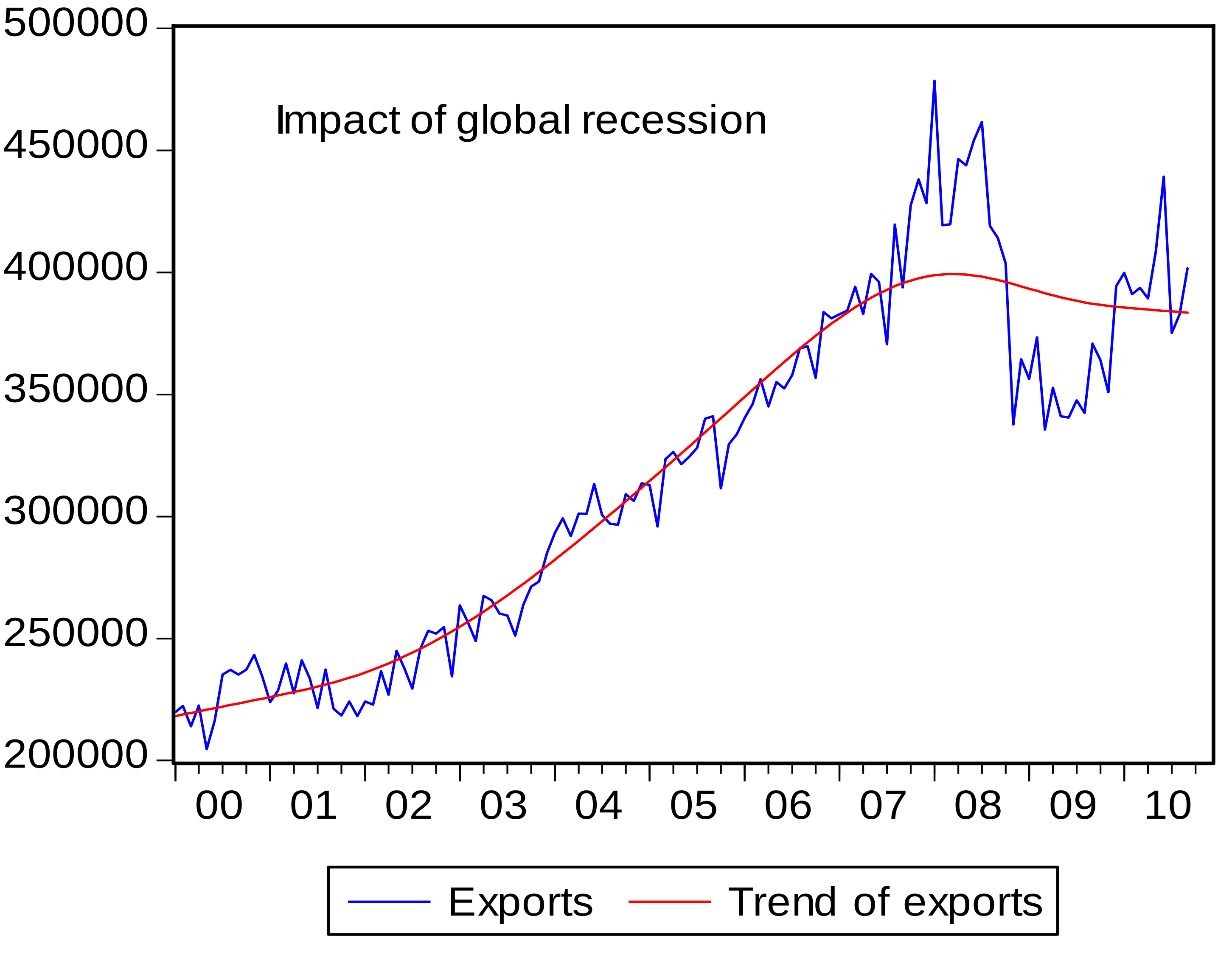
EE460: Fiscal Policy for Growth and Stability

Bhanupong

Lecture 26

Outline

- **Fiscal stimulus and global recession**
- **Spending and taxation: long-term relationship**
- **Long-term and cyclical movements**
- **Rules for fiscal sustainability**
- **Automatic fiscal stabilizers**
- **Fiscal policy and economic growth**


500000
450000
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Impact of global recession
00
01
02
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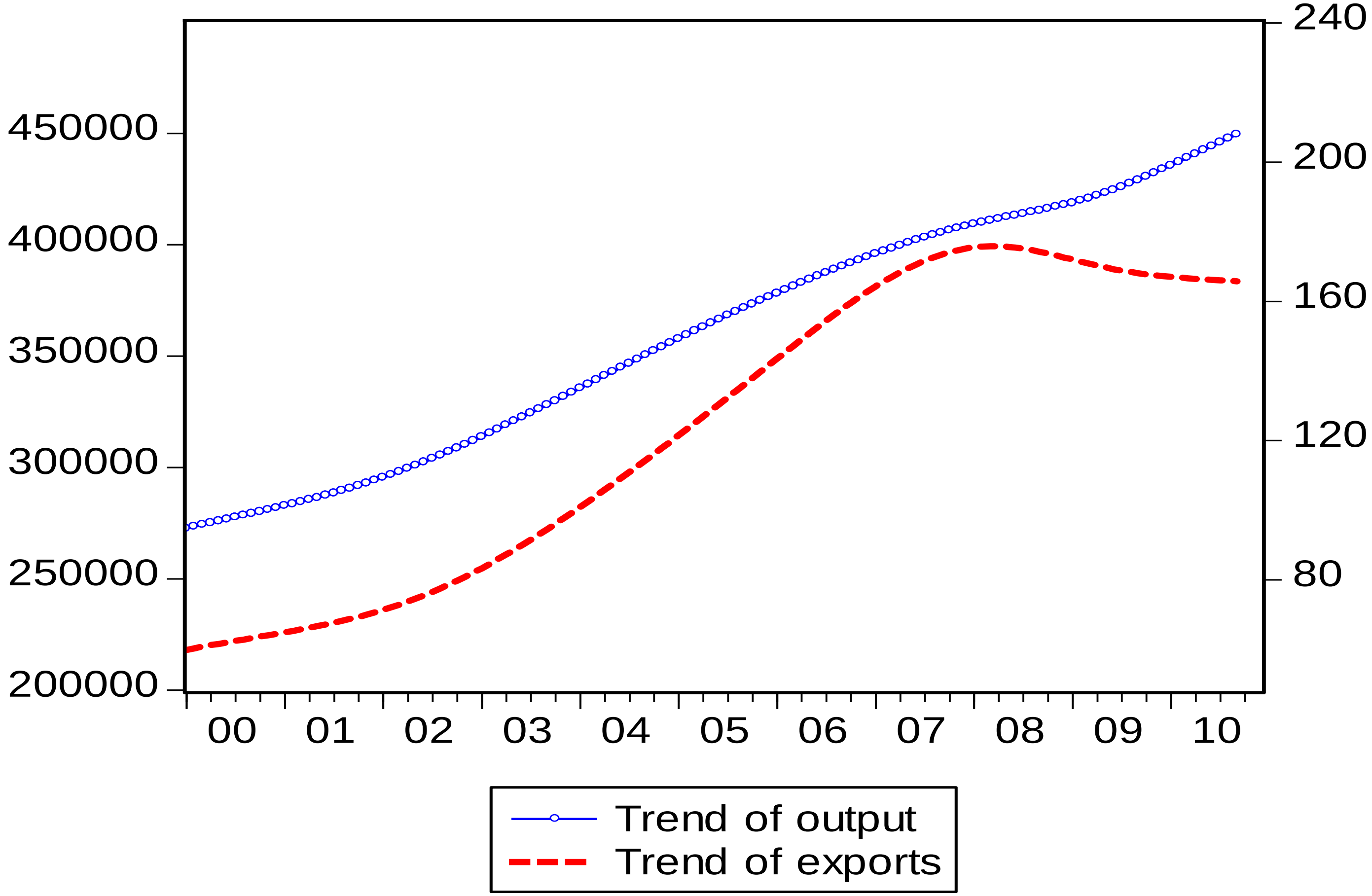
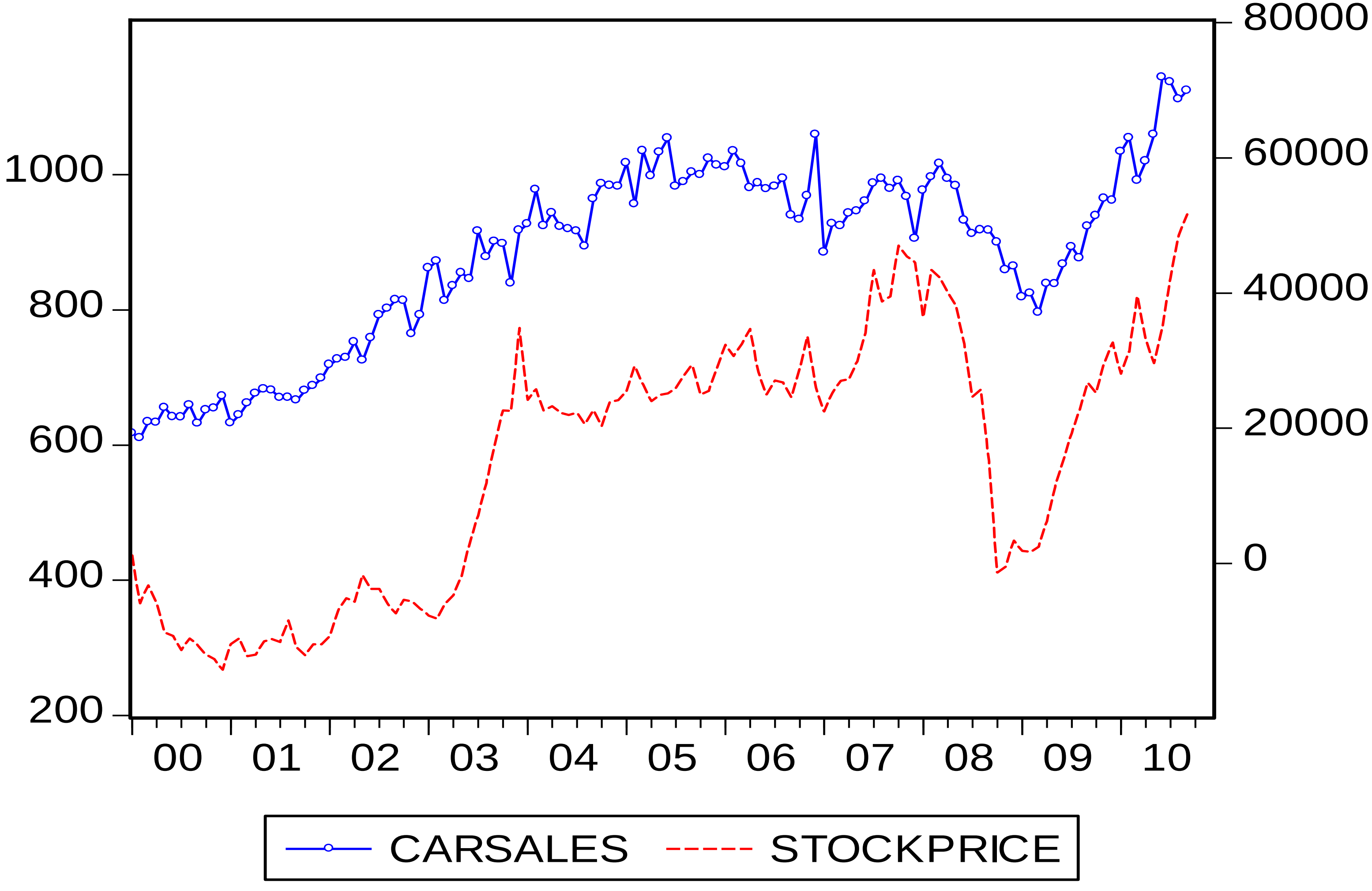
08
09
10
Exports
Trend of exports

