

# Economic Policy #03-04

## Fiscal Policy

# Fiscal Policy

- Concepts and measurements
- Theories: keynesian vs. neo-classical view
- Forms of fiscal policy: automatic stabilizers vs. discretion
- FP during crisis
- Public debt
  - measurement
  - debt and deficit dynamics
  - how to reduce the debt burden
- Fiscal rules

# Concepts and measurements #1

Fiscal policy (FP) contains decisions regarding taxes and public spending.

The notion of FP usually refers to its *stabilization function* – changes in taxes and public expenditures for purposes of dampening the fluctuations of the economic cycle – theoretically inspired by J.M. Keynes.

Toward the end of the 20<sup>th</sup> century theoretical and empirical doubts about the effectiveness of FP.

Now in many countries the key point of FP is public debt sustainability.

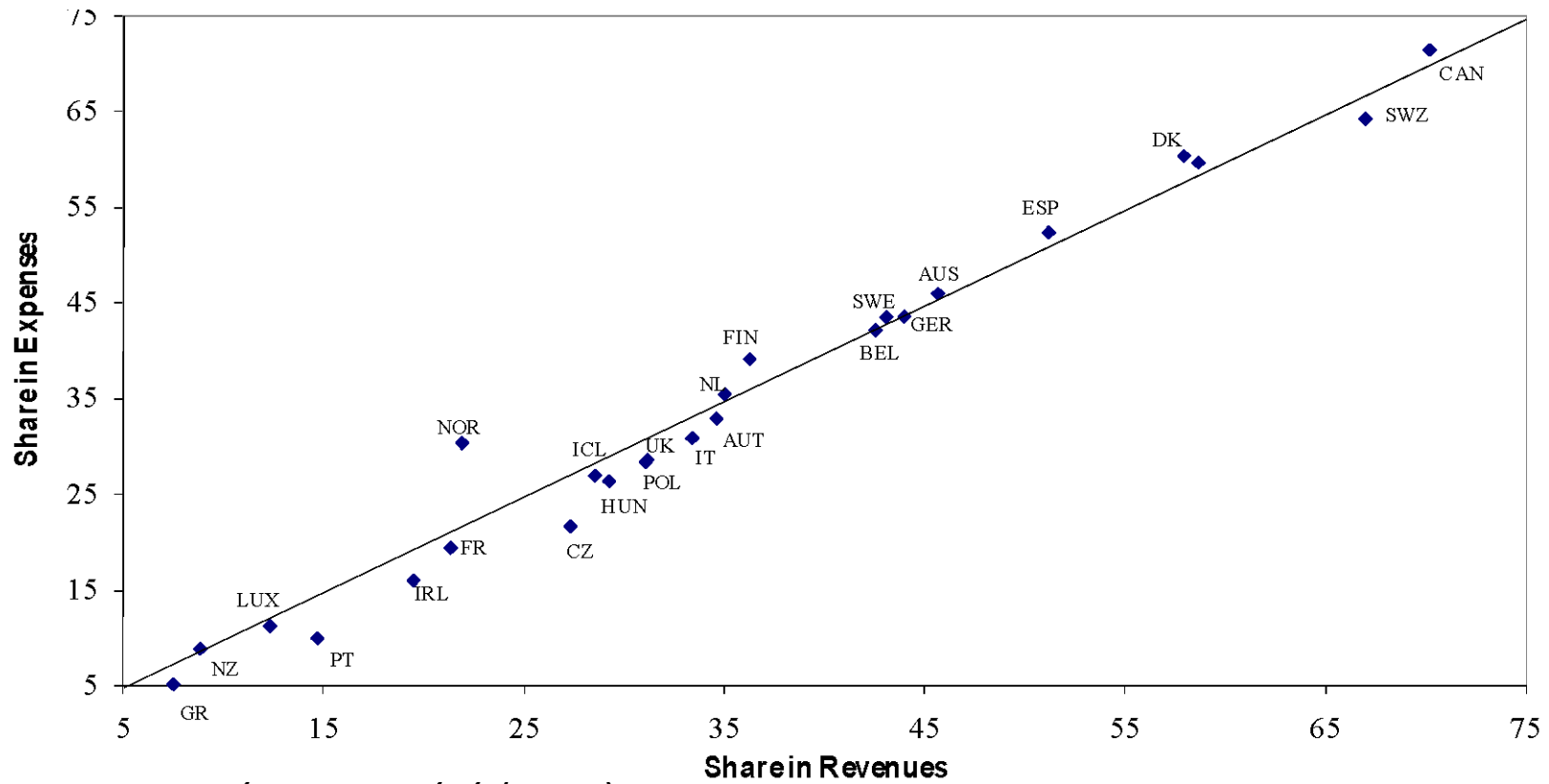
# Concepts and measurements #2

Public budget is a document that specifies the origin and volume of both income ("receipts") and intended spending over a certain horizon (usually a year).

- **Receipts**: income from direct and indirect taxation, social contributions, income from public assets or from provision of public services and, possibly, disposal of public assets.
- **Spending**: defense, police, justice, education, research, support to the economy, social policy, health, foreign policy, development assistance, etc.
- Budgets for different **levels** of government, cities to central government.

