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Economic Policy

Fiscal Policy 2

Fiscal policy

- Fiscal policy (FP) – set of decisions and rules regarding taxes and public expenditures for purposes of smoothing the fluctuations of economic cycle in order to keep unemployment close to its equilibrium value and avoid the build-up of deflationary and inflationary pressures (Samuelson, 1948)

Fiscal policy

- Concepts and measurements
- Theories: Keynesian vs. neo-classical view
- FP during crisis
- **Public debt**
 - measurement
 - debt and deficit dynamics
 - how to reduce the debt burden
- **Fiscal rules**
- **Case studies**

Public debt

- Public debt = the total of all bonds and other debt owed by a government. Usually, cumulated deficits.
- Absolute level x debt-to-GDP ratio
- Net public debt = gross public debt – value of public assets
- Problem of off-balance-sheet liabilities (ageing, too-big-to fail banks)

Gross vs. net debt

Country	Net debt	Gross debt
Brazil	35,2	68
Canada	34,7	85,3
France	84	90,2
Germany	57,4	81,9
Great Britain	81,6	88,8
Italy	106,1	127
Japan	133,5	238
Norway	-167	34,1
Saudi Arabia	-53,9	3,7
South Africa	35,6	42,3
USA	84,1	102,7

IMF 2013

CS: Government Pension Fund of Norway

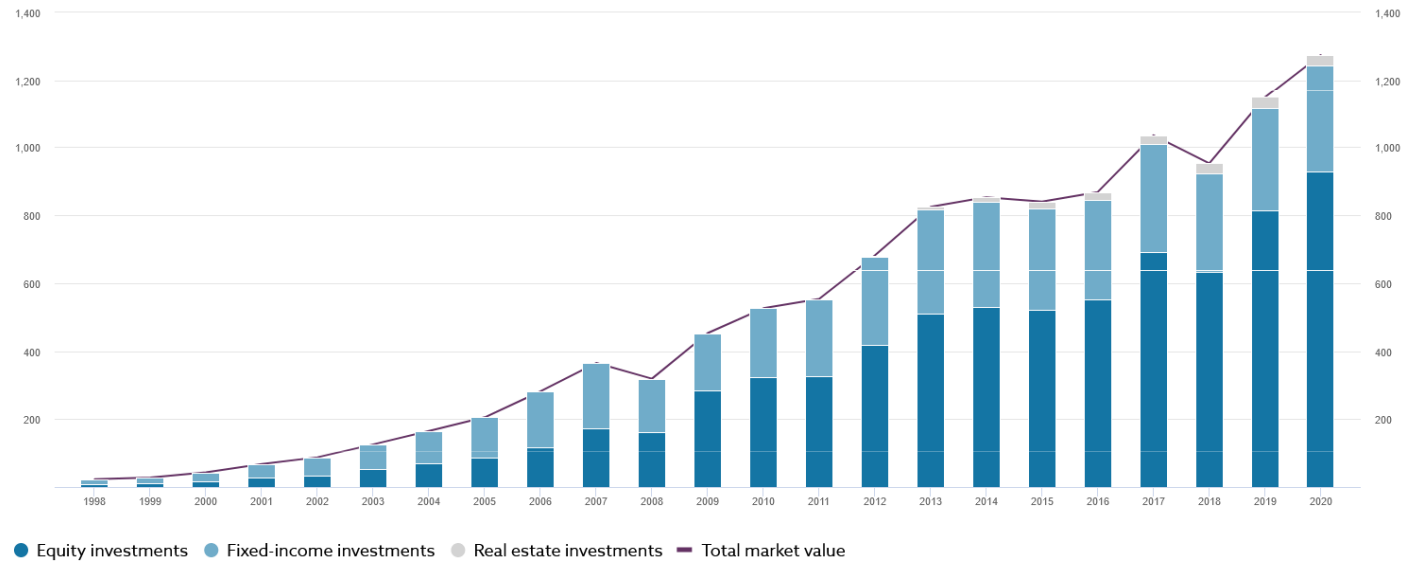
- established in 1990 (first money transfer to the fund in 1996)
- invests surplus revenues of the Norwegian petroleum sector
- is invested in international financial markets (2021):
 - equity 73 %
 - bonds 25 %
 - real estate 2 %
- 9 123 companies in 73 countries are invested in the fund
- aim: ensure responsible and long-term management of revenue from Norway's oil and gas resources, so that this wealth benefits both current and future generations



