

# **Fiscal Sustainability Concepts and Policies: Europe and Asia**

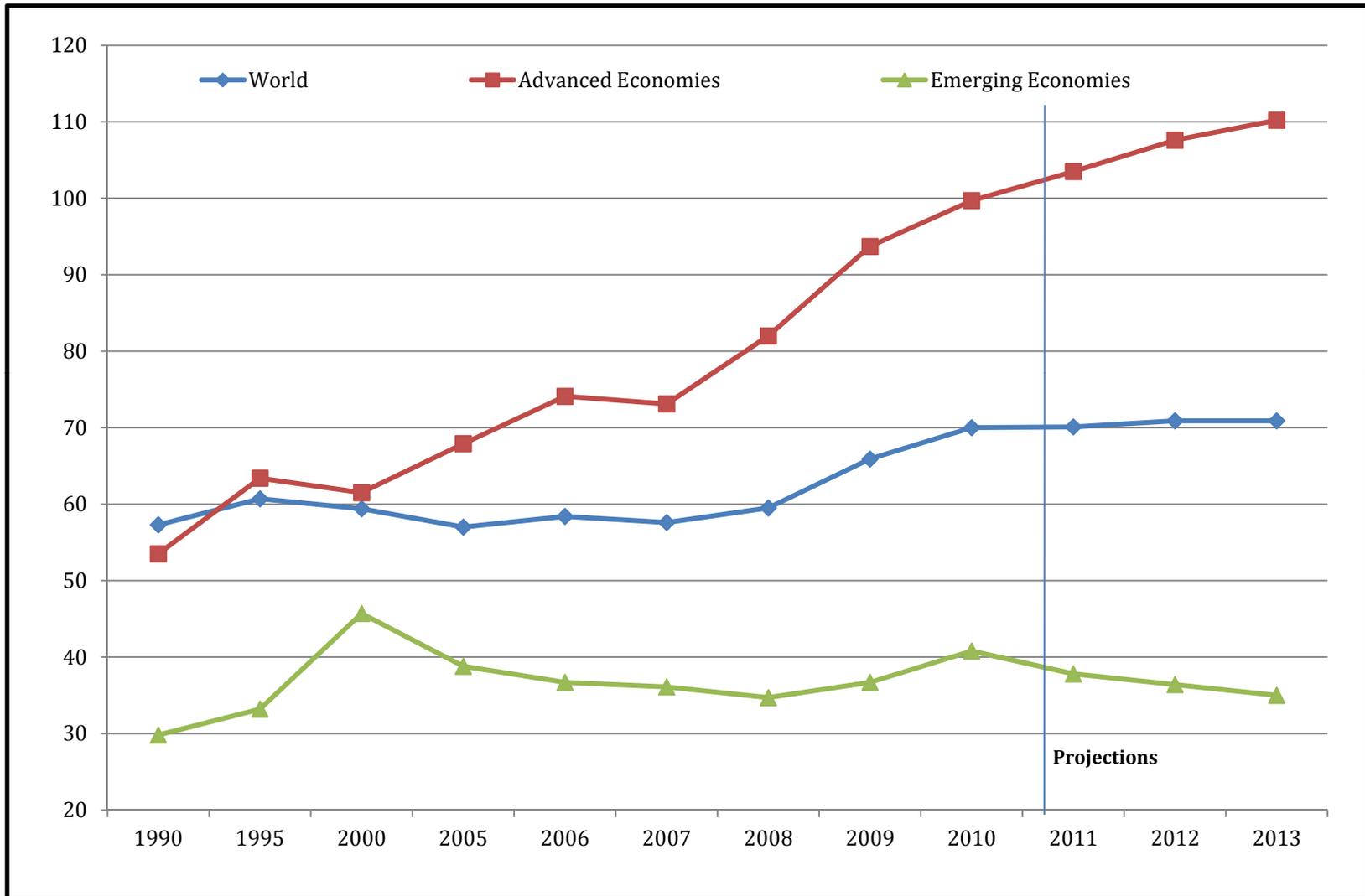
**Ramkishen S. Rajan**  
**George Mason University and**  
**LKY-SPP, National University of Singapore**

**E-mail: [rrajan1@gmu.edu](mailto:rrajan1@gmu.edu)**

# 1. Introduction

- The fiscal positions of many advanced economies (AEs) have deteriorated precipitously over the last two decades.
- Gross government debt to GDP for AEs which was 60 percent in 2000 stood at about 100 percent in 2010.
- This share is set to increase significantly if current trajectories hold (IMF, 2012).
  - Mounting concerns about debt sustainability in many AEs.
  - Caveat: *Net versus Gross debt.*

