Monetary and fiscal policy within the EU

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Economic Monetary Union

Established by 1992 Maastricht Treaty

- Decision to form EMU was taken in 1988

Part of three stage process for euro introduction

1. July 1990
2. January 1994
3. January 1999

Stage 1 July 1990

1. Abolished all restrictions on movement of capital between member states
2. Increased cooperation between central banks
3. European Currency Unit (ECU) established

Complete freedom of financial transactions was meant to improve economic convergence

Stage 2 January 1994
Establishment of two common institutions

1. European Monetary Institute (EMI), which later became the
2. European Central Bank (ECB)

EMI had two main tasks

1. Strengthen central bank cooperation and monetary policy coordination
2. Preparation for conduct of single monetary policy and currency

Stage 3 January 1999
Fixing of currency exchange rates: euro introduction

- Conduct of single monetary policy by ECB
- Note existence of European System of Central Banks

Stage 3 also meant entry into effect of

- Intra-EU exchange rate mechanism: ERM II
- Stability and Growth Pact

Maastricht Treaty had two key aspects

1. Guarantee price stability
2. Create an independent central bank.

Treaty negotiations involved getting member state to agree upon

- Best policies
- Giving up autonomy over monetary policy

Most policies followed German example

- Germany had strong currency
- German Reunification (1990)

Prior to EMU there was the European **Exchange Rate Mechanism** (ERM, 1979)

- Stabilise exchange rates across member states
- Provided central exchange rate against ECU; cross-rate for other currencies

ERM aim twofold

1. Increase trade
2. Control inflation

ECU was benchmark currency

- ERM based on idea of fixed exchange rate; albeit with margins on either side of the central exchange rate
- Each currency had a target zone in which the value of the currency could fluctuate relative to the ECU

Problem: monetary policy autonomy resulted in different inflation rates

Different inflation rates means realignment

- Vulnerable for speculation crises
- Market could anticipate on these realignments, selling off currencies

High-inflation countries could bring down inflation by following Bundesbank

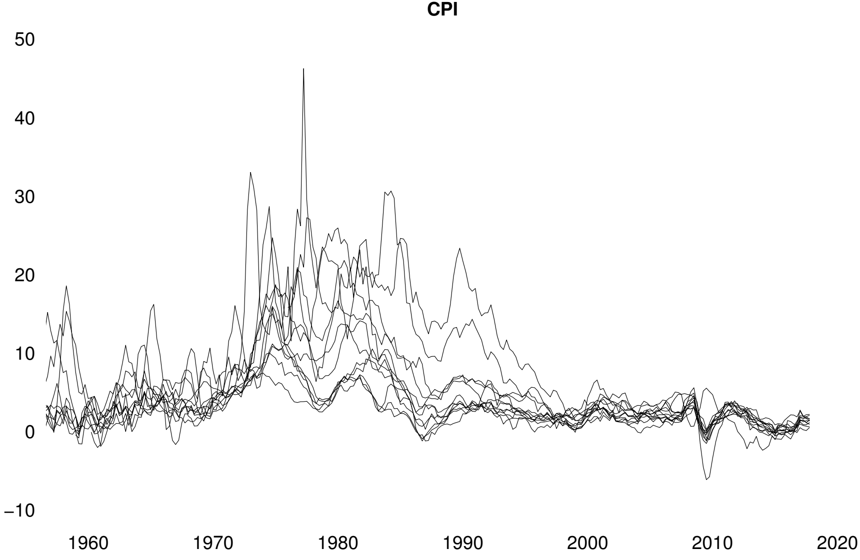
- Became de facto ERM standard
- No realignment between 1987-1992

ERM went 6 years without realignment

- One issue: inflation rates didn't really converge

Countries with high inflation rates saw national currencies appreciating

- Results in loss of competitiveness


CPI
50
40
30
20
10
0
−10
1960
1970
1980
1990
2000
2010
2020

Deutschmark served as anchor for whole system

- De facto autonomy by Bundesbank
- Symmetric system became asymmetric

Two important implications

1. Bundesbank leadership not popular with other countries
2. 1991-1992 crisis: breakdown of ERM in 1992

Eventually three events brought down the ERM

1. German Reunification
2. Denmark rejecting the Maastricht Treaty
3. French referendum

German reunification (1991)
High inflation risk due to state of East Germany: Bundesbank increased interest rate to quell risk