CS: Government Pension Fund of Norway

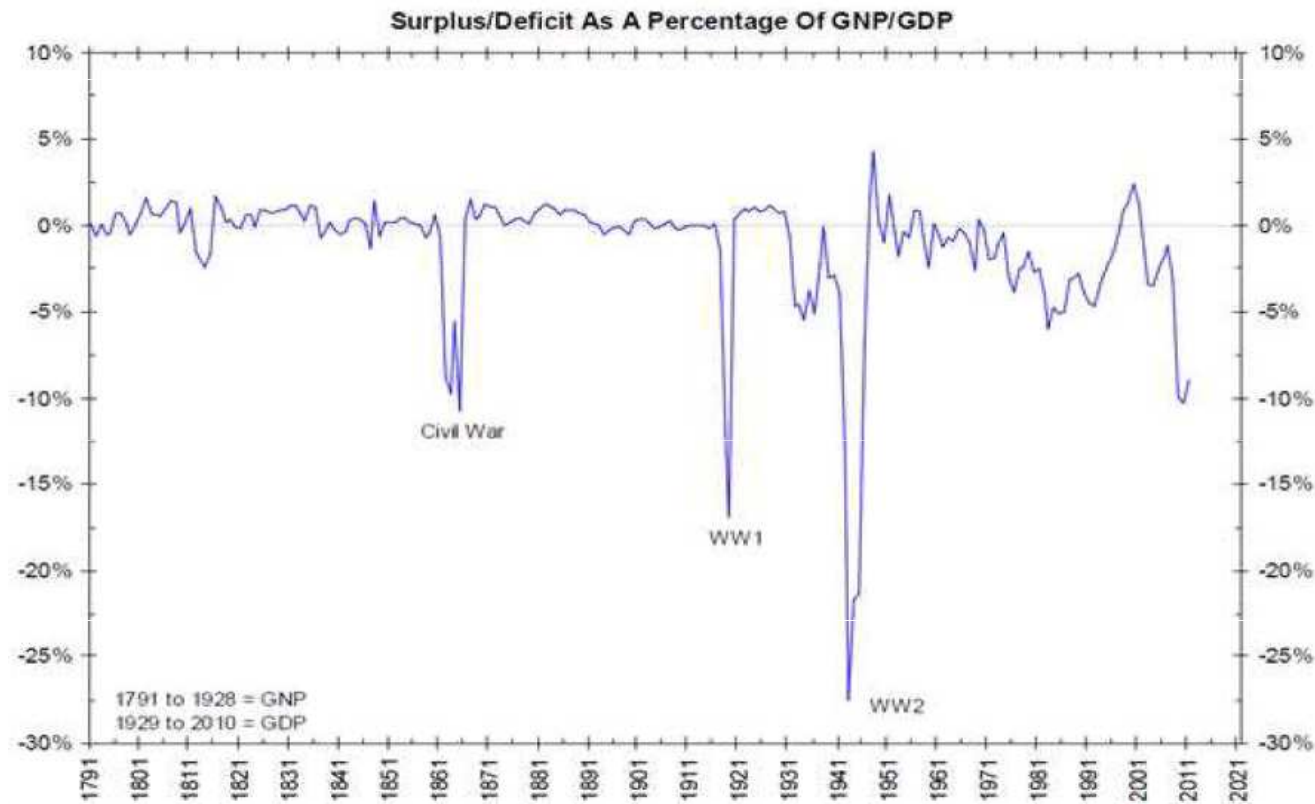
- total market value 1,274 billion USD (320% GDP)
- average annual return: 6.6%