## Gross Government Debt (% of GDP)

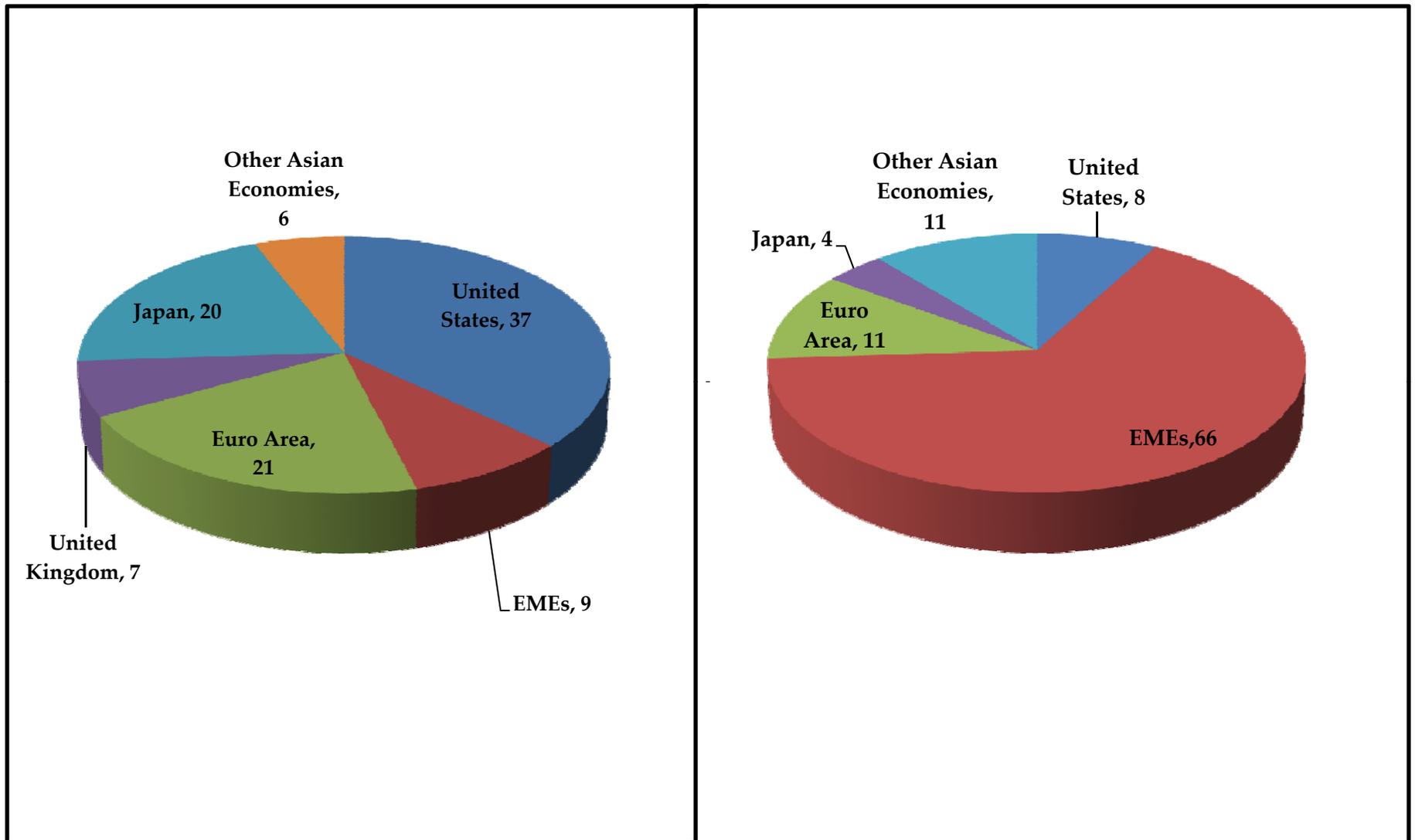


Source: Compiled from IMF.

- Public debt for emerging markets economies (EMEs) fairly stable at 35-40 percent of GDP since 2005.
- EMEs responsible for about two-thirds of global GDP growth in 2007-2011 but accounted for less than 10 percent of the increase in global debt.

**Global Public Debt: Percent Change, 2007-2011**

**Global GDP: Percent Change, 2007-2011**



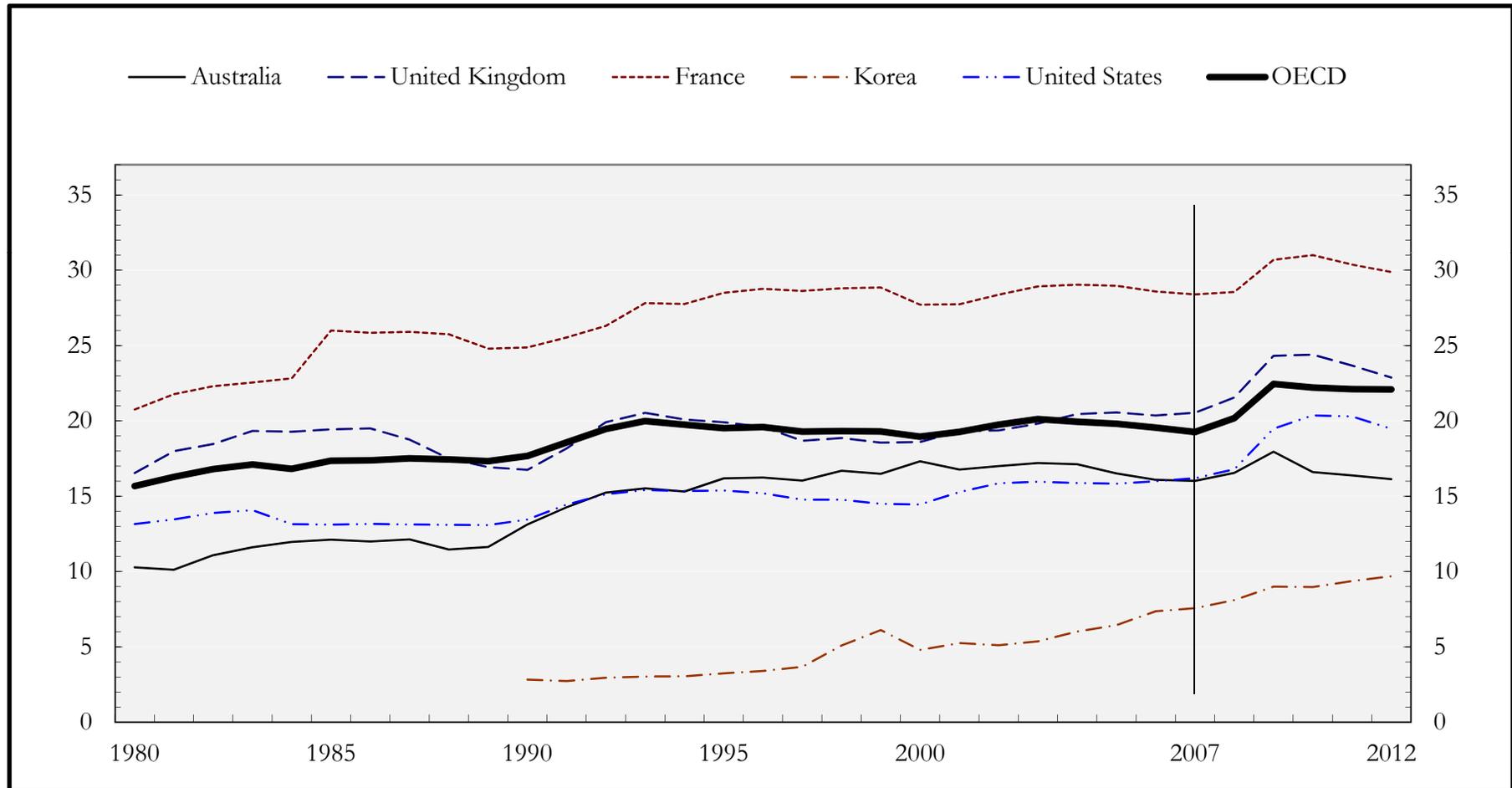
Source: Reproduced from Prasad (2011) based on IMF data .

