Understanding the Slowdown of Capital Flows to Emerging Markets?

A Comment

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Helene Schuberth
Oesterreichische Nationalbank

Summary

- **Slowdown in net capital inflows into EMEs is comparable to previous episodes, but structural changes and policy shifts make EMEs less vulnerable**

- **Slowdown mostly explained by narrowing growth differential (perspectives) vis à vis AEs**

- **Global factors in explaining gross capital inflow volatility are higher for countries with**
  - **Open capital account**
  - **Fixed exchange rate regimes**
  - **Lower foreign exchange reserves**
  - **Higher debt**

Policy implications

- **Domestic policies may mitigate vulnerabilities stemming from disorderly retrenchment of capital flows**

  - **Prudent fiscal policies**

  - **Macroprudential policies**

  - **Exchange rate flexibility**

  - **Foreign reserve management**

- **Trilemma – no Dilemma?**

Questions

- **Does the link between global factors in explaining capital inflows and country-specific characteristics hold for regional subgroups (i.e. CESEE EMEs)?**

  Robustness checks with respect to empirical methodologies, selection of variables (global and domestic)?

- **What is the role of Balance Sheet Effects? Do flexible exchange rates regimes act as buffer to global factors?**

  Rather than stemming credit boom and capital inflow pressure it seems that the exchange rate appreciation may further fuel gross capital inflows (Bruno and Shin 2015)

- **Is the slowdown in EME's capital inflows related to previous excessive inflows?**