Historic investments

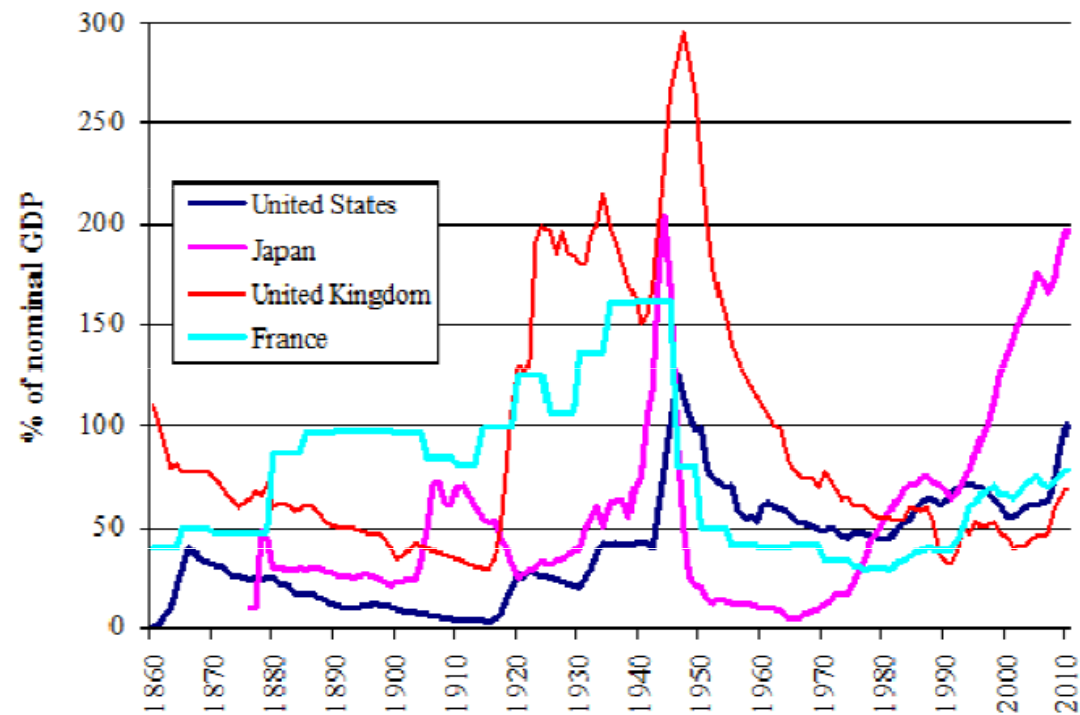


The axis values are in billions

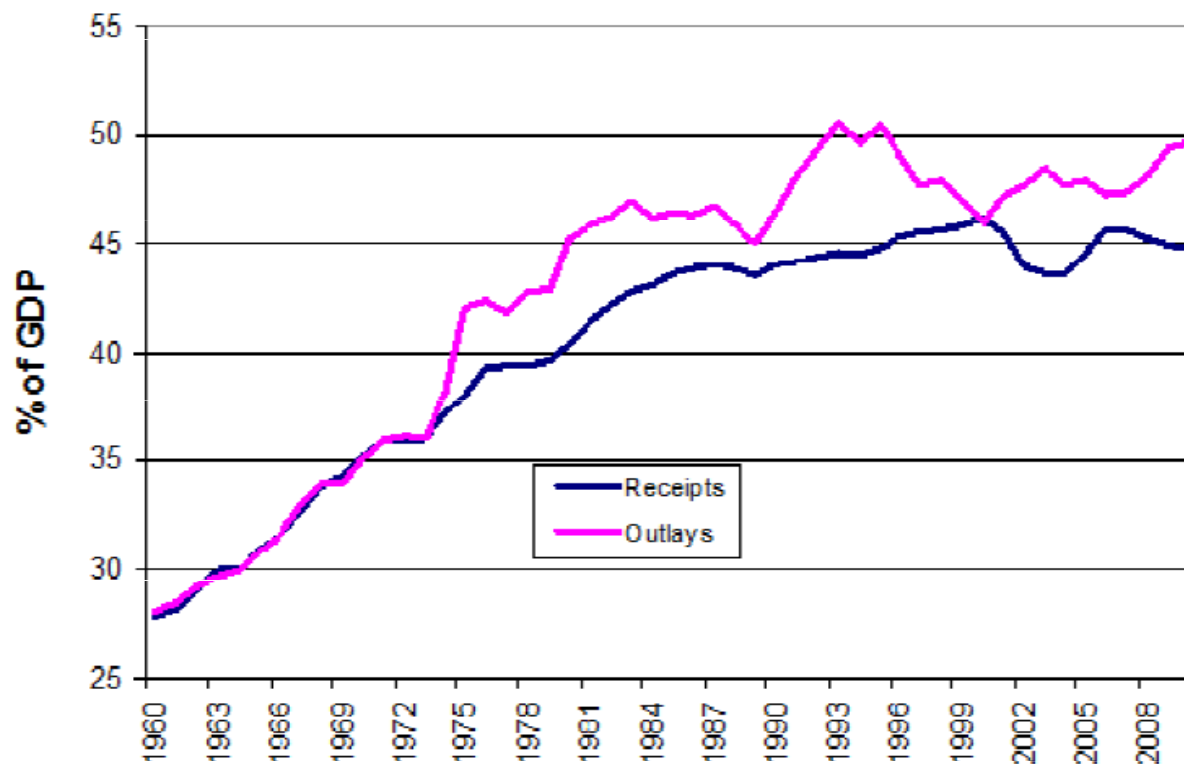
Large deficits were mostly the results of wars (e.g., USA)



Public debt ratios have reached very high levels in the past



Advanced countries have been in deficit since 1970



Debt sustainability

- Solvency: borrower's ability to face its commitments (situation in the time)
- Sustainability: policy course compatible with solvency at all times in the future
- Sustainability is forward-looking by nature and relies on assumptions on future policy and on the ability of the government to collect/increase taxes

Debt sustainability

- *„Debt can almost always be serviced in some abstract sense, through additional taxation and through the diversion of yet more domestic production to exports to generate the revenue and foreign exchange needed to service the debt. But there is a political and social, and perhaps moral, threshold beyond which policies to force these results become unacceptable.“*

J. Boorman (2002)

Debt and deficit dynamics

– Stock-flow equation: $B = (1 + i)B_{-1} + D$,

– Where D is primary deficit, B is the public debt and i is the nominal interest rate of government bonds

– We can rewrite to percentage of nominal GDP: $\frac{B}{GDP} = (1 + i) \frac{B_{-1}}{GDP_{-1}} \frac{GDP_{-1}}{GDP} + \frac{D}{GDP}$

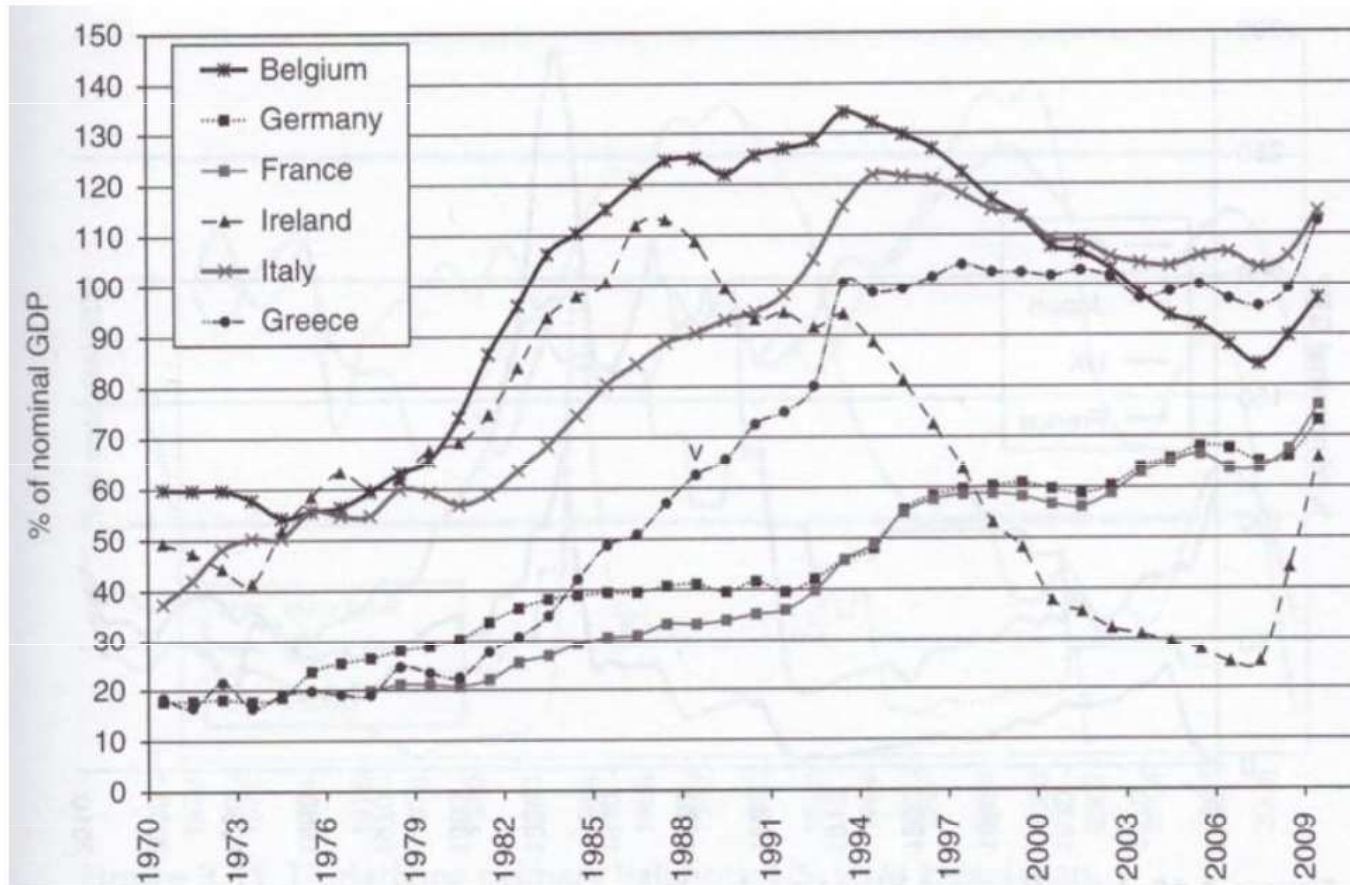
– We denote n as nominal GDP growth $\frac{GDP}{GDP_{-1}}$, $b = \frac{B}{GDP}$ and $d = \frac{D}{GDP}$