Note: The charts show the percentage contribution of countries or country groups to the changes in the absolute levels of global net government debt and global GDP (measured in a common currency at market rates).

- Some of the abrupt fiscal deterioration in AEs is cyclical due to the Great Recession.
  - Public debt of AEs just under 75 percent of GDP end 2007.
  
- Structural reasons behind fiscal worsening.
  - Tax revenues for AEs (OECD) around 35 percent of GDP between 1995 and 2007 (before falling because of recession).
  - Problem in AEs has been a sharp rise in govt expenditures.
    - 38 percent of GDP since 2001 jumping to 43-45 percent by 2009-2010 due to stimulus and fiscal stabilizers. (vs. 23 percent for developing Asia)

- About half of the expenditures relate to social protection including public pensions.

### Public Social Expenditure in Selected OECD Countries, 1980-2012 (% of GDP)



Source: Reproduced from OECD Social Expenditure database (SOCX). The main social policy areas are as follows:  
 Old age, Survivors, Incapacity-related benefits, Health, Family, Active labour market programmes, Unemployment, Housing, and Other social policy areas.

- Given worsening demographics inevitable upward pressure on such expenditures.
  - Fiscal consolidation in AEs all the more imperative.
  
- Reinhart and Rogoff (2011) note: *“combination of high and climbing public debts..and the protracted process of private deleveraging makes it likely that the ten years from 2008 to 2017 will be aptly described as a decade of debt”*.

- Financial markets have already passed the verdict that some fiscal positions in Europe are not sustainable (notably the PIIGS).
  
- Questions we look at:
  - How do we measure fiscal sustainability? – *main focus*.
  - **Are there some principles of sound budgetary practise?**
    - **Is there a single right model of fiscal rectitude?**
  - What is the impact of the Euro crisis for Asian regionalism?

## 2. What is Fiscal Sustainability (FS)?

- No obvious theoretical benchmark for fiscal sustainability (FS):
  - Broadly refers to limits on the government debt.
    - IMF (2011) notes that *“fiscal policy stance can be regarded as unsustainable if, in the absence of adjustment, sooner or later the government would not be able to service its debt”*.
  - Intertemporal fiscal solvency criterion --- PV of future primary surpluses equal initial level of public debt (or some target level):
    - there are surpluses at some time in the future; and
    - pace of debt issuance is not faster than real interest rates. – No Ponzi criterion.

- At an operational level, FS often refers to one where the debt stabilizes as a share of GDP.
- Defining FS as one where the debt-to-GDP ratio stabilizes, drives ( $\Delta d = 0$ ), we obtain the following:

$$d^* = pb(1 + g)/(r - g) \quad (1)$$

*where: d- debt to GDP ratio; r – real interest rate; g – long run growth rate of real GDP; pb – primary balance to GDP.*

- Debt ratio will rise if real interest rate exceeds economic growth unless primary budget is in sufficient surplus.
- Conversely if a country runs a primary deficit, growth must exceed real interest rates for debt ratio to decline.
  - Importance of economic growth!
  - Implies country is over saving and investing and is dynamically inefficient (i.e. beyond Golden Rule of savings).
- Eg. if historical interest rates average 2 percent, economy grows at 6 percent and primary deficit is 3 percent of GDP, debt ratio stabilizes at 80 percent of GDP.