- **What is the role of capital flow management?**

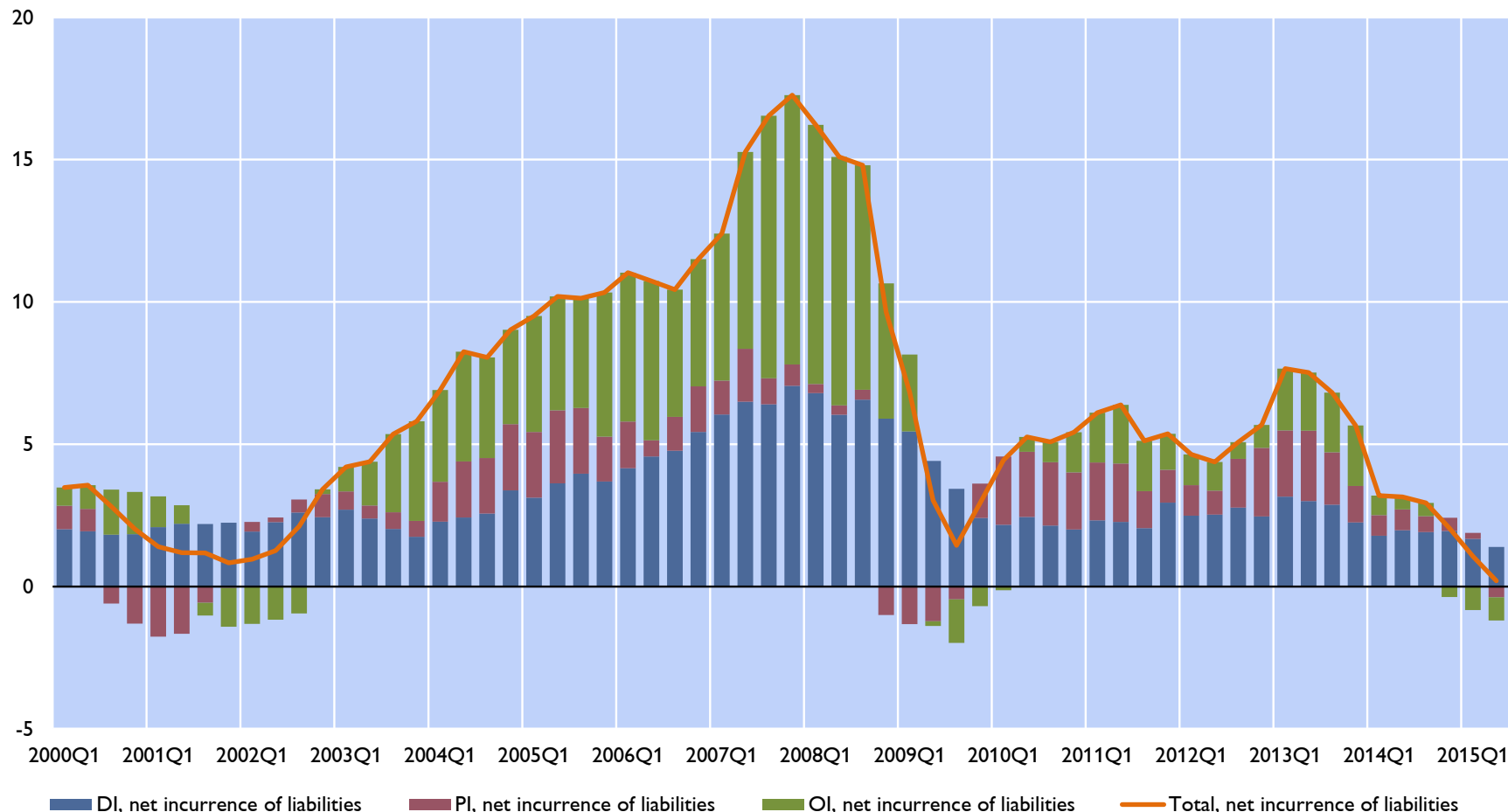# Further Slides

Findings from

How do global factors influence the dynamics of international capital flows into CESEE?

Eller, M., F. Huber and H. Schuberth. 2016. Understanding the drivers of capital flows into the CESEE countries. In: OeNB. Focus on European Economic Integration Q2/16.

Boom-bust cycle of gross capital inflows, strong FDI and cross-border lending via banks prior to 2008

CESEE-12: Net incurrence of DI, PI and OI liabilities

*% of GDP, cumulative four-quarter moving sums*

DI, net incurrence of liabilities   PI, net incurrence of liabilities   OI, net incurrence of liabilities   Total, net incurrence of liabilities

Source: IMF, Eurostat.

Cumulated gross capital inflows before/after 2008 (1)

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Net incurrence of DI, PI and OI liabilities

*in % of GDP of the starting year (2000 and 2009 respectively)*

Legend:
- ■ Net incurrence of DI liabilities
- ■ Net incurrence of PI liabilities
- ■ Net incurrence of OI liabilities
- ◆ Net incurrence of total liabilities
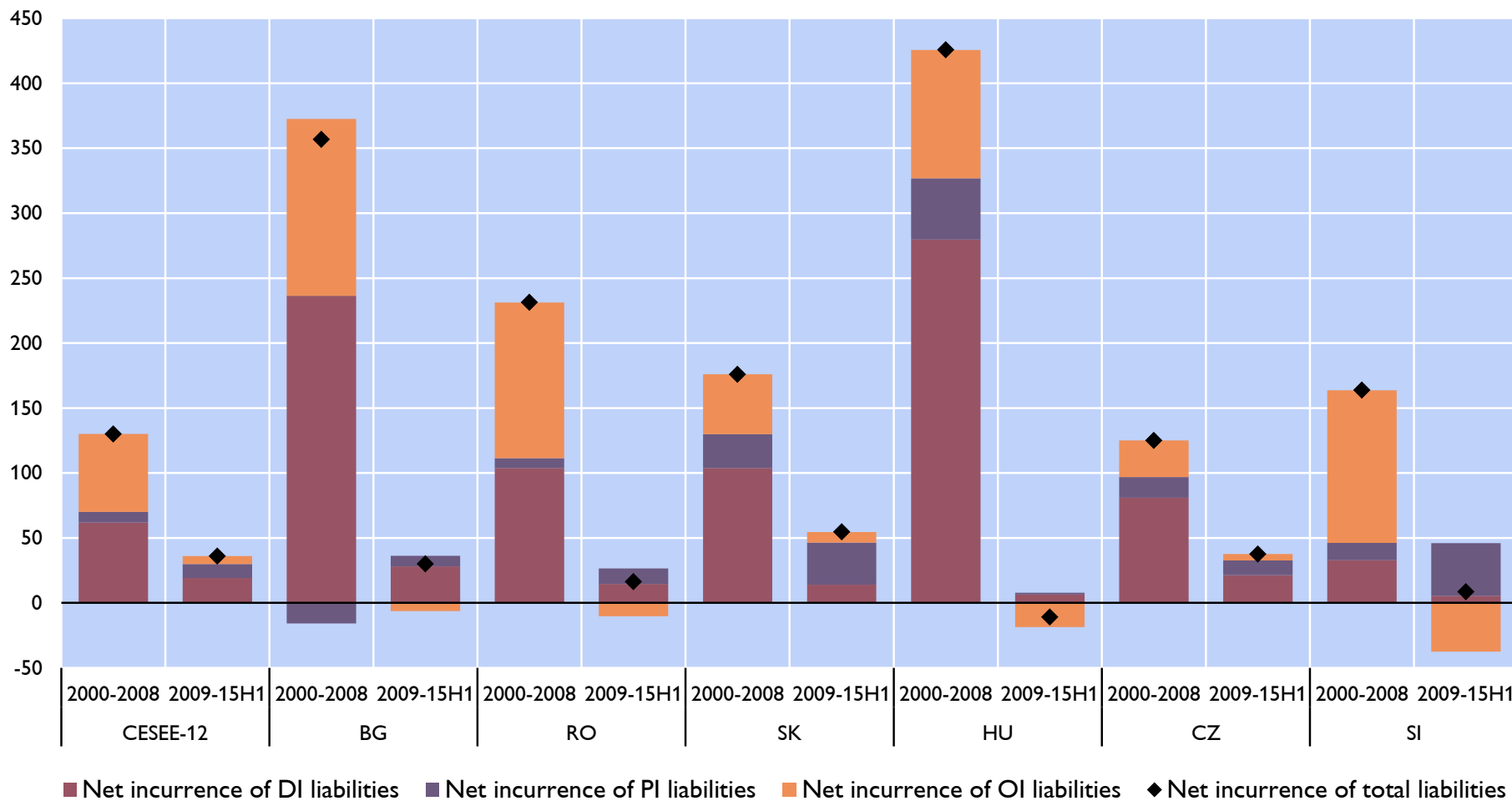
Source: IMF, Eurostat.