– $b = b_{-1} \left(\frac{1+i}{1+n} \right) + d \cong (1 + i - n)b_{-1} + d$

– If $i < n$, public debt can be stabilized by GDP growth.

– If $i > n$, debt stabilization requires a primary surplus ($d > 0$)

Public debt developments in selected countries



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 public debt	Required primary surplus to stabilize the debt/GDP ratio
Belgium	80,8	-0,9	4	2
Germany	50,1	-1,3	2,5	1,3
Ireland	59,9	-30	3	1,5
Italy	99,1	-0,3	5	2,5
Netherlands	34,6	-4,1	1,7	0,9

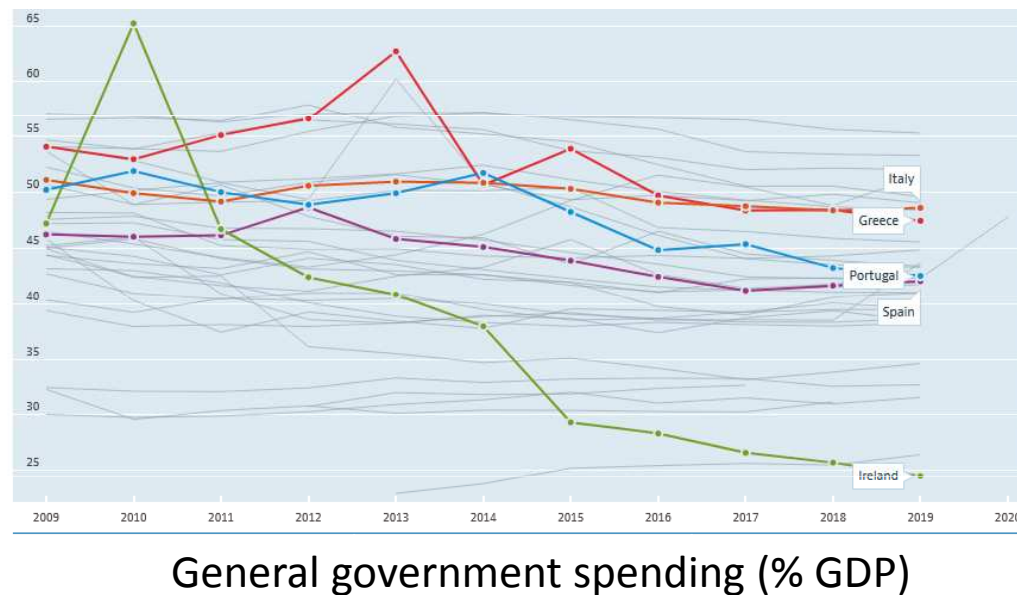
- Required primary surplus to stabilize the public debt: how the surplus should look like to not growing public debt
- Required primary surplus to stabilize the debt/GDP ratio: how the surplus should look like to stabilize debt/GDP ratio.

=> reality and figures needs to stabilize public debt differs a lot

How to reduce the debt burden?

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

- the most direct but also most difficult way
- As difficult as it is, deficit reduction had been successfully implemented in many European countries



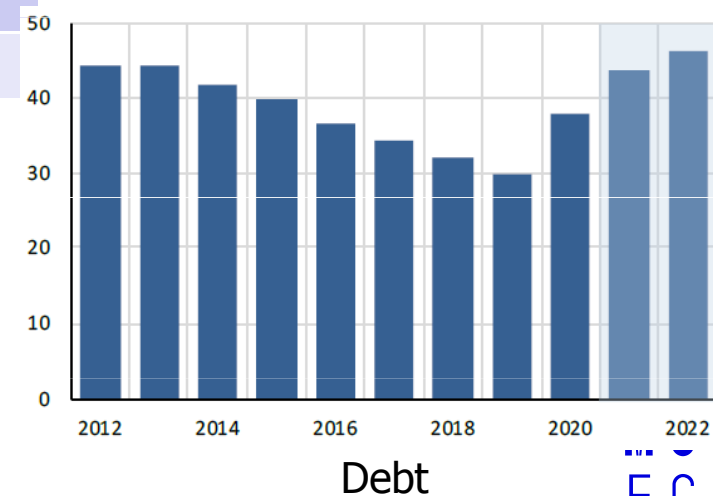
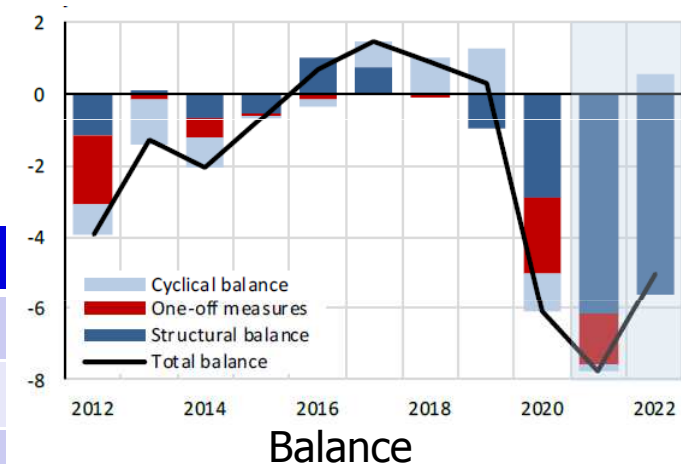
How to reduce the debt burden?