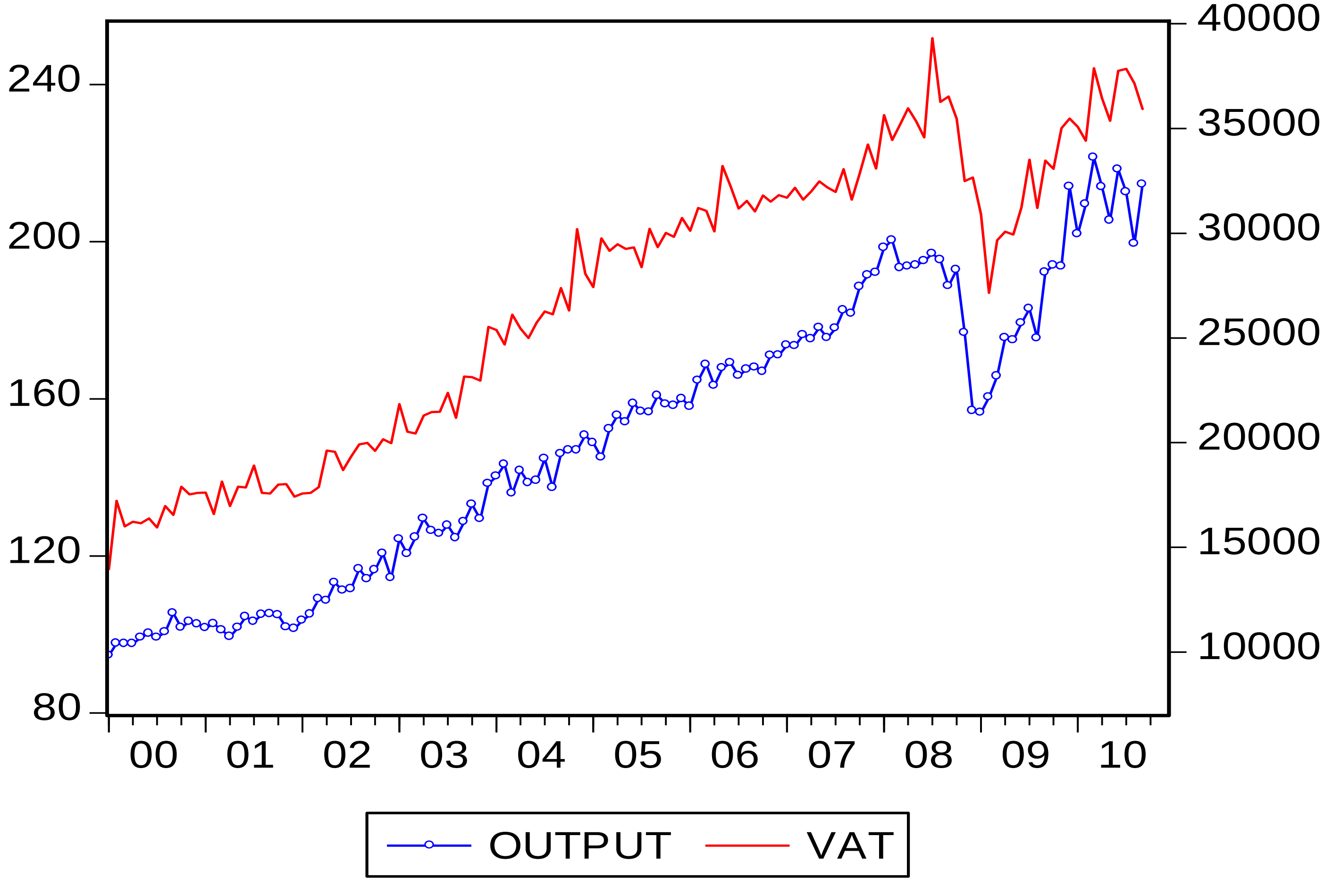
Long-term paths of output and exports



Consumer durables and asset prices



Manufacturing output and value added tax



Competing hypotheses

(1) Buchanan and Wagner (1978): Higher taxes lead to more government spending.

(2) Peacock and Wiseman (1979): Temporary increases in government spending lead to permanent tax increases (spend-and-tax hypothesis).

(3) Meltzer and Richard (1981): Fiscal synchronization hypothesis: spending and taxes adjust as the public chooses an optimal package of taxes and government spending.

Plausible Causality

$$R \rightarrow G \qquad (1)$$

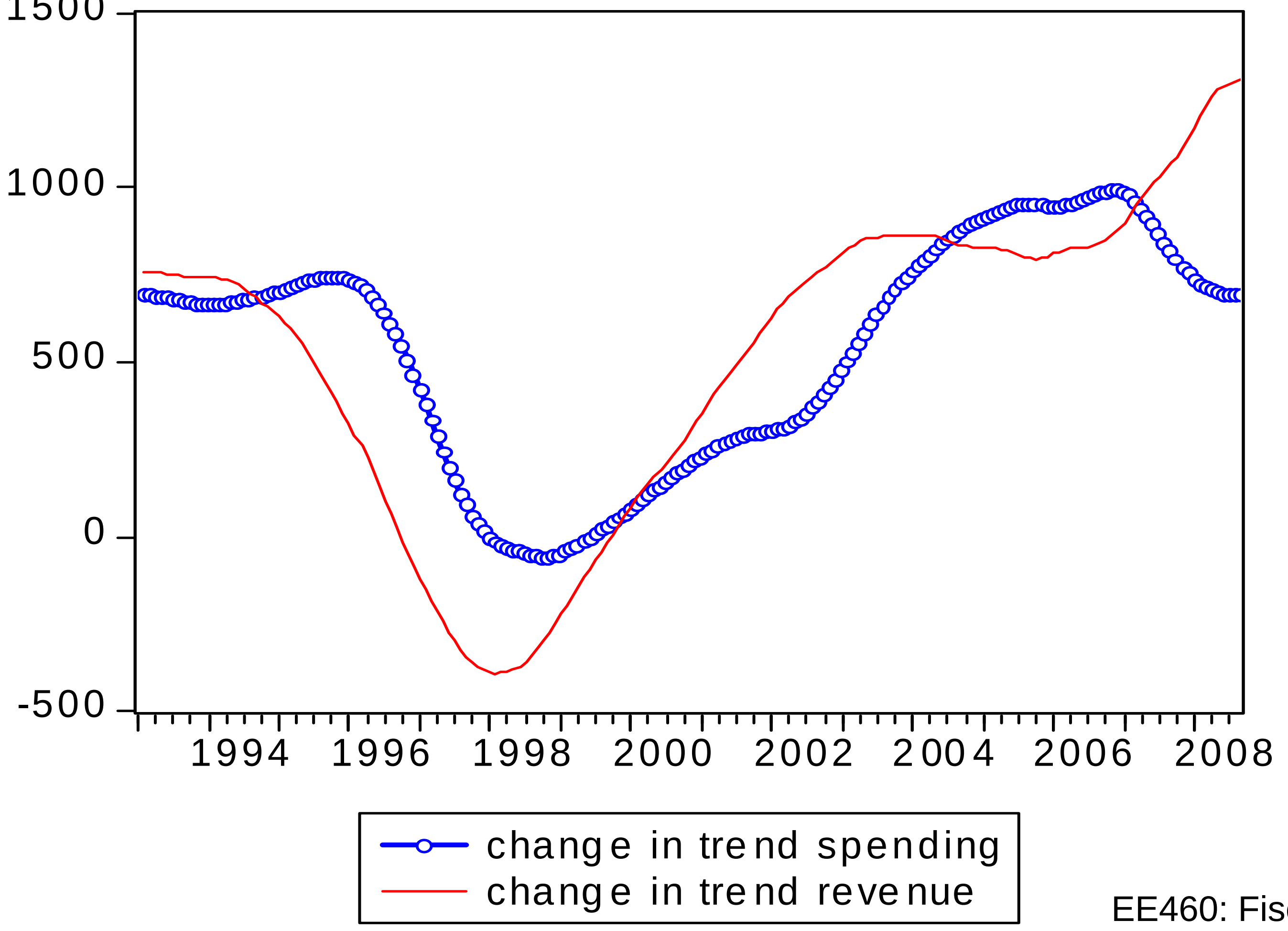
$$G \rightarrow R \qquad (2)$$

$$G \Leftrightarrow R \qquad (3)$$

Null hypothesis	F-Statistic	Probability
Δ (G) does not Granger Cause Δ(TAX)	2.23	0.11
Δ(TAX) does not Granger Cause Δ (G)	3.97	0.02

