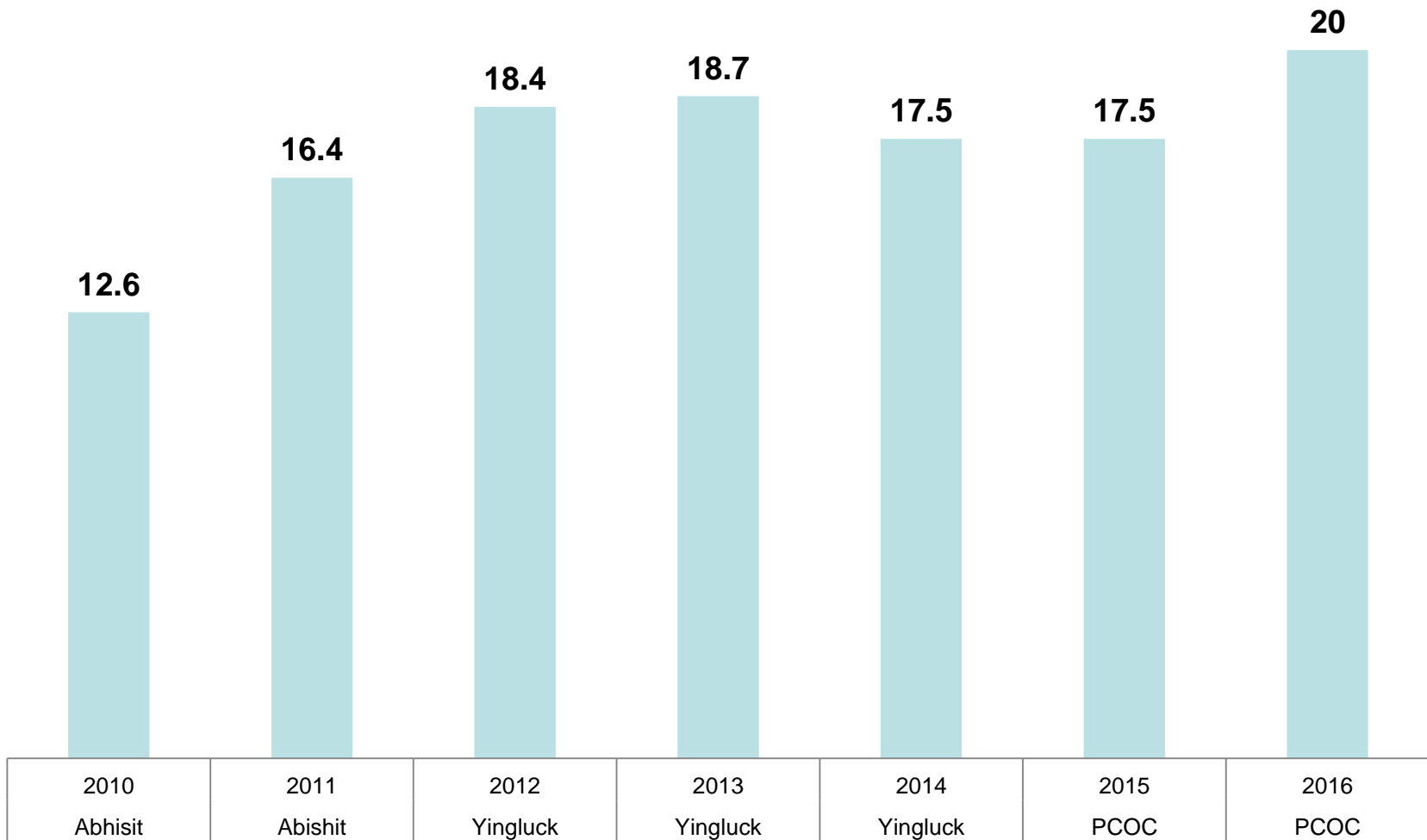


Capital spending must not fall below 25% of total budget

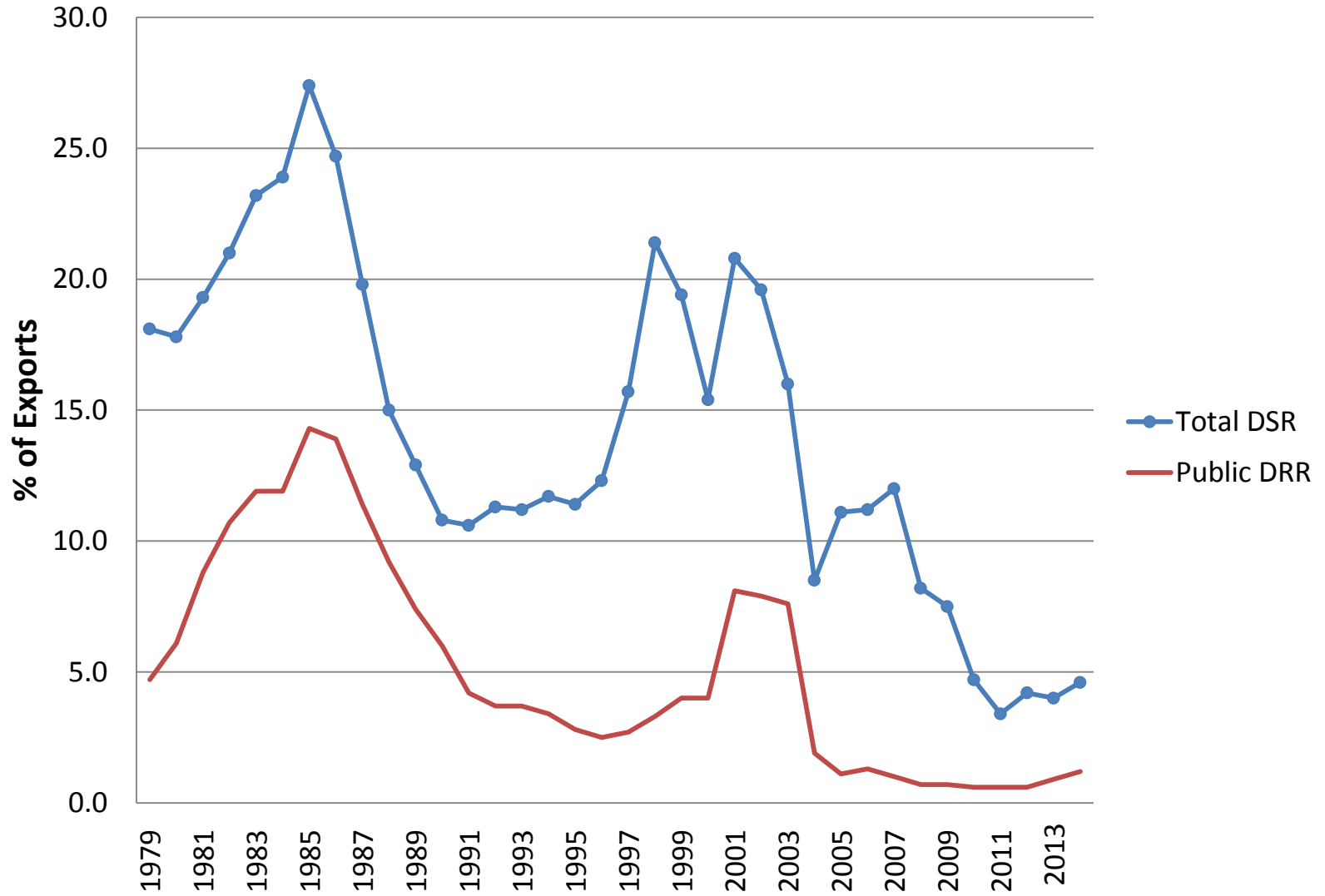
Share of capital expenditure



Share of public investment (% total budget)



Thailand's Debt Service Ratio



Fiscal variables, growth and output nexus

$$(1) \quad \text{Log}(R) = \alpha + \beta \cdot \log(Y) + \gamma \cdot \log(P)$$

$$(2) \quad \text{Log}(G) = \delta + \eta \cdot \log(Y) + \theta \cdot \log(P)$$

$$(1)-(2) \quad \text{Log}(R/G) = (\alpha - \delta) + \\ + (\beta - \eta) \log(Y) \\ + (\gamma - \theta) \log(P)$$

$$\text{Log}(R/G) = (\alpha - \delta) + (\beta - \eta) \log(Y) + (\gamma - \theta) \log(P)$$

If $\beta > \eta$ and If $\gamma > \theta$

automatic stabilizer mitigates

the impact of booms and busts

on aggregate demand

Table 2: Revenue and expenditure elasticities (Jan 1993- Dec 2013)

| | Price elasticity | Output elasticity |
|-------------|------------------|-------------------|
| Revenue | 0.65 | 0.72 |
| Expenditure | 1.51 | 0.33 |

Source: Estimated coefficients obtained from running a double-log regression of revenue and expenditure on manufacturing production and consumer price indexes.

Inflation tax

- Public spending must be controlled during high inflation to avoid fueling inflationary pressure ($1.51 > 0.65$).
- Inflation can be spiraling if the government insists on maintaining the level of real expenditure during the time of high inflation.

Automatic fiscal stabilizers

- Revenue elasticity with respect to output is ***greater*** than expenditure elasticity.
- In table 2: $0.72 > 0.33$ Output growth leads to revenue increases more than expenditure
- Increasing tendency for budget surplus (deficit) during booms (slump)
- Inflation reduces tax revenue, but it does not significantly increase public spending.
- The government cannot rely on inflation tax.
- There is a deep-seeded belief that public investment can contribute to growth during stagnation.

A caveat after recovery

- If a country has established fiscal automatic stabilizers, fiscal policy can be stabilizing and it does not have to depend on a long-delayed budgetary process.
- Expansionary fiscal policy employed to counteract short-term fluctuations must be withdrawn after the economy is on its recovery path.

Addicted to populism

- If not, it can be a burden to the government and result in adverse impact on the economy.
- The risk and adverse consequences of withdrawal of fiscal spending consequences must be considered before implementing fiscal expansion in response to insufficient aggregate demand.

