

# **Fiscal Policy for Long-term Growth and Price Stability**

**Bhanupong  
Lecture 25**

# Course Syllabus

## Lecture 25

### **Fiscal policy, Fiscal sustainability, and long term growth**

- The role of fiscal policy as a tool for stabilization.
- Can fiscal expansion lead to sustainable growth?
- How sustainable is Thailand's fiscal deficit?
- What is the role of institutions in shaping the country's financial stability?

# Fiscal policy and fiscal sustainability

- What would be the consequences of populism policy in 2018? What is the appropriate level of public debt
- How is the long-term growth path affected by fiscal structure and fiscal space?
- “Lessons from Thailand’s Fiscal Policy”  
*Asian Economic Papers* Vol.14, no.3. 2015.

# Asian Economic Papers

Fall 2015, Vol. 14, No. 3, Pages 110-125

Posted Online August 31, 2015.

(doi:10.1162/ASEP\_a\_00384)

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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.

# Key Words

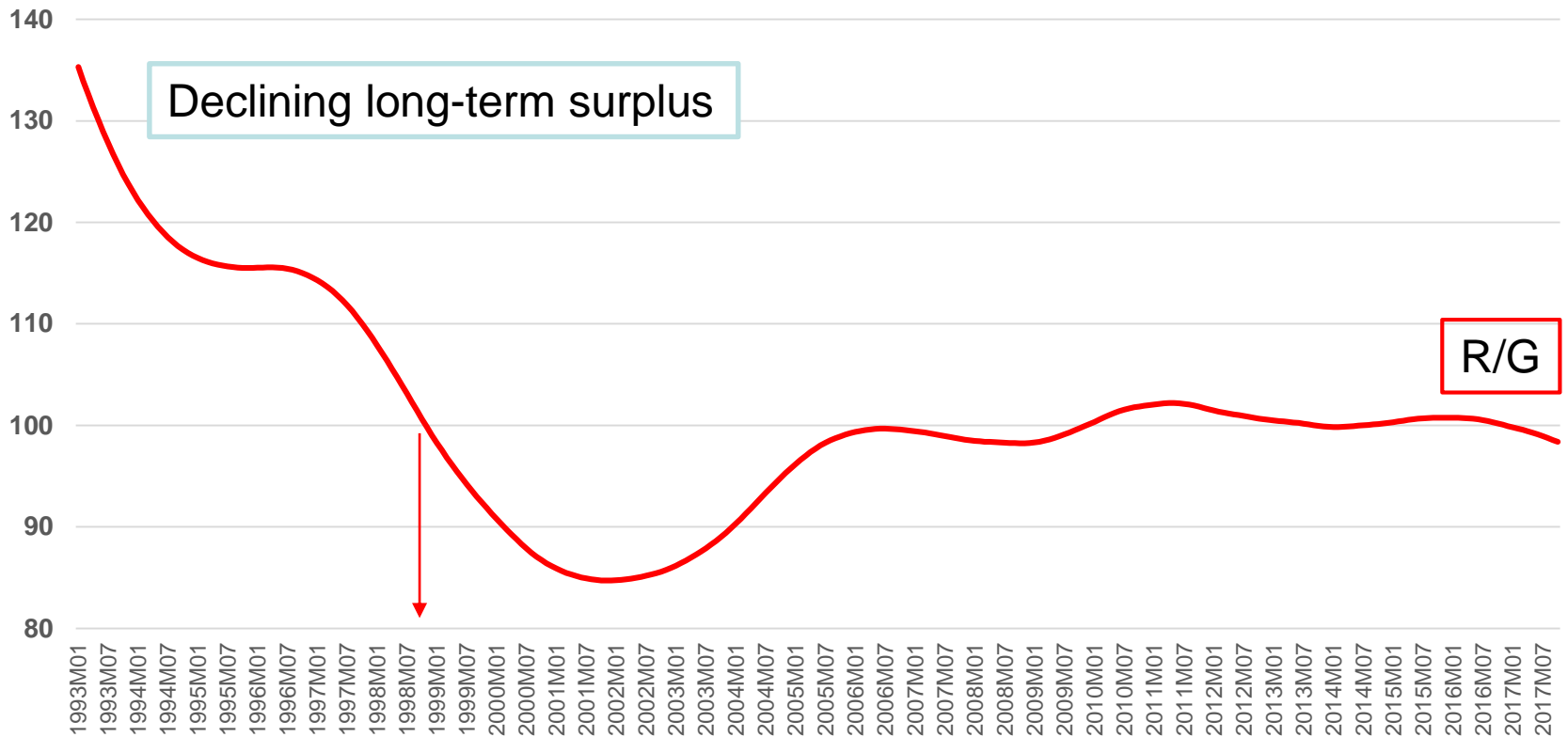
- Fiscal stimulus and recession
- Thailand's rules for fiscal sustainability
- Automatic fiscal stabilizers
- Fiscal policy and economic growth
- Rules for effective fiscal policy
- Lessons from Thailand's fiscal policy

# Structural Fiscal Position

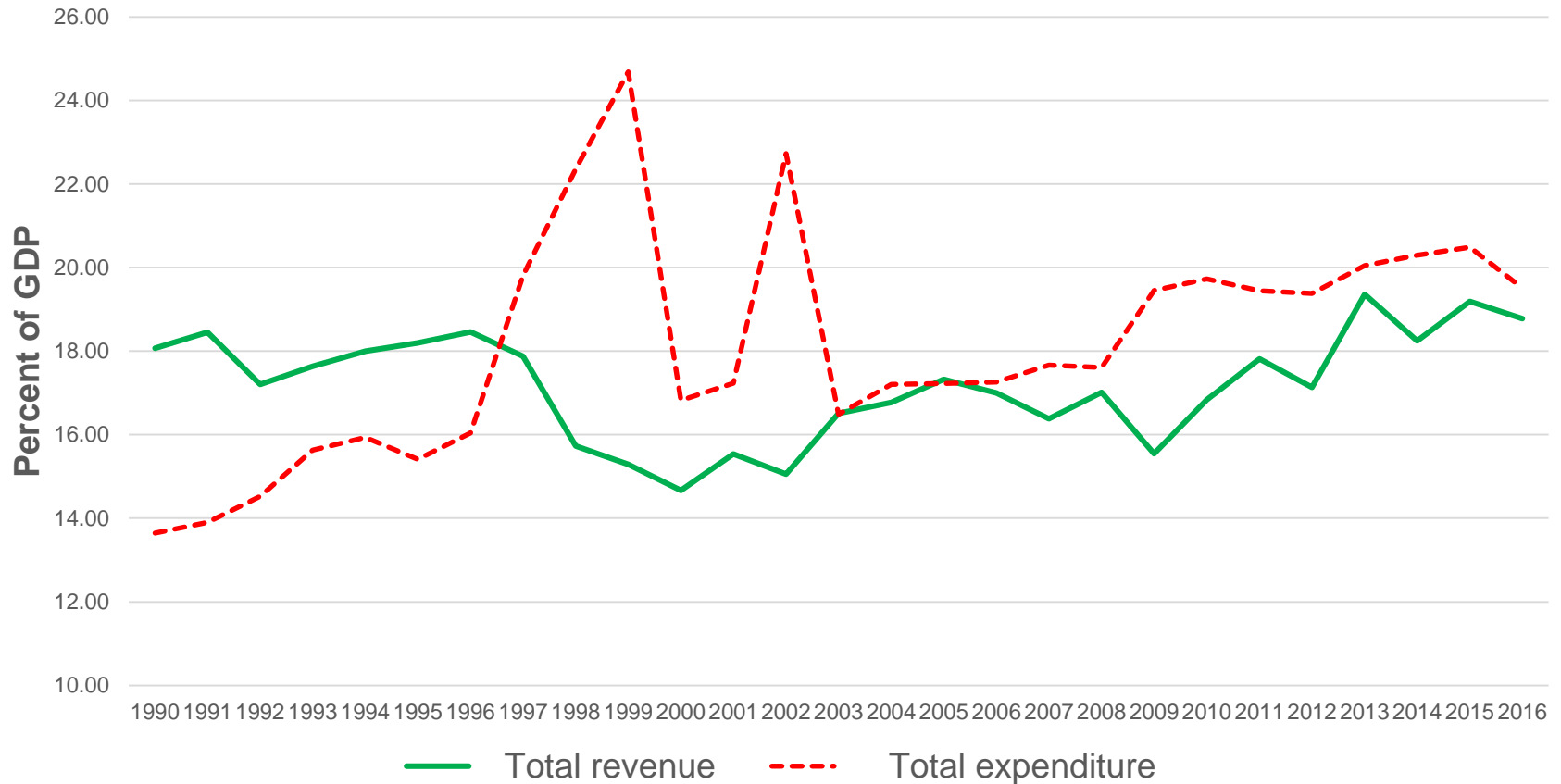
Fiscal stance

Ratio of Public Revenue/Expenditure (R/G)

Trend values: Obtained by removing cyclical values from the actual values  
(percent)



# Public Revenue and Expenditure: 1990-2016



# Three methods of deficit finance

## (1) **Money finance**

The central bank buys bonds, injecting money supply to the economy.

Strong output expansionary impact when there is excessive supply and high level of unemployment.