Fiscal stance shown by structural budget deficit

The role of automatic tax stabilizers



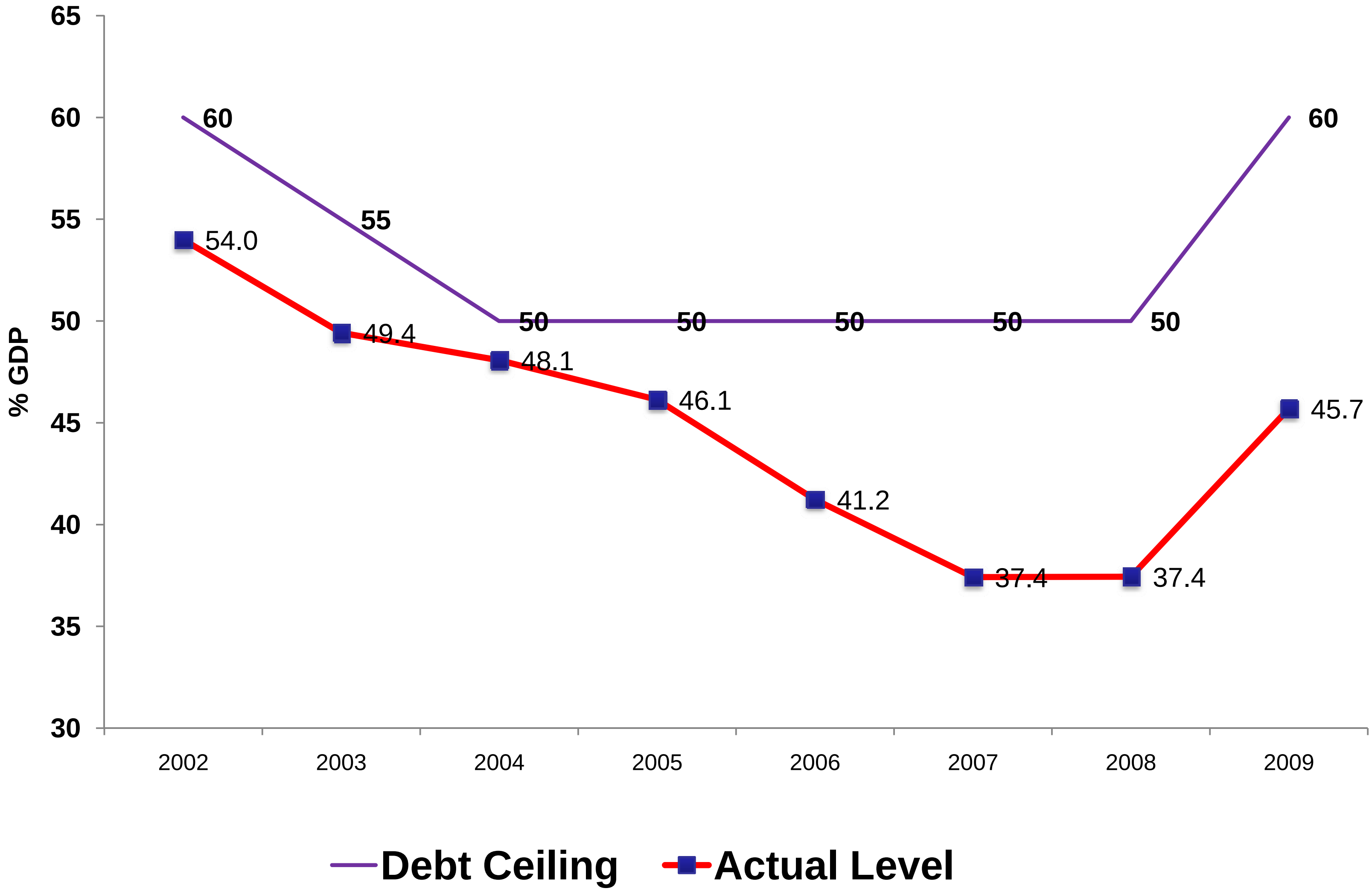
Budget deficit and economic growth

- 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.

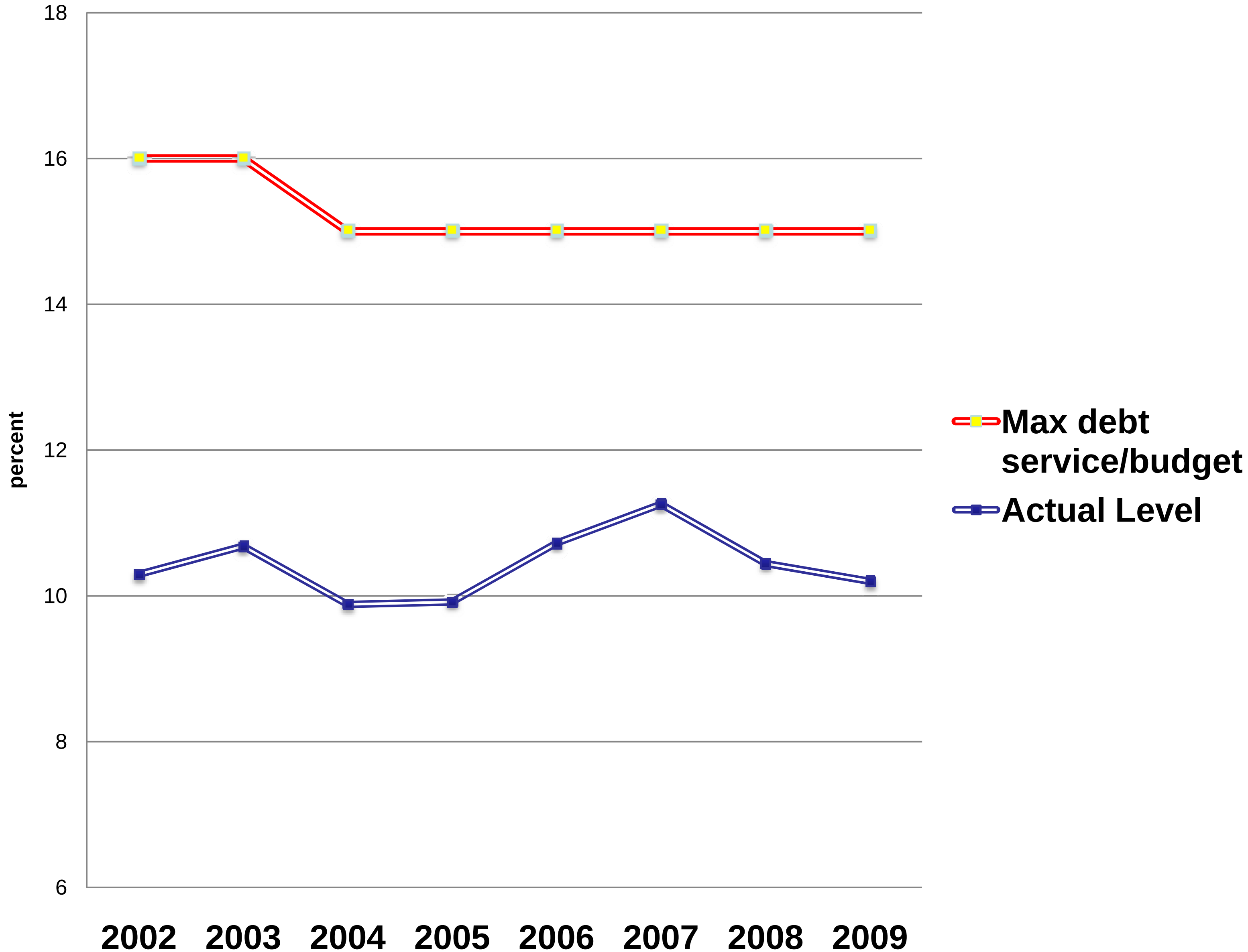
Rules of fiscal sustainability

- Size of public debt
- Size of debt service
- Public capital vs. consumption expenditure
- Ratio of foreign debt-service to exports

