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# European monetary integration

Radek Čajka

Miami University, Farmer School of Business

# About the lecturer

- Radek Čajka, Ph.D.
  - Assistant professor at the Department of International Business, Faculty of International Relations
  - Vice-dean for international relations and PR
  - University of Economics, Prague
  - radek.cajka@vse.cz

# Outline of the lecture

- Potential pros and cons
- Brief history of the European monetary integration
- CR and Maastricht convergence criteria
- State of real convergence
- Hurdles to overcome
- Euro area crisis
- Greek crisis
- Discussion

# Purpose of the integration

- Before we get to the historical aspects, think about why there has been so much effort to achieve high level of monetary integration?
- Is single market not enough?

# Potential benefits and costs

- Benefits

- transaction costs reduction
- currency risk elimination
- simplification of international payments and investments
- easier price comparison, price transparency
- (being in “the club”)

- Costs

- higher level of capital flows
- loss of autonomous monetary policy
- costs connected with the currency change
- potential price increase
- being in “the club”

# European monetary integration

- Historical aspects
  - Treaty of Rome – 1957
    - First mentioning of the process
  - EMA – 1958
    - Narrowing of the fluctuation band to USD to  $\pm 0.75\%$
  - Werner plan – 1970
    - **Economic** and monetary integration within 3 phases till 1980
    - The first phase began, but because of unfavorable external conditions process never finished
    - Monetarists vs economists clash about economic convergence

# European monetary integration

- „Snake in the tunnel“ system – 1972
  - Reaction to the problems of the B-W monetary system – introducing pegged exchange rates
  - $\pm 2.25\%$  fluctuation band against USD,  $\pm 1.125\%$  against **participating currencies**
  - EMA had to be changed
  - Since 1973 only snake had remained, because countries' currencies started to float against USD

# European monetary integration

- European monetary system – 1979
  - Closer monetary cooperation based on mutually pegged exchange rates
  - 3 pillars
    - ECU
    - Exchange rate mechanism
    - Loan mechanism
  - Had been in place till the end of 1998, is partly functioning till present (ERM II)



# European monetary integration

- Delors report – 1989 (final timetable of the integration process – 3 phases)
  - 1) Legal framework setting (Maastricht treaty), convergence criteria
  - 2) Detailed time specification, formal issues, decision on countries
  - 3) Start of the EMU (1999 – cashless payments, 2002 – all payments, notes and coins)
    - Differences Werner x Delors report

# European monetary integration

- 1. phase
  - July 1, 1990 – December 31, 1993
  - Maastricht treaty
    - Legal framework setting
    - Convergence criteria definition
  - Formation of internal market and capital flows liberalization
  - Strengthening of economic convergence

# Maastricht (nominal) convergence criteria

- In order to ensure the sustainable convergence required for the achievement of economic and monetary union (EMU), the Maastricht (now Lisbon) Treaty sets four convergence criteria which must be met by each Member State before it can take part in the third stage of EMU and hence before it can adopt the euro
- Compliance is checked on the basis of reports produced by the Commission and the European Central Bank (ECB)

# Maastricht (nominal) convergence criteria

- Criterion on price stability
- Criterion on the sustainability of public finances
  - Government deficit criterion
  - Government debt criterion
- Criterion on exchange rate stability
- Criterion on long-term interest rates

# Criterion on price stability

- With regard to “an average rate of inflation, observed over a period of one year before the examination”, the inflation rate is calculated using the increase in the latest available 12-month average of the Harmonized Index of Consumer Prices (HICP) over the previous 12-month average.
- The reference value of the price criterion is calculated as 1.5 percentage points plus the simple arithmetic average of the rate of inflation in the three countries with the lowest inflation rates, provided that this rate is compatible with price stability.

# Criterion on price stability

in %	2011	2012	2013	2014	2015	2016	2017	2018
3 countries avg.	1.6	1.6	0.3	-0.2	-0.9	-0.4	0.8	1.3
Reference value	3.1	3.1	1.8	1.3	0.6	1.1	2.3	2.8
Czech Republic	2.1	3.5	1.4	0.4	0.3	0.6	1.5	1.8

Source: Czech National Bank

# Criterion on price stability

- The Czech Republic was compliant with the criterion on price stability in 2011. It temporarily failed to fulfil the price stability criterion in 2012 due to an increase in indirect taxes (an increase in the reduced VAT rate of 4 percentage points and increases in excise duties) and adverse supply shocks, but since 2013 it has been compliant with it again.
- As apparent, the main problem in (not only Euro area) remains deflation

# Criterion on sustainability of public finances

- Article 126 of the Treaty sets out the excessive deficit procedure, which is specified in more detail in the Stability and Growth Pact. According to Article 126(3) of the Treaty, the European Commission prepares a report if a Member State does not fulfill the requirements for fiscal discipline, in particular if:
  - 1) the ratio of the planned or actual government deficit to GDP exceeds a reference value (defined in the Protocol on the excessive deficit procedure as 3% of GDP), unless:
    - either the ratio has declined substantially and continuously and reached a level that comes close to the reference value, or
    - the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value.
  - 2) the ratio of government debt to GDP exceeds a reference value (defined in the Protocol on the Excessive Deficit Procedure as 60% of GDP), unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.