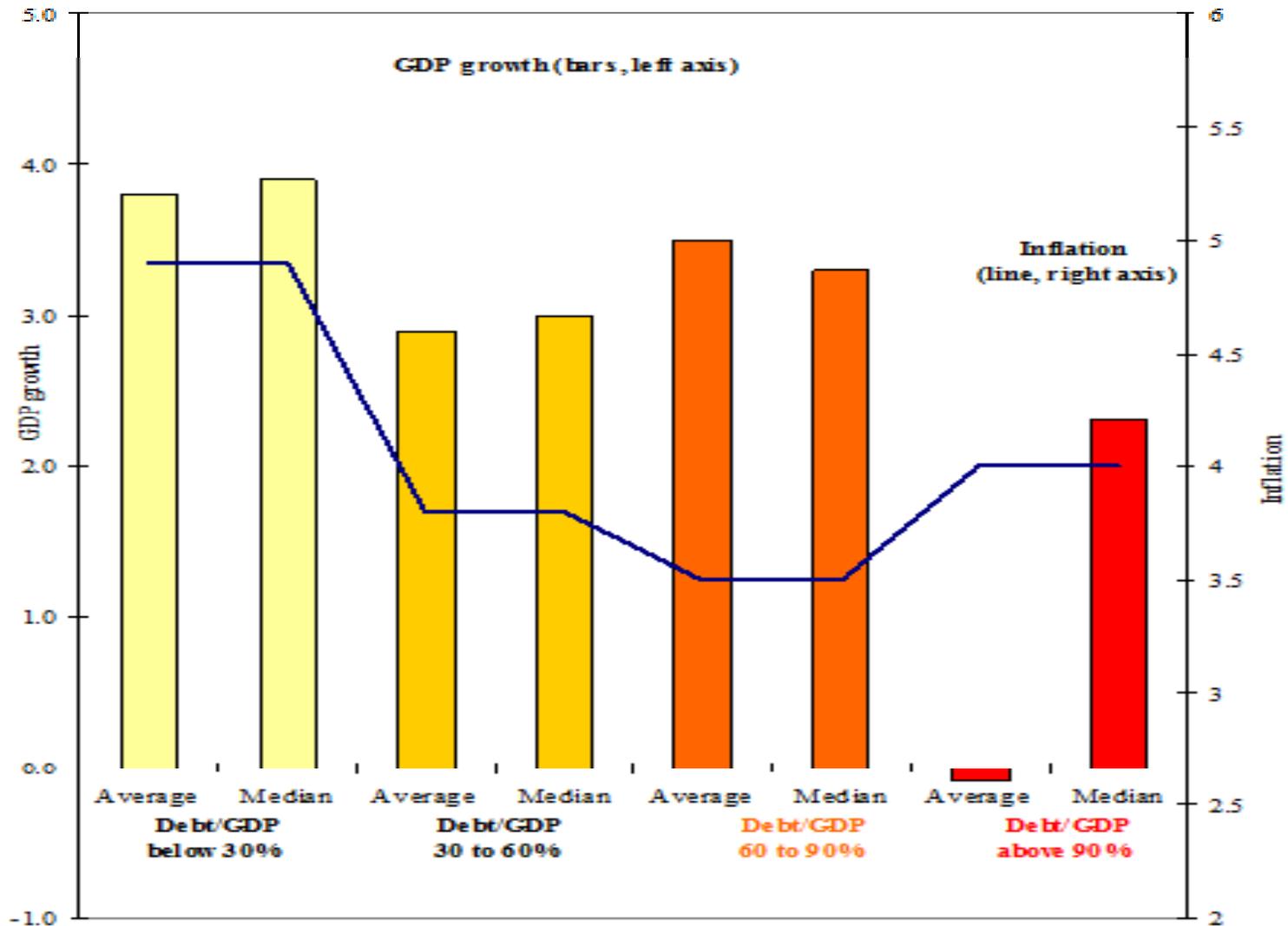
- Problems with this framework:
  - Partial equilibrium in nature.
  - Assumes primary balance, interest rates and economic growth to be exogenous variables.
  - Does not incorporate uncertainty, etc.
  
- Alternative measures more complicated, more assumption-laden and cannot always be easily operationalized.

- Most FS measures focus on solvency
  - Do not pay attention to possibility of forced adjustment by markets if creditors stop financing sovereign.
  - Liquidity risk is potentially of more concern the greater the share of debt owned by foreigners (i.e. external debt).
  - Who owns debt and maturity structure? *Capital flows story not solvency story* (Krugman).
  
- IMF and others developed non-parametric methods or signal approaches to alert about possible crisis.
  - Many of the early warning signal (EWS)-type models plagued by fairly high Type I and II errors (i.e. false positive or false negative).
  
- Not surprising as financial markets driven by investor psychology, news, herding behaviour – multiple equilibria.

# Debt Laffer Curve and Tipping Points

- Another method involves estimating thresholds:
  - If debt rises above a certain point they may start becoming a severe drag on economic growth.
- Related to the older Debt Laffer curve (Overhang) literature.
  - Rising borrowing costs, uncertainty, expectations of higher future tax burdens/subsidy cuts, loss of competitiveness.
- Reinhart and Rogoff (2010) examine histograms of data from 44 AEs and EMEs over two centuries (1790-2009).
  - Growth decline by 1 ppt beyond 90 percent threshold.
  - Data for EMEs included public and private debt -- when total external debt reaches 60 percent of GDP, annual growth declines about 2 ppt.
  - Controversial in the US but validated by other studies.
  - But issue of causality between debt and growth.

## Public Debt and Growth: Tipping Points



Notes: Central government debt includes domestic and external public debts. The 20 AEs included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, the UK, and the US.

Sources: Reinhart and Rogoff (2010).

