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# **Croatian path to the monetary union: why, when and what can we learn from our peers?**

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# Introduction

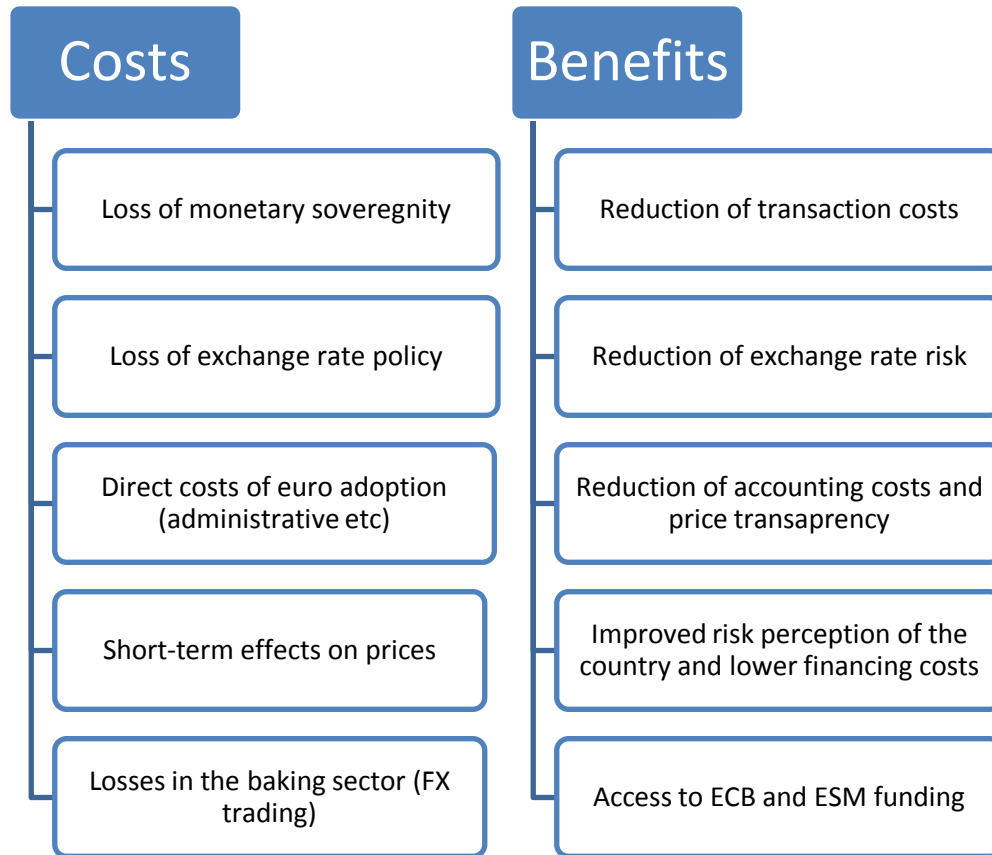
## NMS path towards euro

- NMS formally committed to adoption of euro once the necessary conditions are satisfied, meaning that the euro adoption is an **obligation**
- The first step in the process of euro adoption is joining the **ERM 2** and minimum 2 year stay in ERM 2 is one of the **convergence criteria**
- Timing of the entrance to ERM 2 heavily depends on local political and economical situation but also to international environment → experiences of **peer NMS** show that convergence criteria play very important role

## Some Croatian specificities

- Unlike most of its peers who joined EU in the accelerating phase of European business cycle and euro euphoria, Croatia joined the community after several **years of European and domestic recession** and shortly after the outburst of (Greece-related) **euro zone crisis**
- Very high degree of **eurisation**
- **Swiss franc “crisis”**
- 2017 – euro adoption back on the **policy agenda**
- Eurobarometer 2017 – **52%** of citizens in favor of euro adoption

# Euro adoption – brief cost-benefit analysis



Based on Eudey (1998), Bilas (2005), Sturm et al (2009), Ganev (2010) and Popidera et al. (2015).