# Various degrees of centralization

Fig. Ratio of local to general government expenses and revenues



Source: Bénassy-Quéré (2012)

# Budget imbalance

Budget balance = income – expenditures: surplus (+) or deficit (-)

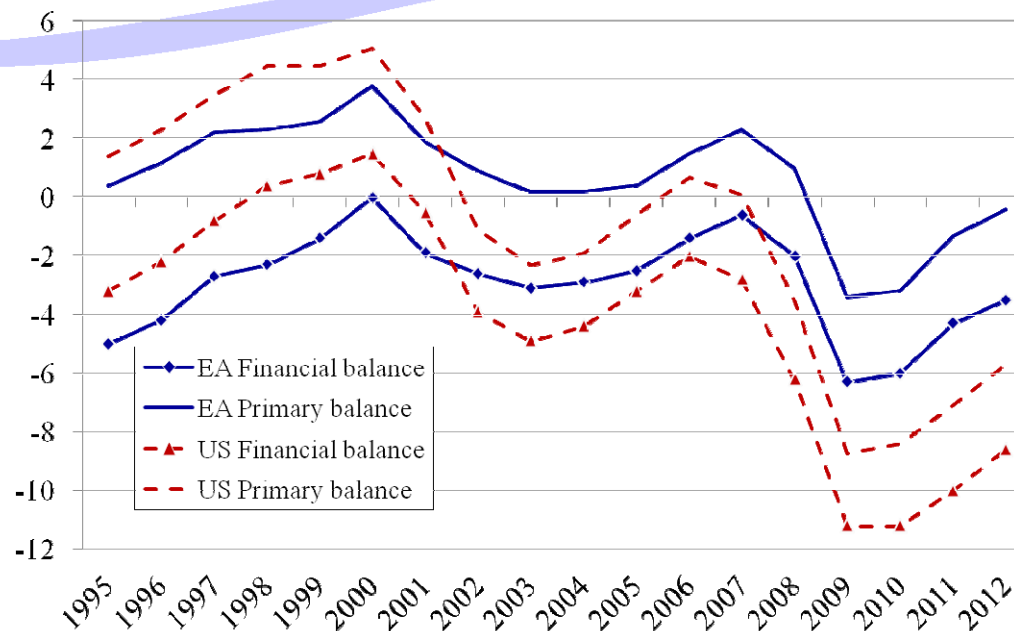
- **Financial** (overall) balance (= net lending): including net interest payments
- **Primary balance**: excluding net interest payments
- **'Underlying' primary balance**: excluding net interest payments and one-off operations
- **Cyclically-adjusted (structural) balance**: excluding cyclical balance => FP stance

# Financial (overall) vs primary deficit

*Financial balance* (net lending) = primary balance – net interest payments

*Fig.* Financial and primary balance, Euro area and USA (% of GDP)

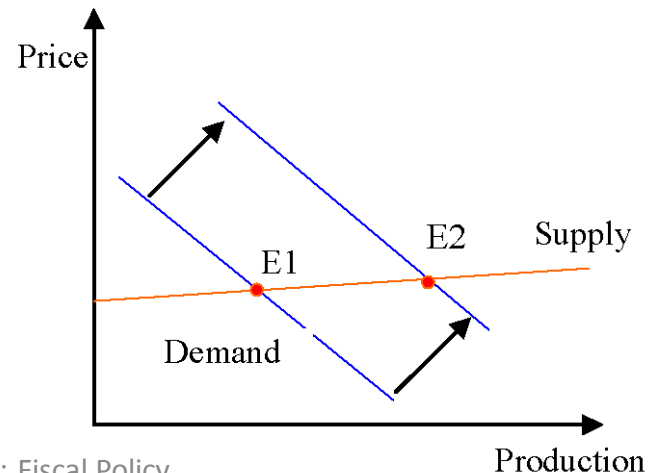
Financial and primary balance, Euro area and United States (% of GDP)



# Keynesian view

- ***Keynesian multiplier***
- Limitations:
  - slope of supply curve
  - crowding-out (interest rate, exchange rate)
  - Ricardian equivalence

Effect of an expansionary fiscal policy

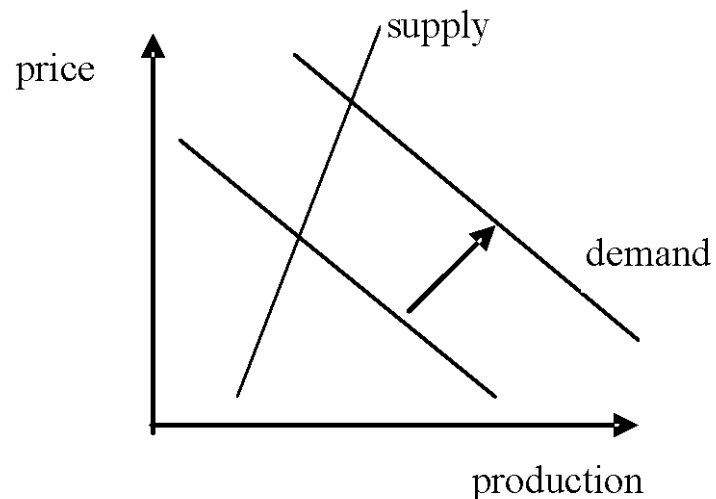




# Neo-classical view

- complete *crowding out* or ricardian equivalence
- supply rigidity: price flexibility, rational expectations

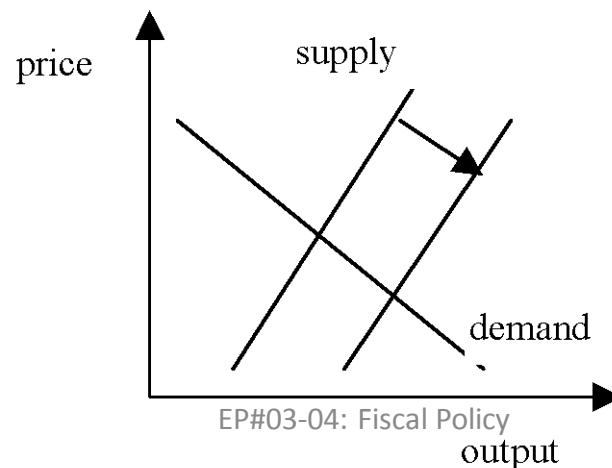
## Effect of an expansionary fiscal policy



# Supply-side effects of FP

- Directs: positive for (most) tax cuts, negative for (some) spending cuts
- Permanent spending cuts also signal lower taxes in the future, thereby they have supply-side effects
- Composition of fiscal adjustments matters

## Supply-side effects of a tax cut



# Threshold effects

- When the budgetary situation is perceived as unsustainable, further fiscal expansion makes fiscal retrenchment more likely.
- Therefore fiscal expansion can provide a stimulus *below* a certain deficit/debt threshold, and be contractionary *above* that threshold.
- Conversely, there is some evidence of expansionary or neutral fiscal contractions: Denmark (1983-86), Ireland (1987-89), Finland (1992-98) and Sweden (1993-98) . But context of expansion abroad, fall in interest rates, currency depreciation.