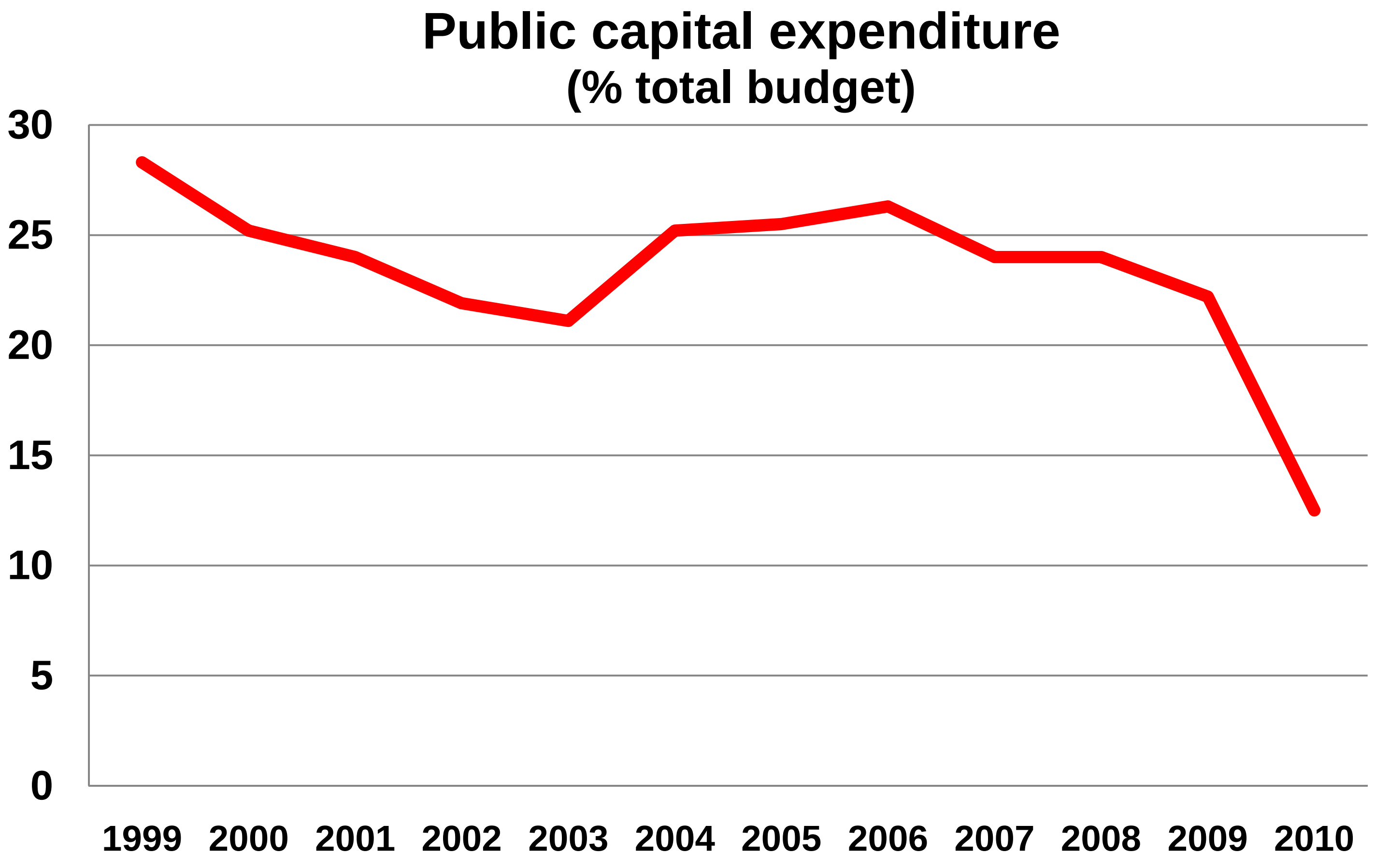
Regulation on Public Debt



Debt Service to Total Planned Spending



Capital spending must not fall below 25% of total budget



Estimated fiscal elasticities

2000-2005

	expenditure	Tax
Output	0.22	0.55
Price	1.27*	-1.1*

2006-Aug 2010

	expenditure	Tax
Output	-0.35	1.19*
Price	1.82	-1.89*

A success in inflation control brings about fiscal stability

Inflation tax

- Public spending must be controlled during high inflation to avoid fueling inflationary pressure.
- 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.
- 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 taxation, public investment, and other aspects of fiscal policy can contribute to growth and to during stagnation.

- 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.
- 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.

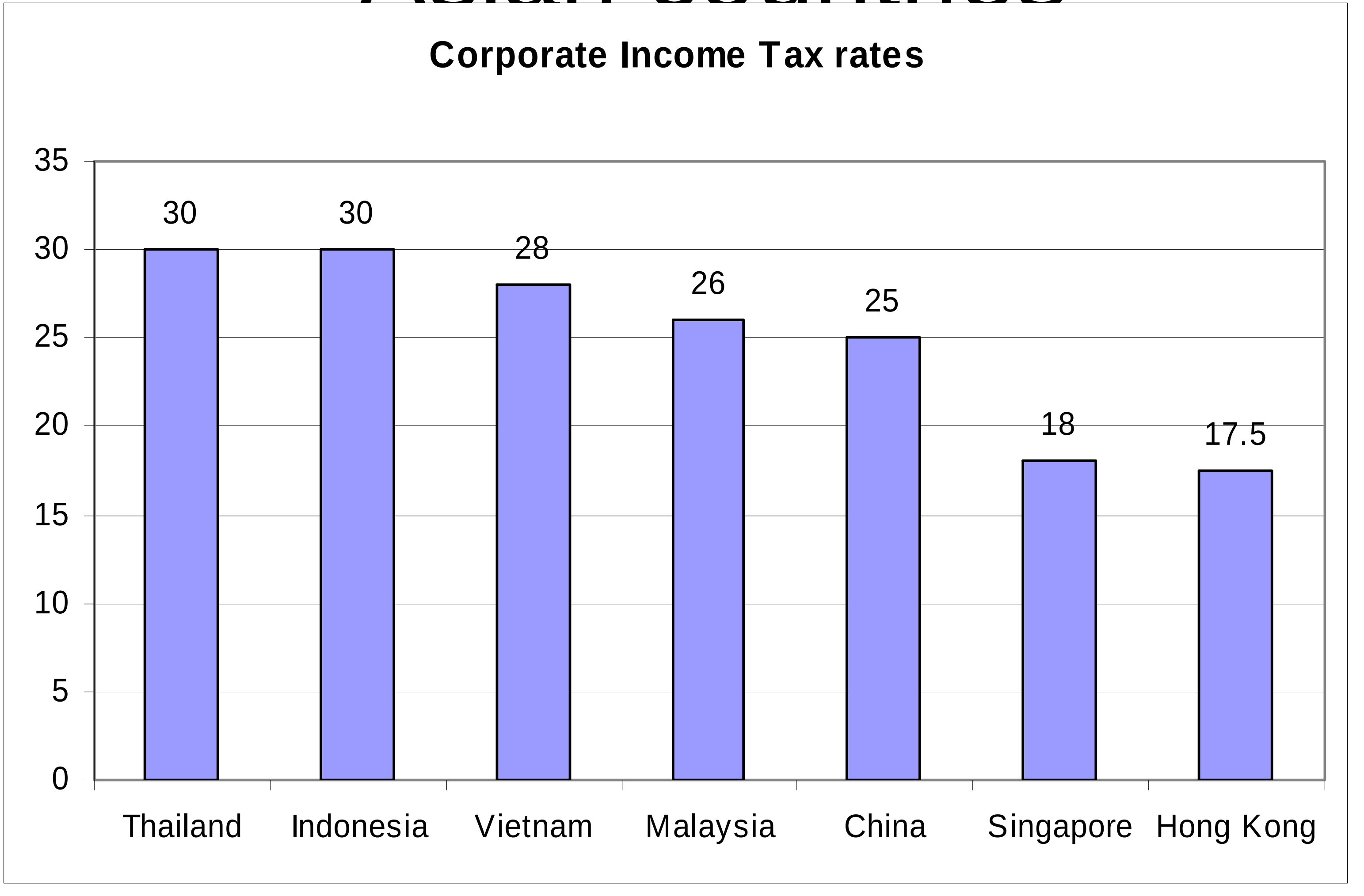
Public consumption and investment

- Taxes on investment and income have a detrimental effect on growth since taxes reduce the private return to 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.