***No crowding out effect*** as the interest rate tend to decline.

***High inflationary impact*** if output is near full employment: **Inflation tax**.

# Seigniorage

- Seigniorage is a convenient source of revenue for some governments.
- By providing the government with increased purchasing power at the expense of the public's purchasing power, it imposes what is metaphorically known as an **inflation tax** on the public

# Three methods of deficit finance

## (2) **Tax finance**

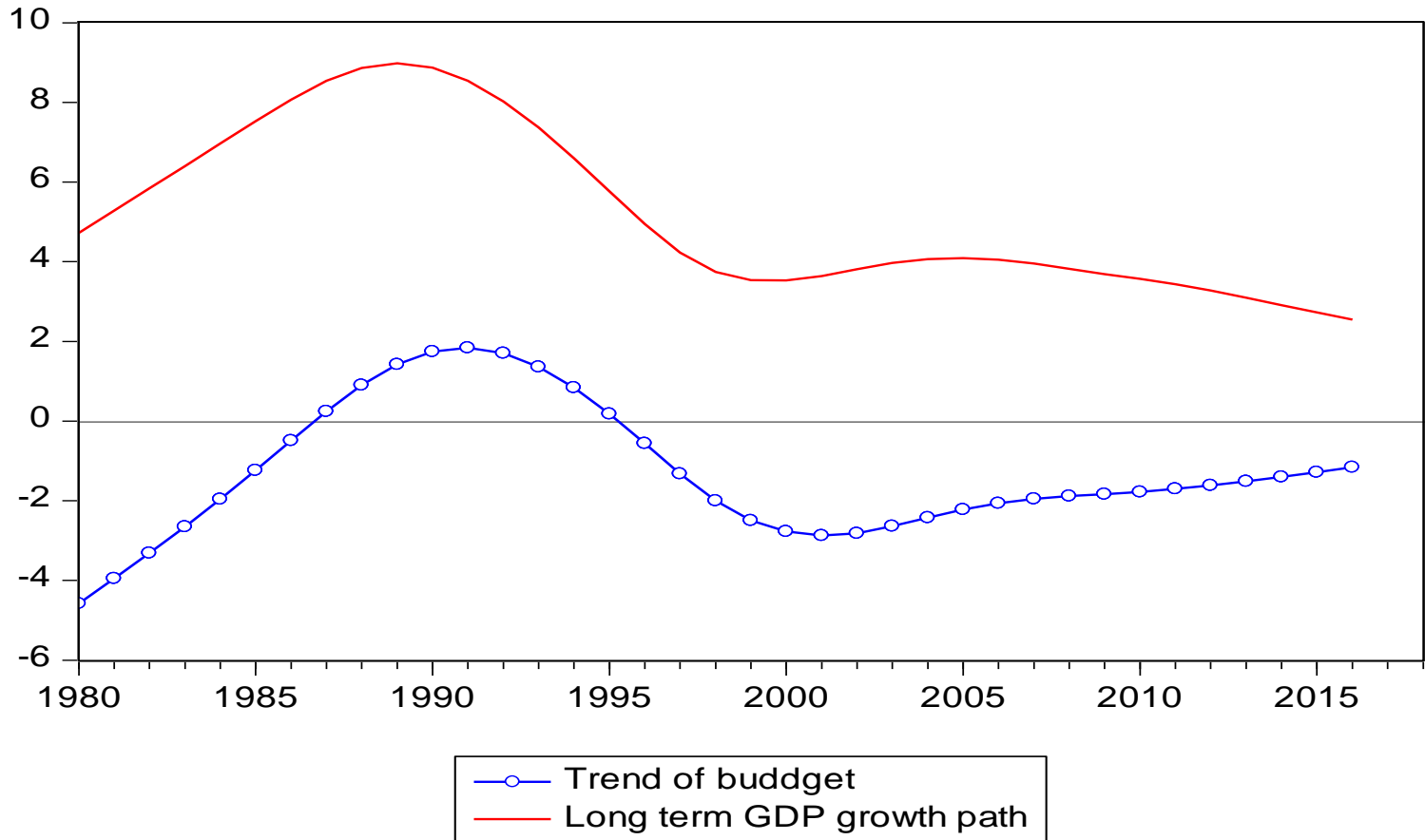
low expansionary impact since consumption declines offsetting government spending

This method can be employed when the economy is near full employment

## (3) **Bond finance**

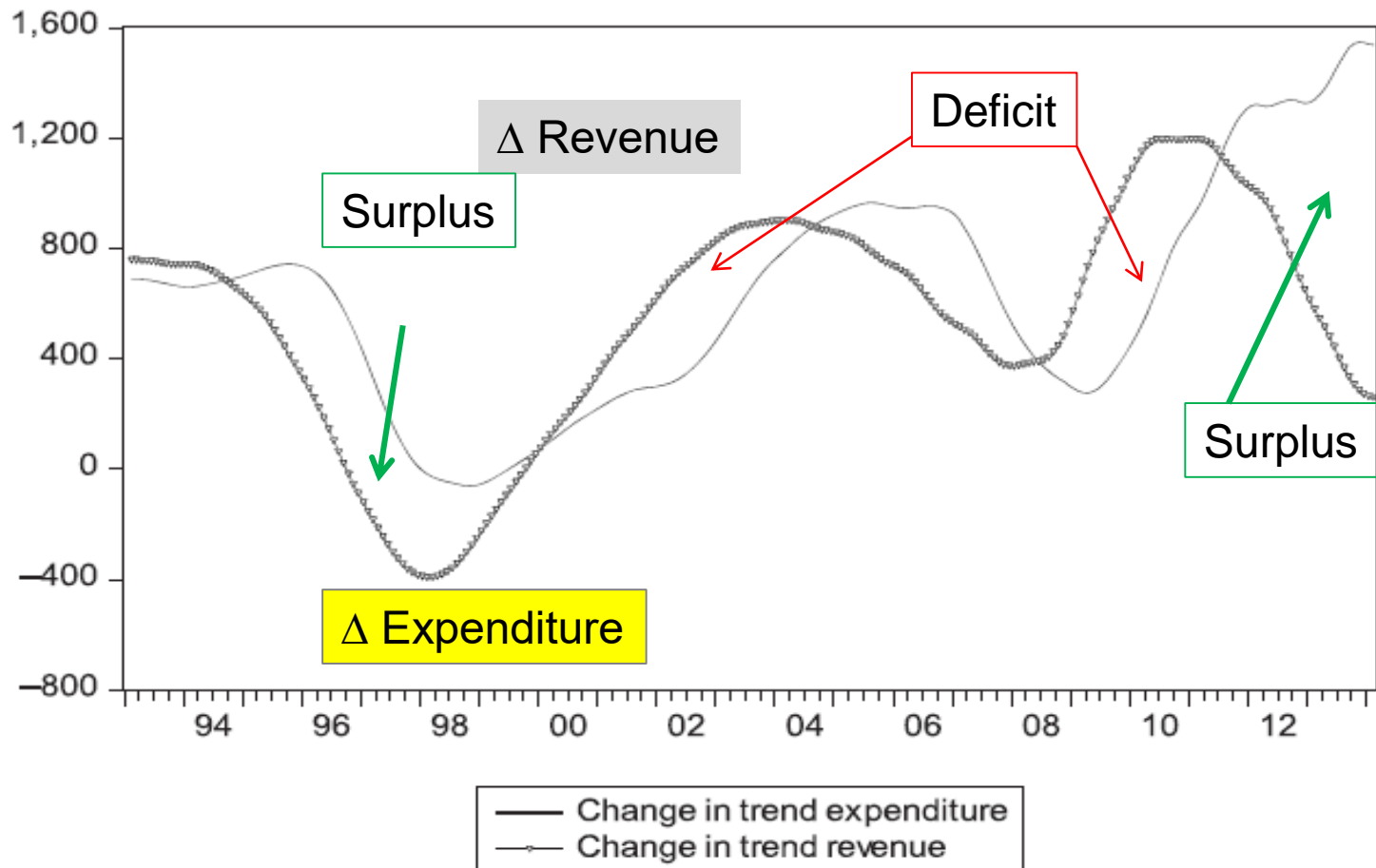
subject to **crowding-out effect**, because higher interest rate might decrease private investment, money supply remains constant

# As growth accelerates, budget deficit falls



# Fiscal stance (expansionary vs. contractionary) shown by structural surplus and deficit

Figure 3. Fiscal stance: Structural changes in trend fiscal variables



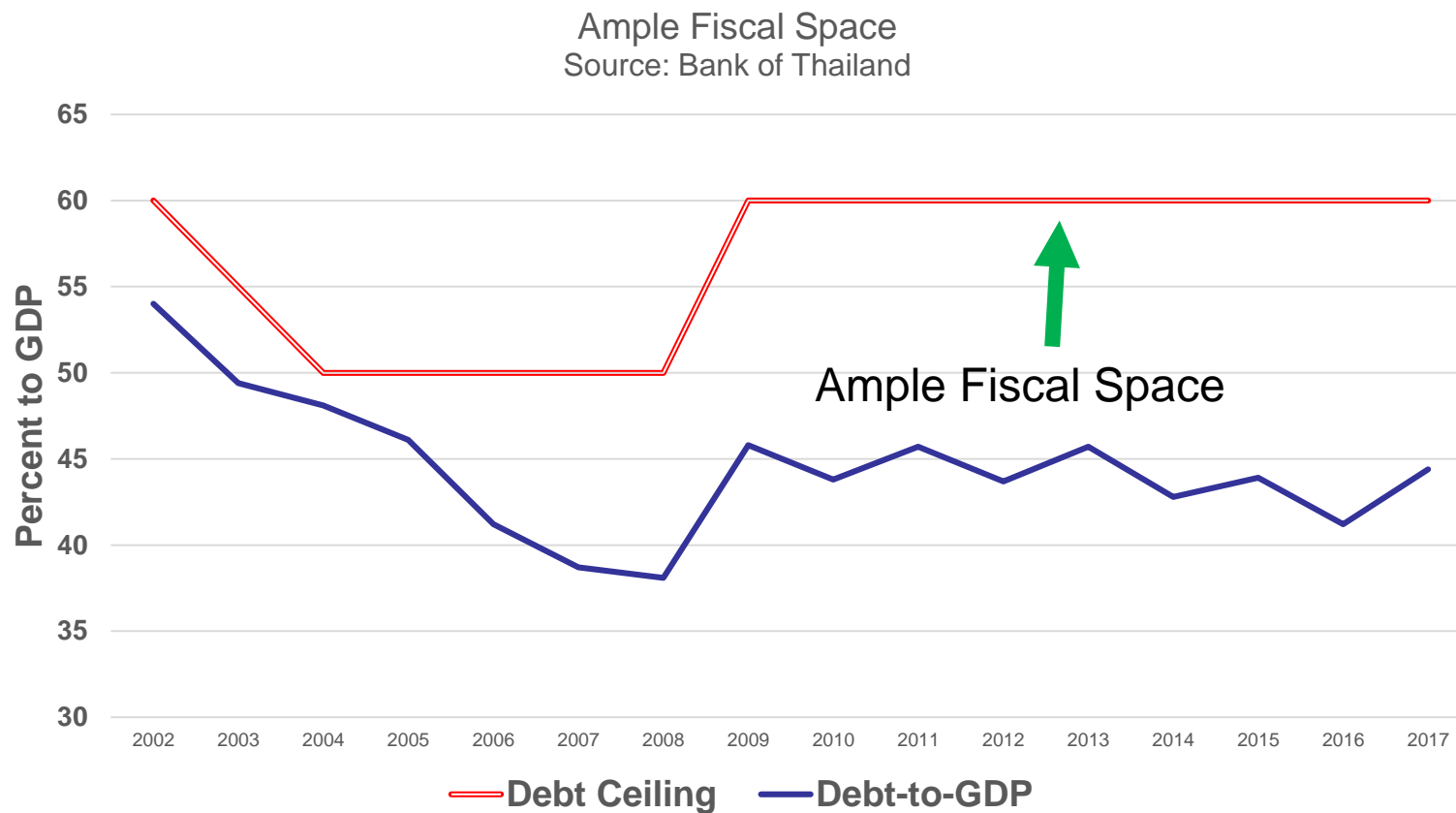
# *Budget deficit and economic growth*

- 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.