2. Raising economic growth

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

CS: reduce the debt burden in the Czech Republic

General government balance	2015	2016	2017	2018	2019
General government balance	-0.6	0.7	1.5	0.9	0.3
General government debt	39.7	36.6	34.2	32.1	30.0
Change in debt-to-GDP ratio	-2.2	-3.1	-2.3	-2.2	-2.0
GDP growth	4.6	2.5	5.2	3.2	3.0



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?

3. Monetization (inflation tax)



How to reduce the debt burden?

– 4. Default

- not rare in Europe before 20th century
- restructuring: rescheduling, write-downs, interest reductions...
- coordination: Paris club (public creditors); London club (private creditors); IMF, World Bank.

How to reduce the debt burden?

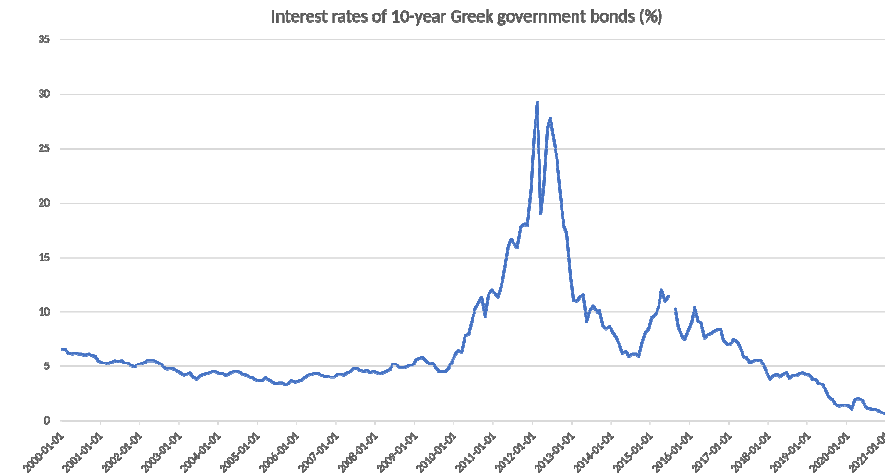
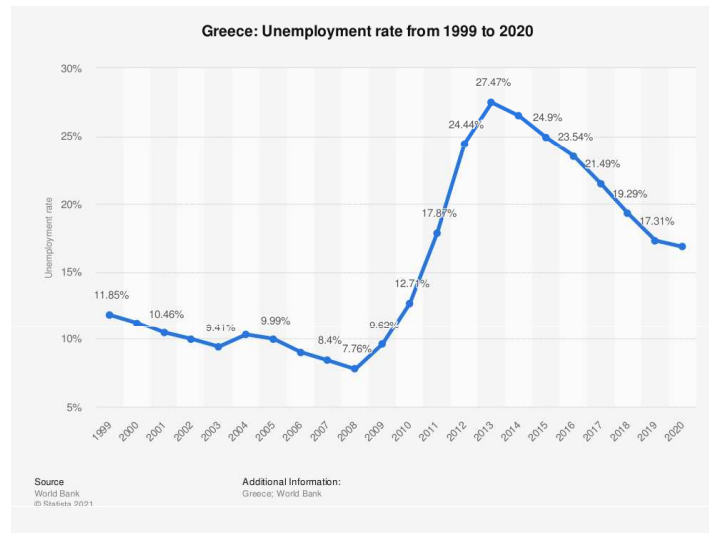
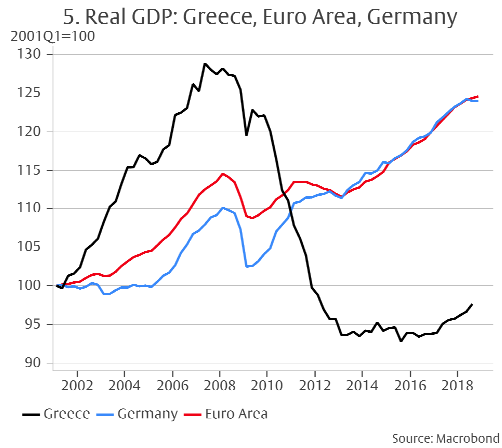
In practice

- Assistance from financial institution
- Implementation of an adjustment program aimed at restoring debt sustainability
- Debt reduction

CS: Greek government debt crisis (simplified)

- 2009: increase in government deficit
- 2010:
 - increased in government bond yields => credit rating agencies downgraded Greek bonds to junk status
 - European Commission, ECB, IMF launched a €110 billion bailout loan to rescue Greece from sovereign default and cover its financial needs
 - condition: implementation of austerity measures, structural reforms and privatization of government assets
- 2011:
 - debt reduction, lower interest rates
 - bank recapitalization
 - sale of some state-owned assets
- 2012: second bailout programme
- 2015: third bailout programme
- 2019: Greece sold 10-year bonds for the first time since before the bailout

CS: Greek government debt crisis (simplified)