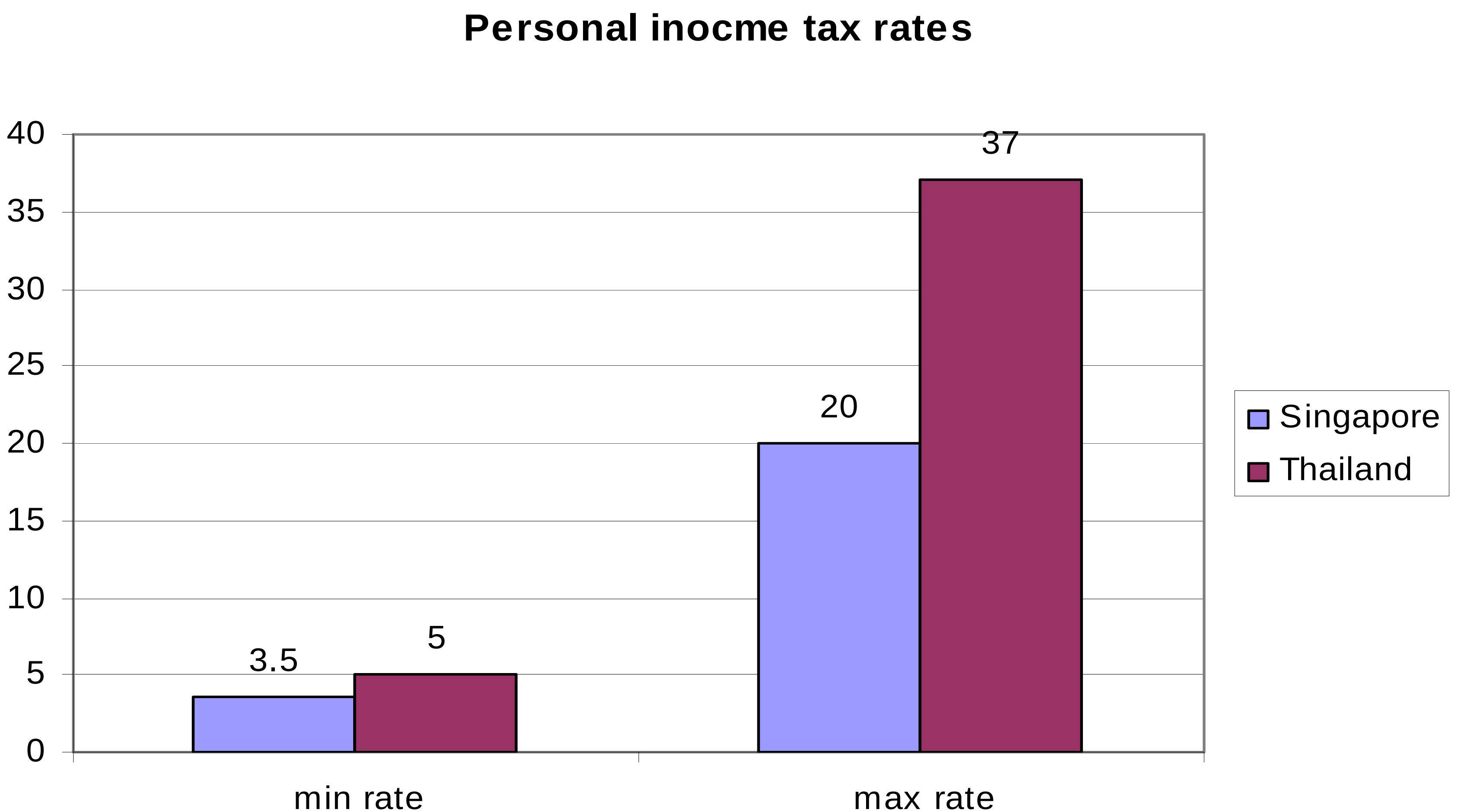
Capital vs. current spending

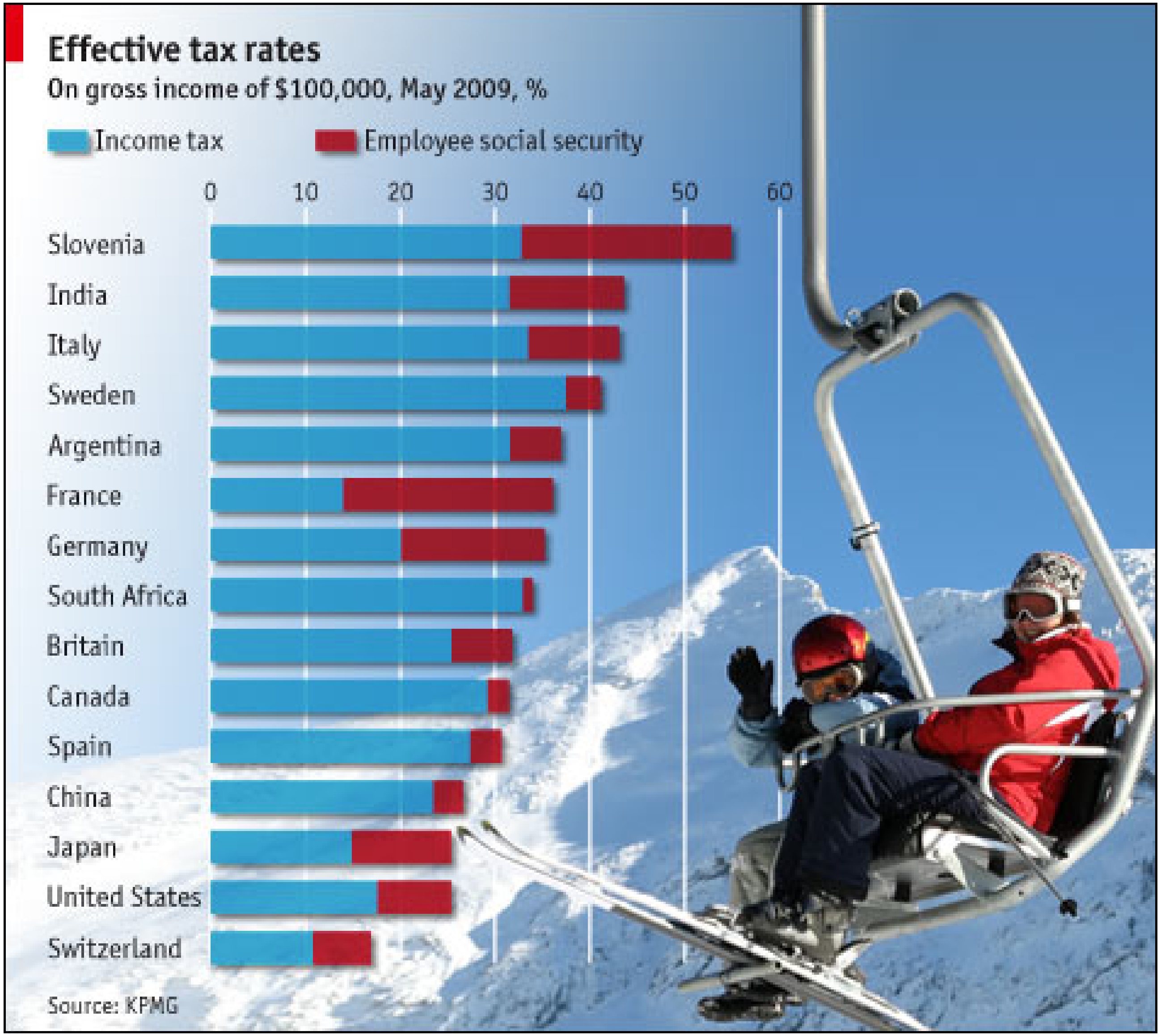
- Structure of public expenditure matters for long-term growth.
- Rising share of current spending is detrimental to long-term growth in the long-run.
- How to finance capital and current spending

Past corporate tax rates in Asian countries

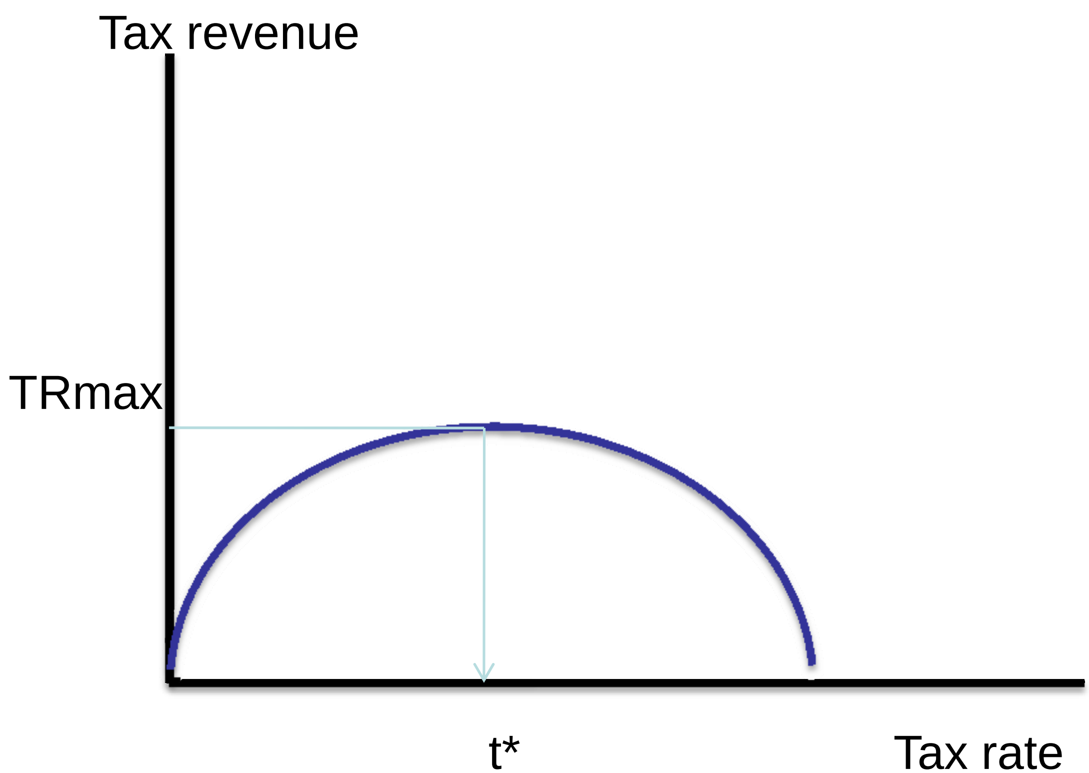


Progressive income tax rates
(automatic tax stabilizer)




Effective tax rates
On gross income of $100,000, May 2009, %
Income tax
Employee social security
0
10
20
30
40
50
60
Slovenia
India
Italy
Sweden
Argentina
France
Germany
South Africa
Britain
Canada
Spain
China
Japan
United States
Switzerland
Source: KPMG