# Brief cost-benefit analysis of euro adoption in Croatia

Costs

# Monetary sovereignty

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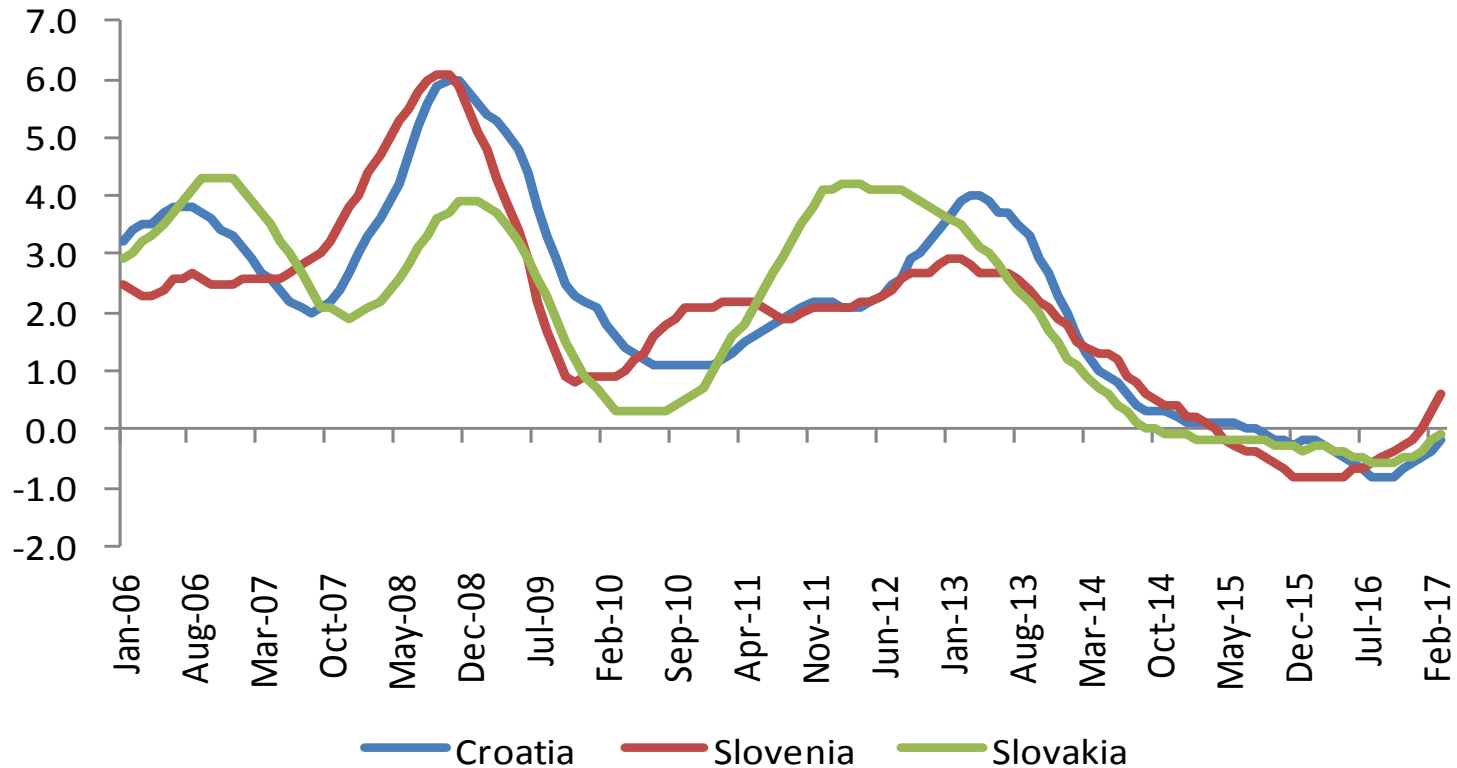
| Instruments/characteristics | Monetary policy sovereignty | Explanation   |
|-----------------------------|-----------------------------|---|
| Interest rate channel       | <b>Limited</b>              | No key rate + non-functioning transmission mechanism                          |
| Exchange rate channel       | <b>Limited</b>              | Limited by exchange rate anchor   |
| Lender of last resort       | <b>Limited</b>              | Only formally; domination of foreign banks (liquidity window at mother banks) |
| Impossible trinity          | <b>Limited</b>              | Managed exchange rate and capital mobility                                    |