# Criterion on sustainability of public finances

DEFICIT (% of GDP)	2011	2012	2013	2014	2015	2016	2017	2018
Reference value	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
Czech Republic	-2.9	-4.0	-1.2	-1.9	-0.6	-0.2	-0.2	0.1

Source: Czech National Bank

DEBT (% of GDP)	2011	2012	2013	2014	2015	2016	2017	2018
Reference value	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Czech Republic	41.0	44.7	44.9	42.2	40.3	38.6	38.5	37.1

Source: Czech National Bank

# Criterion on sustainability of public finances

- As a result of a sharp slowdown in economic growth and recession in late 2008 and early 2009, the general government balance saw a marked deterioration. In addition to the unresolved structural problems of Czech public finance, the government sector was facing an unprecedented shortfall in tax revenues owing to the extraordinarily unfavorable economic situation and to legislative changes approved mainly on the revenue side of the public budgets.
- Expenditure on mitigating the effects of the recession on economic agents was increased at the same time. For 2010 the government prepared consolidation measures that helped reduce the general government deficit compared to 2009.

# Criterion on sustainability of public finances

- The government resulting from the spring 2010 elections has thus tightened the fiscal objectives for the coming years compared to the Czech Republic's January 2010 Convergence Program. It has also set the objective of achieving balanced general government accounts in 2016 provided that there is economic growth in the period under consideration.
- Austerity measures had been undertaken, but the new government of 2014 has decided to increase public expenditures.
- But it remains essential to address the structural problems of public finance.

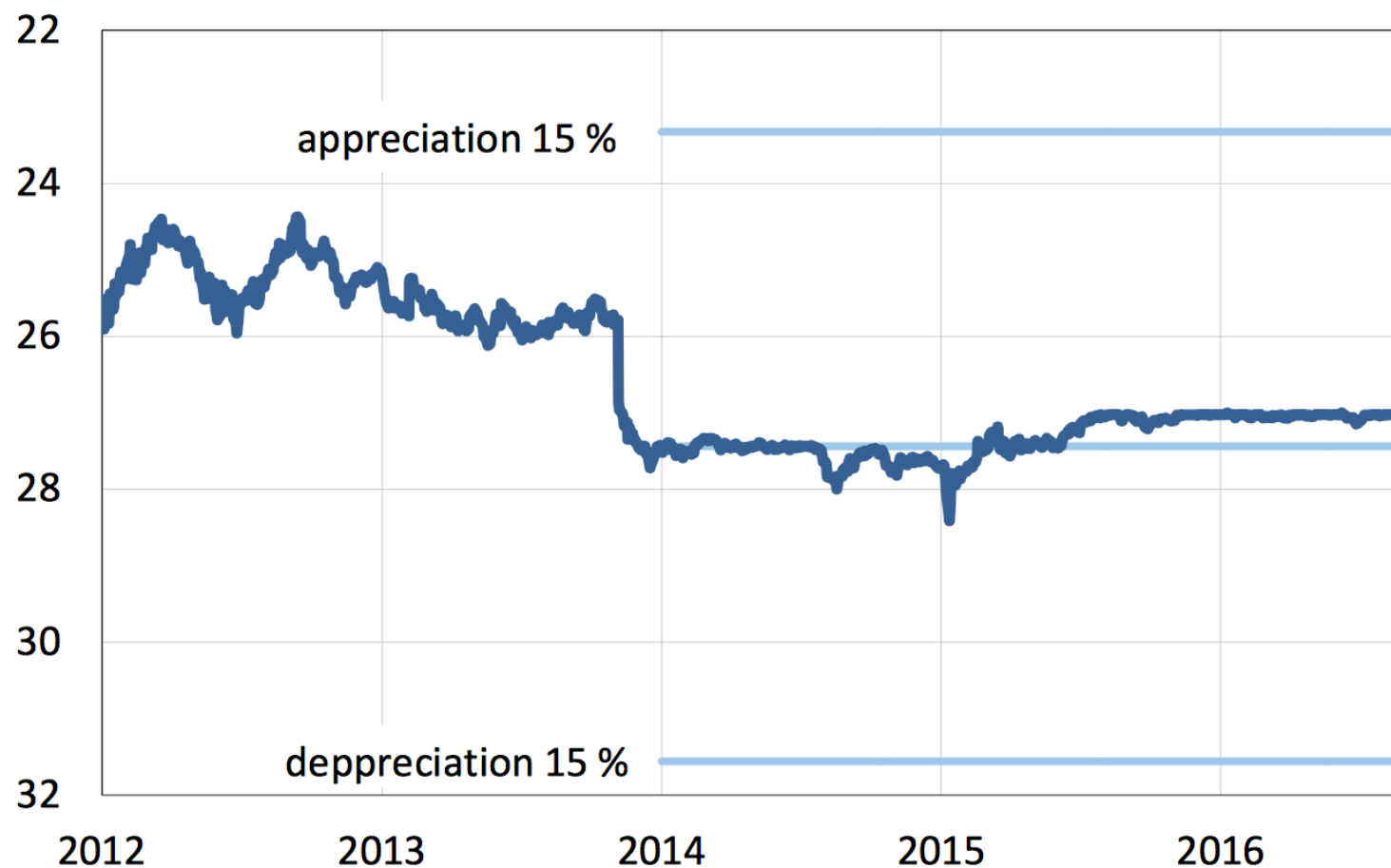
# Criterion on sustainability of public finances

- The government sector deficit in 2012 has been substantially increased on a one-off basis by the passing of the government proposal of a law on rectifying some property injustices against churches.
- The whole sum of the financial compensation, which amounts to CZK 59 billion, i.e. 1.5% of GDP, is taken into account in 2012. This is therefore a methodological issue of the accrual system of accounting.