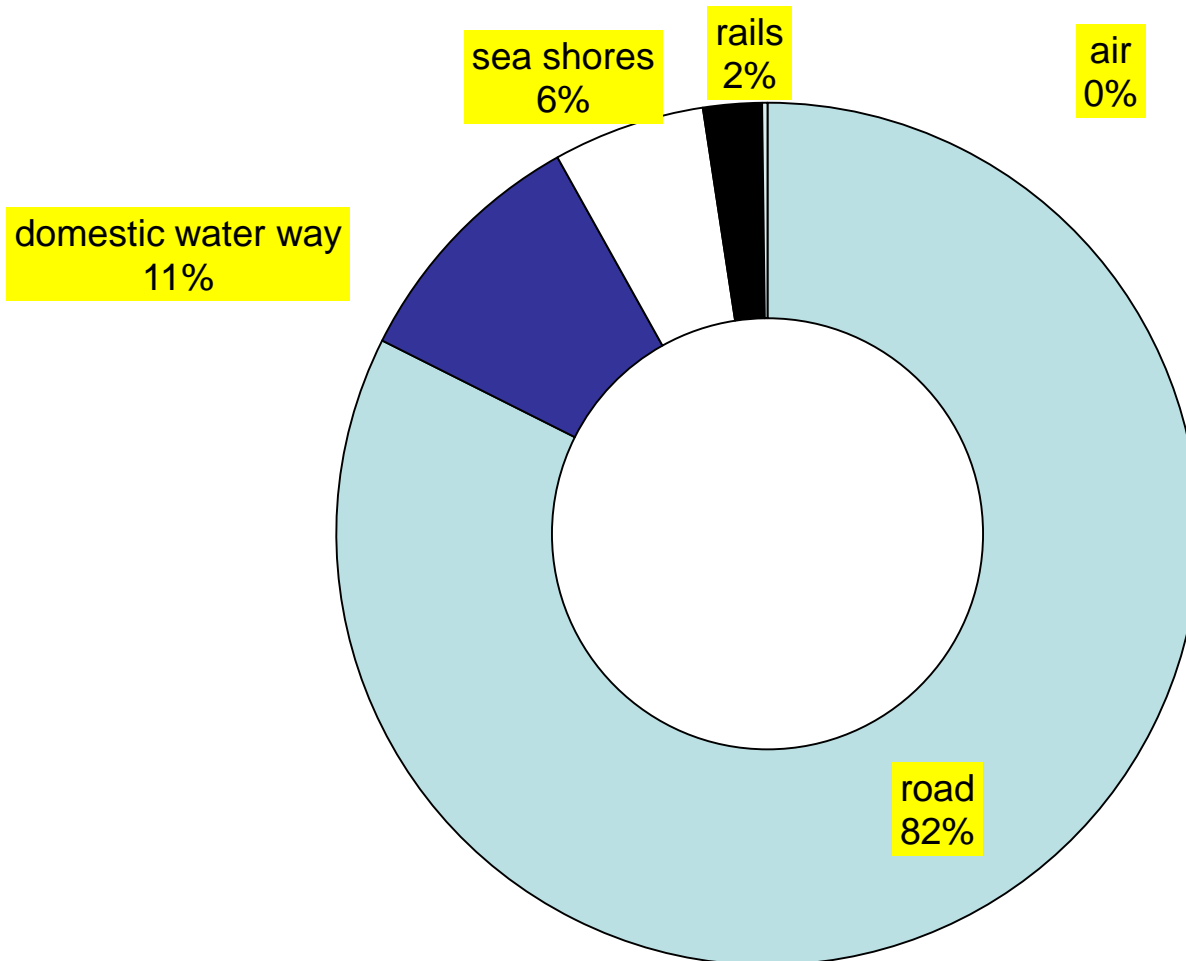
Public consumption vs. public investment

- Taxes on investment and income have a detrimental effect on growth since taxes reduce the private return to capital accumulation.
- **Government consumption has no permanent impact on growth** since the productivity of the private sector is unaffected.
- **Public investment** has positive impact since it enhances the productivity of the private sector. (Complementarity between public and private capital stock)

Capital vs. current (consumption) public spending

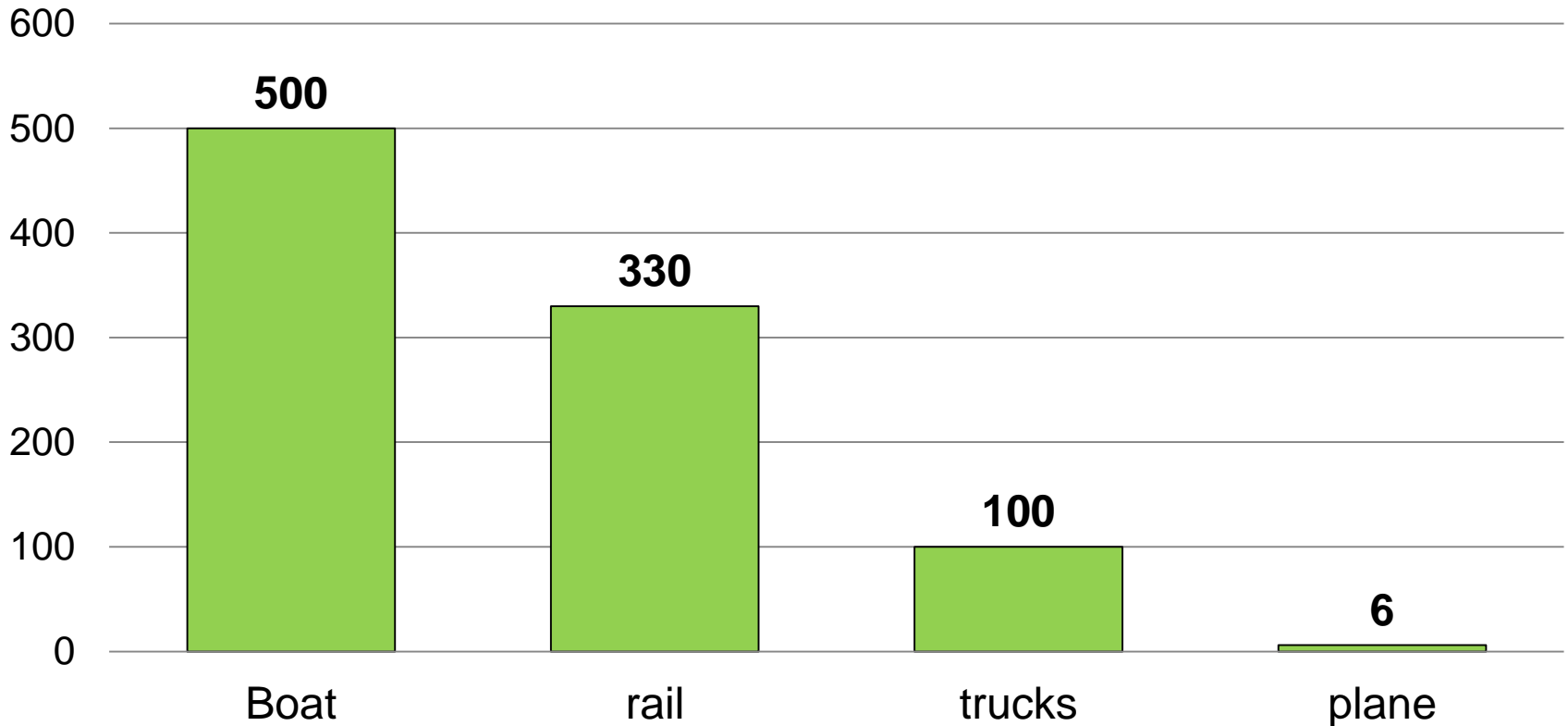
- Structure of public expenditure matters for long-term growth.
- Rising share of current spending is detrimental to long-term growth in the long-run.
- How to finance capital and current spending
- Focus on the marginal benefits and marginal cost of infrastructure spending such as transportation