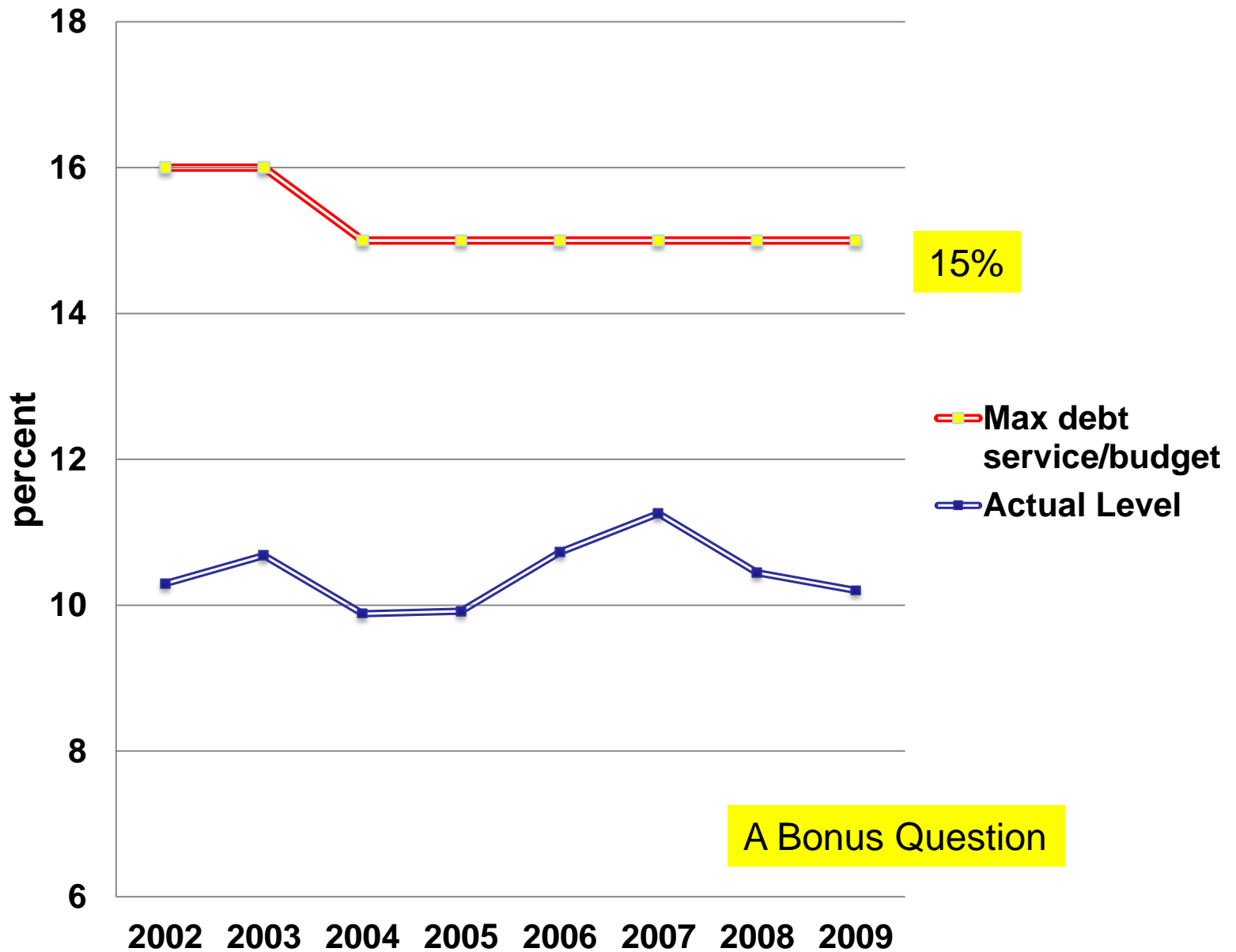
# Four rules of fiscal sustainability

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

# 1. Debt Ceiling and Fiscal Space

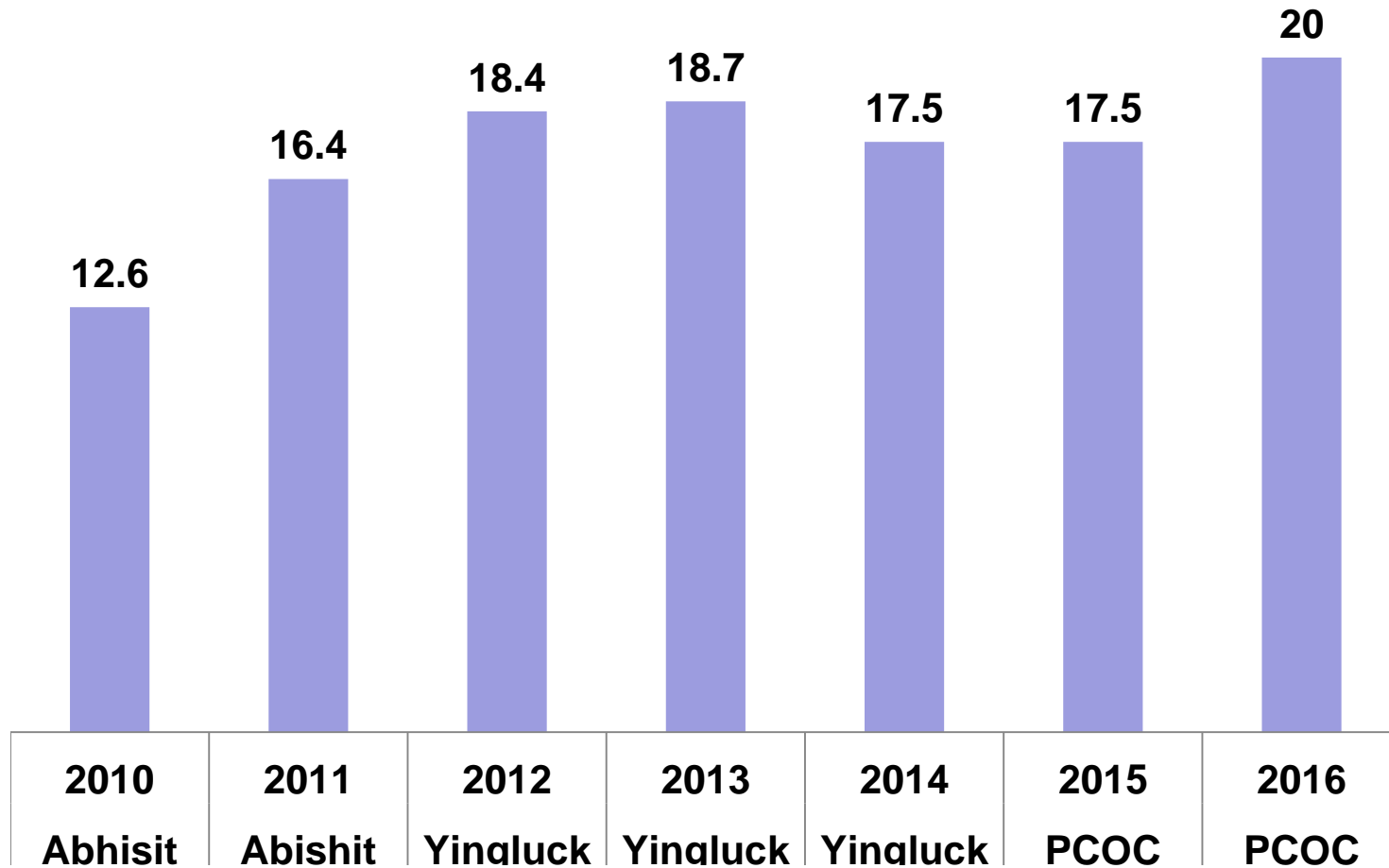


## 2. Maximum Debt Service: 15 % of total budget



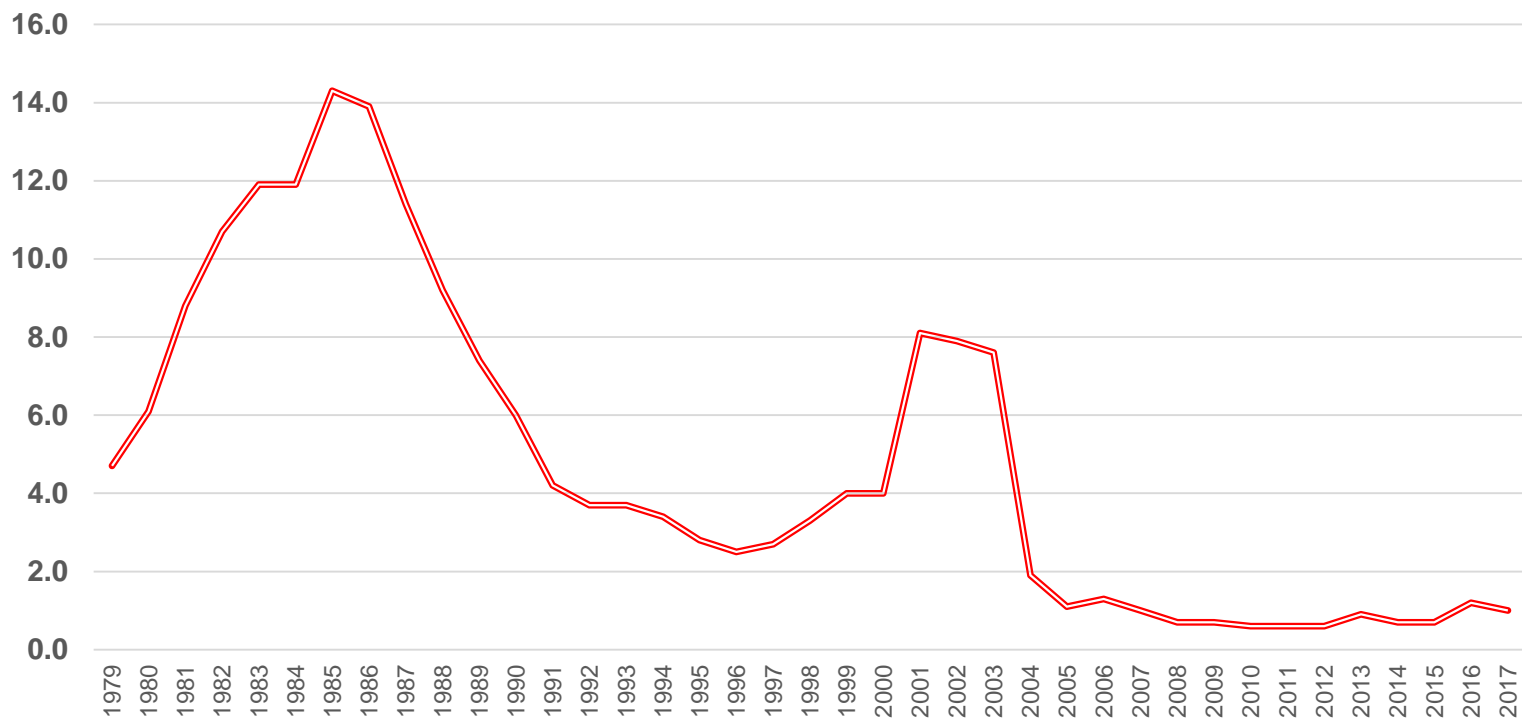
### **3. Minimum Level of Capital Expenditures At least 25% of total budget**