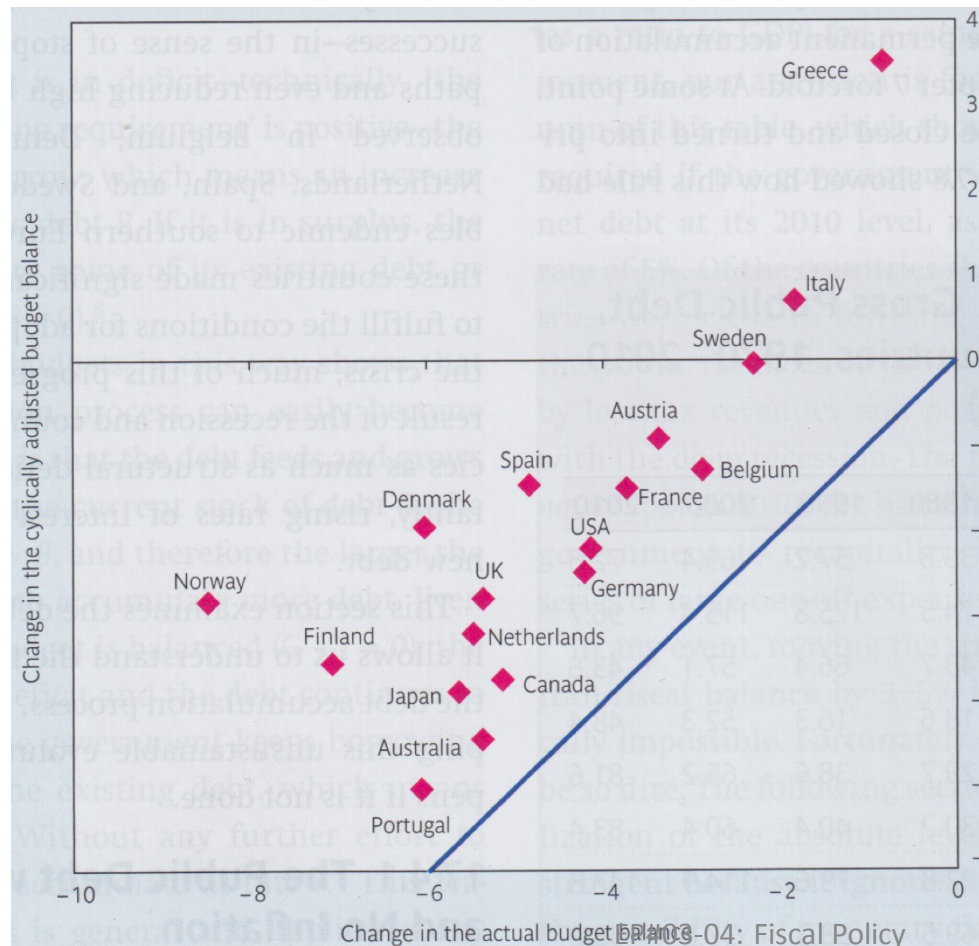
# Discretionary FP vs. automatic stabilizers

***Discretionary FP*** includes changes in government spending and taxation that need specific approval (usually requires legislative action) => risk of time lags.

***Automatic stabilizers*** increase (decrease) budget deficits during times of recessions (booms) without specific new legislation => no time lags: e.g. unemployment insurance program, progressive income taxes.

# The end of discretionary fiscal stabilization?

Fig. Changes from 2008 to 2010 in actual and cyclically adjusted budget balances, 20 OECD countries (% of GDP)



Source: Burda&Wyplosz, 2013

# FP during the 2008-09 crisis

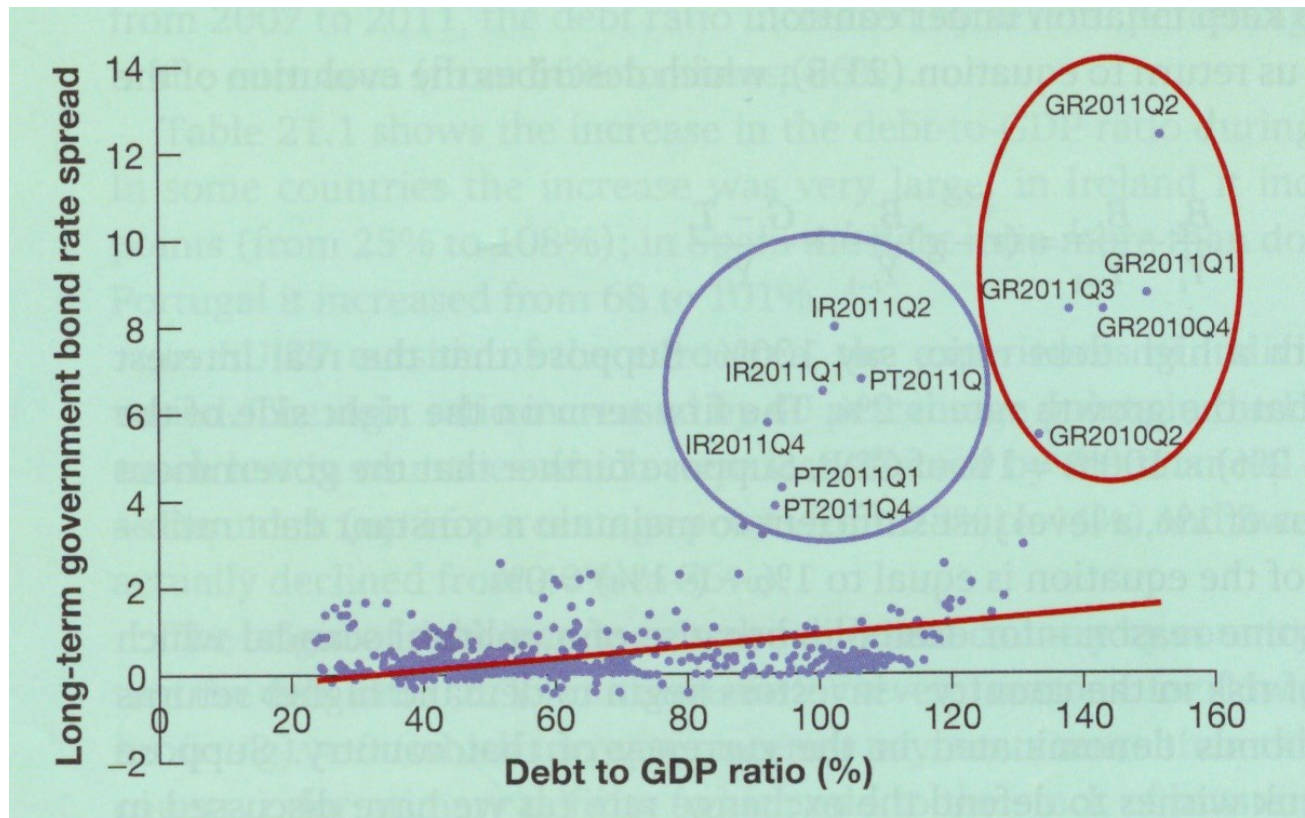
- Arguments in favor of 2009 stimulus:
  - risk of depression
  - ineffectiveness of monetary policy (transmission through financial system clogged, in addition to zero bound)
- Exceptional effectiveness of fiscal policy because of:
  - generalised excess supply
  - excess savings and flight to safety resulting in ultra-low bond rates
  - focus of agents on short-term horizon, credit constraints
  - symmetric character of shocks, therefore gains from coordinated action