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Source: authors

# Effect on prices

Experiences of Slovenia and Slovakia: only 0.2-0.4bp higher annual inflation rate



Source: Eurostat

# Benefits

# Transaction costs

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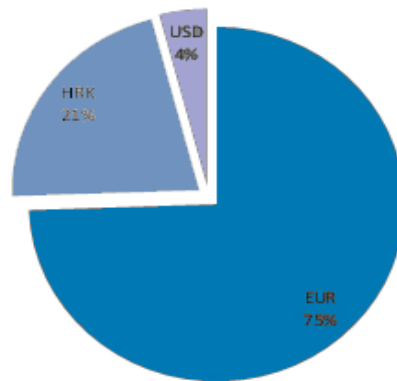
| Exports         |            | Imports         |            |
|-----------------|------------|-----------------|------------|
| Italy           | 13%        | Germany         | 16%        |
| Slovenia        | 12%        | Italy           | 13%        |
| Germany         | 11%        | Slovenia        | 11%        |
| B&H             | 10%        | Austria         | 9%         |
| Austria         | 7%         | Hungary         | 8%         |
| <b>Total EA</b> | <b>56%</b> | <b>Total EA</b> | <b>61%</b> |

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Source: Eurostat; authors

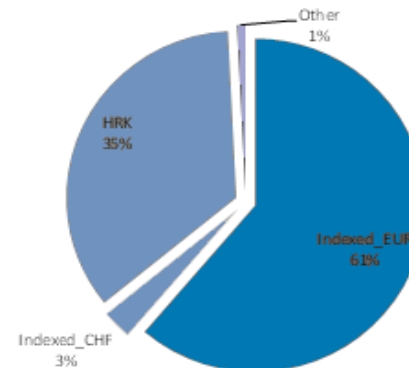
# Exchange rate risk

Figure 1a: Public debt currency structure (31.12.2016)



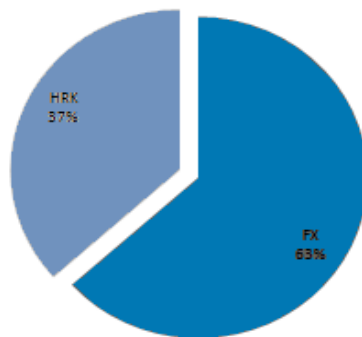
Source: Ministry of finance (2017)

Figure 1b: Household loans currency structure (31.3.2016)



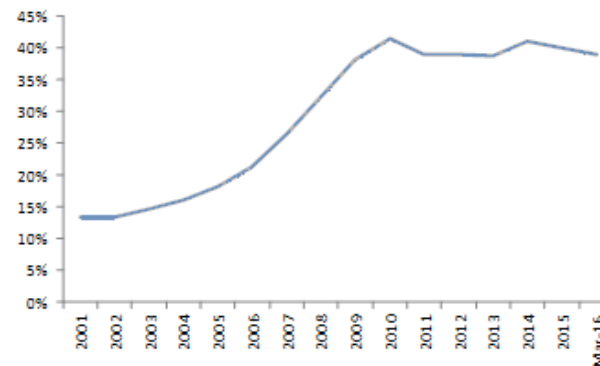
Source: Croatian National Bank (2016)

Figure 1c: Corporate loans currency structure (31.12.2016)