# Criterion on exchange rate stability

- Article 3 of the Protocol on the Convergence Criteria stipulates that “the criterion on participation in the exchange rate mechanism of the European Monetary System shall mean that a Member State has respected the fluctuation margins provided for by the exchange rate mechanism of the European Monetary System without severe tensions for at least two years before the examination.
- In particular, the Member State shall not have devalued its currency’s bilateral central rate against any other Member State’s currency on its own initiative for the same period.”

# Exchange rate development (CZK/EUR)



Source: Czech National Bank

# Criterion on long-term interest rates

- Article 4 of the Protocol on the Convergence Criteria stipulates that “the criterion on the convergence of interest rates means that, observed over a period of one year before the examination, a Member State has had an average nominal long-term interest rate that does not exceed by more than two percentage points that of, at most, the three best performing Member States in terms of price stability. Interest rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions.”

# Criterion on long-term interest rates

in %	2011	2012	2013	2014	2015	2016	2017	2018
3 countries avg.	3.3	3.1	4.4	1.8	1.8	1.9	4.1	2.3
Reference value	5.3	5.1	6.4	3.8	3.8	3.9	6.1	4.3
Czech Republic	3.7	2.8	2.1	1.6	0.6	0.7	1.2	1.5

*Source: Czech National Bank*



# Criterion on long-term interest rates

- The current debt crisis in the euro area presents some risk to government bond yields. However, as noted above, investors have confidence in Czech bonds, as evidenced by the correlation between Czech and German ten-year government bond yields in recent months.

# Convergence criteria

- What do you think? Have the criteria been set well and properly?
- Or are they posing eventual threads?

# European monetary integration

- 2. phase
  - January 1, 1994 – December 31, 1998
  - More detailed timeframe (Green paper)
  - Stability and growth pact (1997)
    - EDP, weakening (2005), strengthening (2010), completed with Fiscal treaty
  - EMI and ERM II

# European monetary integration

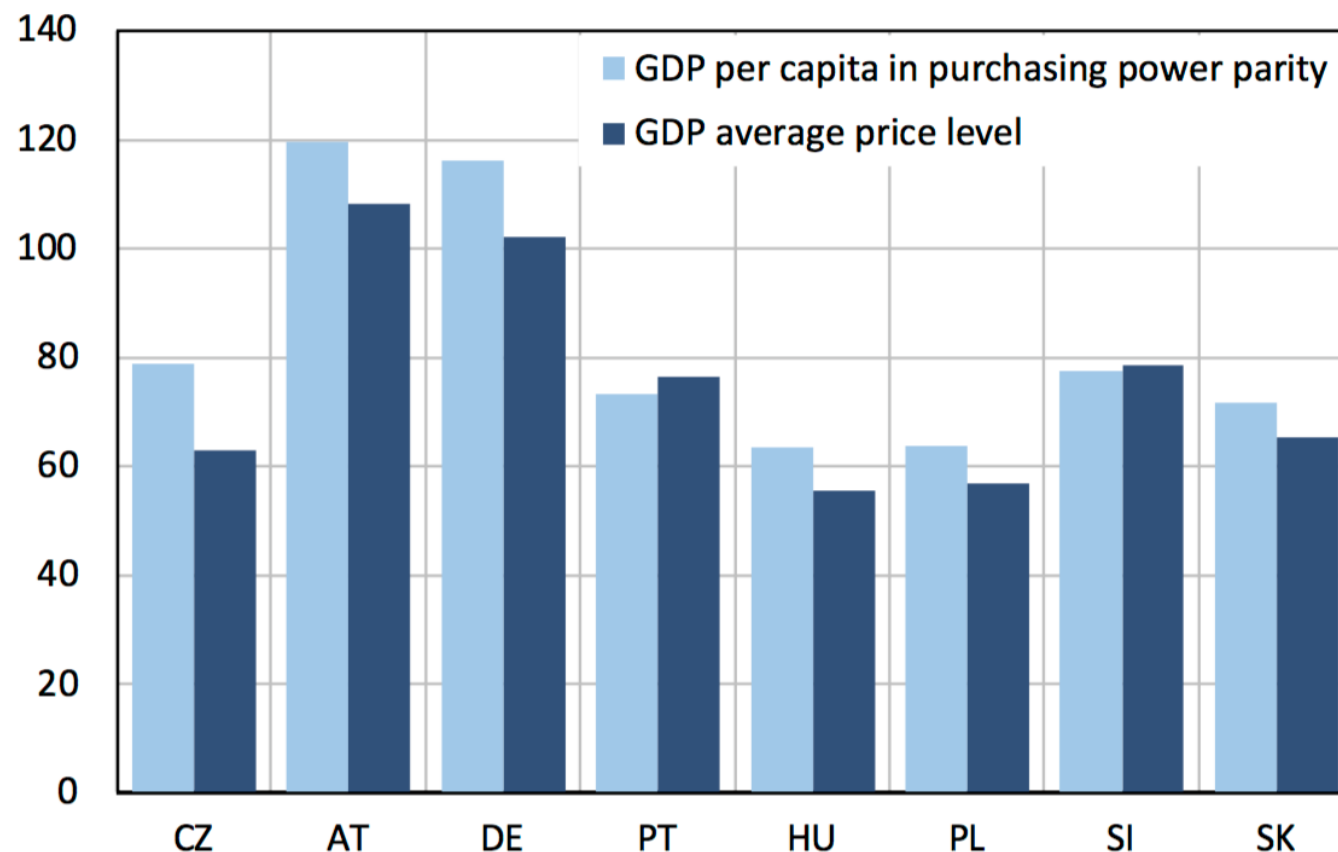
- 3. phase
  - January 1, 1999 – February 28, 2002
  - Third phase participants set by 1998 Convergence report (11 – without Greece)
  - First in cashless form, since January 1, 2002 in cash form
  - 2001 – Greece, 2007 – Slovenia, 2008 – Malta, Cyprus, 2009 – Slovakia, 2011 – Estonia, 2014 – Latvia, 2015 – Lithuania