# FP after the crisis

- Fiscal space dramatically reduced in several Euro area countries because of concerns over:
  - sustainability (Portugal, Greece)
  - implicit liabilities (Ireland)
  - transparency (Greece)
  - macro conditions (Spain)
- Most countries moving towards budgetary consolidation in 2011
- Ideal policy combines improvement of intertemporal balance through reforms (e.g. pensions) and limited fiscal contraction in the short term
- However many countries had no choice but to consolidate aggressively.

# Debt and foreign spreads

Fig. Long-term sovereign bond spread in Ireland, Portugal and Greece, 2010-11



Source: Blanchard et al. (2013)



# Public debt

Public debt = the total of all bonds and other debt owed by a government. Usually cumulated deficits.

***Debt-to-GDP ratio*** => ability to repay the debt. But the public debt needs not be repaid.

***Net public debt*** = gross public debt – value of public assets

Problem of *off-balance-sheet liabilities* (ageing, too-big-to-fail banks)

# Off-balance sheet liabilities

	Direct	Contingent
Explicit	Civil-servant pensions	State guarantees, deposit insurance schemes
Implicit	Ageing-related expenditures	Too big to fail

# Gross vs. net debt

## Gross and net public debt ratios in selected OECD countries in 2010 (% of GDP)

En pourcentage du PIB			
	Bruts	Nets	Écart
Norvège	49,7	- 165,9	215,6
Finlande	57,6	- 64,5	122,1
Japon	200,0	116,0	84,0
Suède	49,1	- 26,1	75,1
Corée	34,6	- 37,4	72,0
Danemark	55,6	- 1,3	56,9
Canada	85,1	30,4	54,6
Estonie	12,5	- 36,5	49,0
Slovénie	48,4	0,8	47,6
Suisse	42,6	1,3	41,4
France	95,2	58,9	36,3
Pays-Bas	70,6	34,4	36,2
Allemagne	87,1	52,2	34,9
Autriche	78,2	44,0	34,2
Pologne	62,4	28,7	33,7
Royaume-Uni	82,2	53,9	28,3
Italie	126,1	98,6	27,5
Espagne	67,1	40,3	26,8
États-Unis	94,2	68,4	25,8
Australie	23,6	1,8	21,9
Belgique	100,2	80,3	19,9
Zone euro	92,9	58,5	34,5
Total OCDE	97,9	58,1	39,8

Source: Bénassy-Quéré (2012) FR#03-04: Fiscal Policy

# Debt and deficit dynamics

- Stock-flow equation:  $B = (1+i) B_{-1} + D$  where  $D$  is the primary deficit,  $B$  is the public debt and  $i$  is the nominal interest rate.
- In percentage of nominal GDP:

$$\frac{B}{GDP} = (1+i) \frac{B_{-1}}{GDP_{-1}} \times \frac{GDP_{-1}}{GDP} + \frac{D}{GDP}$$

- Denoting by  $n$  nominal GDP growth,  $g$  real GDP growth and  $r$  the real interest rate:

$$b = \frac{(1+i)}{(1+n)} b_{-1} + d \cong (1+i-n) b_{-1} + d \cong (1+r-g) b_{-1} + d$$

# Debt and deficit dynamics: implications

- *Maastricht criteria:  $d + ib = 3\%$  ;  $\pi + g = 5\%$  ;  $b = 60\%$*
- The debt ratio can remain constant despite permanent deficits (ex.  $b = 80\%$ ,  $g = 2\%$ ,  $\pi = 2\%$ ,  $d + ib = 3.2\%$ )
- If  $r > g$ , debt stabilization requires a primary surplus