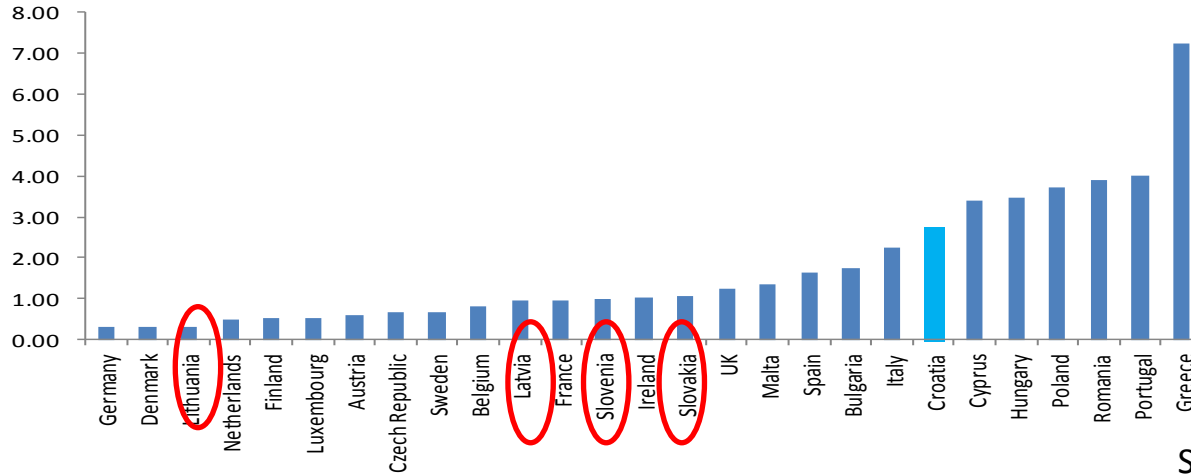
Source: Croatian National Bank

Figure 1d: External debt of corporate sector

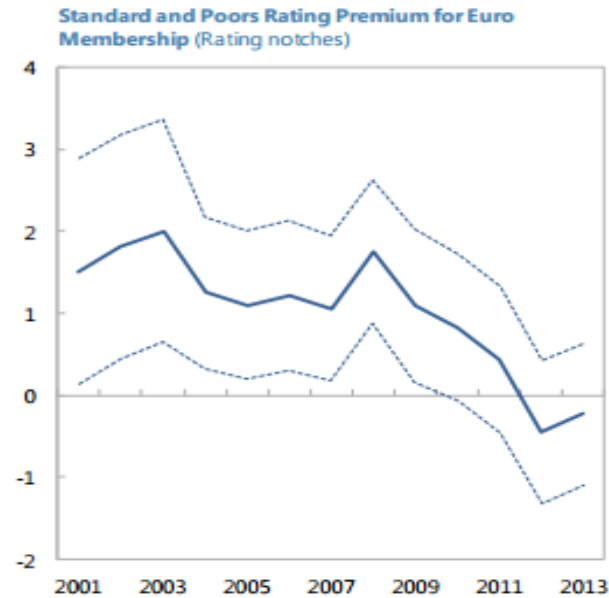
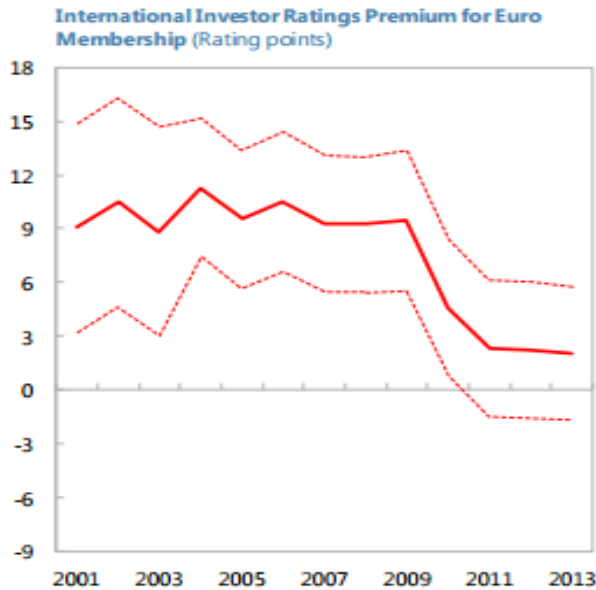


Source: Croatian National Bank (2016)

