Exchange Rate Regimes in Emerging Europe

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Almost any type of Exchange Rate Regime can be found in (non-CIS) CESEE

- **Fixed**
  - **Euro area membership:** Estonia, Latvia, Lithuania, Slovak Republic, Slovenia
  - **Unilateral use of the euro:** Kosovo, Montenegro
  - **Currency boards:** Bosnia & Herzegovina, Bulgaria

- **Flexible**
  - **Managed arrangements:** Croatia, Macedonia
  - **Inflation targeting and floating:** Albania, Czech Republic, Hungary, Poland, Romania, Serbia
Over time, exchange rate regimes have moved towards either floating or very hard arrangement.
Pros and cons exchange rate regimes: fixed exchange rates

- Supporters hard pegs argue they result in
  - More credibility
  - Lower inflation
  - More stable economic environment
    - Encourages international trade
    - Lower interest rates $\rightarrow$ higher investment
  - Faster growth
Example: introduction of currency board in Bulgaria

CPI inflation in Bulgaria
(Percent, 3-month annualized change)

Currency board introduced

13,636

Pros and cons exchange rate regimes: floating exchange rates

- Supporters floating exchange rates argue
  - Under flexible exchange rate, economy has greater ability to adjust to external trade shocks
  - As they make adjustment easier, they result in faster growth
Example: Poland

Real GDP growth
(Percent y/y)

EUR exchange rate
(Index, 2000=100)
Another difference: as countries get richer, their price level increases...

\[ y = 0.574x + 22.119 \]
\[ R^2 = 0.5945 \]
If exchange rate is fixed, this will happen through higher inflation.
Feasibility of exchange rate regime also depends on whether REER is overvalued

- Baltics had fixed exchange rates and rapid growth
- They pegged exchange rate when wages were still very low
- Other countries with limited exchange rate flexibility but higher wages had much lower growth
With flexible exchange rate, volatile capital flows can lead to large fluctuations in REER.

Nominal and real effective exchange rate of Brazilian Real
(Indices, 2010=100)
What are advantages and disadvantages of various exchange rate regime for SEE?

- What is better—fixed or flexible?
  - Average growth
  - Volatility
  - Ability to deal with shocks

- Focus on experience in last decade and half

- What are future options for SEE countries?
We will compare *de facto* exchange rate flexibility using “fear of floating” index.

Calvo-Reinhart “fear of floating” index, 2003-14

High flexibility | Low flexibility
There has been no difference between fixed and flexible in *average* growth...
...but growth has been more volatile in countries with fixed exchange rates...

Average real GDP growth
(Percent)

High flexibility

Low flexibility
...as was inflation.
During boom floaters let exchange rate appreciate, which tightened monetary conditions
As a result, they built up less imbalances, had less pronounced booms, and lower current account deficits.
Why this difference?—during crisis

- During crisis
  - Floaters had less overhang from pre-crisis boom
  - They could further boost growth by exchange rate depreciation

Contributions to monetary conditions, 2008-10 (Percent)
So is floating exchange rate better?

- Floating may be more difficult for small countries
- Floating may be a problem with extensive euroization (balance sheet effects)
Smaller countries are more likely to have less flexible exchange rate.
Among countries with *de jure* flexible arrangements, exchange rate flexibility is higher in larger countries.

![Graph showing the relationship between population size and exchange rate flexibility. The graph includes points for countries such as Albania, Croatia, Serbia, Czech Republic, Romania, and Poland. The regression line is given by the equation \( y = 0.0265x + 0.0156 \) with an R-squared value of 0.7556.](image)
Low FX flexibility is linked to hyperinflation during transition.

Effective Exchange Rate Flexibility and the Peak Annual Inflation during Transition

- Low Inflation (<100%)
- High Inflation (<1000%)
- Hyper-inflation
Floating is more difficult if you have large scale euroization

- Euroization
  - Loan euroization
  - Deposit euroization

- Loan and deposit euroization are not always linked
Loan euroization has two causes

- Borrower prefers loans in FX (carry trade)
  - Example, CHF-mortgages pre crisis
- Bank has loanable funds in FX,
  - Because domestic deposits are in FX
  - Because funds from parent banks are in FX

- Reverse causality is also likely to play a low ER flexibility creates incentives for higher loan euroization
Pre-crisis, carry trade and bank funding flows played an important role

- Pre-crisis loan euroization in EU New Member States was driven by
  - Funding inflows from Western Banks
  - Carry trade
  - Not by excessive deposit euroization
Pre-crisis, large differences in FX linked to external funding, not deposit euroization

Foreign Currency Loans, Foreign Currency Deposits and Exposure of Western Banks, 2008

Foreign currency loans (Percent of GDP)

Foreign currency deposits (Percent of GDP)

$y = 0.8836x + 5.8917$

$R^2 = 0.5871$
Post-crisis, drivers of FX loans have changed

- Carry trade no longer prevalent (no new Swiss franc loans)
- Bank funding flows have reversed
Currently differences in FX deposits play clear role in explaining differences in FX loans.
What determines deposit euroization?

- Memories of hyperinflation
- (Lack of) institutional quality

![Graph showing the relationship between peak inflation during transition and deposit euroization. The x-axis represents peak annual inflation (percent, logarithmic scale) and the y-axis represents FX deposits (2006, share of total). The graph includes data points for various countries such as ALB, BGR, HRV, CZE, ETC, and markers for higher institutional quality. The correlation coefficient is R² = 0.45.](image-url)
Exchange rate options going forward

- At some point in future, SEE countries will
  - Have converged a lot further with Western Europe
  - Are all EU members
  - Have adopted the euro
However, it may take a long time before sufficient convergence

GDP per capita in Germany (Constant 2014 dollars, PPP-adjusted)

Per capita income in CESEE countries as of 2015
What to do in the run-up to euro area membership?

For countries with flexible exchange rates:
- Little reason for strategic re-orientation.
- Some floaters could gradually introduce more flexibility into their floats

For countries with fixed exchange rates, two options:
- Either stick to fixed rate regime (“Baltic path”)
- Or move to a flexible exchange rate regime/inflation targeting.
Baltic path may be bumpy
Pre-conditions for more flexible exchange rate

- **Substantial technical apparatus.** (Building this may be beyond the means of very small economies.)

- **Orderly transition**: uncontrolled move to (more) floating risks de-anchoring monetary policy.

- Floating requires dealing simultaneously with euroization
De-euroization easiest when exchange rate is under upward pressure

- Move to flexibility difficult when depositors fear depreciation -> risks more euroization/capital flight.
- Best introduced when there are appreciation expectations -> financial incentive for savers to move into domestic currency.
Some final thoughts

- Some exchange rate regimes may make it easier to deal with particular type of shocks
- But future shocks may not resemble past shocks
  - In 1990s, when problem was lack of confidence in domestic currency, fixed exchange rates helped
  - In 2000s, when problem was large capital inflows, fixed exchange rate did not
Neither euro adoption nor free float are panaceas

- Economic problems and crises can occur under any type of exchange rate regimes

- Pre-2010, we used to think that euro area countries could not have BOP crisis

- We now know this was not true
Further information and discussion:
Thank you