- Some countries did not follow due to economic slowdown
- Triggered speculative attacks on countries that lost competitiveness

Danish referendum

First to ratify the Maastricht Treaty

- Danes voted against it; sparked contagion fears

French referendum

Similar to Denmark: poll did not look good

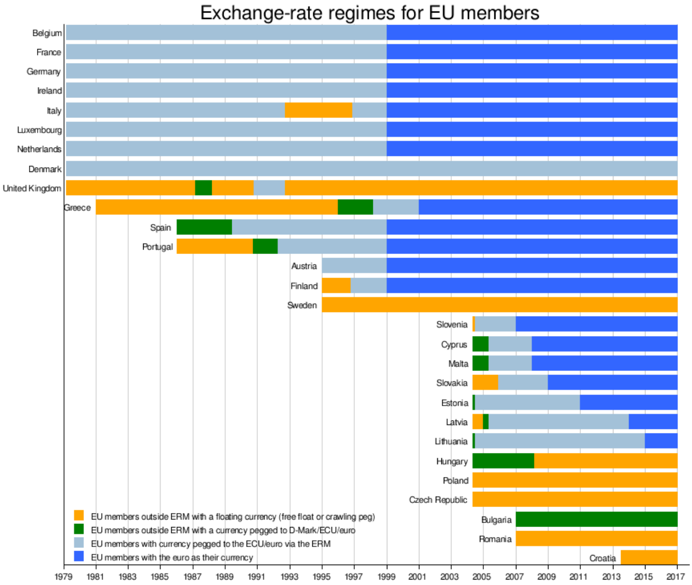
- Again, contagion fears
- Unrest in exchange market, specifically Italian Lira and British Pound

Black Wednesday

- 1987: Sterling pegged; prevents fluctuations of more than 6%
- 1990: Joined ERM
- 1992: German interest rate, and other ERM turmoil, puts pressure on Sterling
  - HMG increased interest rate: spends billions worth of foreign currency to support the Sterling
- 1992: Investors keep selling Sterling for foreign currency

Wednesday 16 Sept: UK leaves ERM

- George Soros might 1B$ profit on this


Exchange-rate regimes for EU members
Belgium
France
Germany
Ireland
Italy
Luxembourg
Netherlands
Denmark
United Kingdom
Greece
Spain
Portugal
Austria
Finland
Sweden
Slovenia
Cyprus
Malta
Slovakia
Estonia
Latvia
Lithuania
Hungary
Poland
Czech Republic
Bulgaria
Romania
Croatia
EU members outside ERM with a floating currency (free float or crawling peg)
EU members outside ERM with a currency pegged to D-Mark/ECU/euro
EU members with currency pegged to the ECU/euro via the ERM
EU members with the euro as their currency
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017

EMU is based on three main principles

1. Provide price stability
2. Central bank independence
3. Fiscal discipline

Price stability

Surprisingly, treaty itself does not give definition: Eurosystem states following

> *..the year-on-year increase in the Harmonised Index of Consumer Prices for the Eurozone of close to but below 2 per cent. Price stability is to be maintained over the medium term .*

Most central banks keep inflation 1.5-2% over 2-3y

- Short run: monetary policy affects inflation, growth, and unemployment
- Long run: monetary policy only impacts inflation

Central bank independence entails that central bank should be able to work without outside interference

- Main aim central bank: price stability
- Other (government) don't mind higher inflation rates

Fiscal discipline required to create conditions under which central bank can operate effectively

- Government borrowing could lead to onset financial crisis (at large enough deficit)
- Government could spend now, to create goodwill with the population, and tax later after the elections (or never)

Moral hazard: in monetary union the government could be waiting for fiscal transfers

- Maastricht Treaty prohibits bailouts

EMU and OCA

EMU not based on OCA theory criteria

- European leaders decided to use another set of conditions

Any EU member can join the euro

- Subject to Maastricth Treaty principles
- From 2020 new member states are obliged to join the euro

EMU entry conditions cover five areas

1. Inflation
2. Long-term nominal interest rate
3. Exchange Rate Mechanism (ERM) membership
4. Budget deficit
5. Public debt