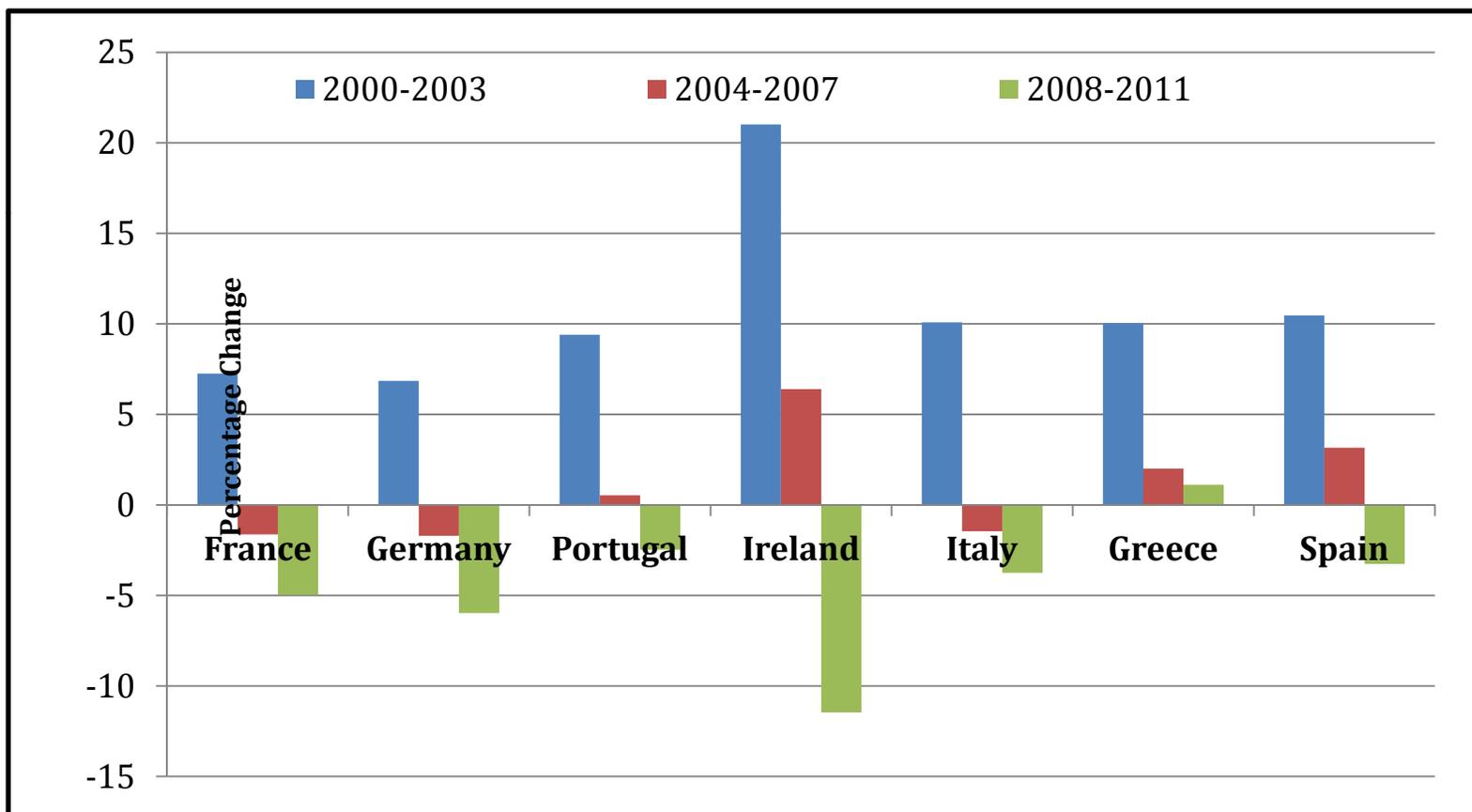
- Taken together, threshold studies suggest quite wide debt ranges:
  - 60-90 percent of GDP for AEs (75 percent mean estimate).
  - 40-70 percent (55 percent mean estimate) for EMEs.
  - Prudential benchmarks suggested by the IMF -- 60 percent for AEs and 40 percent for EMEs.
    - Not apparent how these rules of thumb were reached (median debt-to-GDP ratios historically??)

- IMF (2011b) finds that primary surpluses respond positively to public debt increases and reaction becomes stronger when public debt crosses a 78 percent threshold.
  - They interpret this to mean that fiscal policy is tightened once it crosses the threshold, because it is no longer sustainable.
  
- IMF (2008,2009) examined if effectiveness of countercyclical fiscal policy is conditional on starting level of debt-to-GDP.
  - Effectiveness of fiscal policy is smaller or sometimes negative in countries with public debt above 60-75 percent of GDP for AEs and 25 percent of GDP for EMEs.

- Returning to equation (1) sustainable primary deficits:
  - For AEs about 0.9 percent of GDP. (*Assume higher end of 60-90 percent debt threshold, growth 2 percent and long-term yield of 1 percent*).
  - For EMEs around 1.9 percent of GDP. (*Assume lower end of 40-55 percent threshold, growth of 7 percent and long-term yield of 2 percent*).
- Current median cyclically-adjusted primary deficits about 3.5-4.5 percent for AEs and 1-2 percent for EMEs.
- So while EMEs seem quite comfortable, there needs to be significant fiscal consolidation among many of the AEs.

- Combination of growing fiscal burden and loss of competitiveness in PIIGS. -- Vicious cycle.

Index of Real Effective Exchange Rate (2010=100)  
Annual Percentage Change



Source: Compiled from BIS.

Note: A negative (positive) change implies depreciation (appreciation);

The effective exchange rate is the weighted average of 58 trading partners reported by the BIS.

### 3. Sound Budgetary Principles

- Importance of sound public finances cannot be underestimated.
- Putting government accounts in order will require a sustained effort.

- Urgent need for more credible and specific medium-term consolidation plans while ensuring that economic growth is not compromised.
  - “Growth implosion has as a counterpart a debt explosion”.
  - Most consolidation plans derailed because of growth downturns.
  - According to the IMF (2010a), a 1 percent of GDP fiscal consolidation usually reduces GDP growth by 0.5 percent within two years.
  - Best practise for fiscal consolidation – OECD / IMF.
    - Successful adjustments concentrate on cuts in primary expenditure, especially government wages and transfers rather than tax increases.