Cumulated gross capital inflows before/after 2008 (2)

Net incurrence of DI, PI and OI liabilities

*in % of GDP of the starting year (2000 and 2009 respectively)*

- ■ Net incurrence of DI liabilities
- ■ Net incurrence of PI liabilities
- ■ Net incurrence of OI liabilities
- ◆ Net incurrence of total liabilities
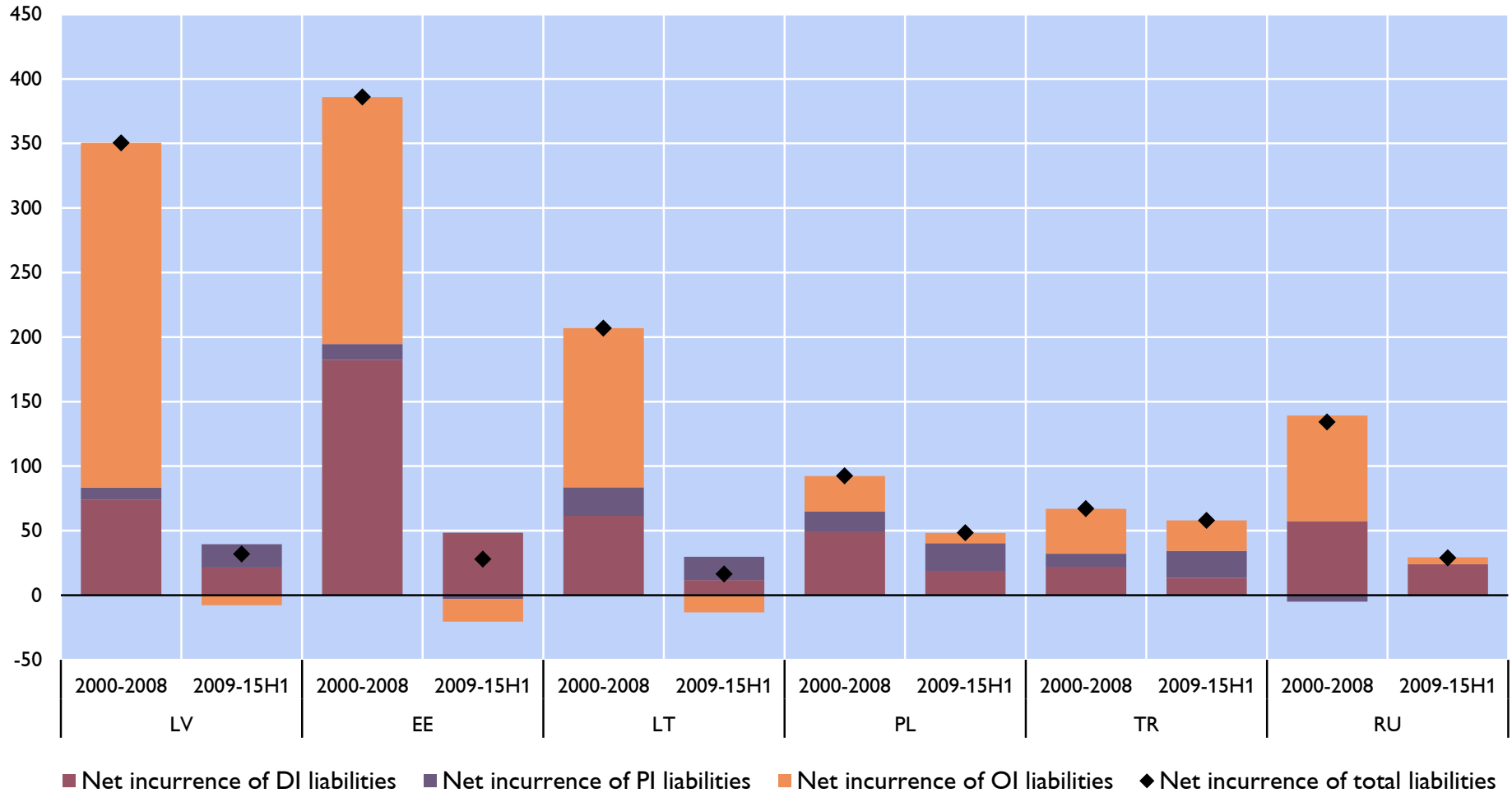
Source: IMF, Eurostat.