Political theory of debt

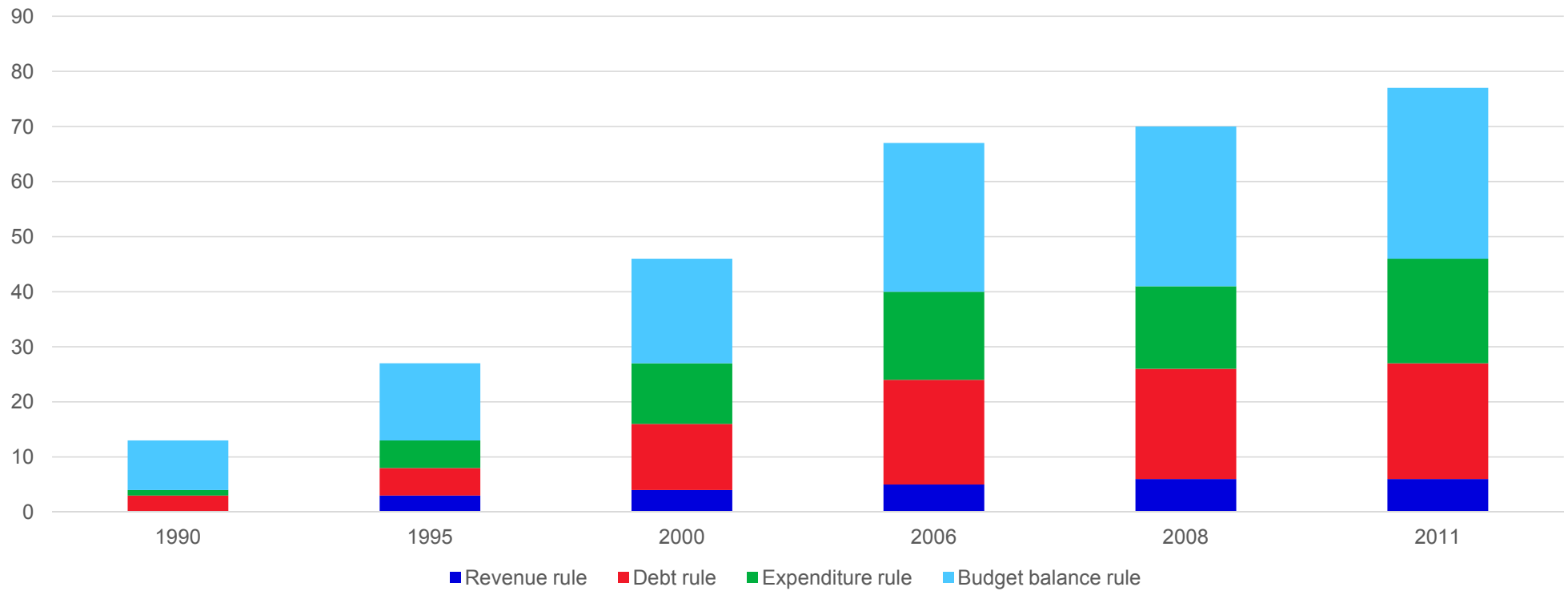
- The choice of who should pay for the reduction of a high debt is a problem of redistribution.
- Suppose that society can be divided into three groups: rentiers, entrepreneurs and workers.
- Each of these interest groups will seek to avoid the burden of adjustment and shift onto someone else.
 - rentiers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

=> solution depends on political decision

Rules and principles

- Concerns about recurrent deficits and the public debt sustainability led many government to adopt budgetary rules; however, fiscal policy is traditionally discretionary
- Increasing reliance on rules to:
 - improve predictability
 - address political failures
 - improve credibility
 - enforce coordination (e. g. between government and central bank)
- Example: European Stability and Growth Pact (1997)
- Current discussions in Europe:
 - strengthening fiscal discipline
 - national fiscal rules and institutions

More and more rules in EU



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,
 - rule 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

- Deficit rules (Stability and Growth Pact)
- Structural deficit rules (Germany after reform)
- Golden rule (Germany before reform, UK 1998)
 - over the economic cycle, the Government will borrow only to invest and not to fund current spending.
- 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 (structural deficit only on public investments)
- Sustainable investment rule (debt ratio 40% over the cycle)
- Public investment shall be implemented only if the present value of expected returns covers the expenditure.
- Two problems:
 - Who determines what is the cycle?
 - How to evaluate the net return on public investment?

Example 1: The UK

2010

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

Example 2: Germany

2009 -(Debt brake)

- Fiscal rule: structural deficit $< 0.35\%$ (for Federal government) and $< 0\%$ (for länder)
- Control account: deficit $< 1\%$ at any time.
- Exceptional circumstances
 - natural disaster

The Stability and Growth Pact

Two elements:

- A preventive arm

Medium term objective for its budgetary position

‘Stability’ (Eurozone) and ‘convergence’ (non-Eurozone) programs

- Dissuasive arm (‘Excessive Deficit Procedure’) allows for:

Advance warning

Recommendation to correct excessive deficit within given timeframe

Eventual sanctions

The Stability and Growth Pact

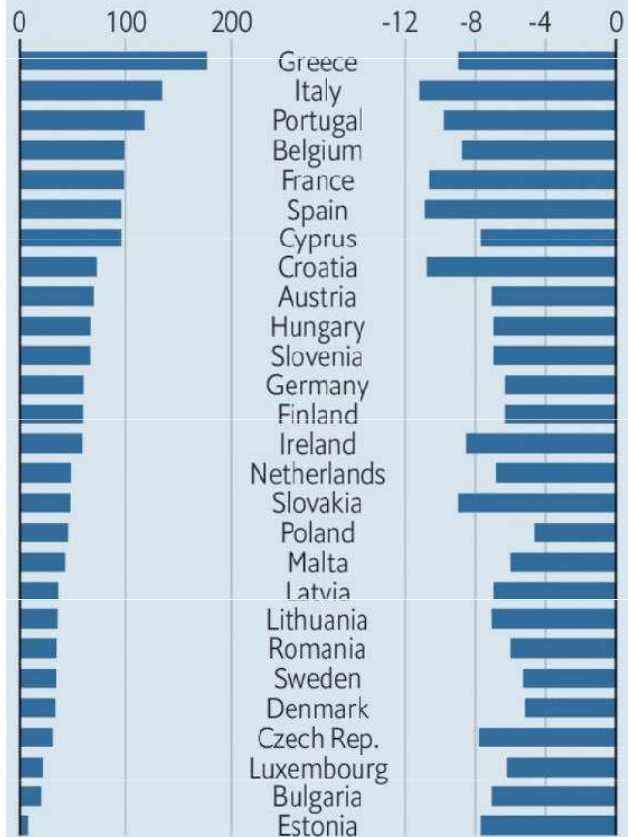
- Recent reforms (six-pack, fiscal compact)
 - Earlier sanctions
 - Debt rule