Thailand's mode of transportation % share

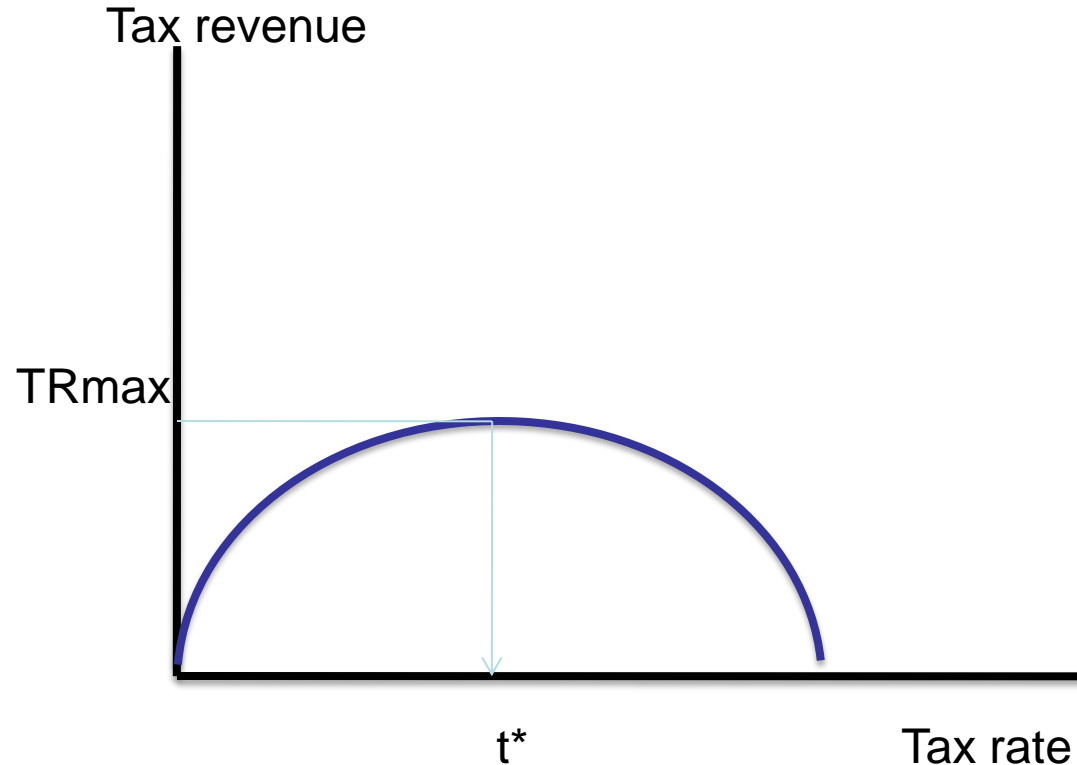


Efficiency differences of transportation modes

Distance (km) covered by different modes of transportation: 5 liters of fuel per ton of freight



Laffer curve: tax rate and tax revenue relationship



Can a tax reduction increase tax revenue?

- The shape of the Laffer curve is determined by the elasticity of labor with respect to the net wage.
- Critics of supply-side economics argue that tax reductions can lead to increased revenue is absurd.
- Which side on the Laffer curve (left or right of the point t^*) the economy is operating?
- Even if tax revenues fail to increase when tax rates fall, it does not mean that tax reduction is necessarily undesirable.

Stylized facts

- The level of development is related to fiscal structure: poor countries rely more on trade taxes, developed countries rely on income taxes.
- Fiscal policy is influenced by the size of the economy (population and GDP level).
- Investment in transport and communication is consistently correlated with growth.
- Public spending on infrastructure has supernormal returns.

To raise or not to raise, that is the question!