Inflation

> *The inflation rate should not exceed the average of the three lowest inflation rates achieved by the EU member states by 1.5 percentage points*

- Ignores Balassa-Samuelson effect

ECB/EC use definition for best performing:

- Candidate member: Three member states with lowest inflation
- Eurozone: Three member states whose inflation rates are closest to but below 2 percent

Long-term interest rate

> *The long-term interest rate should not exceed by more than 2 percentage points the average observed rate of the three lowest inflation rate countries*

Long term is 10 years here.

$$i_t \approx r_t + \pi_t \tag{1}$$

Countries can squeeze prices temporarily: not in long run

ERM membership

> *Countries should have taken part in the ERM at least two years without having to devalue its currency*

Margins quite large: $\pm 15\%$

Budget deficit

> *Budget deficit should not exceed 3 per cent of GDP*

German signature: deficit should correspond to public investments

Public debt

Public debt should not exceed 60% of GDP

This was the average level when the treaty was negotiated in 1991

- Actually it is 60% "or moving in that direction"
- Belgium had public debt that exceeded 60%

Deficits can be altered by shifting around public spending and tax revenues

Monetary vs. fiscal policy

Joining EMU, countries give up autonomy over monetary policy

- Set by ECB

Retain autonomy over fiscal policy

- Within limits of Maastricht Treaty

Fiscal policy only instrument for government to deal with asymmetric shocks

Fiscal policy in most cases not good alternative to monetary policy

1. Budget needs to be balanced
    - Government wants to increase private spending by cutting taxes
    - Will create budget deficit; needs to be accounted for: government borrows
    - Borrowing leads debt; needs to be paid off: future tax increase
2. Slow to implement
    - Establishing budget is a long political process

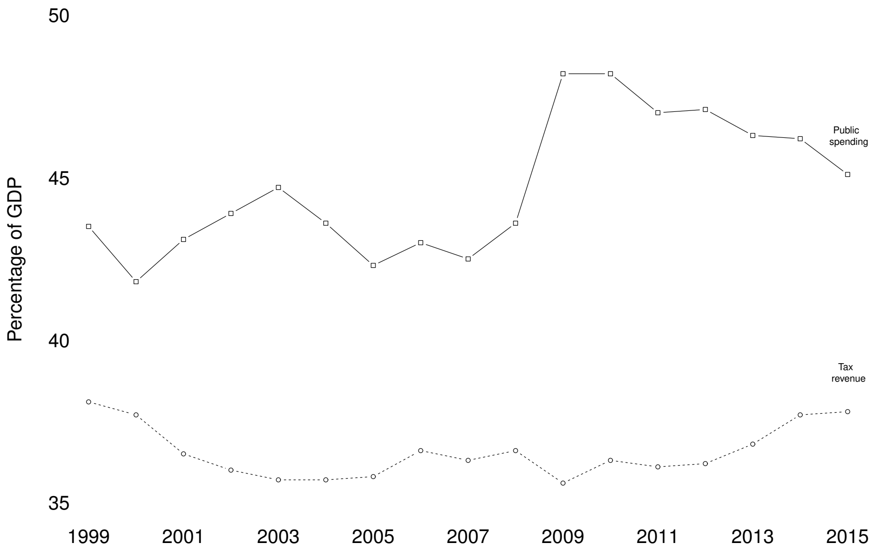
Fiscal policy is counter-cyclical; when economy slows down

- Tax revenues decline
- Unemployment benefits will increase

Fiscal policy automatically expansionary: **automatic stabilizers**

Counter-cyclical fiscal policies can be effective

- Government can borrow more easily compared to households/firms
- Unaffected countries could lend to others in CU


Percentage of GDP
50
45
40
35
1999
2001
2003
2005
2007
2009
2011
2013
2015
Public spending
Tax revenue

Automatic stablisers help dampen impact business cycle fluctuations

- Discretionary policy: government takes active action

Budget figures might obscure government actions

1. Discretionary policy action: budget can improve due to spending cuts or increased taxes
2. Automatic stabilizers: budget improves due to the fact that the economy is in a boom state