Laffer curve: tax rate and tax revenue relationship

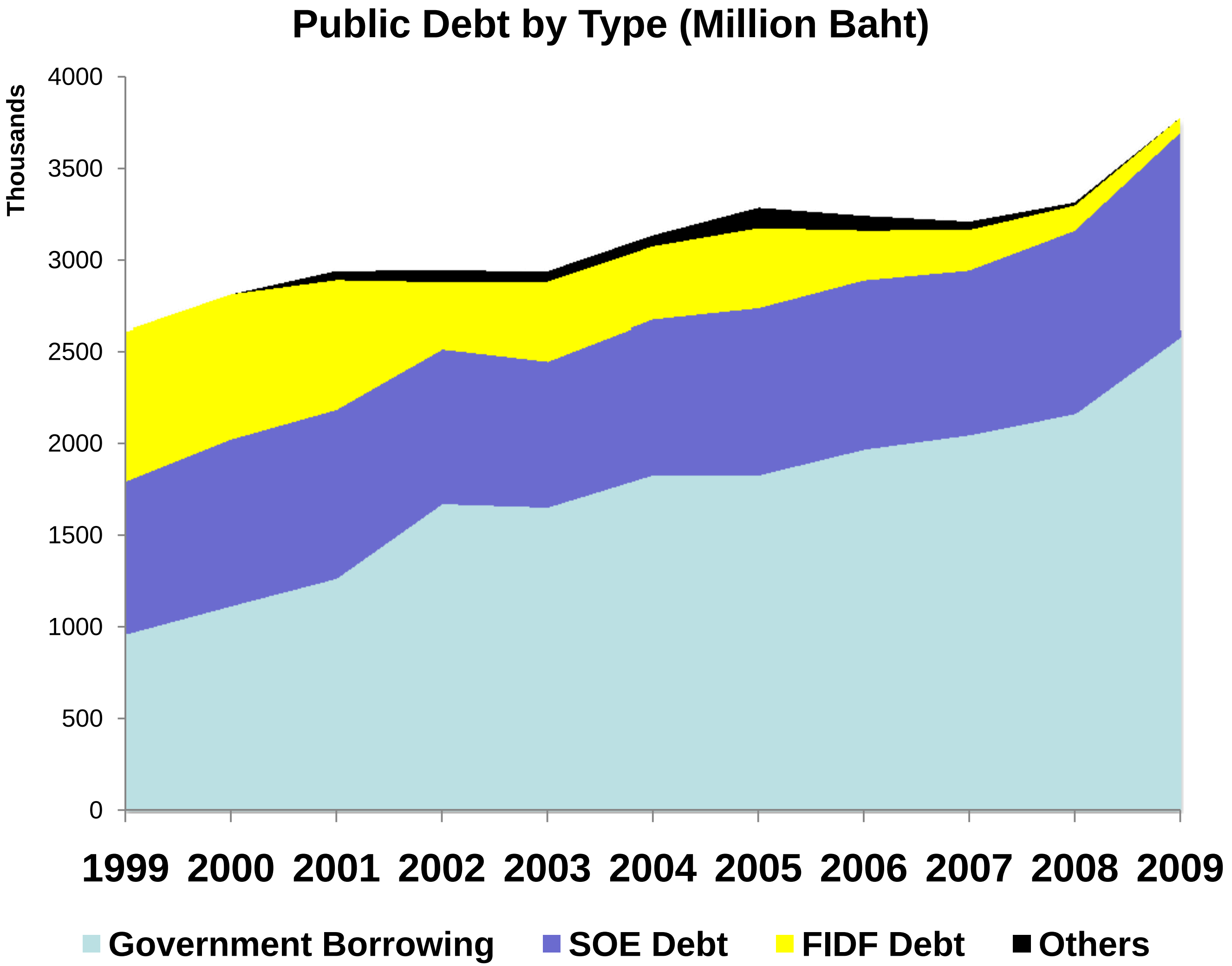


Can a tax reduction increase revenue?

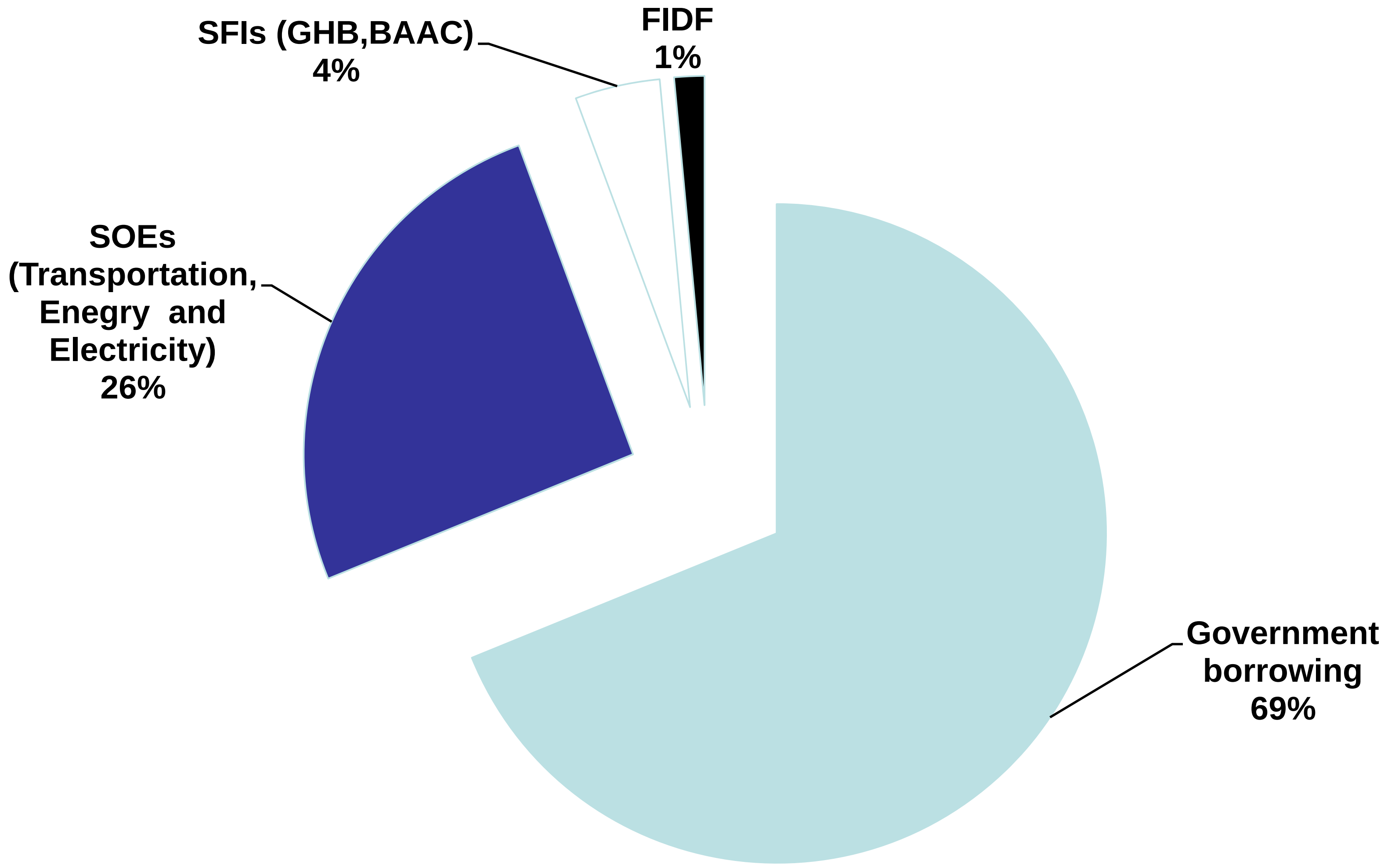
- The shape of the Laffer curve is determined by the elasticity of labor with respect to the net wage.
- Critics of supply-side economics argue that tax reductions can lead to increased revenue is absurd.
- Which side on the Laffer curve (left or right of the point t*) the economy is operating?
- Even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

Stylized facts

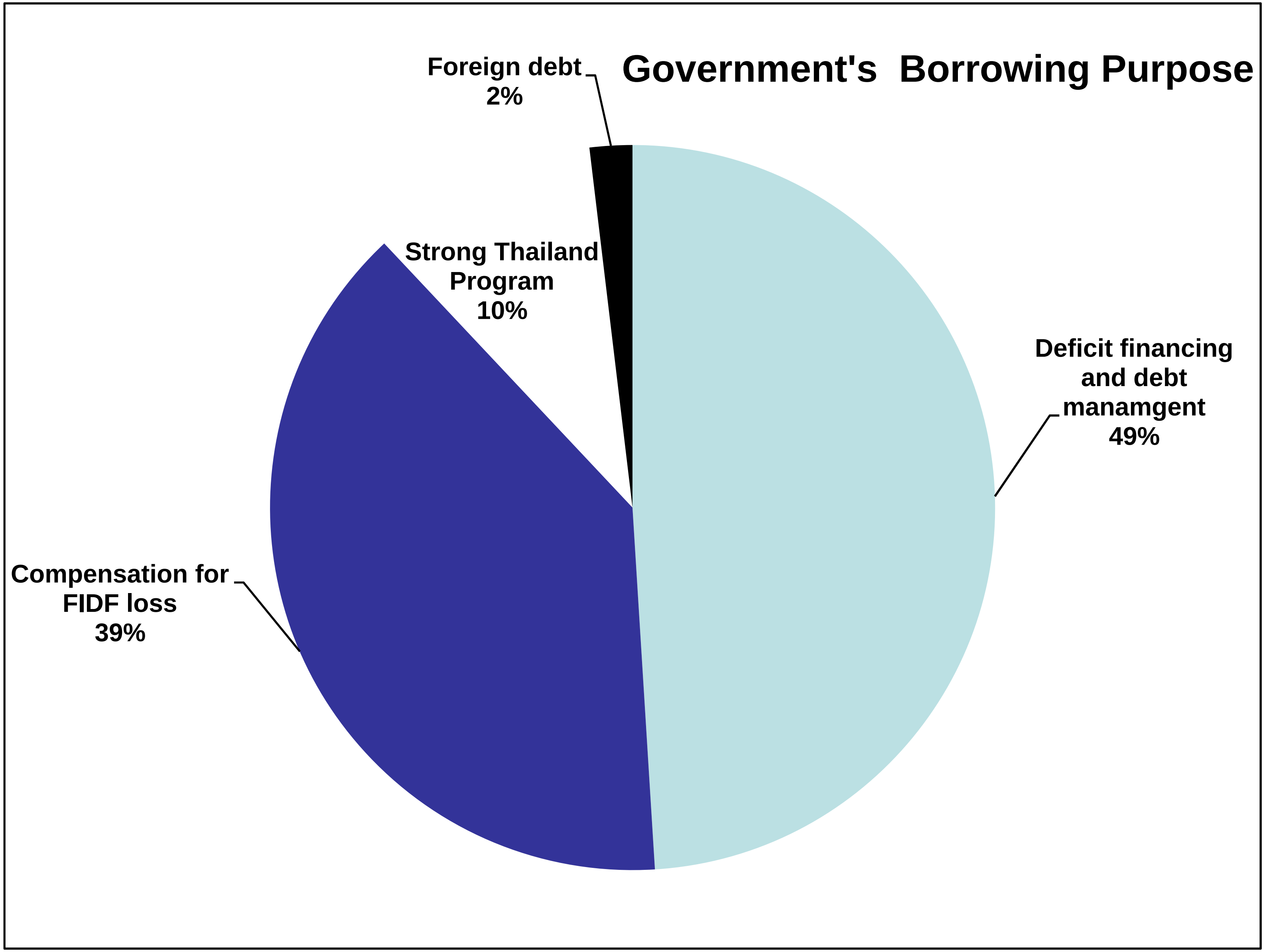
- **The level of development is related fiscal structure: poor countries rely more on trade taxes, developed countries rely on income taxes.**
- **Fiscal policy is influenced by the scale of the economy (population and GDP level).**
- **Investment in transport and communication is consistently correlated with growth.**
- **Public spending on infrastructure has supernormal returns.**
- **The effects of taxation on growth are difficult to insolate.**
- **Is there any limit to government spending?**
- **Fiscal space is impaired by high debt-GDP ratio.**