# Risk perception and financing costs

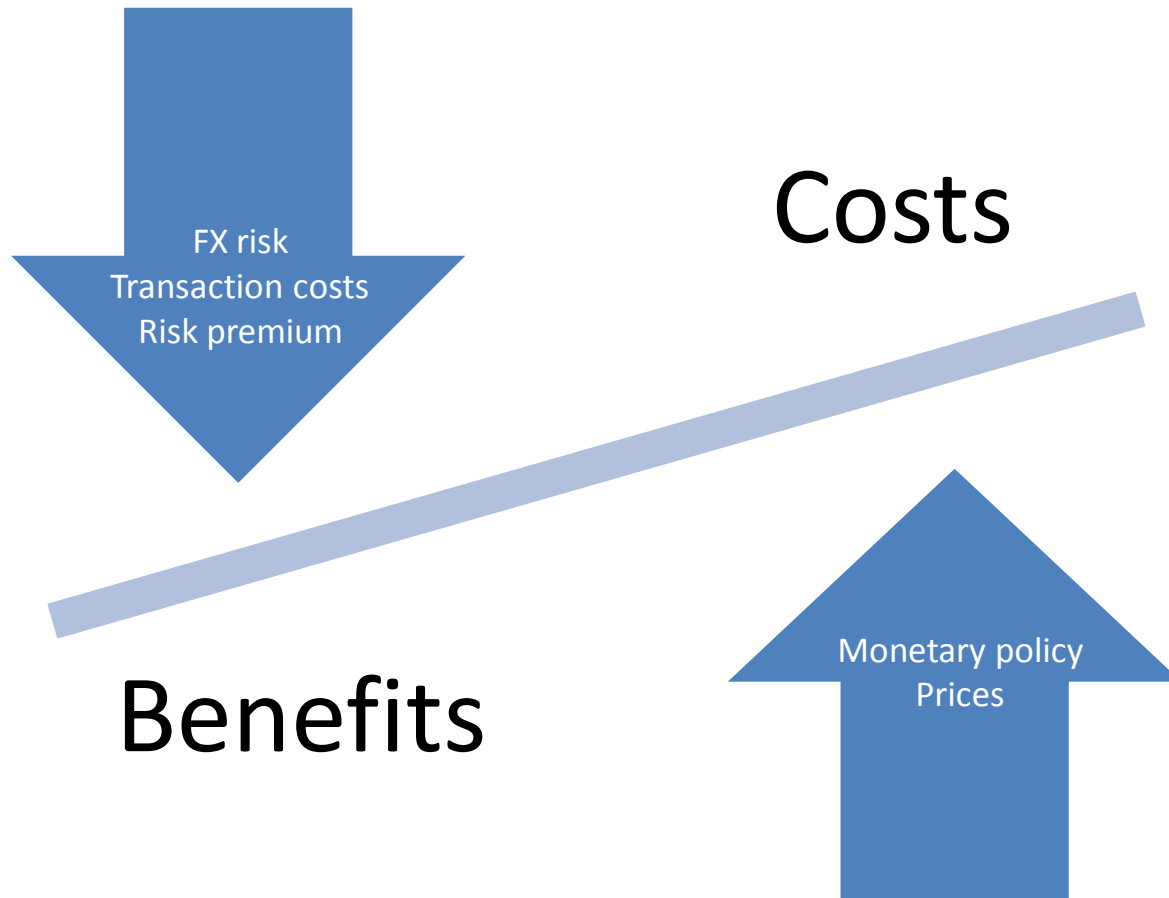