# Net government indebtedness and primary budget balances, 2010 (% of GDP)

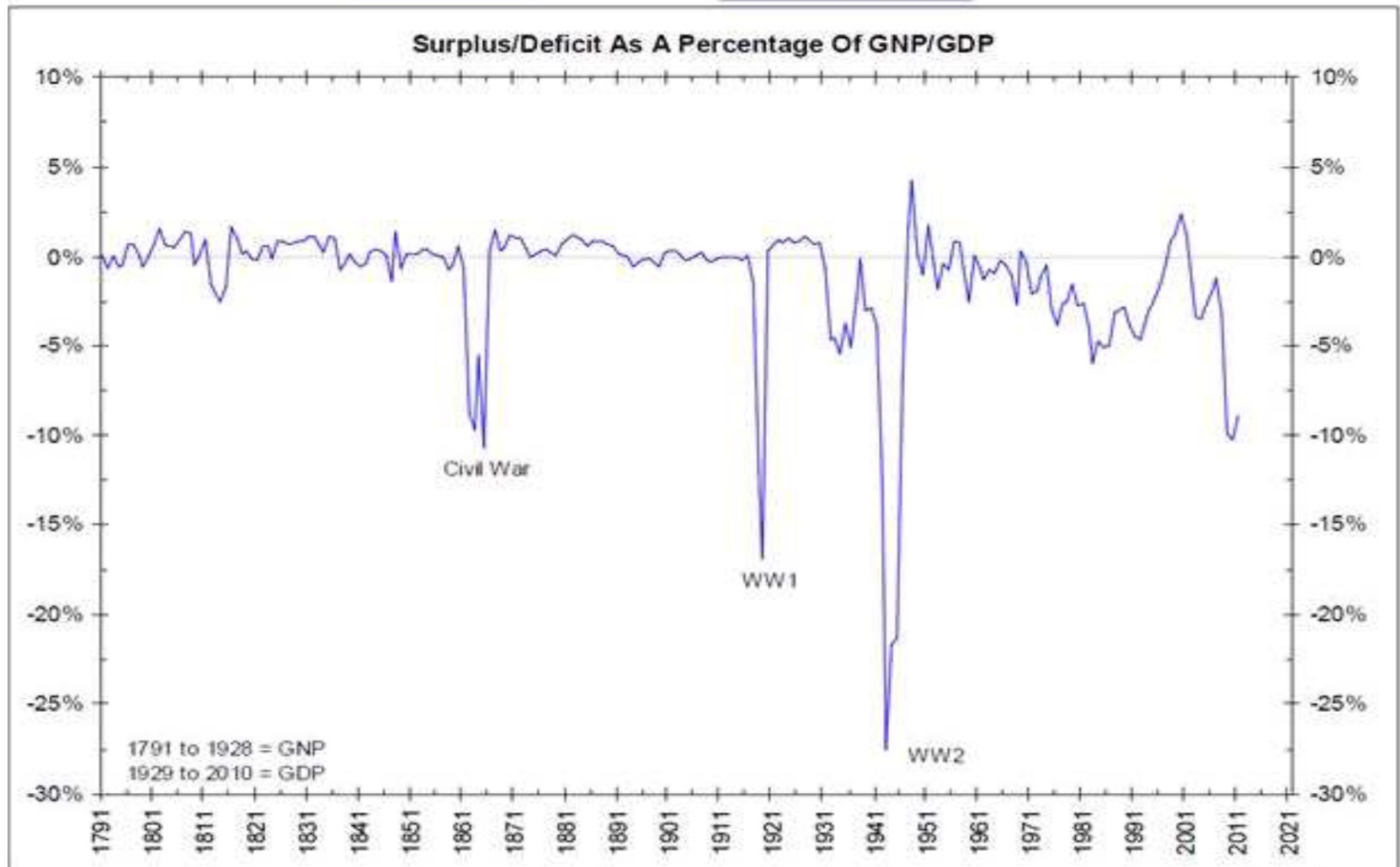
	Net debt in 2010	Primary budget surplus in 2010	Required primary surplus	
			to stabilize the absolute debt stock	to stabilize the debt/GDP ratio
Belgium	80.8	-0.9	4.0	2.0
Germany	50.1	-1.3	2.5	1.3
Ireland	59.9	-30.0	3.0	1.5
Italy	99.1	-0.3	5.0	2.5
Netherlands	34.6	-4.1	1.7	0.9

Source: Burda&Wyplosz, 2013

# Lessons from history

- No economic *limit to public debt* (provided citizens are willing to pay for a high primary surplus)
- History does not provide a clear answer either. Debt ratios have reached 200% of GDP or more. However defaults at lower debt levels were common before the 19th century and still occur in developing and emerging countries.
- Reinhart, Rogoff and Savastano (2003) and Reinhart and Rogoff (2010) claim that '*debt intolerance*' can set in at low debt-to-GDP ratios and that debt has negative consequences on growth already when the debt ratio reaches 90% (60% in emerging economies).