- The effects of taxation on growth are difficult to insolate (other factors as well as the two way causation).
- Fiscal space is impaired by high debt-GDP ratio. The small fiscal space reduces the government's ability to counteract recession.
- Should the government raise the value added tax rate?
- Is there any limit to government spending?

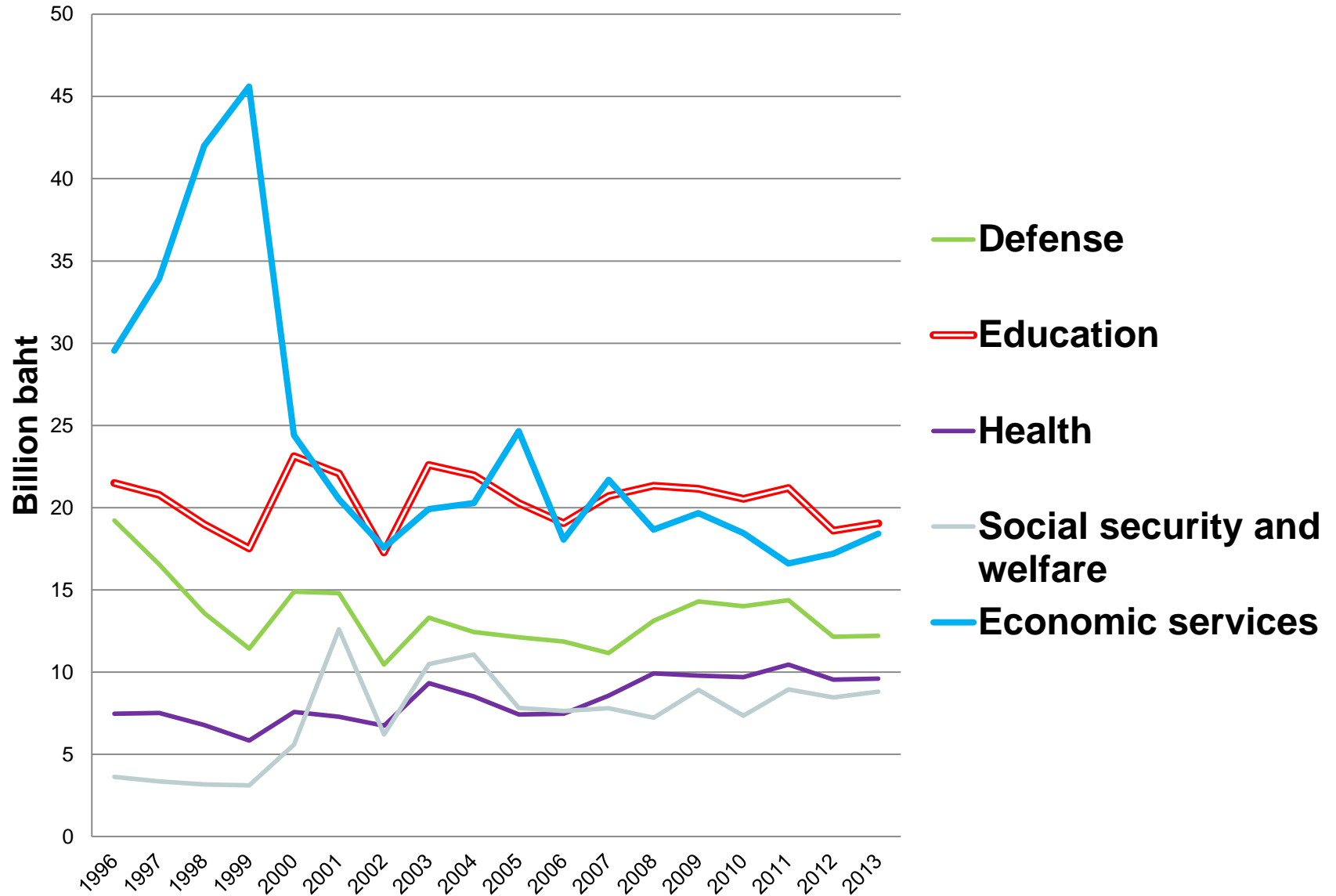
To stabilize the public debt

- To keep the Debt-to-GDP constant, the government must increase its primary surplus in line with the increase in $(r-g)$.
- The spending cuts or tax increases are likely to prove politically costly, generating even more political uncertainty and the need for an even higher interest rate.
- A sharp fiscal contraction is likely to lead to a recession, decreasing the growth rate.