**Share of public investment in various governments  
(% total budget)**



# 4. External Debt Service (Ceiling 5 % of exports)

Public External Debt Service Ratio  
(% exports)



# ***Fiscal variables, growth and output nexus***

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

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

$$(3) = (1) - (2)$$

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

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

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

*automatic stabilizer mitigates*

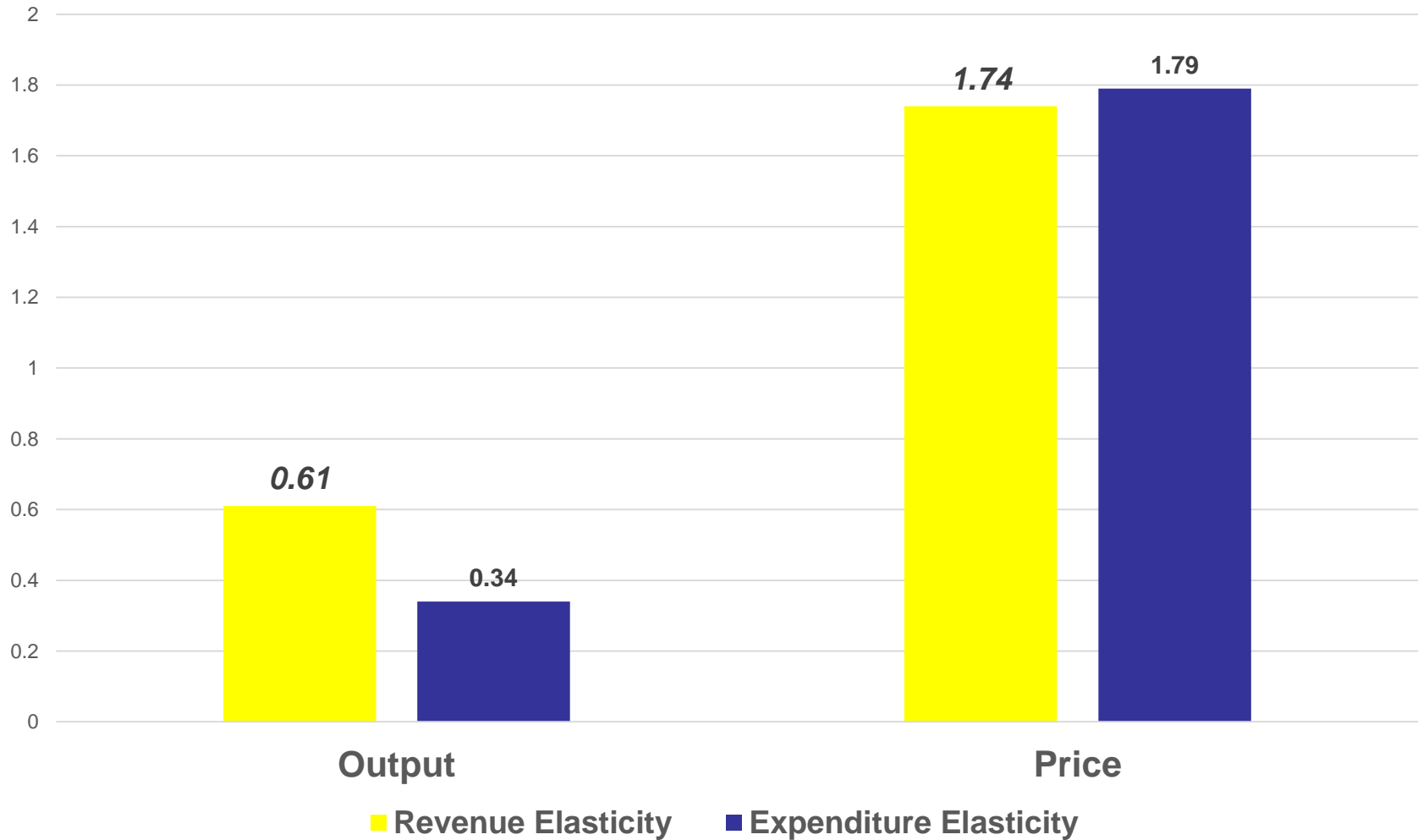
*the impact of booms and busts*

*on aggregate demand*

# Dynamism of automatic stabilizers

Note: 12 month-lag for revenue, 30 month-lag for expenditure

Source: FMOLS estimates based on monthly data 1995 to 2017

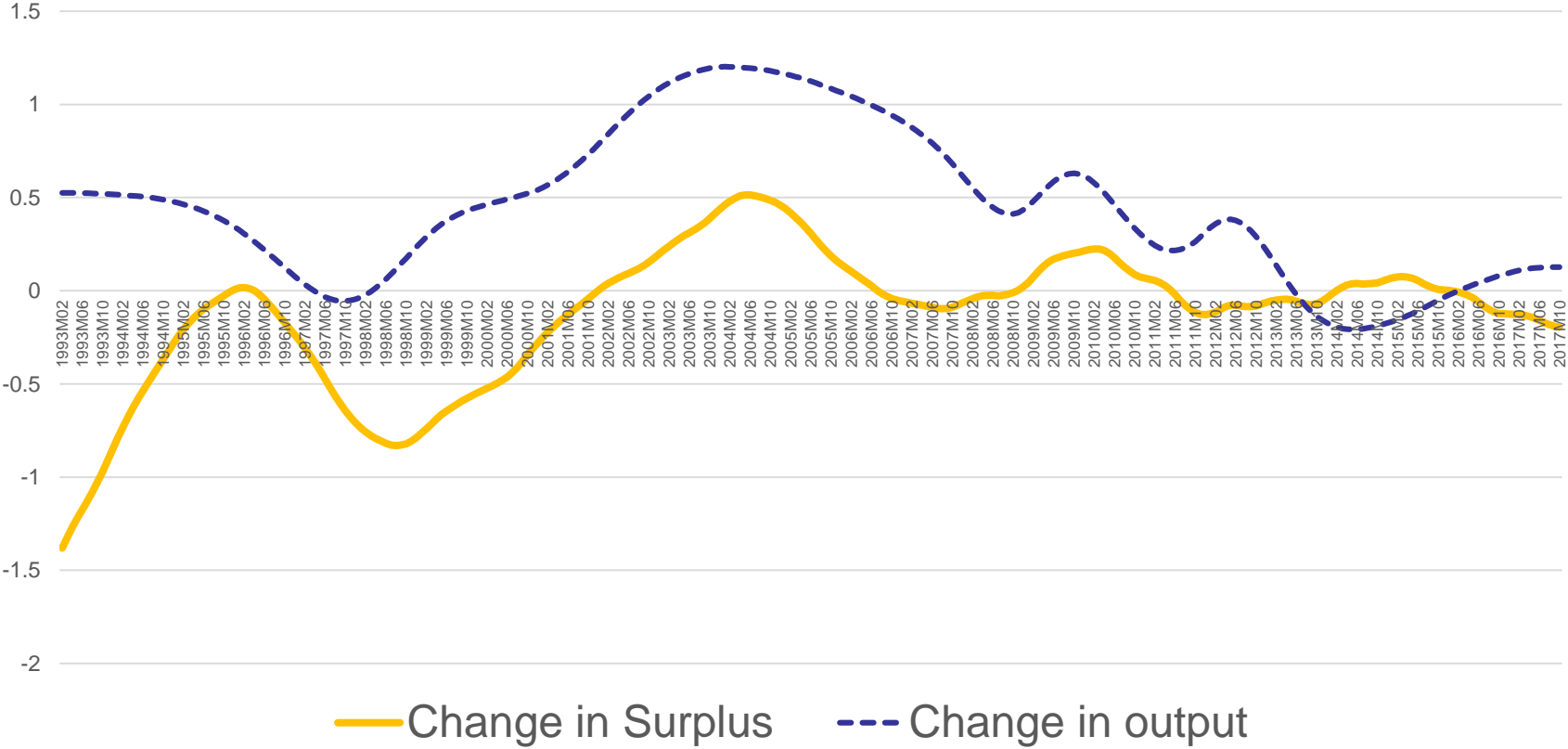


# When GDP rises

- Revenues increase faster than Expenditures
- Revenue elasticity with respect to output is **greater** than expenditure elasticity ( $0.64 > 0.34$ )
- Therefore during the boom, budget tends to surplus
- During the slump, budget tends to deficit

# Increasing tendency for budget surplus (deficit) during booms (slump)

Budget Surplus and output growth  
Source: Bank of Thailand



# When price increases

- Tax revenues tend to rise, and so do public expenditures
- But public expenditures rise faster than revenue, so deficit is enlarged during inflation
- Public spending must be controlled during high inflation to avoid fueling inflationary pressure ( $1.79 > 1.74$ ).
- The government cannot rely on inflation tax by printing money (Selling bonds to the BoT), since it would create more deficit as inflation is spiraling.

# 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.
- As President Kennedy once said “***the time to repair the roof is when the sun is shining.***” Instead, we are punching more holes in the fiscal roof.