# Real vs nominal convergence

- Economic situation in Europe has showed that pursuing only nominal convergence is not enough.
- More and more attention is being paid to the process of real convergence, which includes issues like GDP differences, price level differences, economic cycles, structure of the economy and external trade, integration of financial markets, labor market or institutional environment.

# GDP and price level convergence

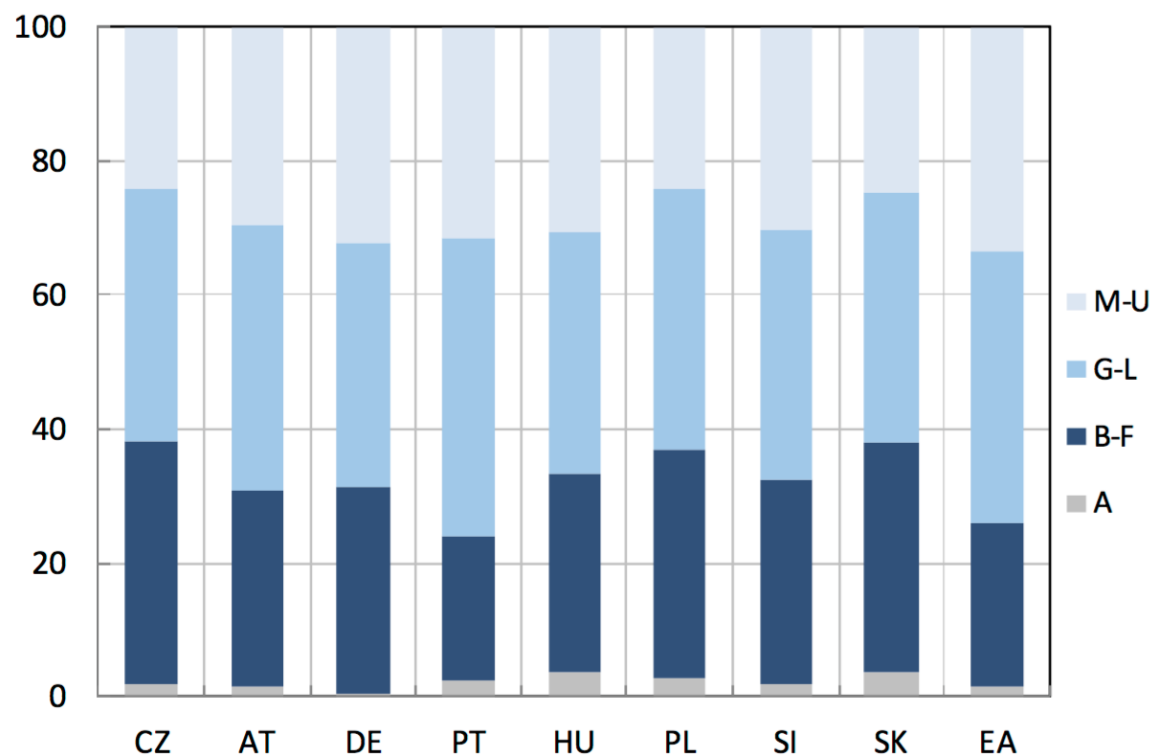