What is the contribution of global factors?
## Intuition on the underlying factor model

- $C_{it} = \lambda'_{Mi,t} f_t^M + \lambda'_{Fi,t} f_t^F + \lambda'_{Ci,t} f_t^C + \lambda'_{Ri,t} f_t^R + \varepsilon_{it}$

- f_t^j … factor: **co-movement of certain variables across all countries included in the sample** (e.g. global economic cycle)

- *M* … **macroeconomic variables**: GDP growth, inflation, exchange rate, trade

- *F* … **financial variables**: short- and long-term interest rates, stock prices, loan and deposit growth

- *C or R* … in addition, a global factor and a regional CESEE factor are extracted from the relevant **capital flow variable**

- ε_{it} … **idiosyncratic** (country-specific + third **global/regional factors)**

- **data set**: 10 time series x 40 countries (of which: 12 CESEE countries), 1994q1-2014q4

Relative contribution of various factors to the variance of gross capital inflows into CESEE (1)
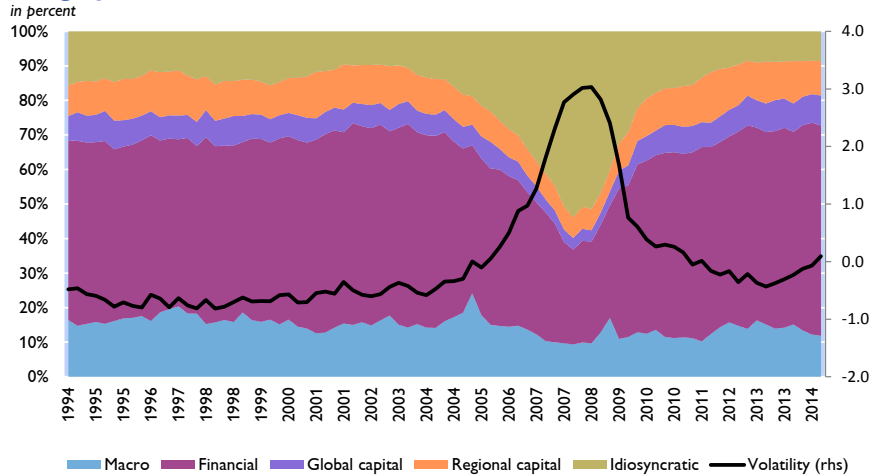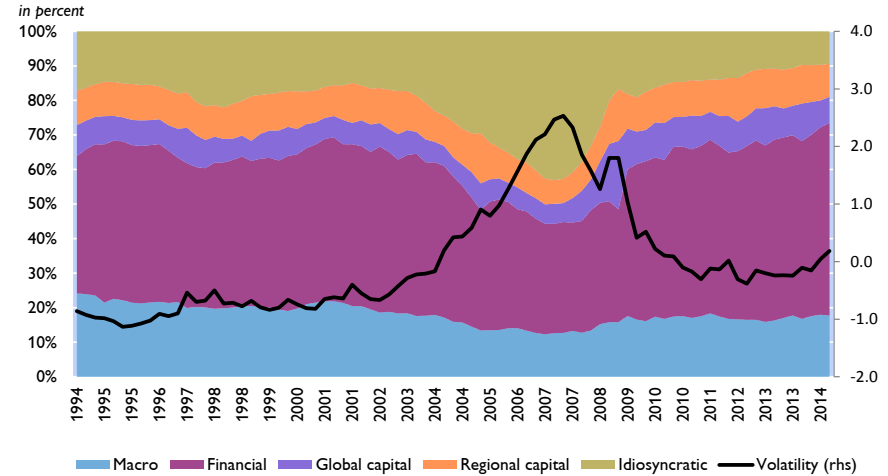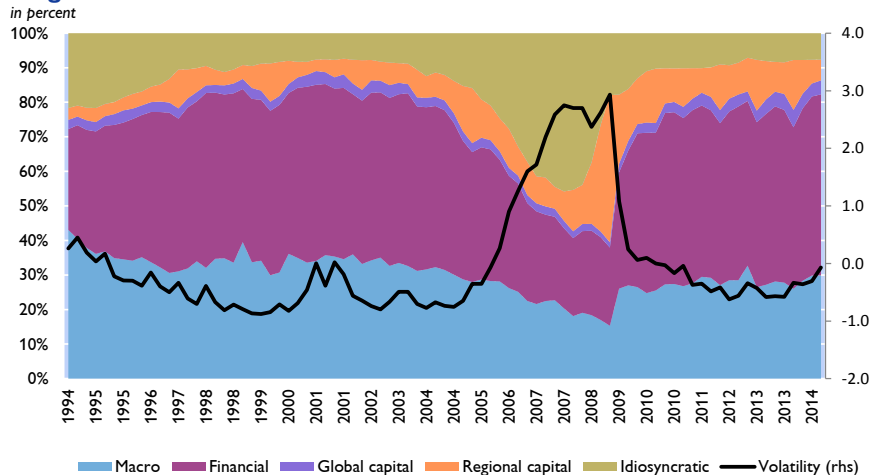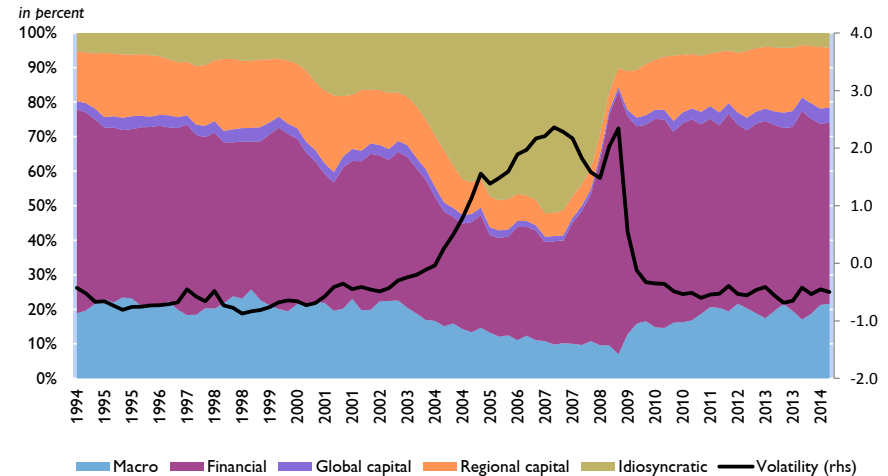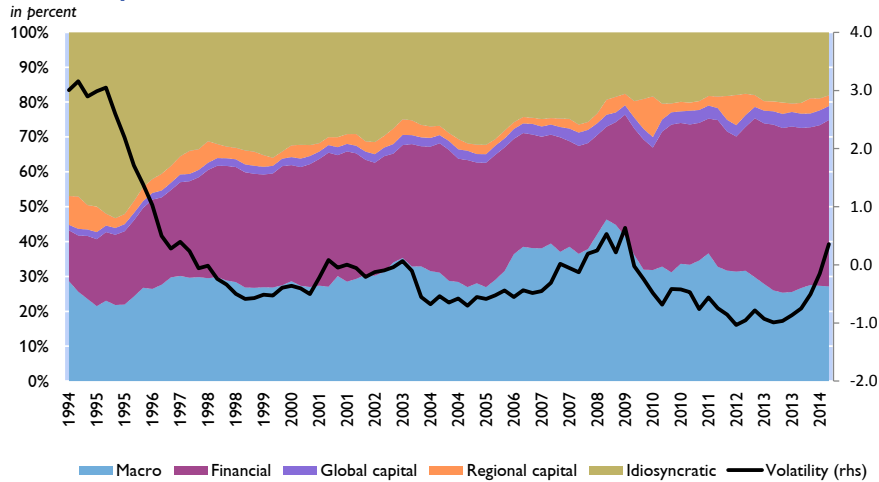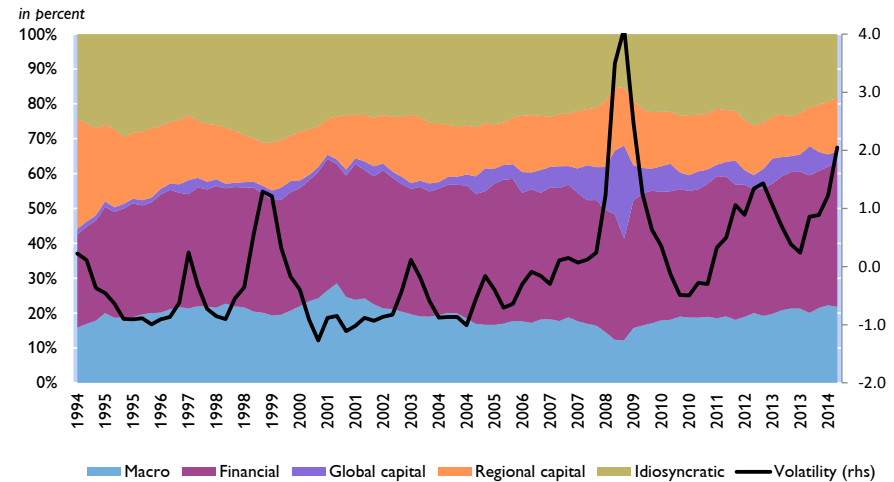
Relative contribution of various factors to the variance of gross capital inflows into CESEE (2)