Mixed impact

European Union

Gross government debt, 2019
% of GDP

GDP*, 2020
% decrease on a year earlier



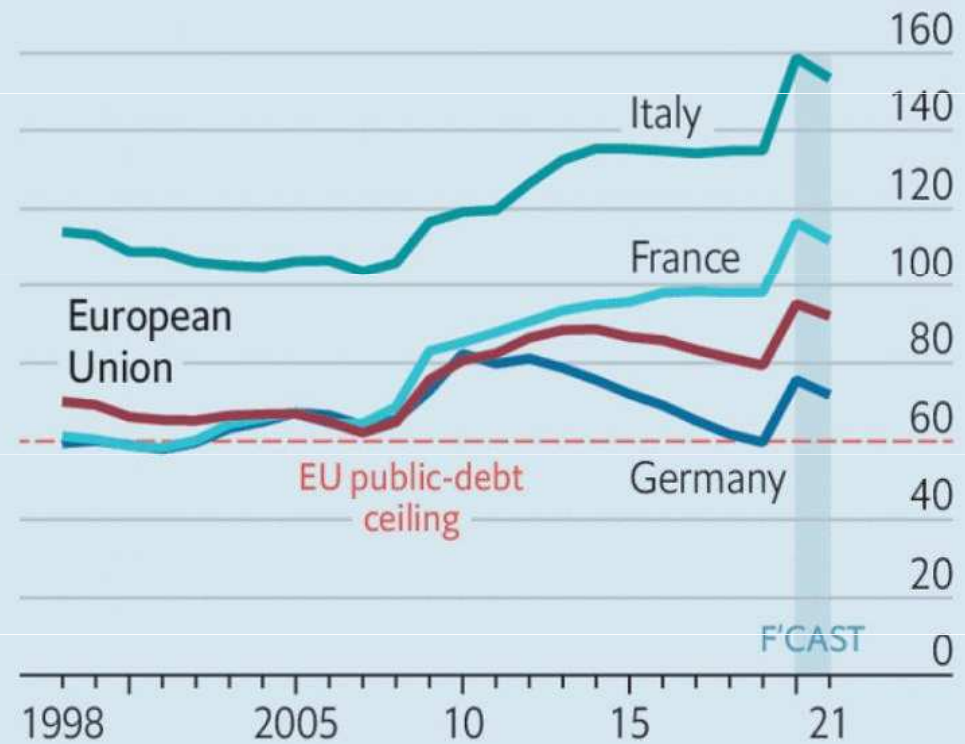
36 Fi Sources: European Commission; Eurostat

*Forecast

he Economist

More of a guideline

Gross government debt, % of GDP



Source: European Commission

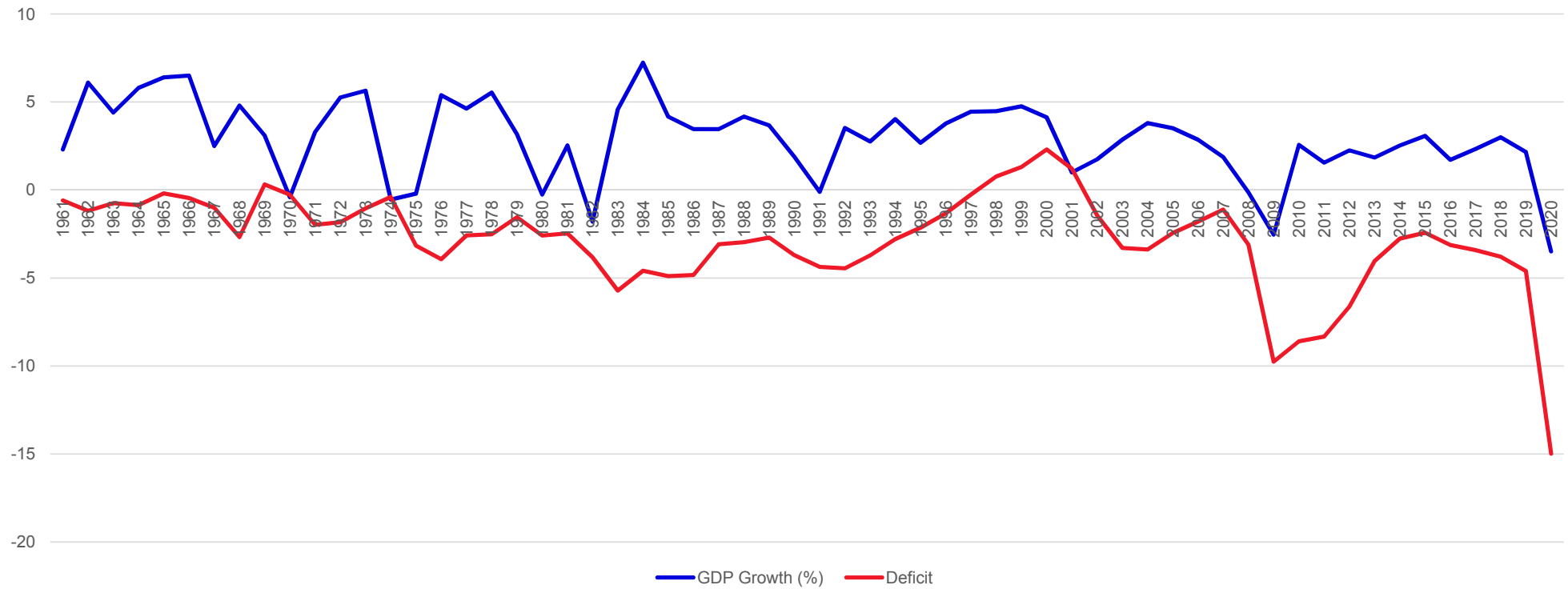
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CS: The US: Fiscal activism