Source: Eurostat



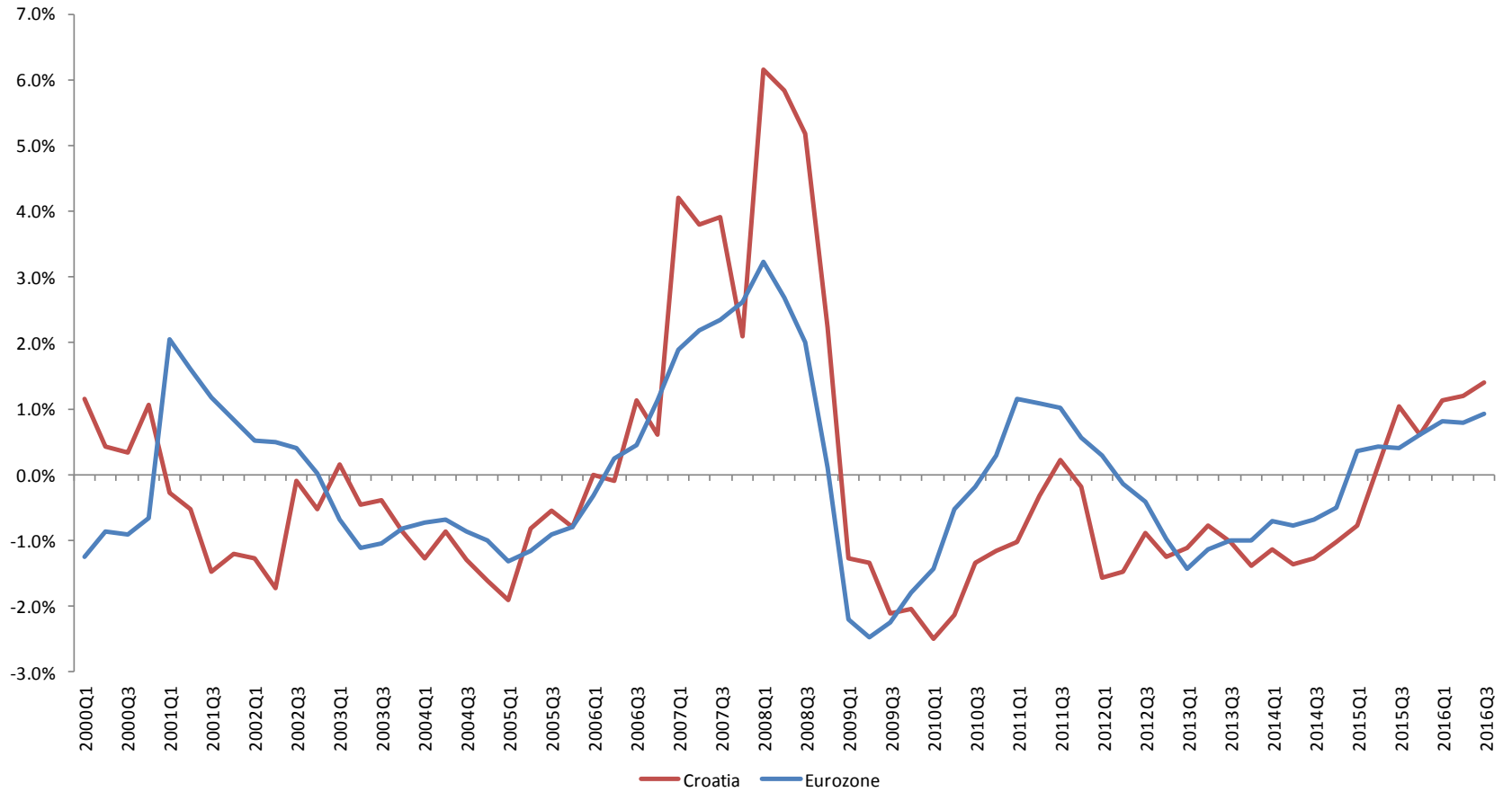
Source: Podpiera et al (2015)