Use **cyclically-adjusted budget balance** to disentangle

1. Discretionary policy
2. Automatic stabilisers

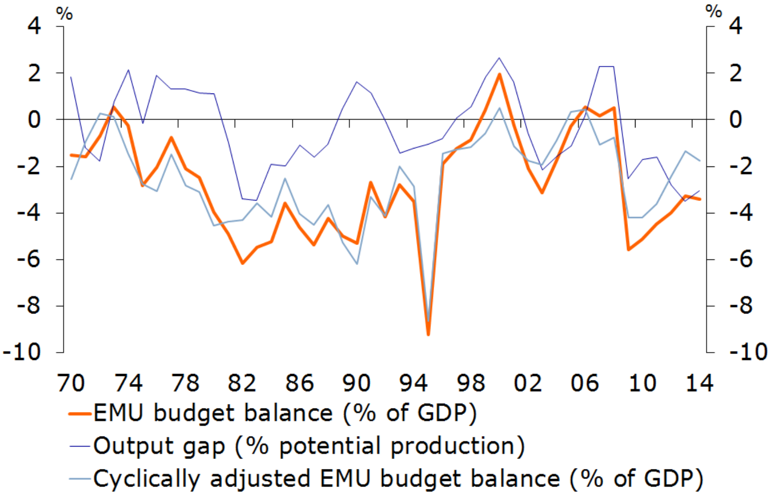
Cyclically-adjusted budget balance relies on **output gap** to measure performance of economy

- Relative to its potential output

$$\tilde{y} = y - y^* \tag{2}$$

y^* is potential output
Difference between the measured budget balance and the cyclically-adjusted budget balance is the work of the automatic stabilizers


Ireland GDP
50000
45000
40000
35000
30000
25000
2000
2005
2010
2015


%
%
4
2
0
-2
-4
-6
-8
-10
70 74 78 82 86 90 94 98 02 06 10 14
EMU budget balance (% of GDP)
Output gap (% potential production)
Cyclically adjusted EMU budget balance (% of GDP)

Why should EU member states coordinate fiscal policy?

- Fiscal policy has spillover effects generating externalities
- e.g. business cycles are transmitted via imports/exports

Makes sense to coordinate policy measures.

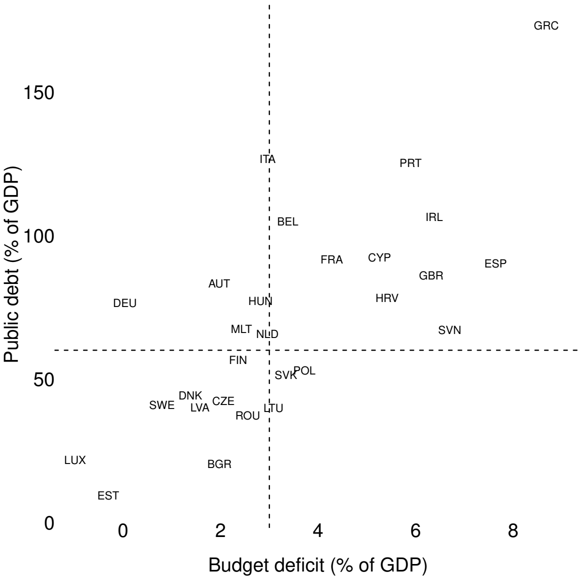
Recall EMU entry conditions which included

- Budget deficit $\leq 3\%$ of GDP
- Public debt $\leq 60\%$ of GDP

Rules once being a member?

Fiscal discipline is important pillar of Maastricht Treaty

- Stability and Growth Pact (SGP)
- Excessive Deficit Procedure (EDP)
  - EDP is part of SGP (11/28 member states currently subject to EDP)


Public debt (% of GDP)
Budget deficit (% of GDP)
0
50
100
150
0
2
4
6
8
GRC
ITA
PRT
BEL
IRL
FRA
CYP
ESP
GBR
AUT
DEU
HUN
HRV
MLT
NLD
SVN
FIN
SVK
POL
DNK
SWE
LVA
CZE
ROU
LTU
LUX
BGR
EST

Stability and Growth Pact (1997)
Aim to improve coordination and monitoring of fiscal and other economic policies of the member state