Czech Republic
in percent
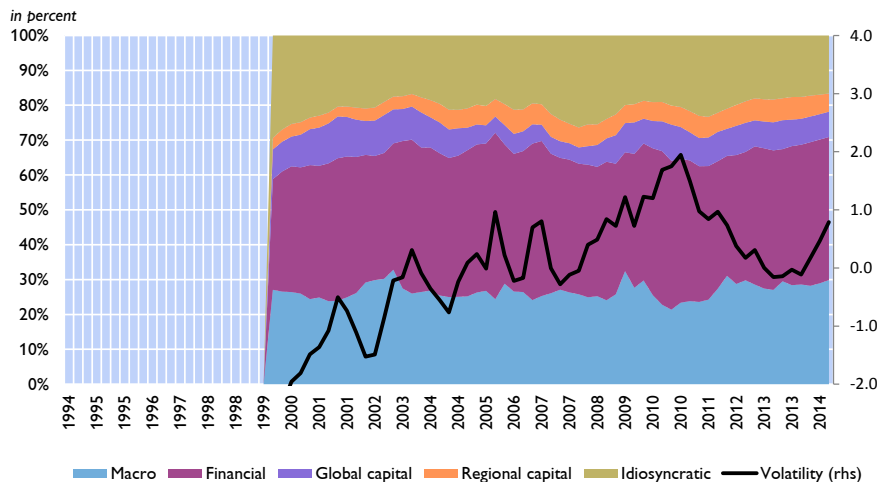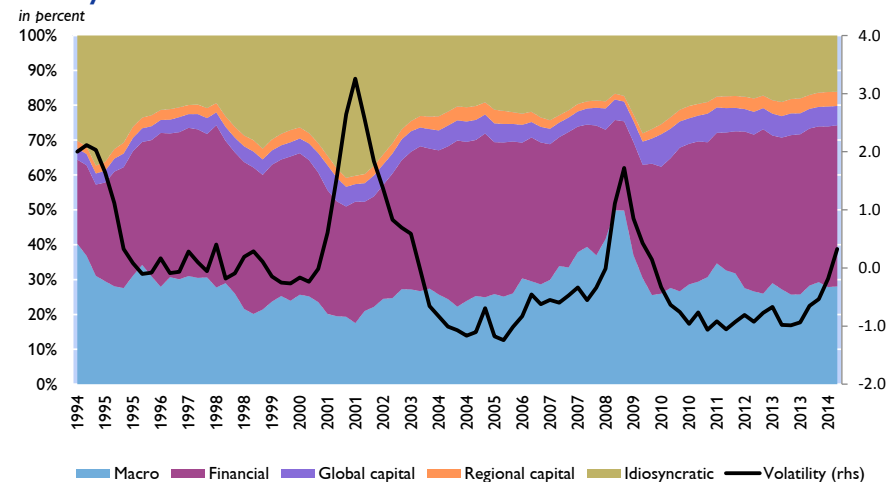
Slovakia
in percent