# Costs vs benefits... and the winner is:



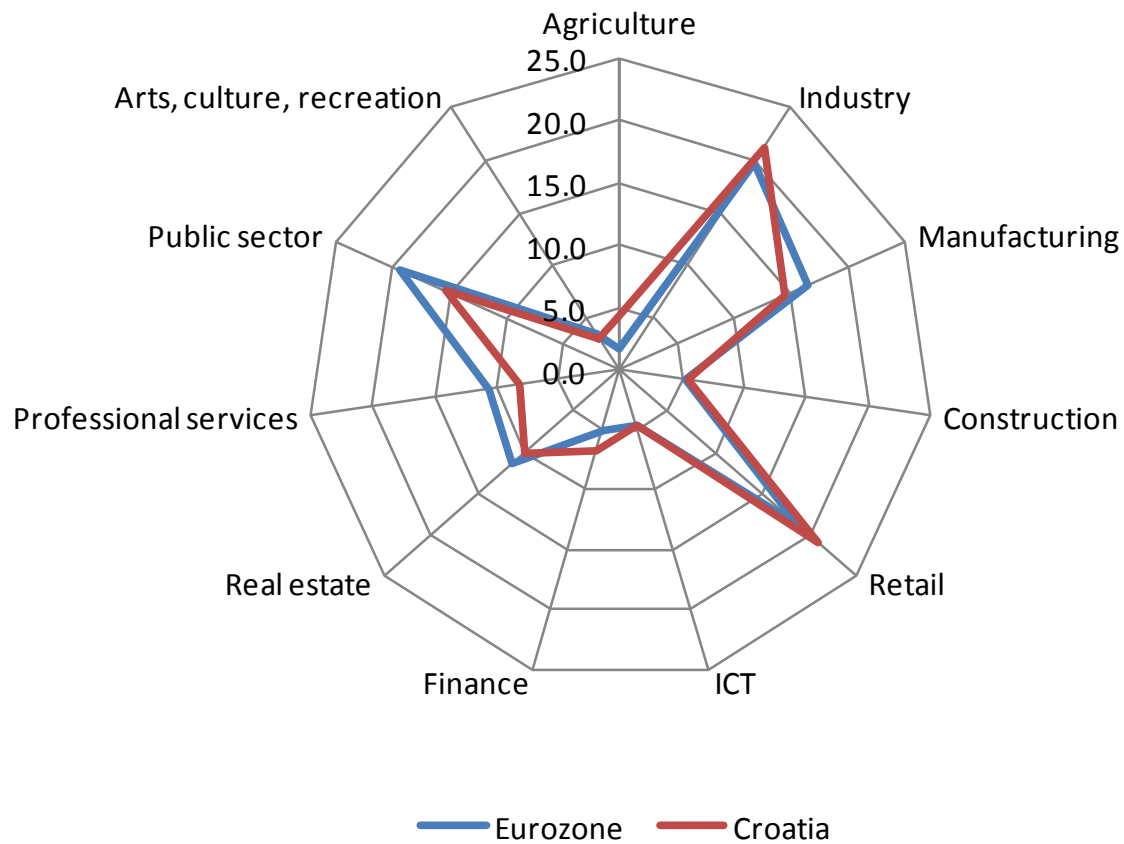
Business cycle synchronization and shock asymmetry?

# Business cycle synchronization



Source: authors; Eurostat

# Structure of the economy



Is Croatia ready for ERM 2?