- emerged in 1960s
- 1970s first oil shock with fiscal expansion => increase in inflation
- 1980s Ronald Reagan: tax cuts and additional military spending
- 1993 Clinton administration embarked on a fiscal adjustment policy based on a strict control on spending => structural primary surpluses 1994-2000
- 2001-02 cyclical downturn – fiscal expansion
- 2008/09 Great Recession – fiscal expansion (government deficit in 2009: -7 % of GDP)

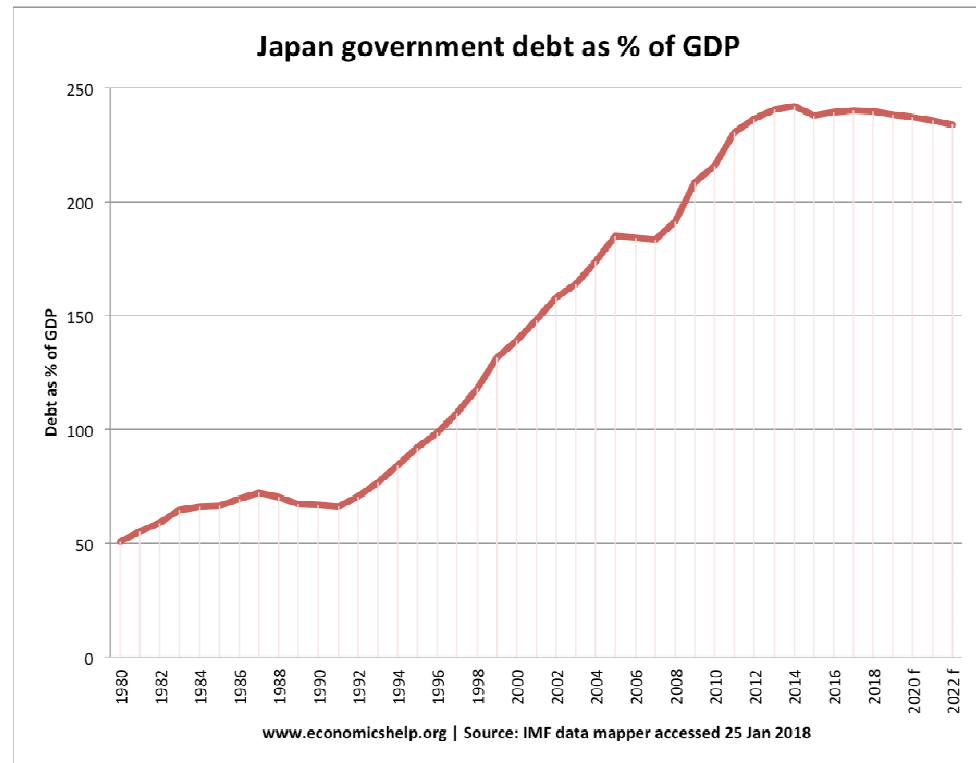
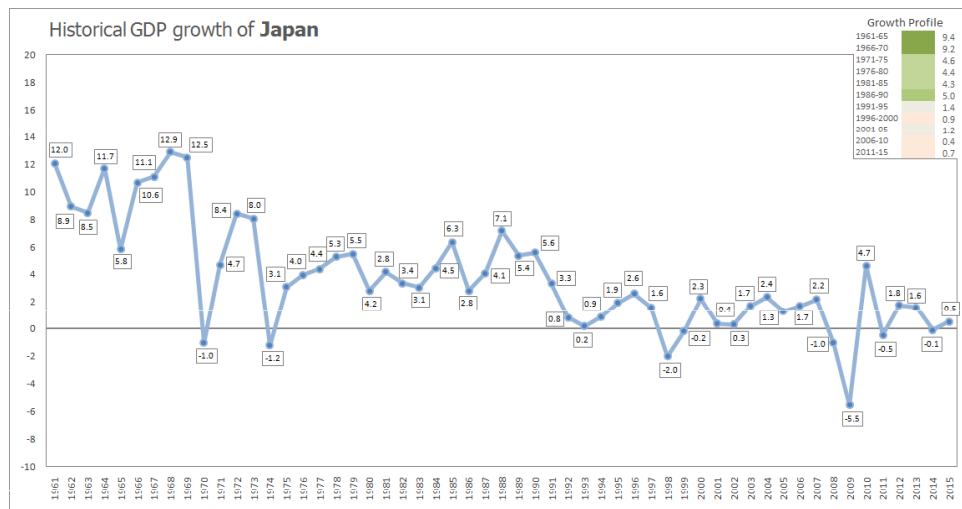
CS: The US: Fiscal activism



CS: Japan: Low-return stimulus efforts

- Japan used fiscal policy massively in the 1990s in an attempt to restore economic growth
- public debt reached the highest level within the OECD
- effectiveness of fiscal stimulus have been weak

CS: Japan: Low-return stimulus efforts



Reference textbook

- Benassy-Quéré, A. et al. *Economic Policy: Theory and practise*. Oxford University Press, 2010. **Chap. 3.**

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