# Large deficits are mostly the results of wars (e.g. USA)

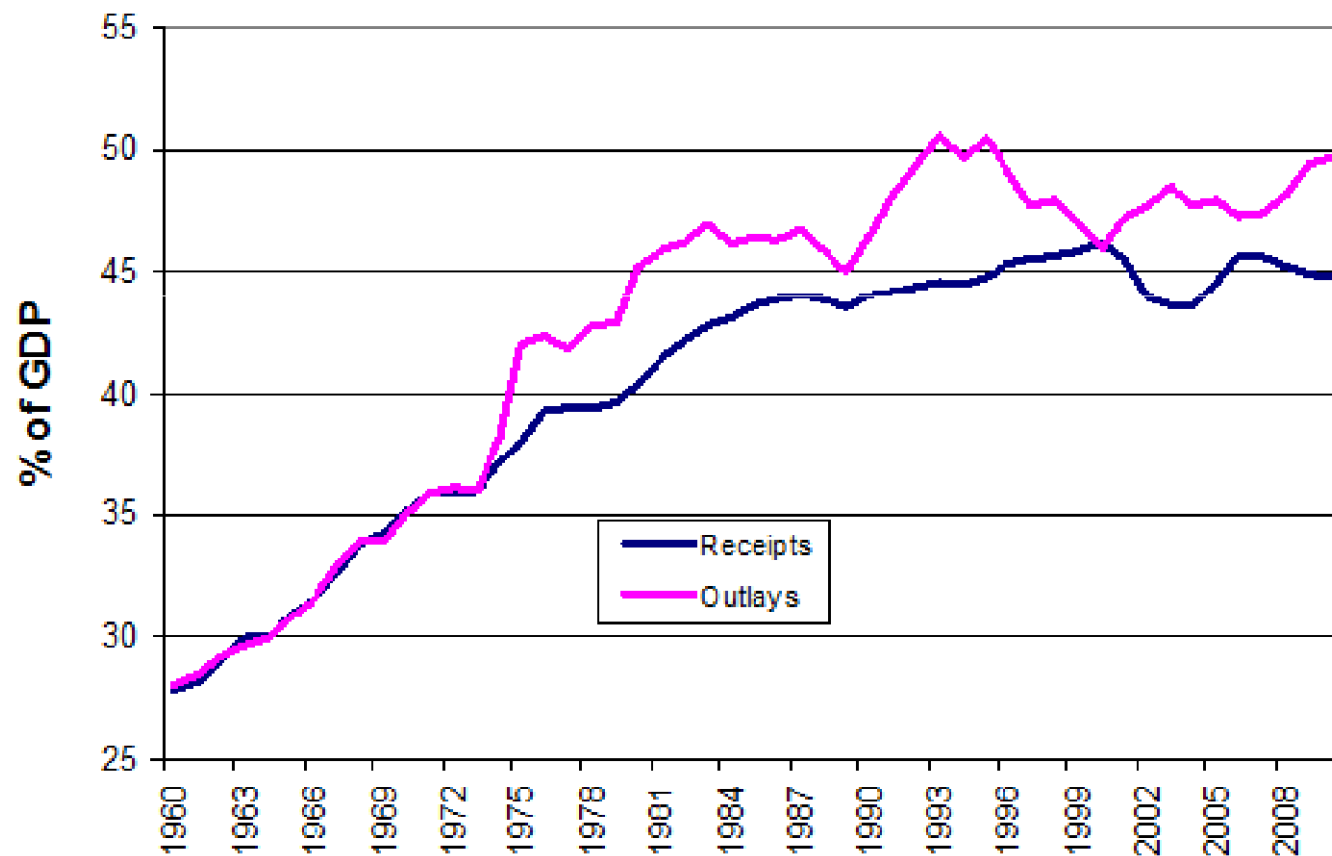


Source: Bénassy-Quéré (2012)



# Advanced countries have been in deficit since 1970

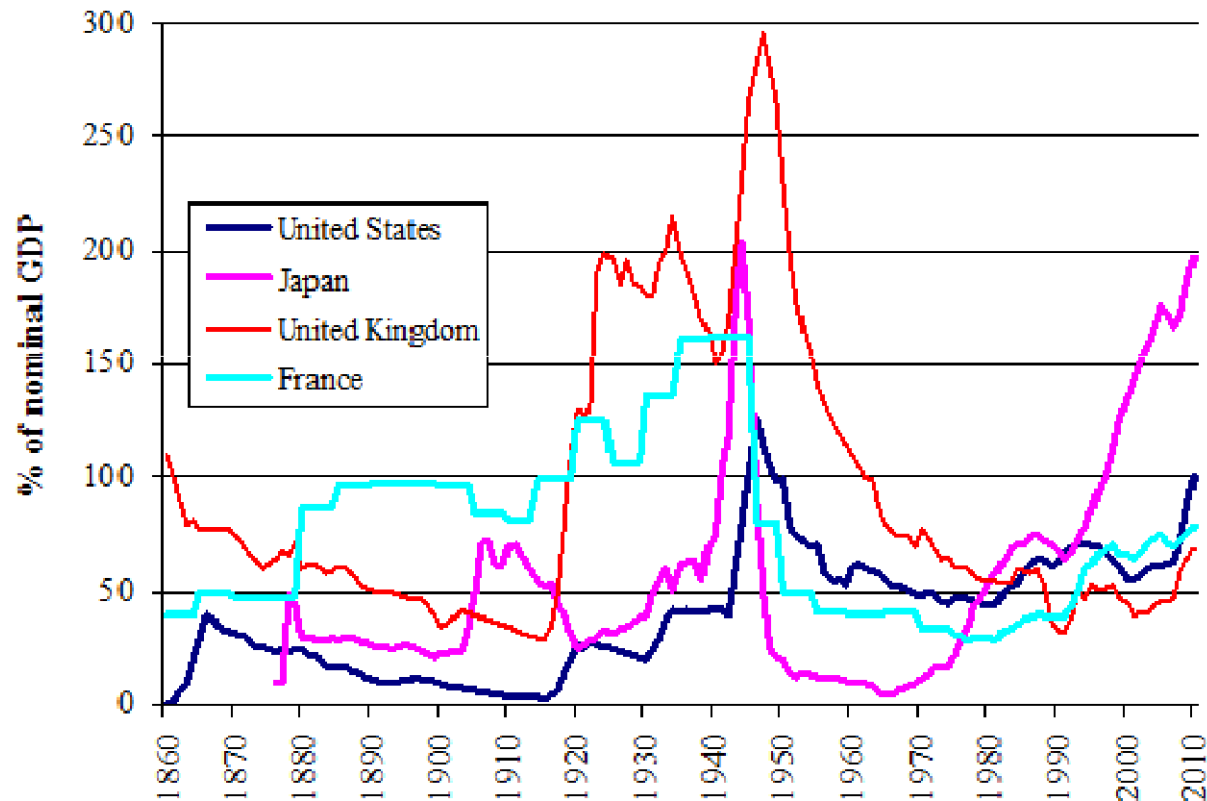
*Fig.* Public expenditure and receipts in OECD countries



Source: Bénassy-Quéré (2012)

# Public debt ratios have reached very high levels in the past

*Fig. Gross debt (as % of GDP)*



Source: Bénassy-Quéré (2012)

# How to reduce the debt burden?

#1. **Fiscal adjustment**: cut spending, raise taxes

– the most virtuous but also most difficult way

	1981-85	1986-90	1991-95	1996-2000	2001-05	2006-10
Greece	0.2	1.3	1.3	3.5	4.0	0.8
Italy	1.7	3.1	1.3	1.9	0.9	-0.3
Portugal	1.5	6.2	1.9	4.2	0.8	0.5
Spain	1.3	4.7	1.7	4.1	3.3	0.9
Euro Area	n.a.	n.a.	1.4	2.7	1.5	0.8
EU	1.5	3.1	1.5	2.9	2.0	1.0

Source: Burda&Wyplosz (2013)

As difficult as it is, deficit reduction had been successfully implemented in many European countries.