- Blanchard and Cottarelli (2011) offer *ten commandments* for design of fiscal strategies. – *We outline a few.*
  - Have credible medium-term fiscal plan (target or rate of decline).
  - Target long-term decline in public debt-to-GDP ratio, not just its stabilization at post-crisis levels.
  - Pace of adjustment must be backed by fairly specific spending and revenue projections and supported by structural reforms. (Pension and health care reforms critical).
  - Strengthen fiscal institutions -- better fiscal rules, better budgetary management, and better fiscal monitoring.
  - Focus on fiscal consolidation tools and structural reforms conducive to boosting potential growth.
  - To be sustainable, fiscal adjustment should be equitable.

- Issue of growth versus equity is worth stressing.
- Sound fundamentals (macroeconomic, financial etc) and equality of opportunities (social mobility) - key for growth.
- However there will be greater demands for more comprehensive social protection given greater number of external shocks and growing inequities.
- Globalists – globalization hasten decline of welfarism while Revisionists argue that globalization may be helpful in making welfarism more cost-effective, market-consistent (workfare not welfare) and thus sustainable.
  - Who's right?
  - Nordic model?

- Among various *fiscally sustainable options* there are tradeoffs for society (not unlike short-run Phillips curve):
  - Is society willing to accept somewhat slower median wage and income growth and a less flexible economy for somewhat more comprehensive social insurance.
  - Are social compacts changing in Asia? -- Needed to maintain social cohesion?

## 4. Monetary Regionalism in Asia

- Regardless of potential outcomes of the Euro zone crisis advent of the euro itself has had a major impact on policy and academic thinking in Asia on monetary regionalism.

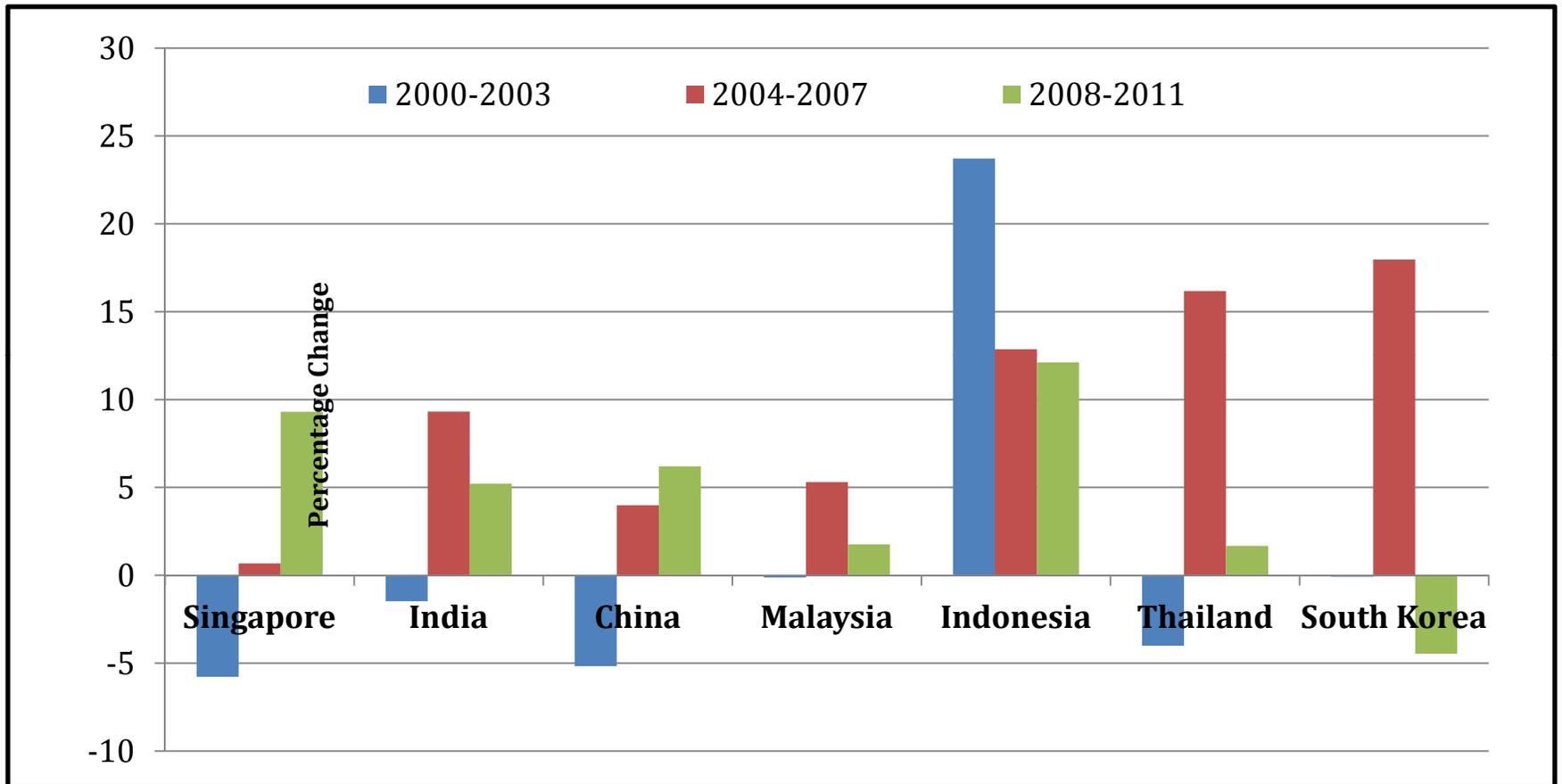
- During Asian crisis and its immediate aftermath (1997-2001):
  - Asian currencies and economies were in freefall.
  - Lack of any kind of regional leadership or cohesion in Asia to deal with the crisis (including the failed attempt by Japan at creating an Asian Monetary Fund).
  - Deep sense of vulnerability and helplessness.
  - The euro was successfully introduced in January 1999 and widely circulated by January 2002.
  - Interest rates in many of the Euro zone economies started converging rapidly towards German rates.
  - Seemed to be a general sense of euphoria in Europe with respect to medium- and long-term prospects.
  - Notwithstanding short-term Euro depreciation, there were proclamations of inevitability of the euro becoming an international currency to rival the US dollar.