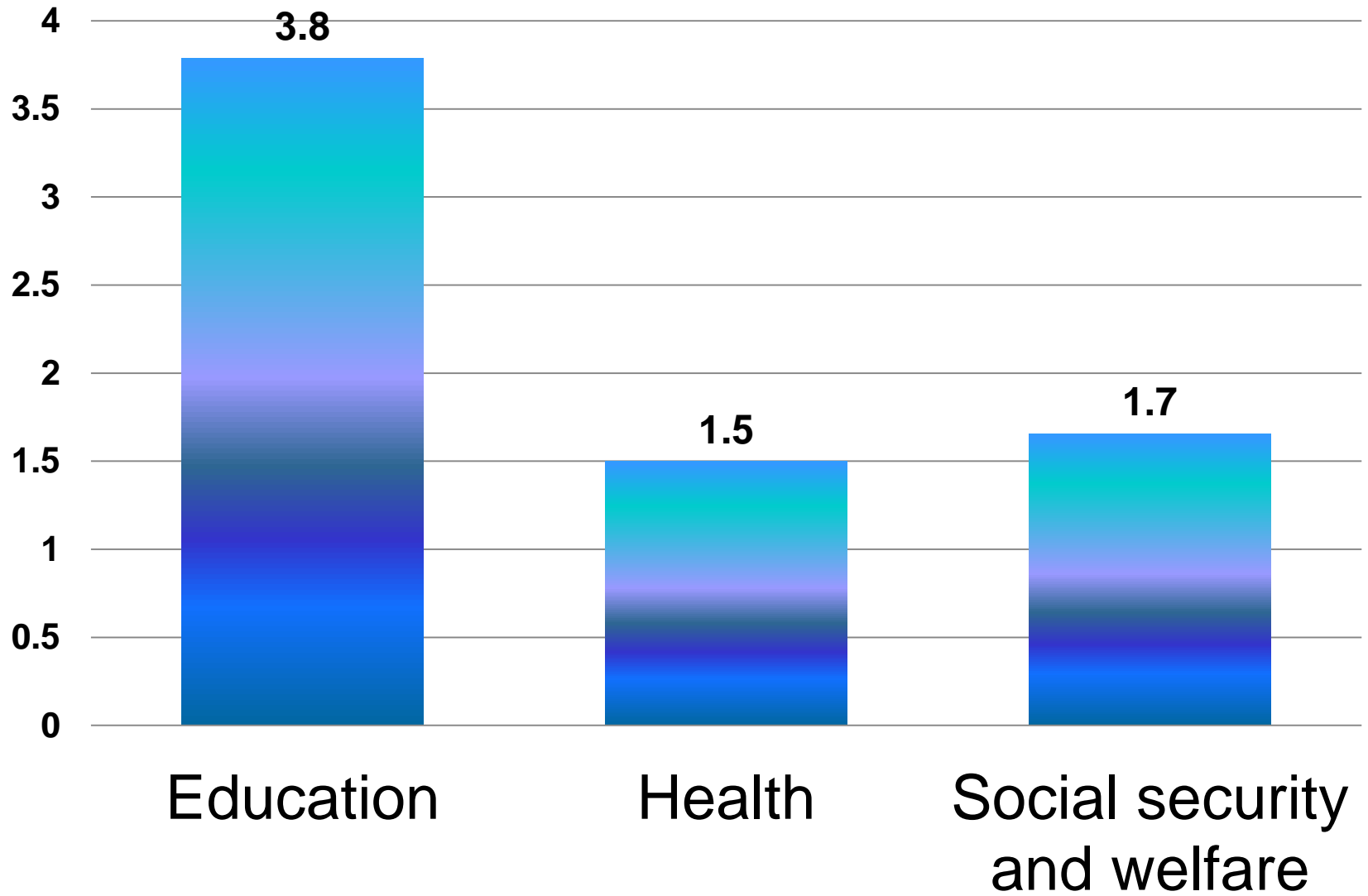
# Addicted to populism

- 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.

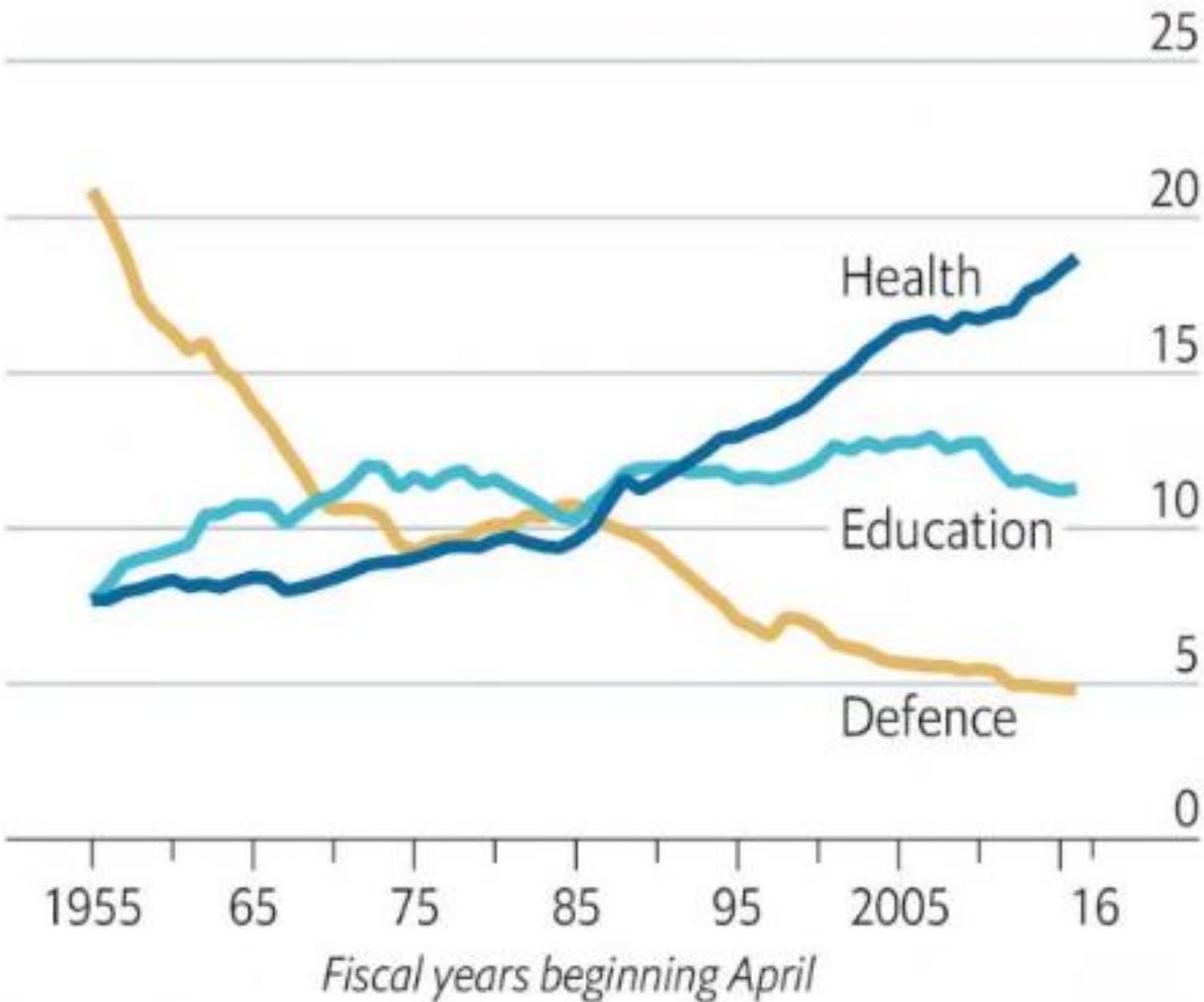
# Stylized facts about fiscal policy

- The level of development is related to fiscal structure: poor countries rely more on trade taxes, developed countries rely on income taxes.
- Fiscal structure 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 super high returns. (more trains, more airports, and more highways)