- Enforce deficit and debt limits, as established by Maastricht Treaty

Main objectives are to ensure that member countries

- Pursue sound public finances
- Coordinate fiscal policies

SGP has evolved over time along with EU's economic governance rules

- 1998: Preventive rules of SGP enter into force
- 1999: Corrective rules of SGP enter into force
- 2005: SGP amendment
    1. Better consideration of national circumstances
    2. More economic rationale to rules
- 2011: Six Pack
- 2013: Two pack and Fiscal Compact
- 2014: Review of SGP
- 2015: SGP flexibility: EC issuing guidance on how rules will be applied

SGP based on three main elements

1. Prevention (1998)
2. Correction (1999)
3. Enforcement (1999)

Prevention

Each EU member state is set a budgetary target in order to bind the government to their commitment towards sound fiscal policy and coordination

- Medium-Term Budgetary Objective (MTO), updated every three years
- Budget deficit is defined in structural terms: Takes into account the business cycle and filters out one-off or temporary measures

Member state has to provide an annual budget outlining how to reach the targets, which is assessed by the EC and the EU governments

- Rules apply to both Eurozone countries and all other EU member states.

Correction

Excessive Debt Procedure (EDP) enters into play when there is excessive debt

- Ensures correction excessive budget deficits $> 3\%$ of GDP or public debt levels $> 60\%$
- Debt levels are excessive when it exceeds 60% of GDP and does not diminish at an adequate rate of 5% per year on average over the last three years

EDP is step-by-step procedure coordinated by EC using data from Eurostat

Excessive Debt Procedure

1. EC reports whether to open EDP
2. European Council decides if excessive debt exists; if so, open EDP
3. Member state is given recommendations, deadlines, and targets (sometimes sanctions)
4. 3-6 months for member state to comply with recommendations
5. EC assesses if action taken is sufficient: informs European Council
   - i Sufficient $\rightarrow$ council takes note
     - EC proposes EDP abrogation, Council takes final decision
   - ii Targets missed $\rightarrow$ new recommendations; extend deadlines
   - iii No effective action $\rightarrow$ new recommendations
     - Sanctions if member state is in Eurozone

Enforcement

Sanctions may follow when countries fail to respect the preventive and corrective rules.

Eurozone countries these could be fines

- 0.2% of GDP, if they fail to abide by either the preventive or the corrective rules
- 0.5% of GDP, if they repeatedly fail to abide by the corrective rules

For all member states the penalty could be suspension of commitments/payments of the structural and investment funds

- UK is excluded from these penalties
- Rules hardly ever enforced on Germany and France

Six Pack

Adjustment of economic governance rules following sovereign debt crisis

1. Operate public accounting systems that comprehensively cover all areas of income and expenditure
2. Make the fiscal data publicly available (monthly basis for central and state governments, quarterly for local governments)
3. Ensure their fiscal planning is based on realistic macroeconomic and budgetary forecasts, using the most up-to-date data
4. Operate specific fiscal rules to help ensure the overall government budget complies with European rules
5. Establish a credible, effective medium-term budgetary framework that includes a 3 year fiscal planning horizon
6. Ensure consistency and coordination of all accounting rules and procedures across all areas of government activity

Six-pack objective was to

- Enhance marcoeconomic surveillance
- Improve procedures to address public deficits and other macroeconomic imbalances

Followed in 2013 by additional rules

- Two Pack: increase in reporting frequency, to enhance surveillance
- Fiscal Compact: stricter interpretation of SGP specifically concerning budgetary targets

Fiscal Compact part of Treaty on Stability, Coordination, and Governance

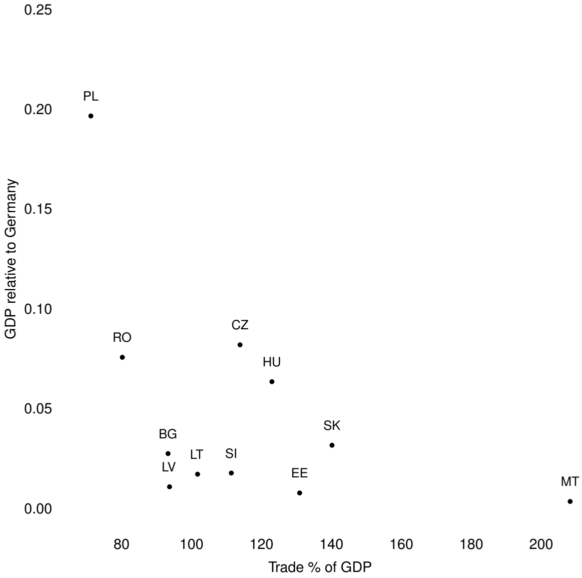
- Signed by all member states except for Czechia, the United Kingdom, and Croatia