- Some tentative lessons for Asian regionalism from the Euro zone's crisis:
  - Trade, investment and financial integration should proceed.
  - Focus should be on developing / strengthening regional crisis prevention and resolution mechanisms. – CMIM, AMRO.
  - But deeper monetary integration must wait:
    - OCA criteria are not endogenous.
    - Willingness to accept loss of sovereignty beyond monetary – financial, fiscal, structural and welfare, “intrusive surveillance”.
    - *De jure* removal of barriers to labour mobility not sufficient – genuine efforts at *de facto* labour integration needed -- especially important if first two are less than ideal.
    - Need for genuine burden-sharing and agreement beforehand and how the sharing will take place.
    - Whether benefits are worth the sacrifice not demonstrably clear.

- Three caveats:
  - Europe's future experience with the enhanced Stability and Growth Pact, Euro Plus Pact, and the permanent crisis management procedure (European Stability Mechanism) will offer useful lessons over time. – *Positive or negative.*
    - *“The euro has a supranational monetary policy framework, while the fiscal side is still national/intergovernmental.”* Charles Goodhart.
  - Greater de facto integration could make regions increasingly susceptible to Euro zone like contagion (cross-holdings of financial assets, reassessment of risk, etc).
  - Intensive and growing intraregional production structures and costs of self-insurance against crises will always put pressure for greater macro policy coordination.