Public Debt by Type (Million Baht)
Thousands
4000
3500
3000
2500
2000
1500
1000
500
0
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Government Borrowing
SOE Debt
FIDF Debt
Others

Thailand's Public debt
31 October 2010



Source: Public Debt Management Office



Source: Public Debt Management Office

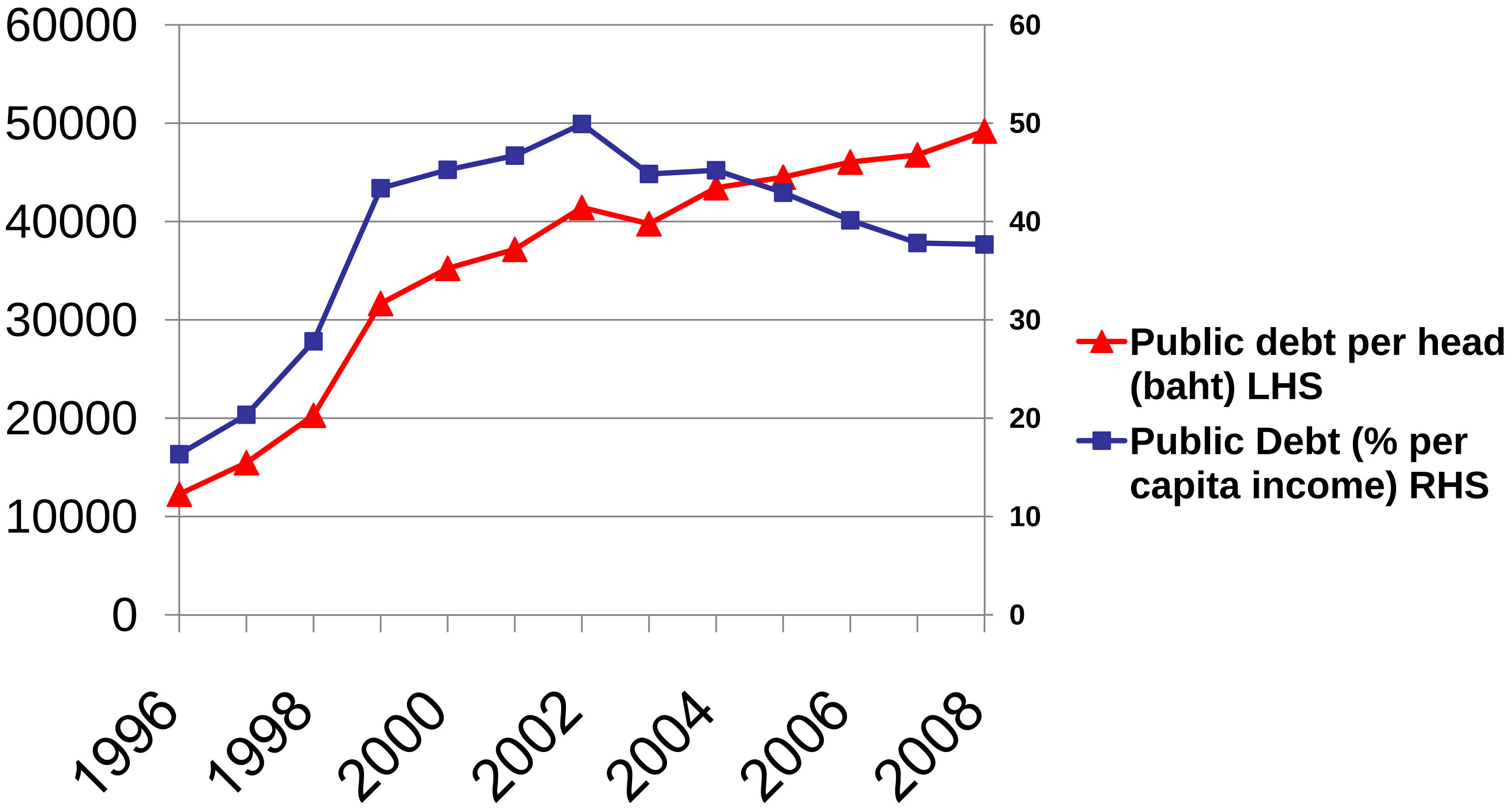
To stabilize the public debt

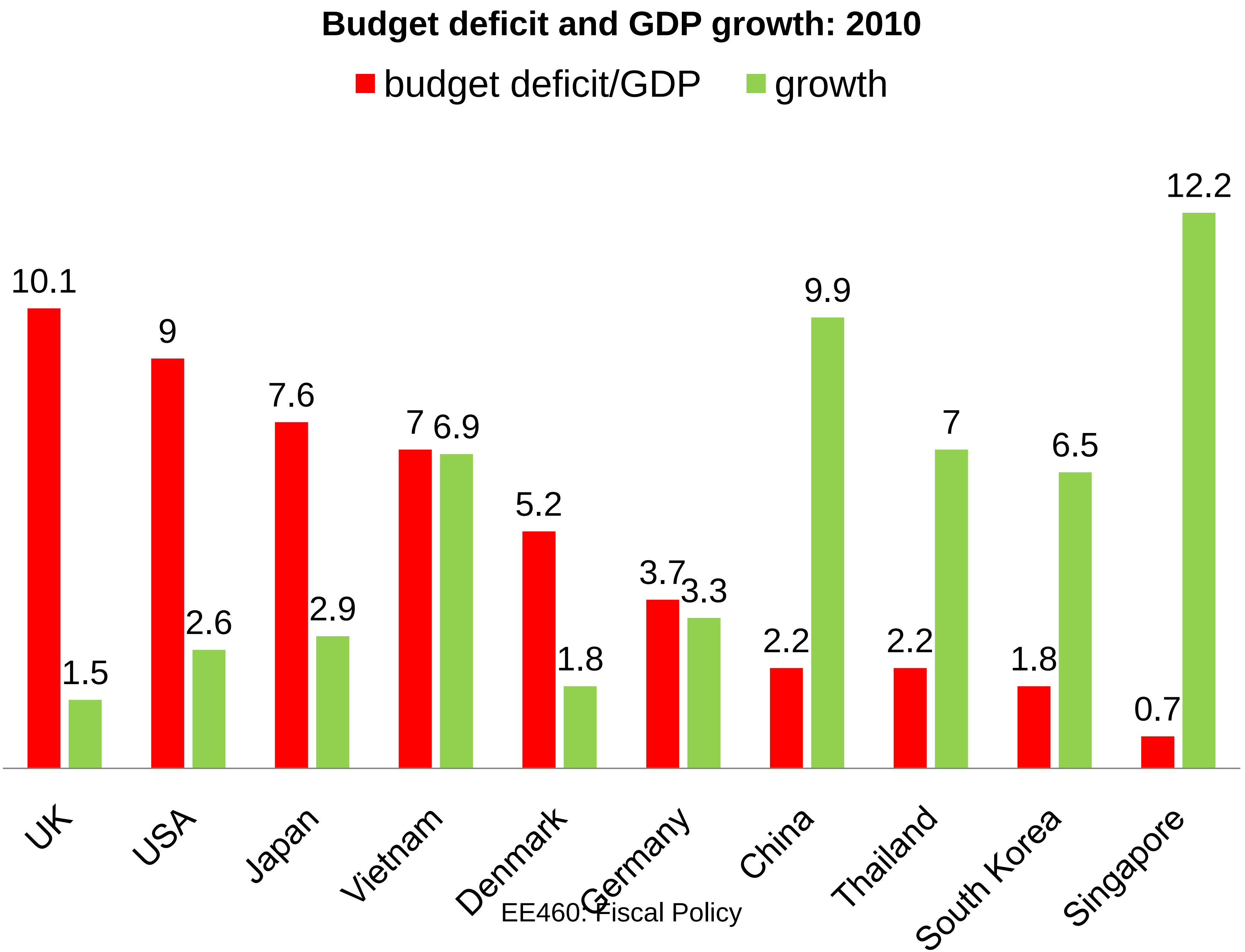
- To keep the Debt-to-GDP constant, the government must increase its primary surplus in line with the increase in (r-g).
- The spending cuts or tax increases are likely to prove politically costly, generating even more political uncertainty and the need for an even higher interest rate.
- A sharp fiscal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

Per capita public debt




Budget deficit and GDP growth: 2010
budget deficit/GDP
growth
10.1
1.5
9
2.6
7.6
2.9
7
6.9
5.2
1.8
3.7
3.3
2.2
9.9
2.2
7
1.8
6.5
0.7
12.2
UK
USA
Japan
Vietnam
Denmark
Germany
China
Thailand
South Korea
Singapore