**Expenditure by function: 2000-2015**  
**Average percentage of GDP**



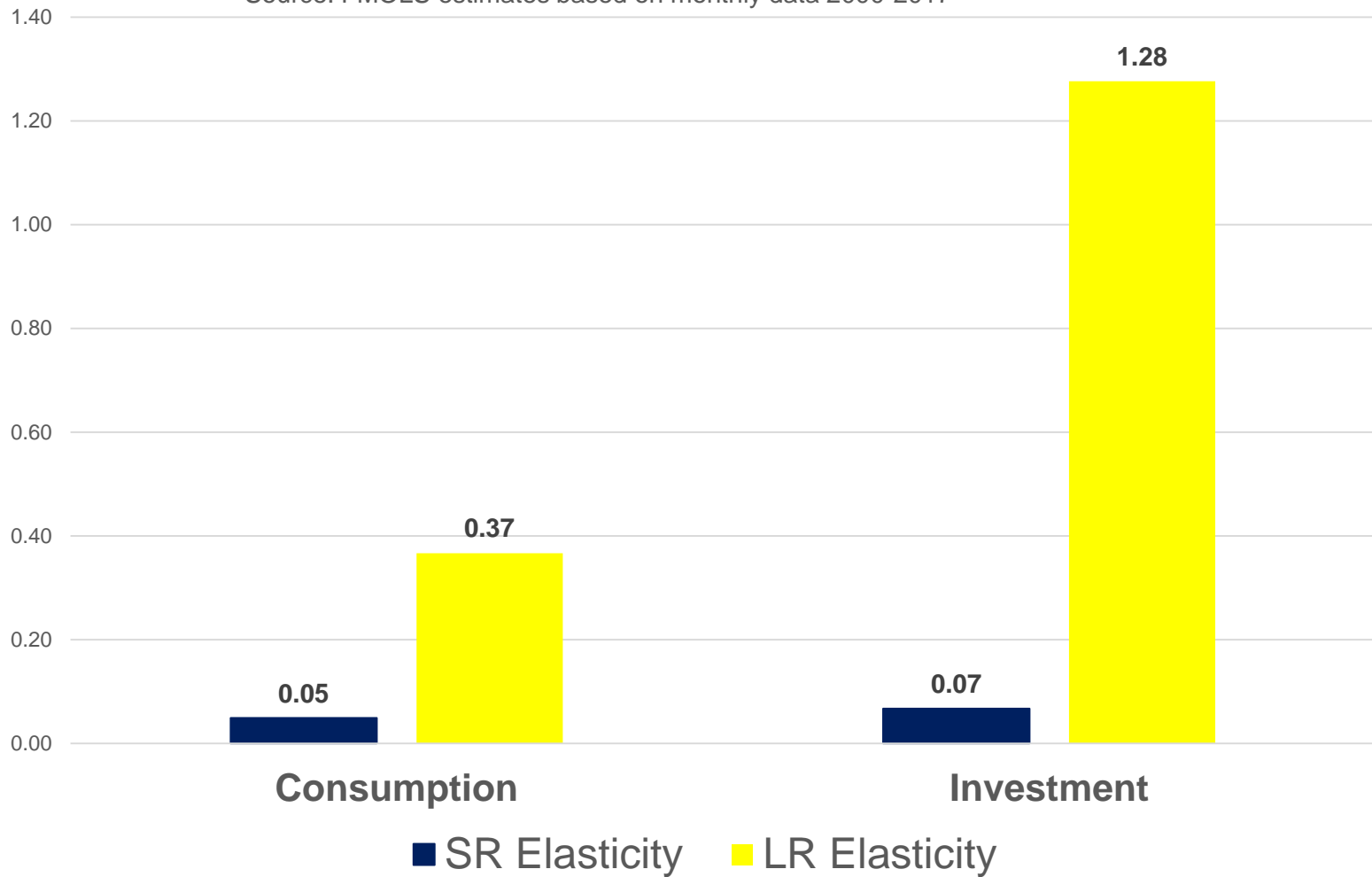
# Britain, % of government spending



Source: IFS

# Short run and long run Impact of public spending on private spending

Source: FMOLS estimates based on monthly data 2000-2017



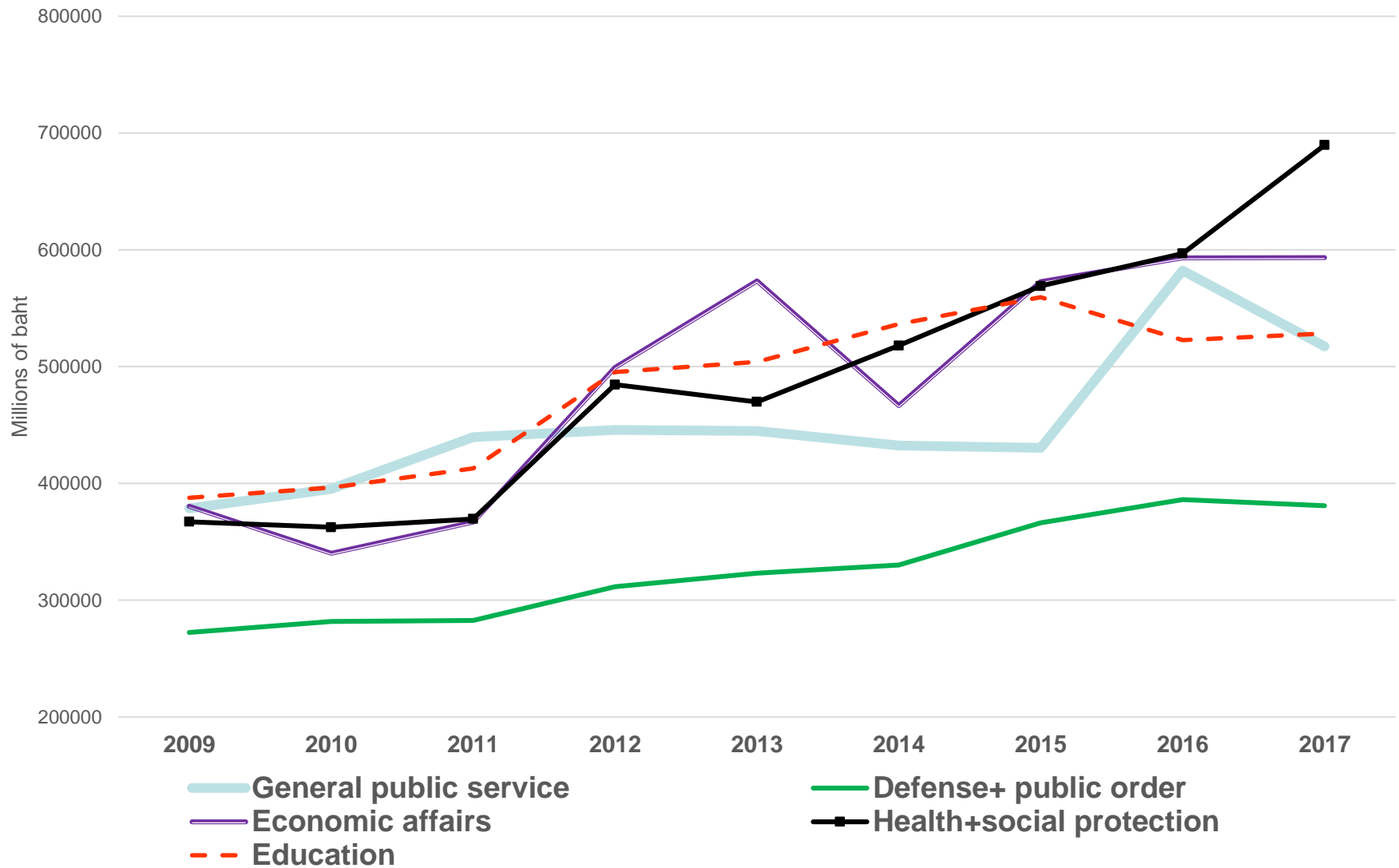
# Public consumption vs. public investment

- 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

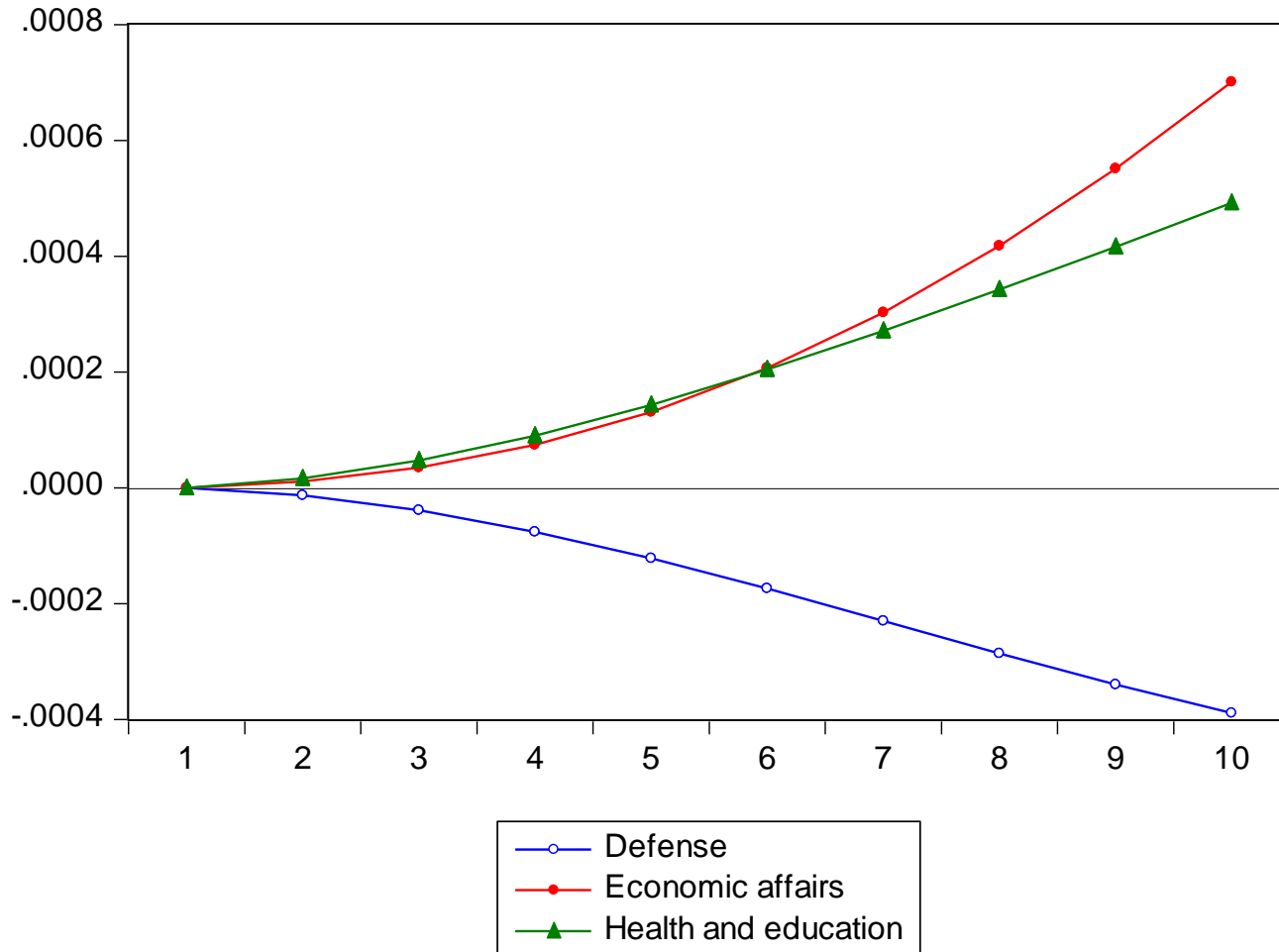
- Structure of public expenditure (ratio of public investment to public consumption) matters for long-term growth.
- Rising share of current spending is detrimental to long-term growth in the long-run.