*Thank You.*

**Index of Real Effective Exchange Rate (2010=100)  
Annual Percentage Change**

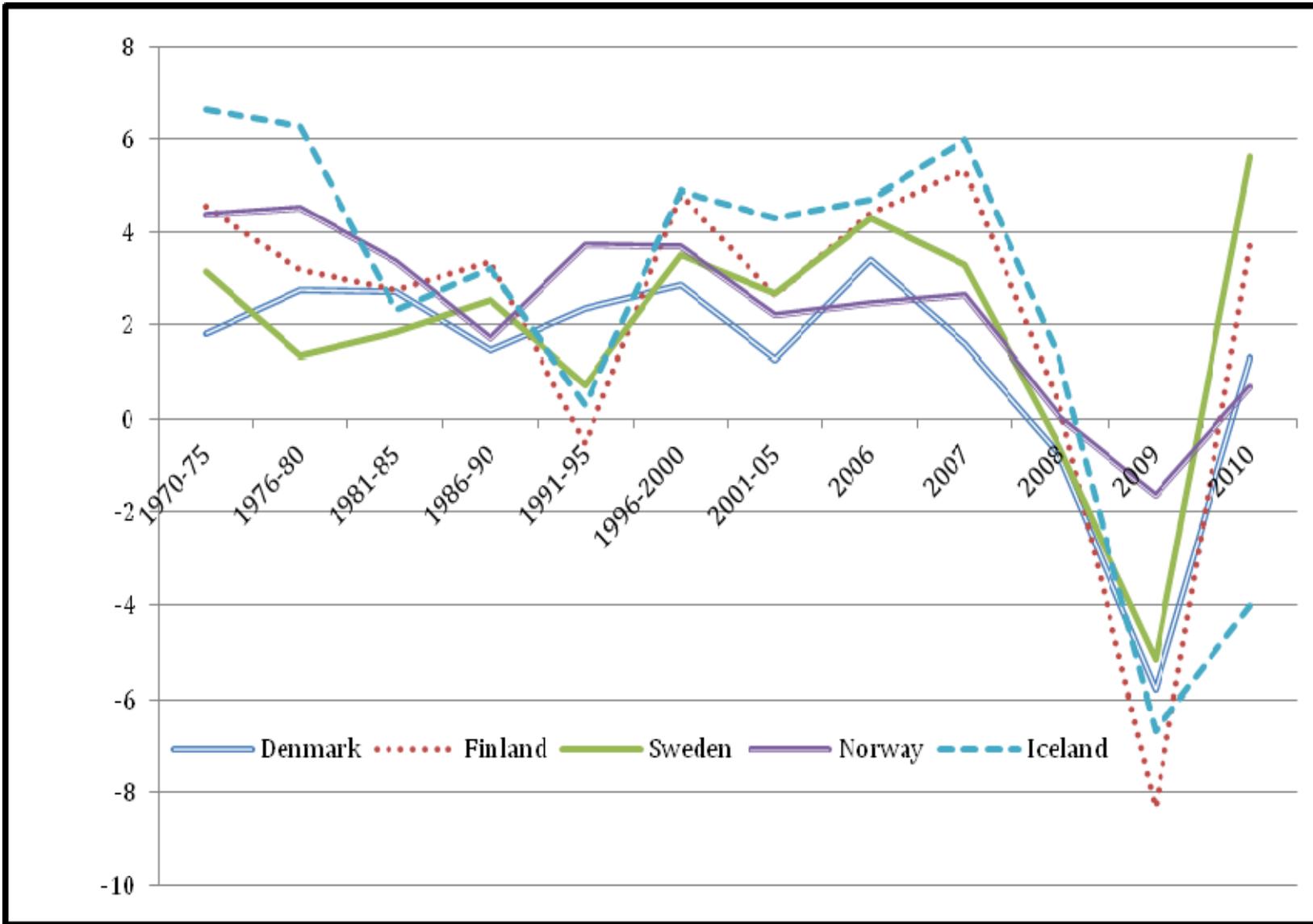


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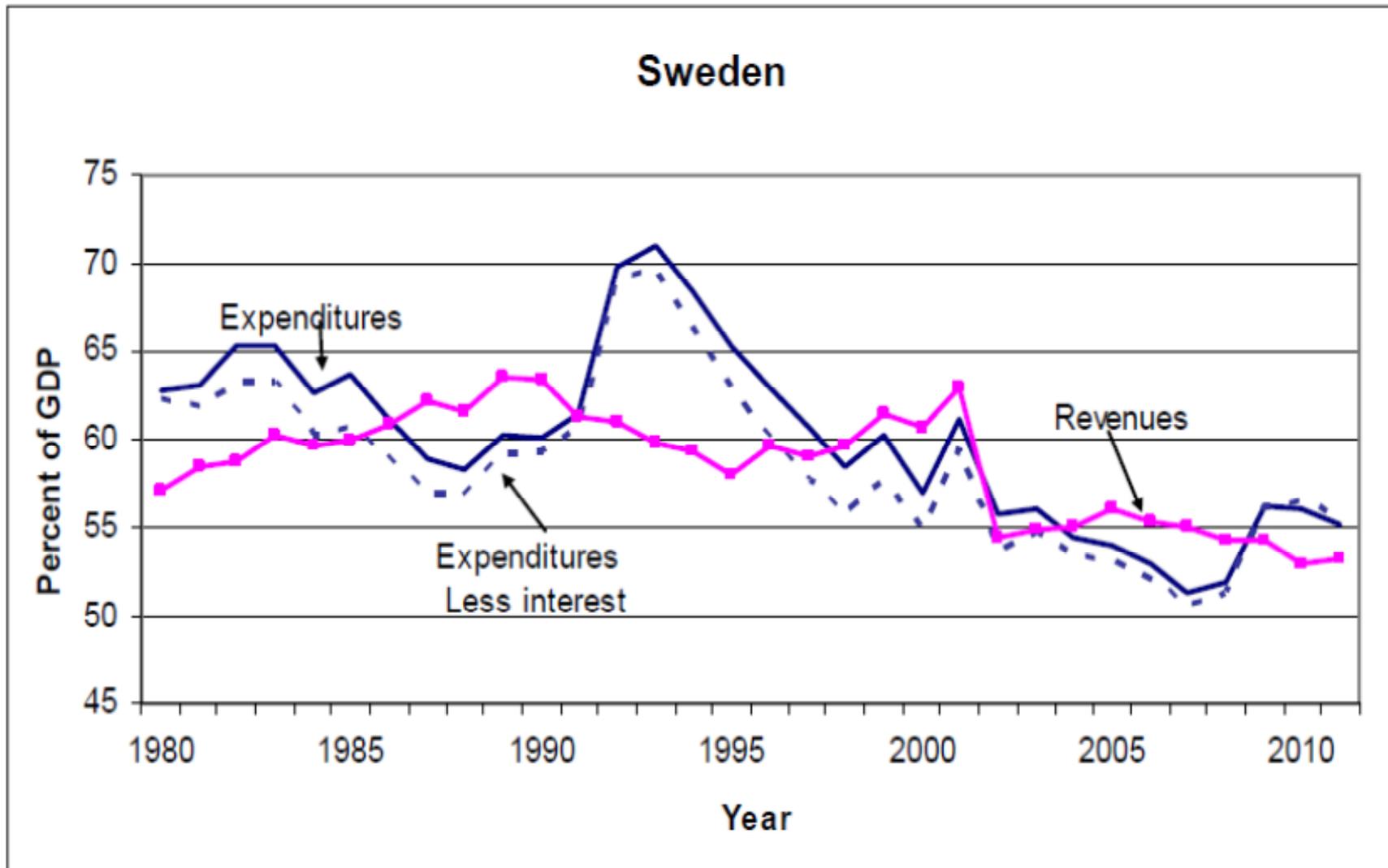
## Annual Growth Rates in Nordics



Source: Compiled from World Development Indicators Online, World Bank.

- *Old style* Nordic model of very cost-ineffective and comprehensive social safety nets financed by ever-rising taxes (Fabian socialism) not fiscally sustainable.
  - Norway has remained more old-style socialist buffered by oil.
  
- *New style* Nordic model – State’s role is still large and welfare fairly comprehensive but govt expenditure has shrunk.
  - *“Social transfers have been trimmed to reasonable proportions, and most publicly financed services are carried out based on the free choice of Swedish citizens”* (Aslund, 2010).

## Swedish Fiscal Consolidation since Financial Crisis of 1990-91



Source: Swedish *Ministry of Finance*.

## *On Swedish Fiscal Policy Management*

- *We now have a robust system with a surplus target of 1 percent over the economic cycle, a multi-annual expenditure ceiling, a centralized top-down budgetary process, in which the Ministry of Finance has a strong co-ordinating role, and a statutory balanced budget requirement for local governments. There is also a fiscal policy council that independently evaluates the government's fiscal policy, including its long-term sustainability, the surplus requirement, and the multi-annual expenditure ceilings.*

*Anders Borg, Minister for Finance, January 2010*