EA19 = 100



Source: Czech National Bank

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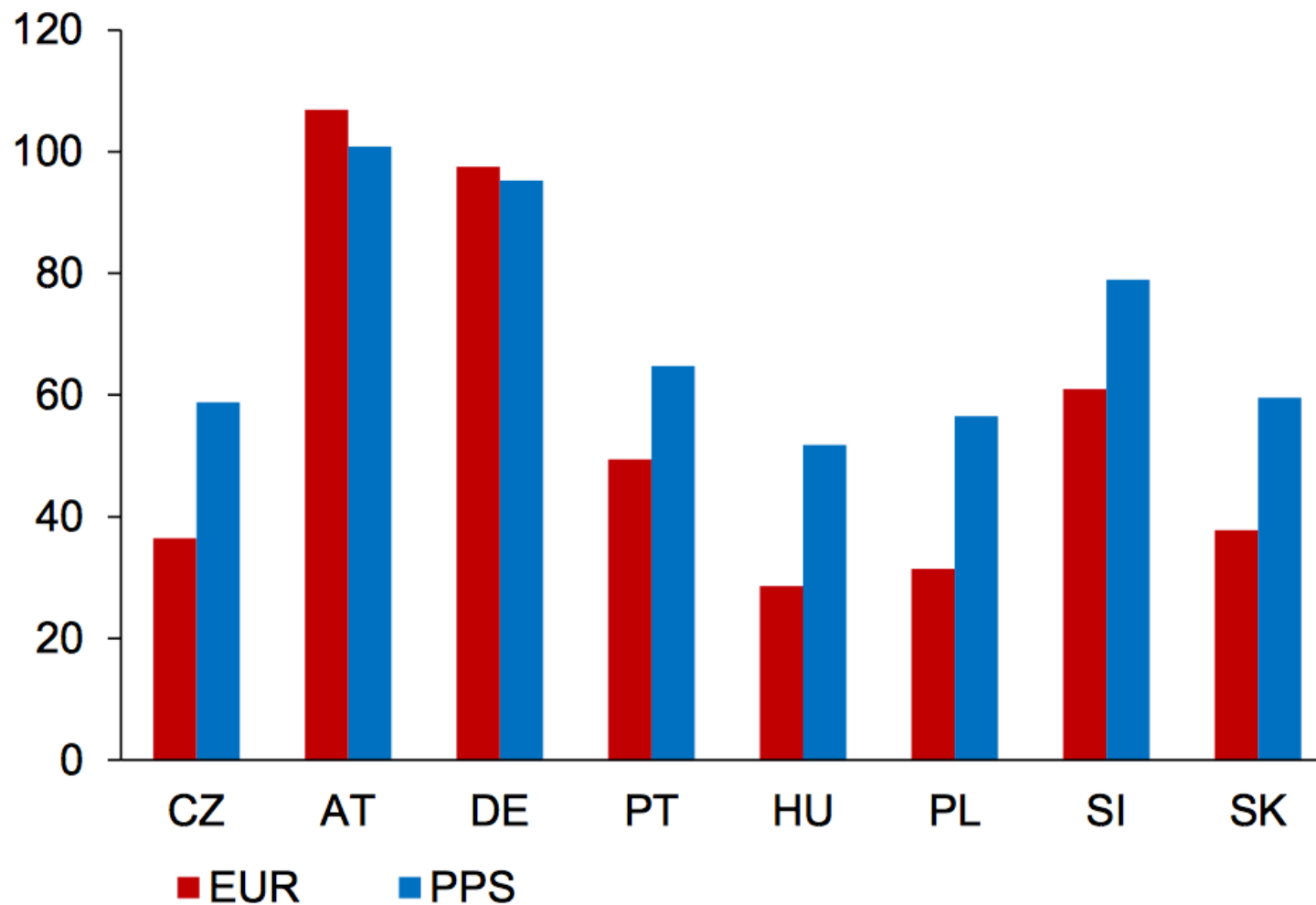
# Shares of economic sectors in GDP in 2014 (in %)



*Note: The sectors are broken down by NACE classification: A: agriculture, forestry and fishing; B-F: industry (including construction); G-L: services (trade, transport, ICT, financial intermediation, real estate services); M-U: Other services.*