Poland
in percent

Turkey
in percent

Legend (all charts): Macro — Financial — Global capital — Regional capital — Idiosyncratic — Volatility (rhs)

Relative contribution of various factors to the variance of gross capital inflows into CESEE (3)

Slovenia
in percent

Macro — Financial — Global capital — Regional capital — Idiosyncratic — Volatility (rhs)

Russia
in percent

Macro — Financial — Global capital — Regional capital — Idiosyncratic — Volatility (rhs)
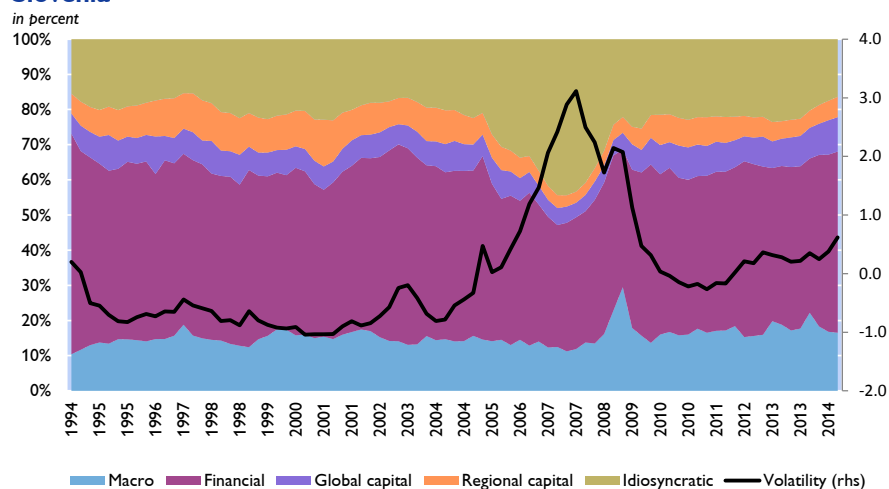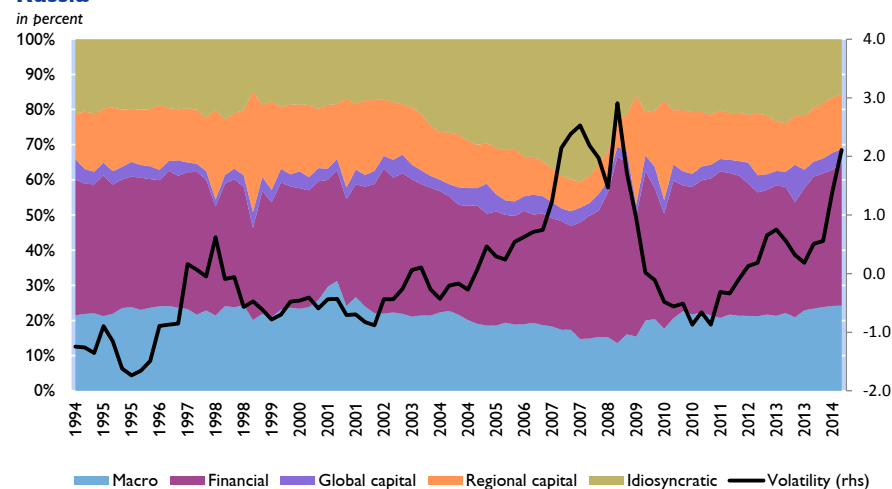
Summary of results

- Volatility of capital flows correlates with economic and financial crises

- **Global/regional factors** explain the **lion's share** of the variance of capital flows: around 80% on average

  - o **global financial cycle: most important factor,** explaining more than 40% of capital flow variance on average; **increasingly important since the 2008/09 crisis**

  - o global economic cycle: second most important factor, explaining around 22% on average; relatively constant share over time

  - o regional capital flow component: third most important factor (10%), followed by global capital flow component (around 6%)

- **Idiosyncratic factors** gain importance particularly from **2003 to 2008** in countries with pronounced boom-bust cycles

  - o indication of excessiveness (exceeding a common global financial cycle)

 - o role of foreign banks' strategic positioning in CESEE?