# How to reduce the debt burden?

## **#2. *Raising economic growth***

- is possible in medium to long run
- factors determining the attainable rate of growth will be spelled out later (Growth policy)

# How to reduce the debt burden?

## **#3 *Monetization (inflation tax)***

- reducing the value of the money base (the central bank's liability) and of the public debt (the Treasury's liability) => tax on money and bondholders.
- inflation must rise unexpectedly and quickly enough
- temporary solution: lenders will demand higher interest rates and will be less willing to agree to long-term loans
- risk of hyperinflation if the government will be forced to create more money to pay back maturing debt

# How to reduce the debt burden?

## #4. *Default*

- not rare in Europe before 20<sup>th</sup> century
- restructuring: rescheduling, write-downs, haircuts, debt conversions (Brady plan, 1989), interest reductions...
- voluntary/compulsory
- coordination: Paris club (public creditors); London club (private creditors); IMF, World Bank.

# Political theory of debt

- The choice of who should pay for the reduction of a high debt is a problem of redistribution.
- Suppose that society can be divided into three groups: rentiers, entrepreneurs and workers.
- Each of these interest groups will seek to avoid the burden of adjustment and shift onto someone else.
  - rentiers are opposed to default and inflation tax
  - entrepreneurs are opposed to taxes on capital
  - workers prefer taxes on wealth and capital and the repudiation of debt

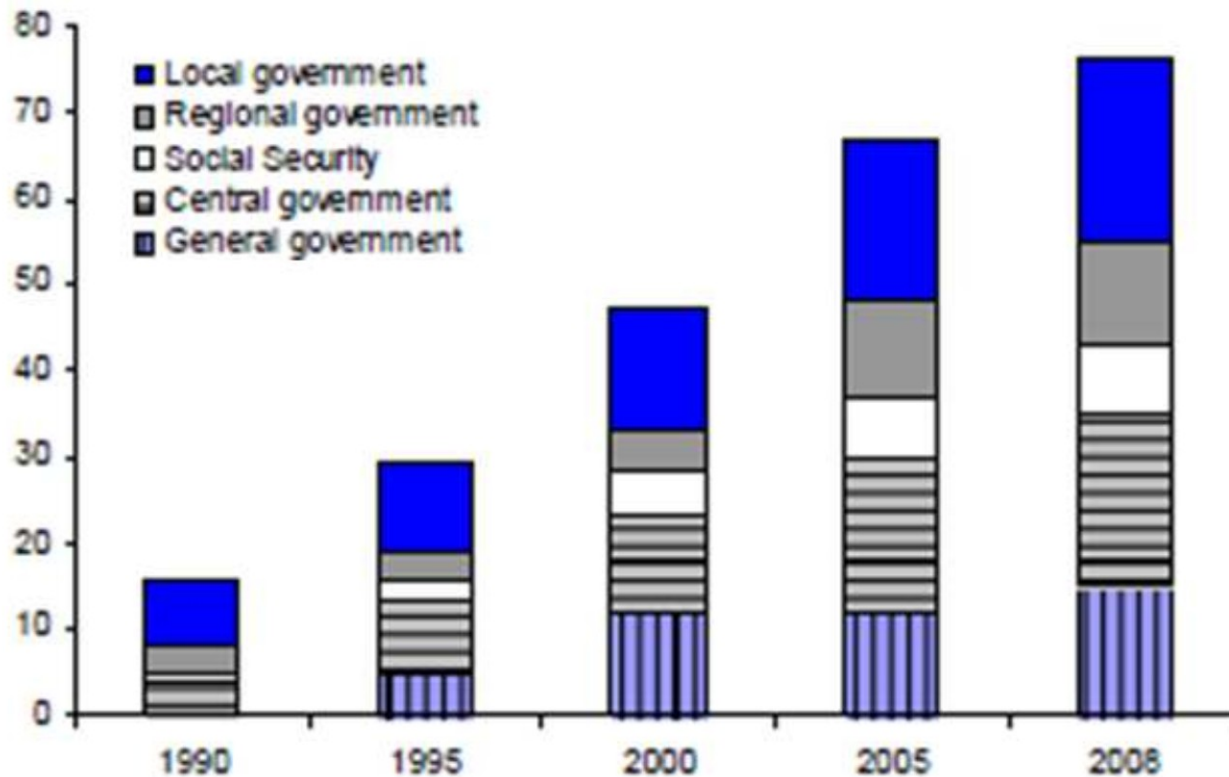
# Rules and principles

- Fiscal policy is traditionally discretionary
- However increasing reliance on rules to:
  - improve predictability
  - address political failures
  - improve credibility
  - enforce coordination
- European Stability and Growth Pact (1997)
- Current discussions in Europe:
  - strengthening fiscal discipline
  - national fiscal rules and institutions



# More and more rules

*Fig.* Fiscal rules in EU member states, by sub-sector



Source: Bénassy-Quéré (2012)

# What is a good rule?

The 'good rule' according to Kopits and Symansky (1998):

- *clear definition,*
- *transparent public accounts,*
- *simplicity,*
- *flexibility – in particular regarding the capacity to react to exogenous shocks,*
- *policy relevance in view of the objectives pursued,*
- *capacity of implementation with possibility of sanctioning non-observance,*
- *consistency with the other objectives and rules of public policies,*
- *accompanied by other effective policies*

# Many rules in practice

- Headline deficit rules (SGP)
- Structural deficit rules (Germany after reform)
- Golden rule (Germany before reform, UK 1998)
- Debt rules (UK under Blair/Brown)
- Spending /receipts rules

**=> *Enforcement is very uneven and difficult to check***

# Example #1. The UK

## 1998-2008

- *Golden rule* (no borrowing for current spending)
- *Sustainable investment rule* (debt ratio 40% over the cycle)

Two problems:

- Who determines what is the cycle?
- How to take contingent liabilities into account?