## Government Expenses (classified by functions)



# Figure 11. 11 Impacts of public spending on long-term private consumption and investment

Response of long-term private aggregate demand to Cholesky One S.D. Innovations in government spending

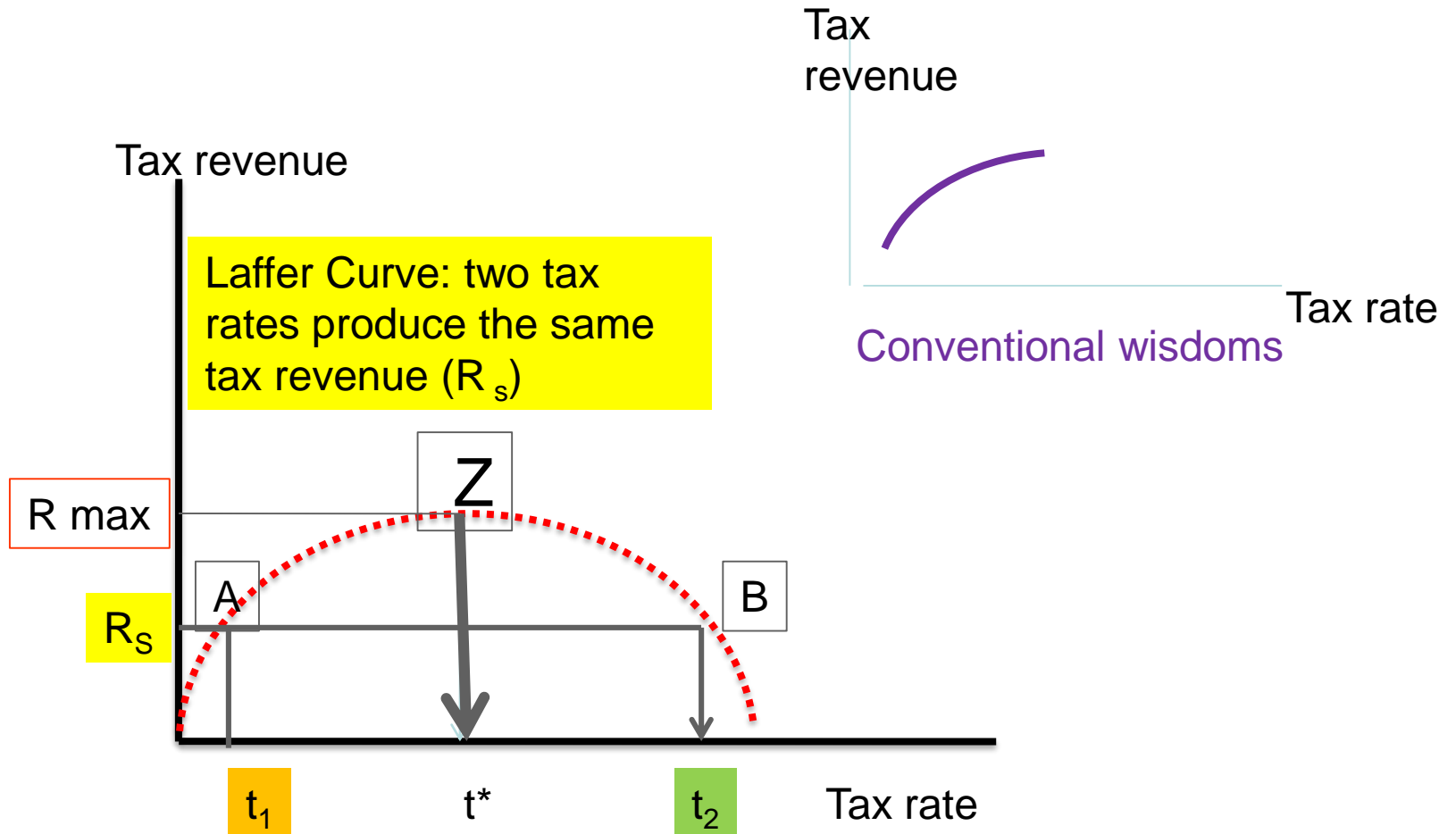


# Rules of effective fiscal policy

- Financing capital and current spending has impact on intergeneration transfers.
- Capital expenditure must be financed by bonds, since the benefits accrue to future generations.
- Current expenditure must be financed by contemporaneous taxes.
- Focus on the marginal benefits and marginal cost of infrastructure spending such as transportation and communications

# Laffer curve: tax rates and tax revenues

## An Inverted U-shaped Relationship



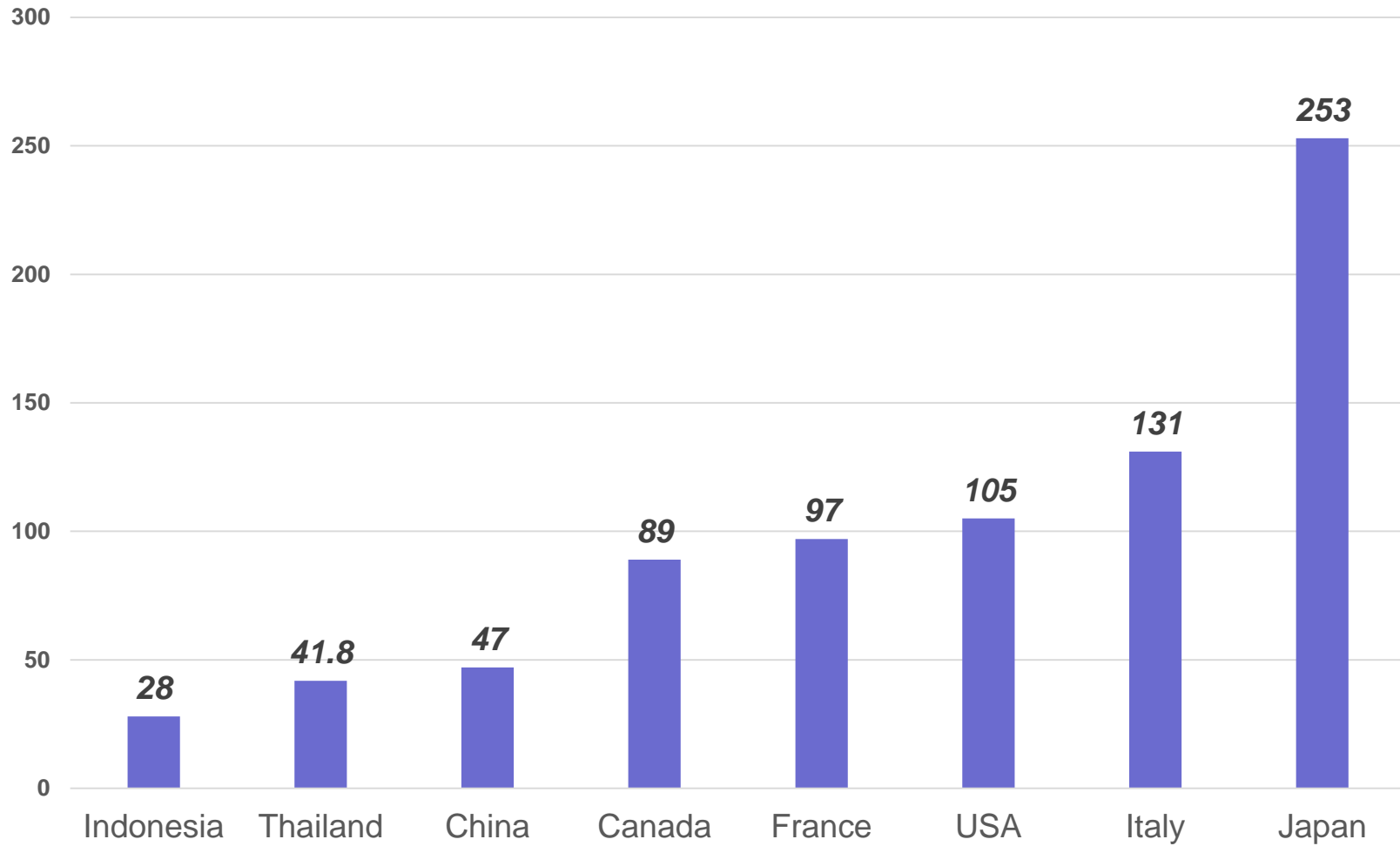
# Can a tax reduction increase tax revenue?

- 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.

# 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 causations).
- **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?
- Is there any limit to government spending?

## Public Debt (% GDP in 2018)



# To stabilize the public debt

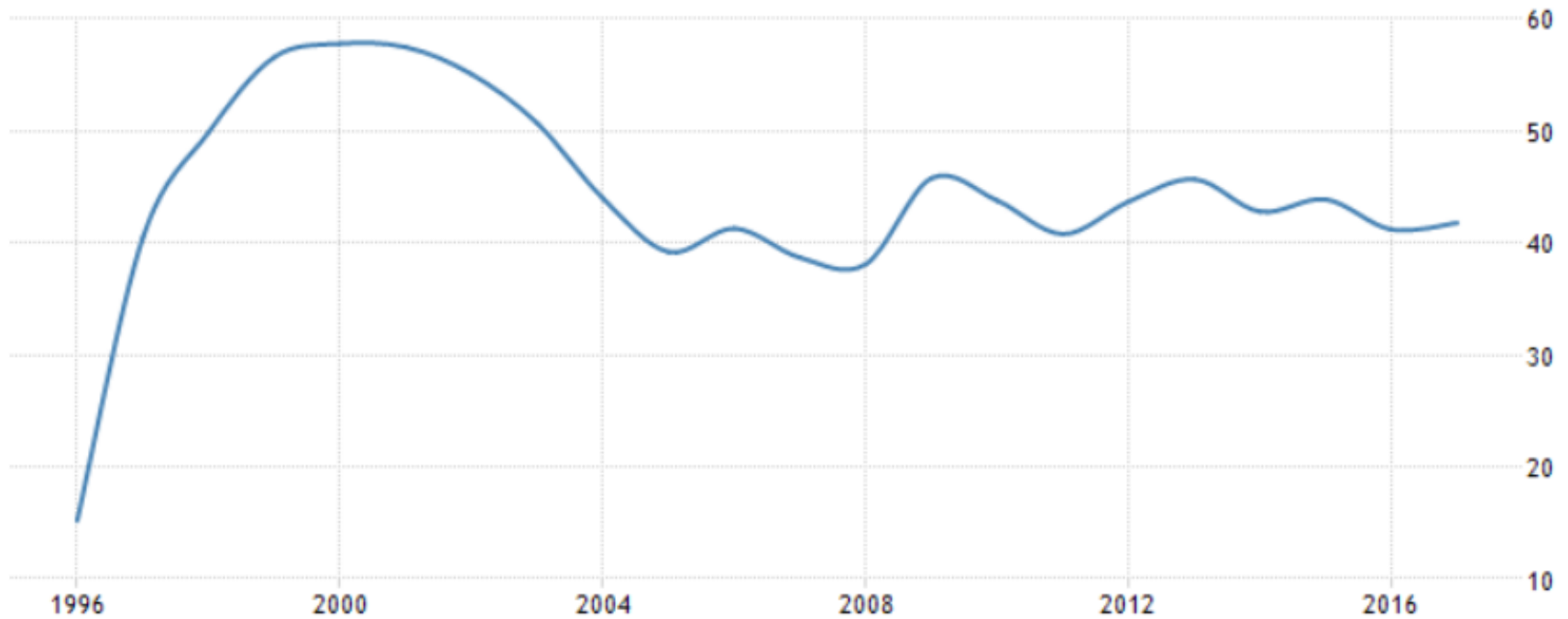
- To keep the Debt-to-GDP constant, the government must increase its **primary surplus** in line with the increase in  $(r-g)$ .
- The spending cuts or tax increases are likely to prove politically costly, generating even more political uncertainty and the need for an even higher interest rate.
- A ***sharp 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:  $(G-T)/Y$
- G excludes interest payments for public debt