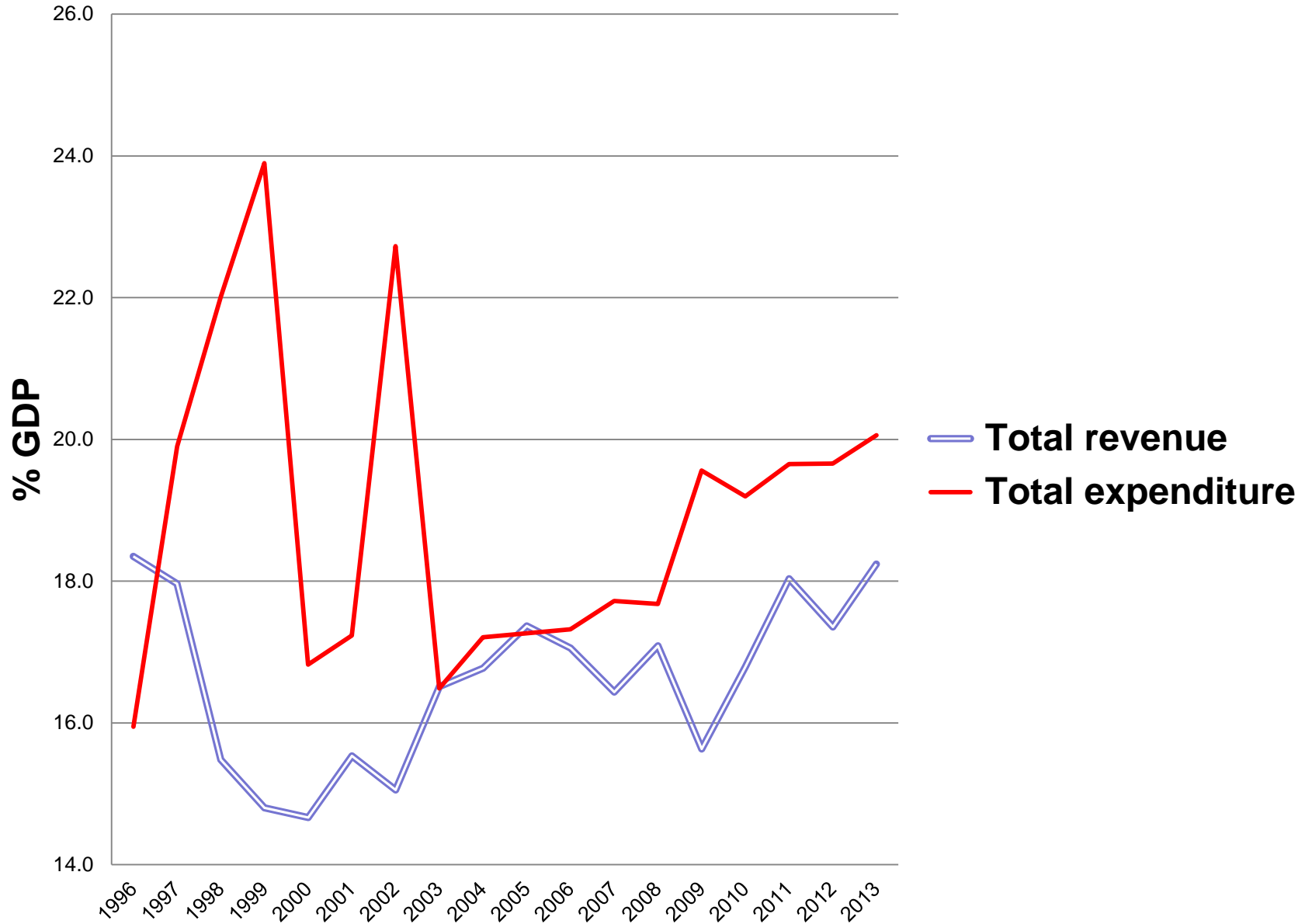
$$\frac{B_t}{Y_t} - \frac{B_{t-1}}{Y_{t-1}} = (r - g) \left(\frac{B_{t-1}}{Y_{t-1}} \right) + \frac{(G_t - T_t)}{Y_t}$$

- The increase in the ratio of debt (B) to GDP will be larger,
- The higher the real interest rate (r)
- The lower the growth rate of output (g)
- The higher the initial debt ratio (B/Y)_{t-1}
- The higher the ratio of the *primary deficit* to GDP (G-T)/Y