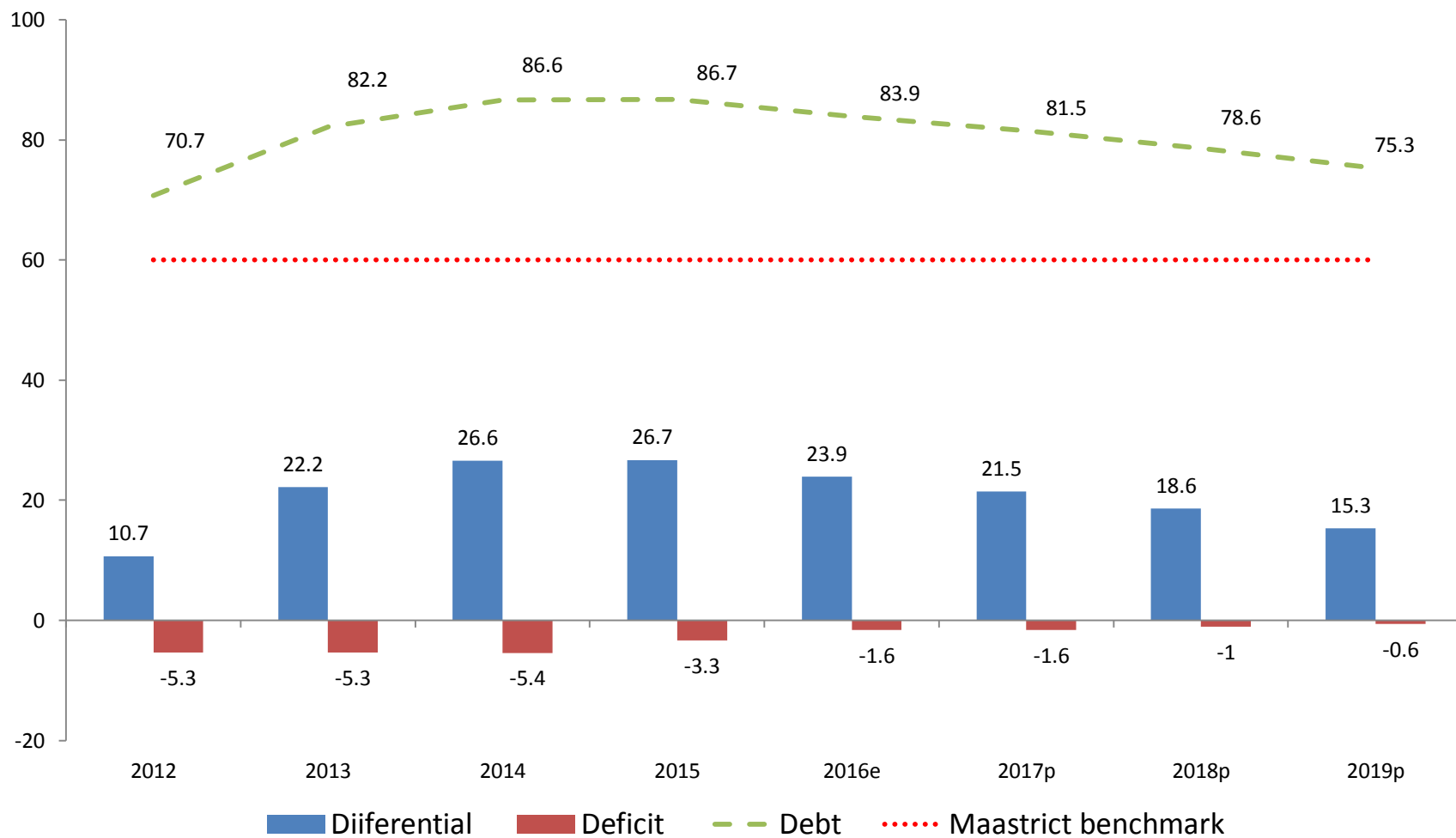
# Convergence criteria

Closed in June 2017

| Country                 | HICP inflation rate | Excessive deficit procedure              |                                       | Exchange rate       | Change in rate   | Long-term interest rate | Compatibility of legislation |
|-------------------------|---------------------|--|---------------------------------------|---------------------|------------------|-------------------------|------------------------------|
|                         |                     | None/open                                |                                       | ERM II member       |                  |                         |                              |
| <b>Reference values</b> | <b>Max. 0.7%</b>    | <b>Budget deficit to GDP (3% of GDP)</b> | <b>Debt-to-GDP ratio (60% of GDP)</b> | <b>Min. 2 years</b> | <b>Max. ±15%</b> | <b>Max. 4.0%</b>        | <b>Yes</b>                   |
| Bulgaria                | -1.00%              | EDP: None<br>2.10%                       | 26.70%                                | no                  | 0.00%            | 2.50%                   | no                           |
| Croatia                 | -0.40%              | EDP: Open<br>3.20%                       | 86.70%                                | no                  | 0.30%            | 3.70%                   | yes                          |
| Czech Republic          | 0.40%               | EDP: None<br>0.40%                       | 41.10%                                | no                  | 0.90%            | 0.60%                   | no                           |
| Hungary                 | 0.40%               | EDP: None<br>2.00%                       | 75.30%                                | no                  | -0.40%           | 3.40%                   | no                           |
| Poland                  | -0.50%              | EDP: None<br>2.60%                       | 51.30%                                | no                  | 0.00%            | 2.90%                   | no                           |
| Romania                 | -1.30%              | EDP: None<br>0.70%                       | 38.40%                                | no                  | 0.00%            | 3.60%                   | no                           |

Source: authors; EC

# Debt rule



Source: authors; MoF

# Conclusions and open questions

# At the end...

## Conclusions

- Croatia as the NMS has the obligation to join euro area
- Benefits of euro adoption in Croatia outweigh costs:
  - High level of eurisation, biggest trading partners in EA, high financing costs, limited monetary policy sovereignty, limited effects on prices (peers)
- Croatian business cycle is highly synchronized with euro area and structure of the economies is very similar (no asymmetric shocks)
- Croatia satisfies most of convergence criteria (end of EDP in 2017)
- There are no major obstacles for Croatia to join monetary union by 2022
- 52% of citizens in favor of euro adoption (Eurobarometer 2017) (Swiss franc crisis?)

## Open questions

- Is there really a broad consensus on euro adoption in Croatia?
- Analysis of the effects of euro adoption on Croatian tourism (one more benefit?)

Thank you for your attention!