The U.S. National debt

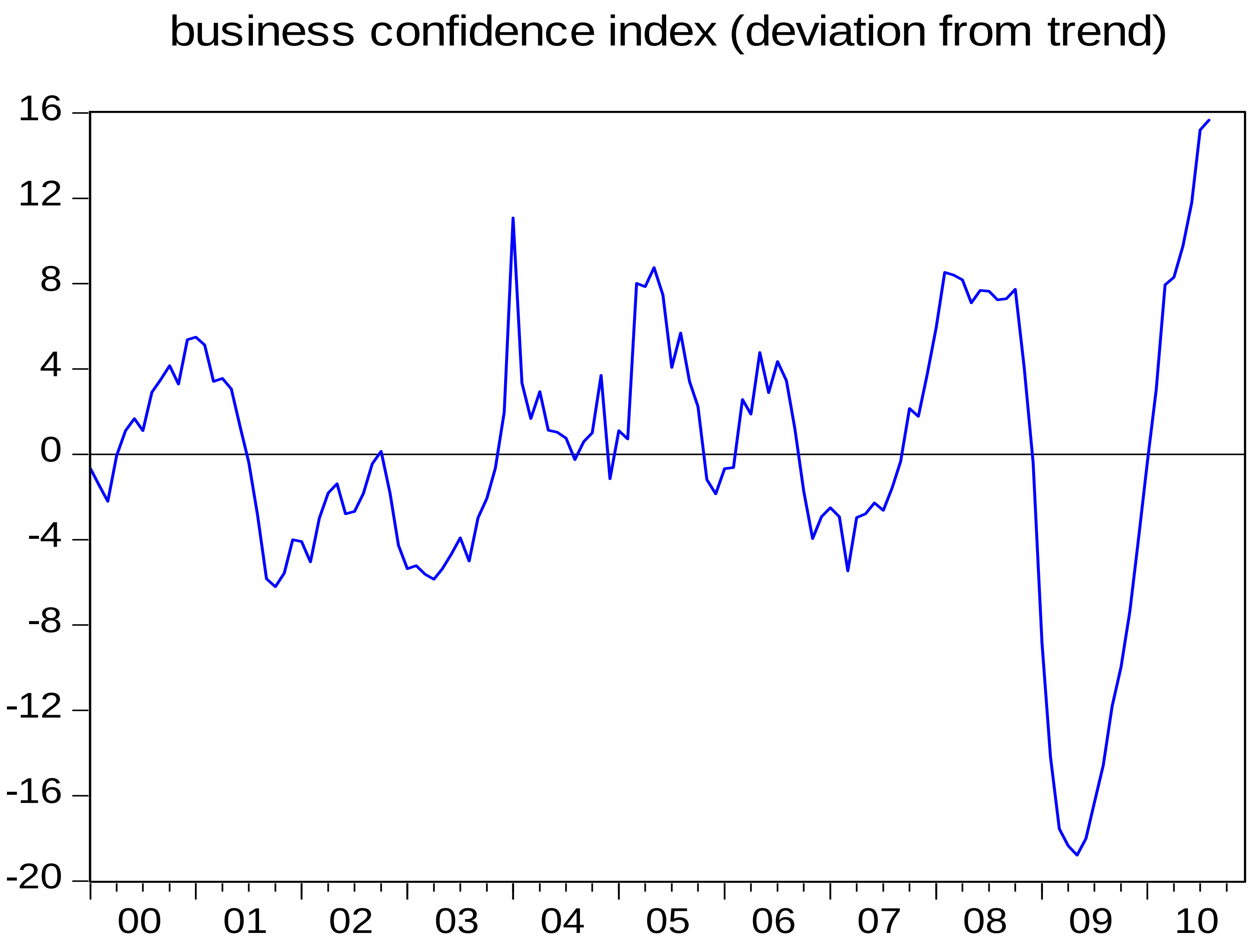
- Sometime early this year, the U.S. will reach the $14.3 trillion national-debt ceiling imposed by law, which was voted by the Democratic Congress in February, not a single Republican voted in favor.
- The Congress must vote to extend the Treasury's borrowing authority otherwise there will be a government shutdown on April 9, 2011.
- The alternative is a potential default on the debt and a risk of global financial crisis.

Fiscal stimulus in Thailand

- In the fiscal year 2010, the budget deficit was around Bt430 billion or 4 percent of GDP.
- In January 2010 the government announced a Bt116.7-billion (US$3.35 billion) stimulus package.
- Spending cuts or tax hikes are painful.
- The Keynesians were right to argue that, without the rise in public borrowing, the recession would have been calamitous. (see the Mellon Doctrine)

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.



EE460: Fiscal Policy

Conditions for effective fiscal stimulus

- Well-timed
- Macroeconomic stability
- Fiscal sustainability to offset precautionary savings
- Well-targeted spending to ensure the largest demand impact
- Pervasive liquidity constraints

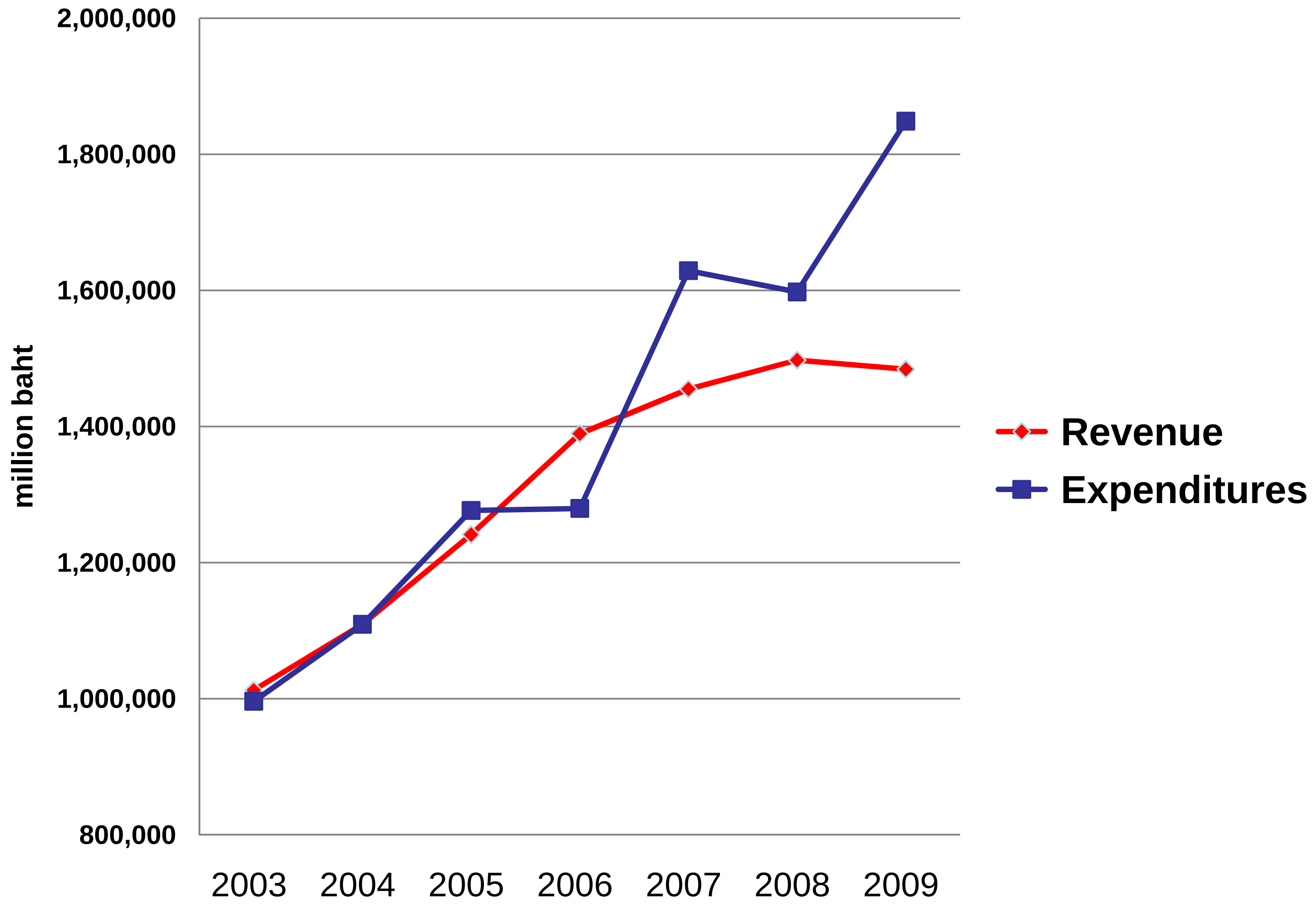
Public debt burden

- In addition to 1.7 trillion baht FY 2010 budget, the government borrowed additional 800 billion baht to stimulate the economy.
- The average interest rate on the stimulus package is 4%.
- The additional borrowing costs extra debt service by 3 billion baht annually.

Public debt and budget deficit

- Debt-to-GDP ratio has reached 40%
- Bonds are future tax liabilities.
- FY 2010, debt service amounted to 12.3% of the budget, 3% of which are principal repayments.
- Interest payments on public debt deprive spending on welfare and education.

Thailand's fiscal stimulus



Those 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.

Concluding remarks

- Fiscal policy can become an effective means to spur growth during the time when consumer and investor confidence is strong.
- However, 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.

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.

Fiscal strategies for long-term growth

- Role of automatic stabilizers
- Contemporaneous tax finances current expenditure
- MC and MB applies

Discussion questions

- In response to the triple-dip global recession, how should the Thai government conduct its fiscal policy?
- How should the government finance its budget deficit?
- What are likely impacts of 2.2 trillion baht mega infrastructure spending programs on output, price levels and current account deficit?