# Average annual wage

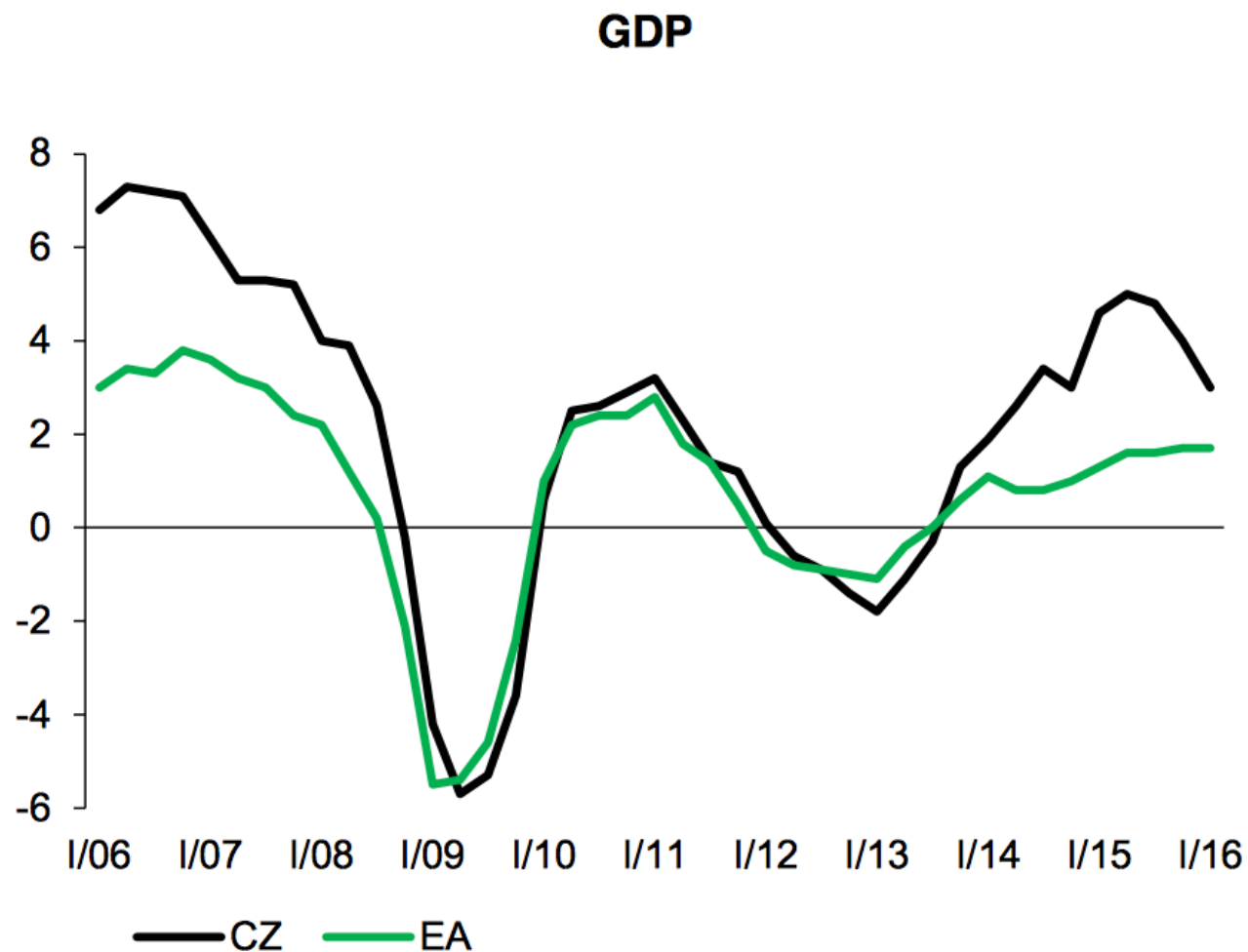
EA19 = 100



Source: Czech  
National Bank



# Synchronicity of economic cycles



# Other aspects

- Similarity of the structure of economic activity
- Long-term development of the exchange rate
- Long-term co-movement in the exchange rate (against USD)
- Trade and ownership links with the euro area
- Financial sector situation, integration of financial markets
- Labor market – wage flexibility, structural unemployment, mobility
- Product market flexibility
- Institutional environment

# Hurdles to overcome for the CR

- Potential future fiscal imbalances
  - reform of healthcare, pension systems (demographic issues), social security system
- Situation in Europe
- Political preparedness
- New convergence criteria?

# Typology of crisis

- Currency crisis – causes run on currencies
  - Currencies devalue
- Bank crisis – run on banks
  - Distrust in national banking system
- Debt crisis – run on bonds
  - Countries have difficulties to repay previous debts

# Crisis solution attitude

- Roots of the crisis
  - Fiscal irresponsible behavior (cheap money)
  - Macroeconomic imbalances (differences in competitiveness)
  - Banking crisis (creating public spending problems)
- Solution
  - Ad-hoc at first (EFSF, EFSM), then permanent (ESM)
  - Future development – 4 unions (economic, fiscal, banking, political)

# Crisis solution attitude

- Both euro area member and non-member countries hit:
  - Greece (2010), Ireland (2010), Portugal (2011), Spain (2012), Cyprus (2012 - 2013)
  - Latvia (2008), Hungary (2008), Romania (2009)