Public Expenditure by Functions



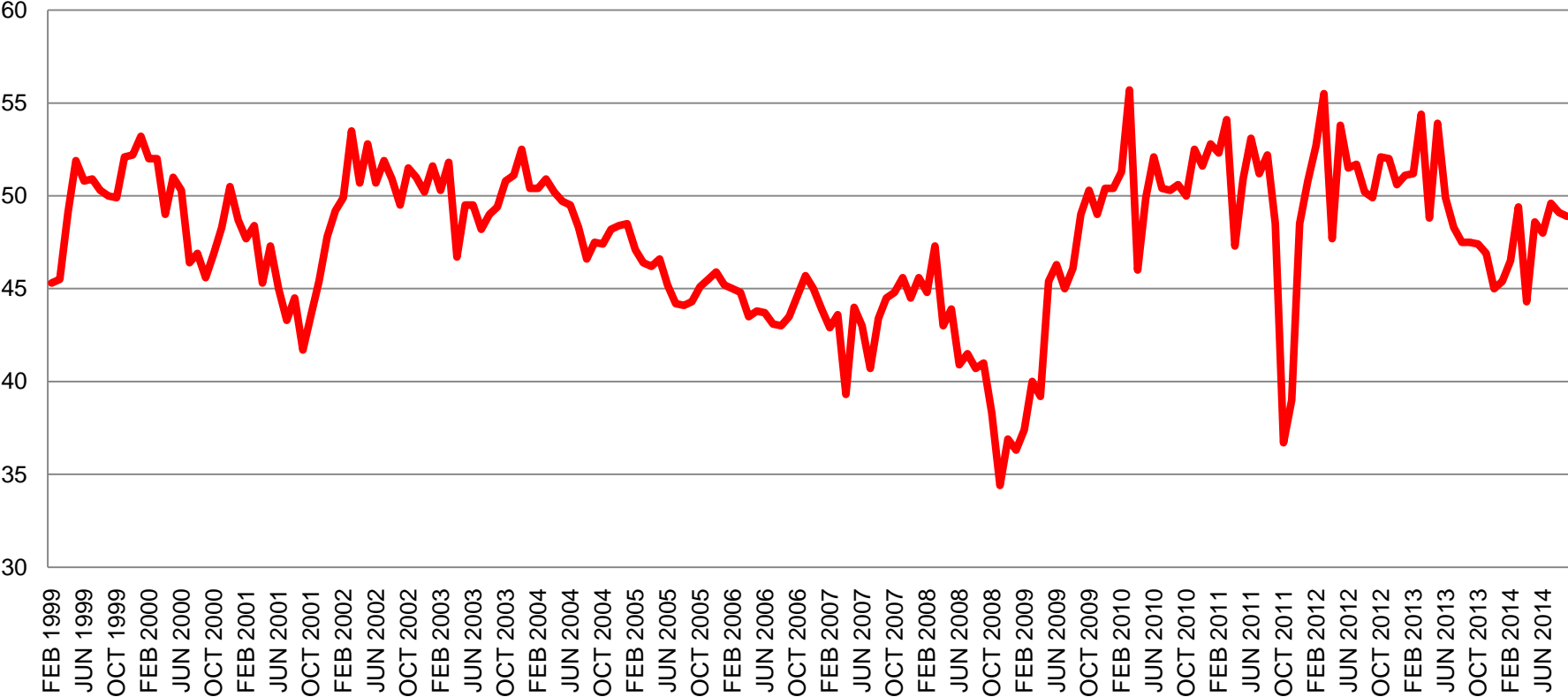
Public Revenue and Expenditure



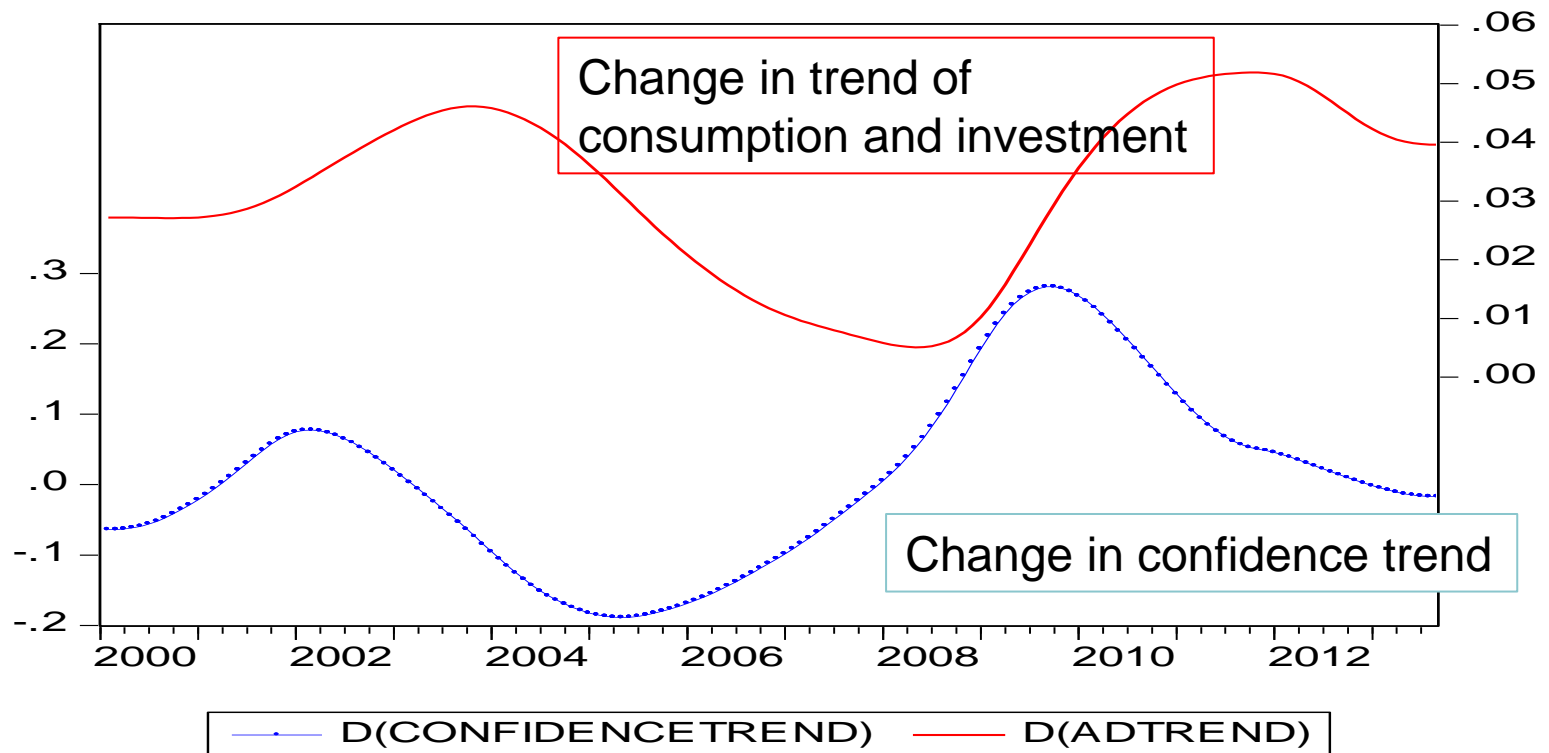
Will fiscal stimulus work?