To reduce Debt/ GDP ratio, GDP growth rate ( $g$ ) must exceed the cost of borrowing ( $r$ )

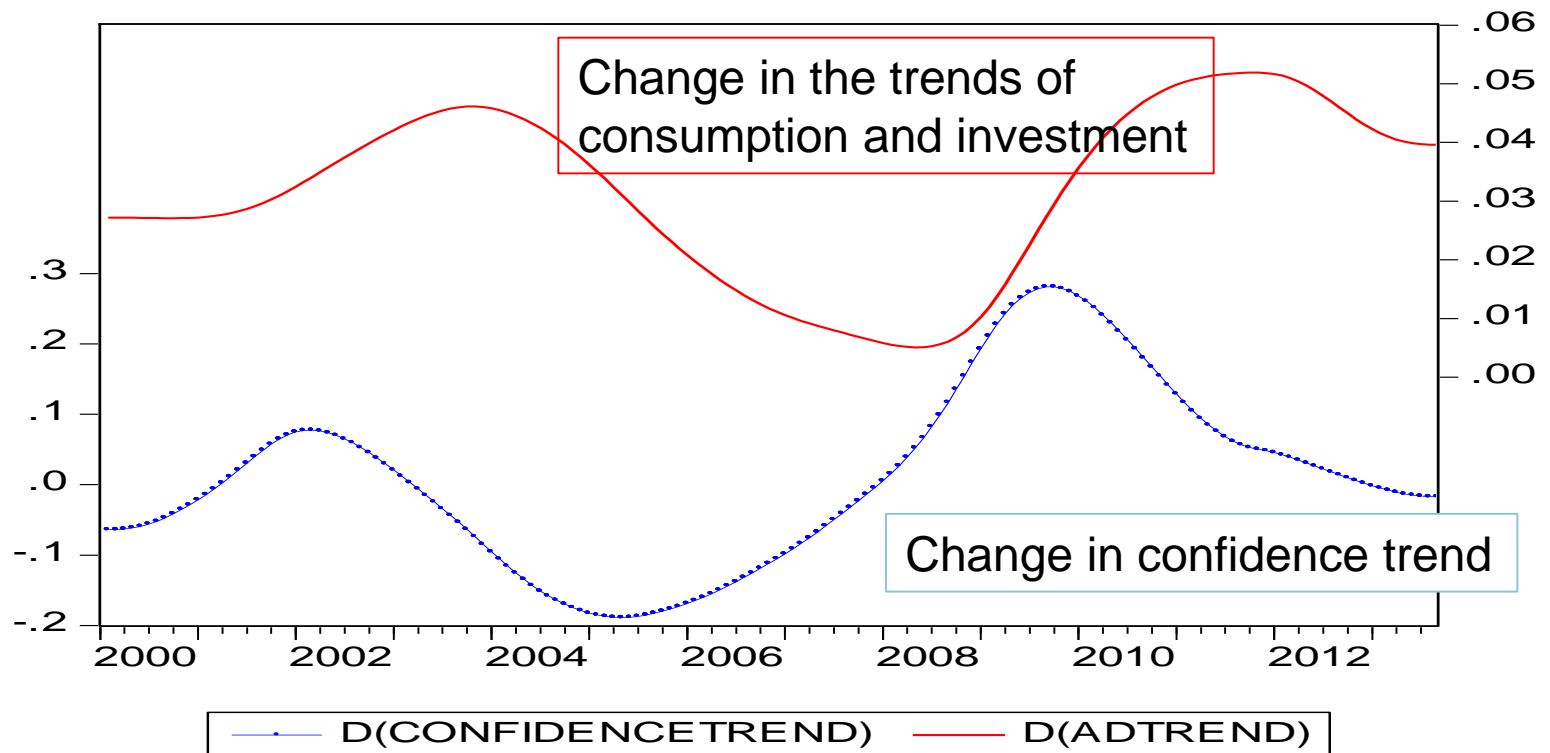
THAILAND GOVERNMENT DEBT TO GDP



# Will fiscal stimulus work?

- Fiscal policy was the only option left during export collapse and uncertain times.
- Fiscal multiplier effect might be limited if the government's income transfer is regarded as transient.
- Consumer confidence and favorable investor sentiment (measured by BSI) are required for effective fiscal stimulus.

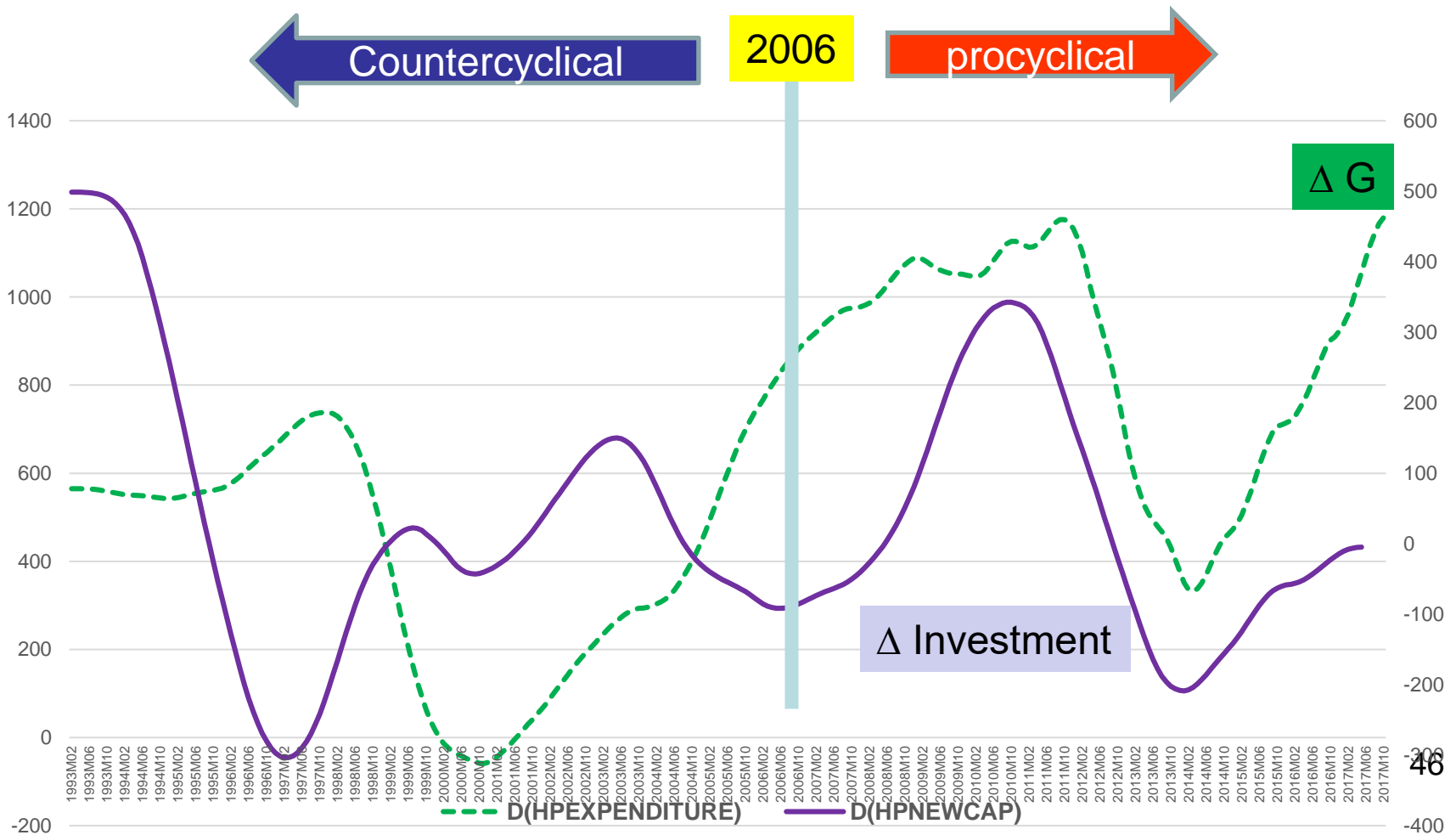
# Confidence (lead) and Private Aggregate Demand (lag)



# Conditions for effective fiscal stimulus

- Well-timed spending and taxing
- Fiscal sustainability must be maintained.
- Well-targeted spending to ensure the largest demand impact (spending towards high MPC groups)
- Aim towards macroeconomic stability (**counter-cyclical** rather than procyclical fiscal policy)

# From countercyclical to procyclical (Changes in G and Private Investment)



# Conditions for effective fiscal stimulus

- Economy-wide (pervasive) liquidity constraints situation (sure spenders: spending should increase right after tax cuts)
- How is the liquidity condition right now? Check Loan/Deposit ratio.
- **Permanent** vs **temporary** policy changes (tax reform vs. temporary tax relief or spending e.g. Temporary tax cut and handouts to stimulate retail sales)

# Fiscal strategies *for long-term growth*

1<sup>st</sup> strategy: The role of **automatic stabilizers** must be emphasized

- It is desirable to establish built-in stabilizers such as progressive income tax system.
- When *corporate income tax* is reduced, the fiscal automatic stabilizers become less powerful.

Only 10 % of the work force pay income tax  
Income tax revenue is about 2 % of GDP

- **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 government must remain committed to its plan of tax reform as tax revenue is too low.

# 2<sup>nd</sup> and 3<sup>rd</sup> fiscal strategies for long-term growth

**2. Contemporaneous tax must** finance only current expenditure, While capital expenditure can be financed by issuing government bonds: for fiscal sustainability and fairness over generations

**3. Marginal Cost and Marginal Benefit principle must be applied** to choices of spending: submarine, tanks vs. schools and hospitals.

# 4<sup>th</sup> Strategy: Ample 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.
- If Debt-to-GDP is low, it provides fiscal space for the government to counteract future external shocks (e.g. exports or investment collapses) through fiscal ease.

## 5th Strategy: Strike the balance between long-term growth and price stability

- Overconservative fiscal policy has a high cost in terms of the loss opportunity to achieve high long-term growth path
- However, over expansionary fiscal policy can turn populism and inflation bias.

# Conclusion I

- 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 II

- 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.
- Consumer confidence and business sentiment are crucial to sustainable recovery and effective fiscal policy.
- Long-term growth is adversely affected by the slowdown in public investment.

# Discussion questions

- In response to a 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, exchange rates, and the current account?