# Crisis solution attitude

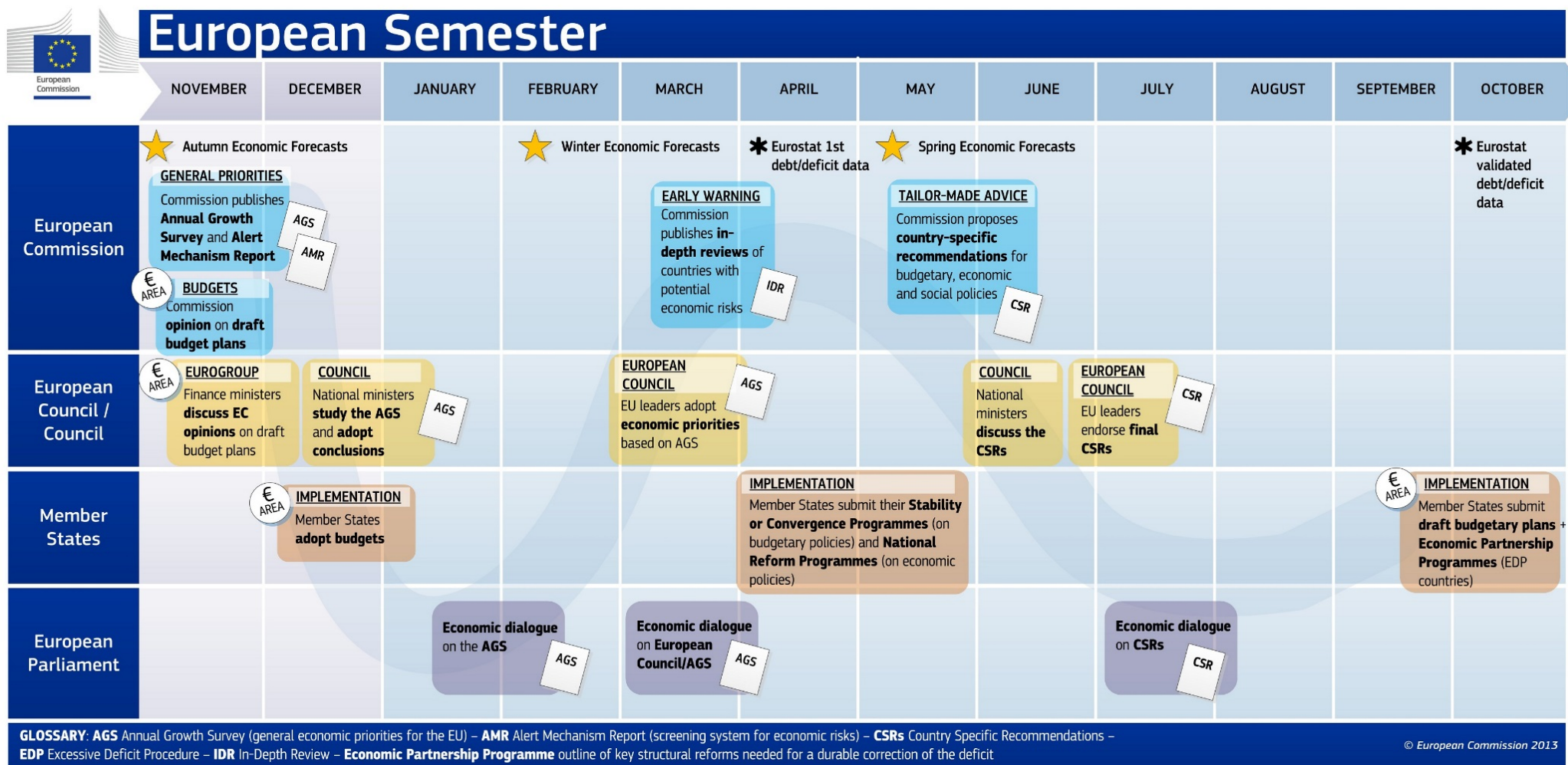
- Temporary measures
  - Since 2008 – economic growth support (*European Economic Recovery Plan*)
  - After Greece:
    - EFSM (*European Financial Stabilisation Mechanism*)
    - EFSF (*European Financial Stability Facility*)
  
    - ESRC (*European Systemic Risk Council*)
    - ESFS (*European System of Financial Supervision*)

# Crisis solution attitude

- Permanent measures – European Semester (part of Europe 2020 strategy)
  - **In March**, EU Heads of State and Government issue EU guidance for national policies on the basis of the Annual Growth Survey. The Spring meeting of the European Council – based on the annual growth survey, takes stock of:
    - the overall macroeconomic situation
    - progress towards the five EU-level targets
    - progress under the flagship initiatives
  - **In April**, Member States submit their plans for sound public finances (Stability or Convergence Programmes) and reforms and measures to make progress towards smart, sustainable and inclusive growth, in areas such as employment, research, innovation, energy or social inclusion (National Reform Programmes).
  - **In May/June**, the Commission assesses these programmes and provides country-specific recommendations as appropriate. The Council discusses and the European Council endorses the recommendations. Policy advice is thus given to Member States before they start to finalise their draft budgets for the following year.
  - Finally, **end of June or in early July**, the Council formally adopts the country-specific recommendations.



# Crisis solution attitude



# Crisis solution attitude

- Permanent measures
  - 2010 – Stability and growth pact strengthening
    - Debt level decrease, reverse voting principle
  - 2010 – Prevention and correction of macroeconomic imbalances
  - 2010 – ESM (*European Stability Mechanism*)
    - Operational from October 2012
    - Since July 1, 2013 the only mechanism

# Crisis solution attitude

- Permanent measures
  - 2012 – Fiscal treaty
    - Completion of Stability and growth pact
    - Balanced budget requirement – max 0.5% of GDP (in terms of structural deficit)
    - This rule must be implemented in national legislation together with a correction mechanism
  - Banking union

# Future of EMU

- Union consisting of 4 pillars
  - 1) Financial pillar – banking union
    - ECB as a common supervisory authority of the euro area
      - ECB: direct responsibility for the 200 largest banks
      - But will have power to deal with small banks if necessary
    - Common resolution fund & mechanisms for failing banks
    - Common deposit-insurance scheme to prevent bank runs

# Future of EMU

- Union consisting of 4 pillars
  - 2) Fiscal pillar
    - Fiscal responsibility
    - Stability bonds?

# Future of EMU

- Union consisting of 4 pillars
  - 3) Economic pillar
    - Economic convergence
  - 4) Political pillar
- What has the QE brought the Euro area so far?