Expanding the eurozone

- 2004, 10 countries joined the EU; 8 former socialist states
- 3/10 have not joined eurozone: Czechia, Hungary, Poland
    - Denmark & Sweden also retain their currency

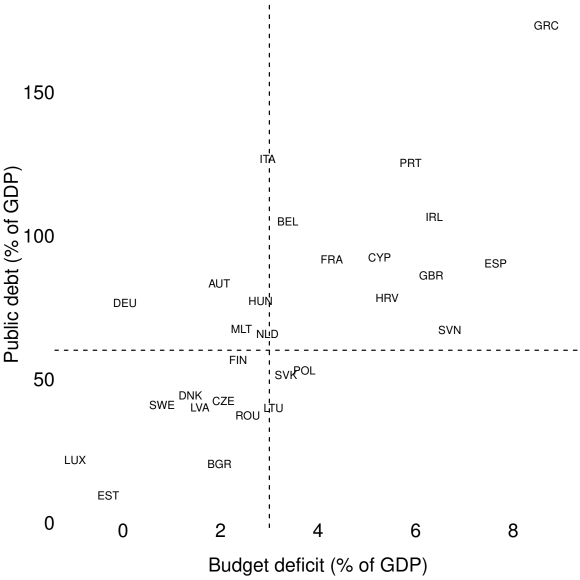
Can ask whether countries could/should join eurozone

1. Beneficial for countries?
2. Beneficial for eurozone?


GDP relative to Germany
0.25
0.20
0.15
0.10
0.05
0.00
PL
RO
CZ
HU
SK
BG
LT
SI
LV
EE
MT
80
100
120
140
160
180
200
Trade % of GDP

Joining the euro would make sense given

- Relative small size of economies
- Openness to trade
- Vulnerability to speculative attacks on their currency



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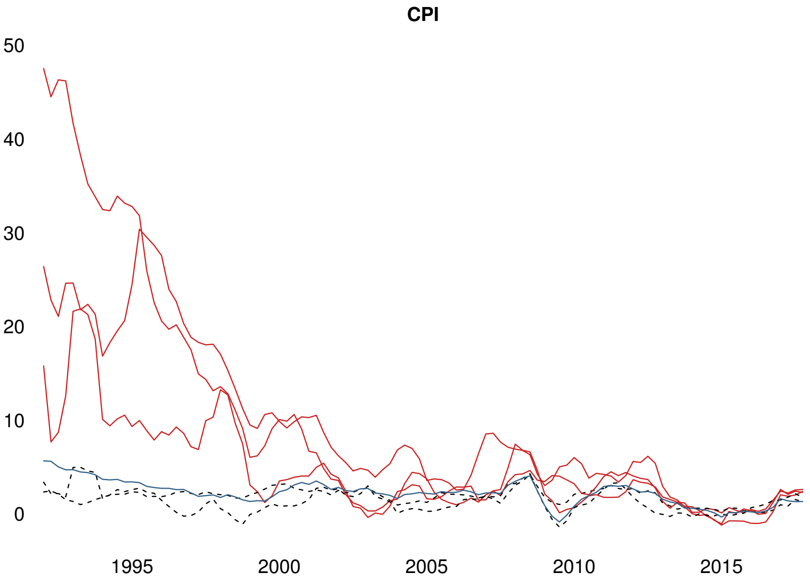
PRT
IRL
BEL
FRA
CYP
ESP
GBR
AUT
HUN
HRV
DEU
MLT
NLD
SVN
FIN
SVK
POL
DNK
CZE
SWE
LVA
LTU
ROU
LUX
BGR
EST


CPI
50
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1995
2000
2005
2010
2015