# Example #1. The UK (cont.)

**2010**

- *Fiscal mandate*: structural deficit < 1 % of GDP over 5 years
- *Office for budget responsibility*: independent fiscal council in charge of forecasts and assessment

# Example #2. Germany

**Since late 1960s**

- ***Golden rule*** of public finances ‘except macroeconomic disturbance’

Two problems:

- extensive notion of ‘macroeconomic disturbance’
- no correction mechanism
- inconsistency with SGP (that does not distinguish between current and investment spending)

# Example #2. Germany (cont.)

## 2009 - (Debt brake)

- *Fiscal rule*: structural deficit  $< 0.35\%$  (Federal government) and  $< 0\%$  (länder)
- *Control account*: deficit  $< 1\%$  at any time.
- *Exceptional circumstances*
  - natural disaster: more deficit allowed but amortization plan
- *Progressive phase-in* (2016)

# The Stability and Growth Pact #1

- Two planks
  - Preventive arm
    - Medium term objective (MTO)
    - ‘Stability’ (Eurozone) and ‘convergence’ (non-Eurozone) programs
  - Dissuasive arm (‘Excessive Deficit Procedure’ – EDP) allows for:
    - Advance warning
    - Recommendation to correct excessive deficit within given timeframe
    - Eventual sanctions



# The Stability and Growth Pact #2

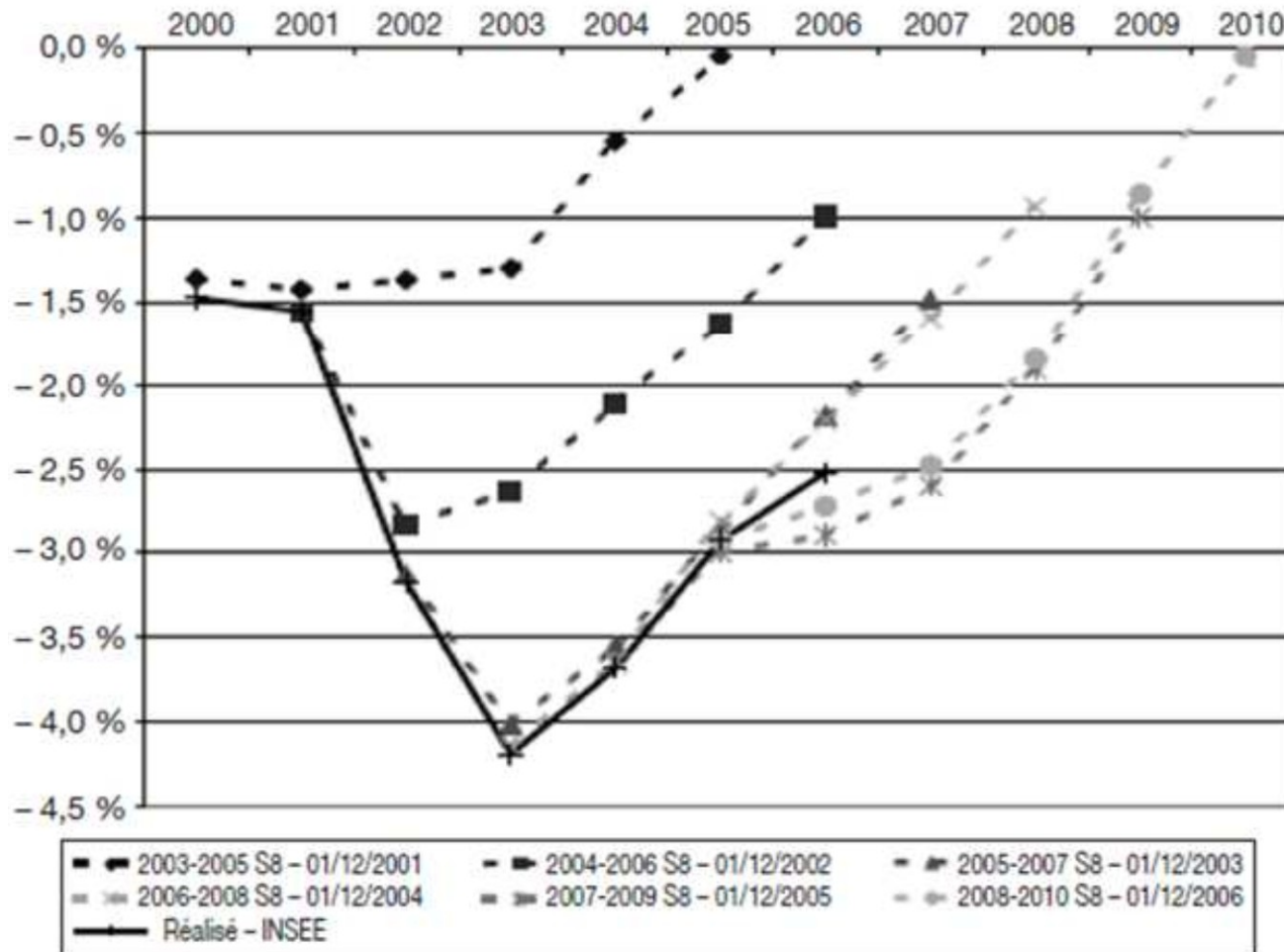
- Recent reforms (six-pack, fiscal compact)
  - Earlier sanctions
  - Reverse-majority voting
  - Debt rule
  - Broadened surveillance (scoreboard)
  - National rules

# What's the rationale?

- Externalities
  - Incentive to deficits in a fixed-exchange rate environment
  - Financial cost of a debt default (banks, bail out)
  - Economic cost of a debt default (pressure on the ECB to inflate away, risk of contagion and disruption)
- Political economy
  - External discipline as a substitute or complement to domestic discipline

# Box. Difficult implementation

## French stability programmes: objectives and outturns



Source: Bénassy-Quéré (2012)