- Fiscal policy was the only option left during uncertain time.
- Multiplier effect might be limited if the income transfer is regarded as transient.
- In a mild cycle, pessimistic expectations can turn a mild recession into a deep economic depression.
- Consumer confidence and favorable investor sentiment are required for effective fiscal stimulus

Business Sentiment Index



Confidence (lead) and Private Aggregate Demand (lag)



Conditions for effective fiscal stimulus

- Well-timed spending and taxing
- Macroeconomic stability (counter-cyclical)
- Fiscal sustainability must be maintained
- Well-targeted spending to ensure the largest demand impact (high mpc group)

Conditions for effective fiscal stimulus

- Economy-wide (pervasive) liquidity constraints situation (sure spenders: spending increases right after tax cuts)
- Permanent vs temporary policy changes (tax reform vs. temporary tax relief)

Fiscal strategies for long-term growth

- Role of automatic stabilizers cannot be underestimated: it is good to establish built-in stabilizers such as progressive income tax system.
- Contemporaneous tax finances only current expenditure, while capital expenditure can be financed by issuing government bonds: for fiscal sustainability and fairness
- MC and MB principle applies to choices of spending: submarine, tanks, F16s, or schools and hospitals.

Those Thais who pay income tax

- Personal income tax collections at just 2% of GDP are particularly low, partly because only ***one-tenth*** of the workforce pays tax, while the corporate income tax base has been eroded through excessive exemptions and deductions.
- The IMF recommended the government remain committed to its plan of tax reform as tax revenue is too low.
- Here is the new tax structure by PCOC government

A new personal income tax structure aims to induce high-income earner to pay tax and enhance Thailand's competitiveness

Unit: Baht

| Tax structure | | |
|---------------|---------------------|------------------------|
| Tax rate | New taxable income | Current taxable income |
| Exempt ▶ | 0-150,000 | 0-150,000 |
| 5% ▶ | 150,001-300,000 | 150,001-300,000 |
| 10% ▶ | 300,001-500,000 | 300,001-500,000 |
| 15% ▶ | 500,001-750,000 | 500,001-750,000 |
| 20% ▶ | 750,001-1,000,000 | 750,001-1,000,000 |
| 25% ▶ | 1,000,001-2,000,000 | 1,000,001-2,000,000 |
| 30% ▶ | 2,000,001-5,000,000 | 2,000,001-4,000,000 |
| 35% ▶ | More than 5,000,000 | More than 4,000,000 |



| Tax allowances | | |
|--------------------|---|---|
| Allowances | New structure | Current structure |
| Personal allowance | ▶ 60,000 baht | 30,000 baht |
| Expense allowance | ▶ Up to 50% of annual income but not exceeding 100,000 baht | Capped at 40% of annual income but not exceeding 60,000 baht |
| Child allowance | ▶ 30,000 baht per child; no limit for the number of kids, with no education allowance | 15,000 baht per child; limited to three kids, with an education allowance of 2,000 baht per child |

Tax Avoidance (legal but unethical) and tax evasion (illegal)

- **Pfizer Inc.** is an American [global pharmaceutical](#) corporation headquartered in [New](#) York in 2016, Pfizer Inc. was expected to merge with [Allergan plc](#), in a deal that would have been worth \$160 billion, to create the [Ireland](#)-based "Pfizer plc".
- Corporate income tax rate in NYC is 35% while 6.5 % for corporation with business arising from research and development in Ireland
- This was the motivation for Pfizer to move the HQ to Ireland.
- The merger was called off in April 2016 by the US government.

Unethical business practice

- SIXTEEN Thai people have so far been confirmed to be listed in the "Panama Papers" - the huge trove of documents released recently that reveals individuals and entities from countries around the world who set up secret offshore accounts, according to the Anti-Money Laundering Organization (AMLO).
- Businessmen have used offshore companies to avoid paying a lot of tax or paying redundant taxes, which are legitimate and many countries accept the practice as an asset management method, although it may not be ethical.
- These panama cases are not frauds such as VAT frauds or under-invoicing on imported cars, etc.
- On fund transfers, any amount transferred out of the country is currently subject to a 15 per cent tax imposed by the Revenue Department.

Fiscal space

- Thailand's fiscal policy was conservative because spending was constrained by tax capacity.
- The reason behind this fiscal prudence is related to conservative budgetary laws.
- Debt-to-GDP is low, providing fiscal space for the government to counteract the future external shocks.

Characteristics of A Resilience Economy

- Sustainable CA Deficit/GDP
- Low External debt/GDP (both private and public)
- Low Short-term external debt/International reserve
- Low Fiscal deficit/ GDP
- Sustainable Public debt/GDP
- $(\pi - \pi^*)^2$ Squared Deviation from inflation target, measuring how constrained the central bank is to respond to crisis with countercyclical policy
- Less degree of fiscal fragility: The presence of credit booms and busts

Conclusion

- Fiscal policy can become an effective means to spur growth during the time when consumer and investor confidence is strong.
- When business sentiment is low, expansionary impact of fiscal deficit will have minimal impact on the economy.

Conclusion

- Rules of fiscal sustainability must be strictly obeyed.
- Tax instruments have become an important stabilizing tools, while public spending did not exhibit counter-cyclical response.
- Tax-financed budget deficit is less inflationary than bond financing deficit.

Concluding remarks

- A sharp fiscal contraction is likely to lead to a recession, decreasing the growth rate.
- Private consumption and business confidence are crucial to sustainable recovery.
- Long-term growth is adversely affected by the slowdown in public investment.

Discussion questions

- In response to a triple-dip global recession, how should the Thai government conduct its fiscal policy?
- For distribution and revenue purposes, should the government employ inheritance and property taxes?
- What are likely impacts of 3.3 trillion baht mega infrastructure spending programs on output, price levels and current account?