# Case of Greece

- At the beginning of all troubles - but is it really the only troublemaker?
- Receives financial support from international institutions and creditors (in installments, based on program performance)
- Current public debt is about 320 billion EUR, which amounts to 175% of national GDP
- Creditors – shift from private to public
- Role of Germany

# Case of Greece

- Uneasy political situation – government of Syriza
- What were the options during 2015:
  - Debt relief (write-off)
  - Debt restructuring
  - Bankruptcy
  - Another package



# Case of Greece

- In 2015 the situation became complicated, as there was another need for new funds
- Greek government (supported by public referendum results) refused conditions of the new arrangement, which had led to serious economic troubles (limitation of bank transactions, ban on money transfers)
- In the end they had to agree on new conditions to get a 86 billion EUR loan (previous were 80+30 and 145+20)

# Case of Greece

- Everything is much more complicated because of the refugee crisis
- (Should they leave Schengen-area?)

Thank you for your attention  
and feel free to provide any  
questions, comments or  
remarks 😊

# Czech economic transition

- Before the WWII, the Czech Republic had belonged to the most developed countries in the world
- As the bipolar world was created after that, unfortunately the country had been assigned to the socialist (communist) part of Europe
- In the sense of economic growth, the two economic systems went different ways since the 1970s

# Czech economic transition



# Czech economic transition

- The process had begun right after the Velvet revolution of 1989
- It was led by the newly formed elite, but also the former one (unfortunately)
  - Lots of people were involved and most of them didn't want to miss the opportunity (to gain something)
- The degree of state (or public) ownership was the highest among the CEE countries

# Czech economic transition

- There was a debate over shock therapy vs gradualism
- The main point was setting up the process - what comes first, what comes second, ...
- In the end, economic reforms proceeded institutional and legal ones
- Lots of people got rich since they knew what to do

# Czech economic transition

- The process could be called economic liberalization
  - There was liberalization of prices, international trade, financial transactions (making the currency internally and externally exchangeable)
  - There was also process of privatization and restitution



# Czech economic transition

- Privatization
  - The chosen way how to transfer enterprises from public to private ownership
    - Small privatization - for small businesses
      - Very often in form of auctions
    - Large privatization - for middle sized and large companies
      - In the form of voucher (coupon) privatization

# Czech economic transition

- Privatization
  - People had the option to buy stocks of companies in a given nominal value
  - Or they could also purchase shares of privatization funds (which previously invested in particular companies)
  - Privatization fund often purchased stocks from individuals in the exchange for their own shares

# Czech economic transition

- Privatization
  - The effectiveness is the question
    - Through vouchers, ownership was very much moldered which didn't make it any easier - above all, people had zero experience
    - That was why most of the vouchers ended by privatization fund - many of those got bankrupt or money was stolen

# Czech economic transition

- Restitution
  - Process of giving people back directly what the communist government had taken them
    - Mostly small business, property, land
    - The same is now happening with churches

# Czech economic transition

- Evaluation
  - Too often the role to be played by the entrepreneur in the economic transformation was neglected and obstacles prevented the emergence of a creative entrepreneurial spirit
  - The transition countries over emphasized macroeconomic factors and minimized the importance of historical, cultural and institutional factors

# Case study - Czech currency crisis of 1997

- Why this case?
  - Nice illustration of typical symptoms, solutions and results
  - Currency, but not financial crisis
  - I'm Czech 😊

# Case study - Czech currency crisis of 1997

- Transformation process in the first half of 1990s
- Very good economic results
  - High growth, balanced budget
- Popular destination for investors
  - High interest rate differential (inflow of spec. capital)
- Exchange rate of *Koruna* was pegged to a basket of DEM (65%) and USD (35%) within  $\pm 0.5\%$

# Case study - Czech currency crisis of 1997

- There was no “one reason”, but rather many negative factors and developments
  - RER appreciation given by higher domestic inflation, stable foreign prices and pegged regime
  - This had led to an increase in current account deficit (mainly through the trade balance)



# Case study - Czech currency crisis of 1997

- There was no “one reason”, but rather many negative factors and developments
  - In February 1996 the band was widened to  $\pm 7.5\%$
  - Growth slowed down, unemployment increased, CA deficit increased to 9% of GDP
  - Political instability (debate over fiscal and monetary policies)

# Case study - Czech currency crisis of 1997

- In April 1997 the government introduced a „package“ of macroeconomic reforms
- But markets did not calm down (taking into account their bad experience with Asian crisis)
- First comments about a necessity to devalue Koruna

# Case study - Czech currency crisis of 1997

- Speculators used the opportunity and started to open short positions on Koruna since May 15
- Czech National Bank was trying to defend the peg by intervening in spot and forward markets (in a non-sterilized way) and by raising the interest rates

# Case study - Czech currency crisis of 1997

- There was also some informal pressure on commercial banks to restrain access to Koruna for non-residents
- Even locals lost confidence and were trying either to sell Koruna, or buy imported goods (or both)

# Case study - Czech currency crisis of 1997

- That was a signal for the Czech National Bank that the peg can't be prolonged for a long period
- On May 26<sup>th</sup> a floating regime was introduced
- Interesting fact – Koruna never left the band during those 11 days