How to contain potentially negative spillover effects of global (financial) cycles?

- **Cost/benefit analysis required**: financial market instability and little room for maneuver in autonomous monetary policy vs. improved allocative efficiency and risk-sharing

- **Direct capital controls** are not in line with EU legislation

- Internalization through improved **international monetary policy coordination**: currently hardly feasible

- **Most promising: macroprudential measures** aimed at avoiding excessive credit growth (CCB, leverage ratios, LTV, debt-to-income ratios, FX lending)

  & agreement with capital flow-sending countries (avoid circumventions)

  & strengthening resilience of local financial systems (e.g. capital requirements)

Evolution of gross capital inflows over time (1)
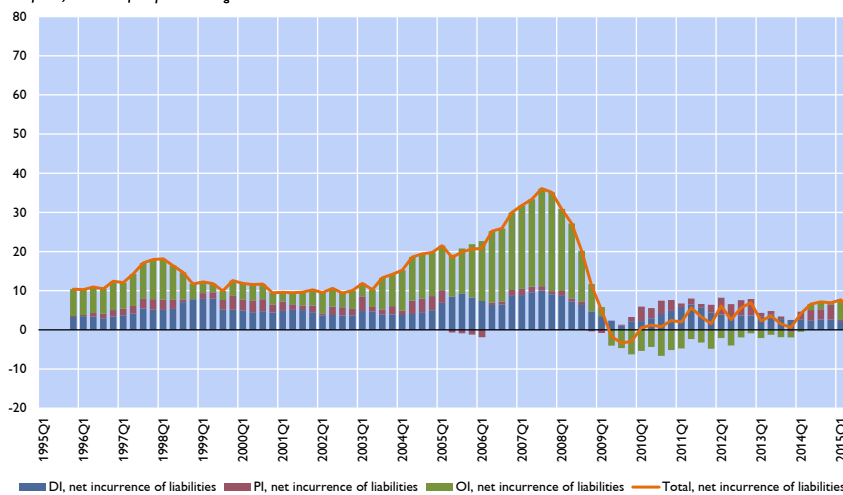
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Hungary - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums
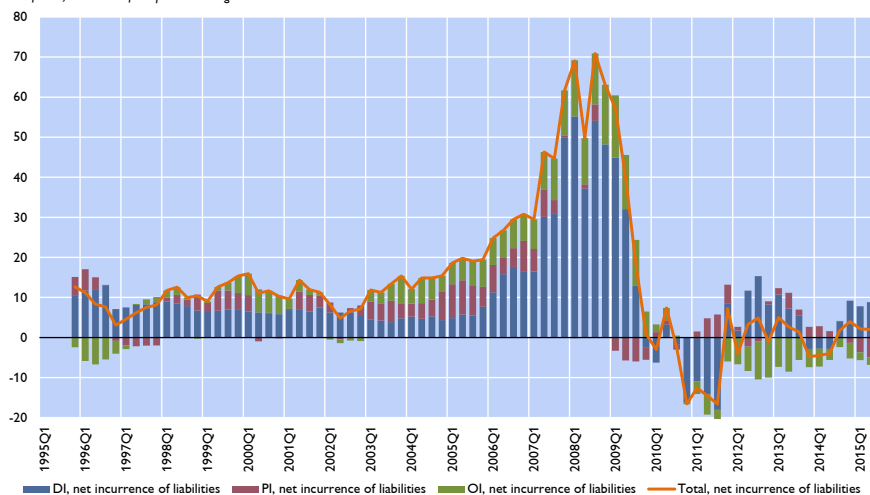
DI, net incurrence of liabilities PI, net incurrence of liabilities OI, net incurrence of liabilities Total, net incurrence of liabilities
Source: IMF, Eurostat.

Baltics - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

DI, net incurrence of liabilities PI, net incurrence of liabilities OI, net incurrence of liabilities Total, net incurrence of liabilities
Source: IMF, Eurostat.

Bulgaria - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums
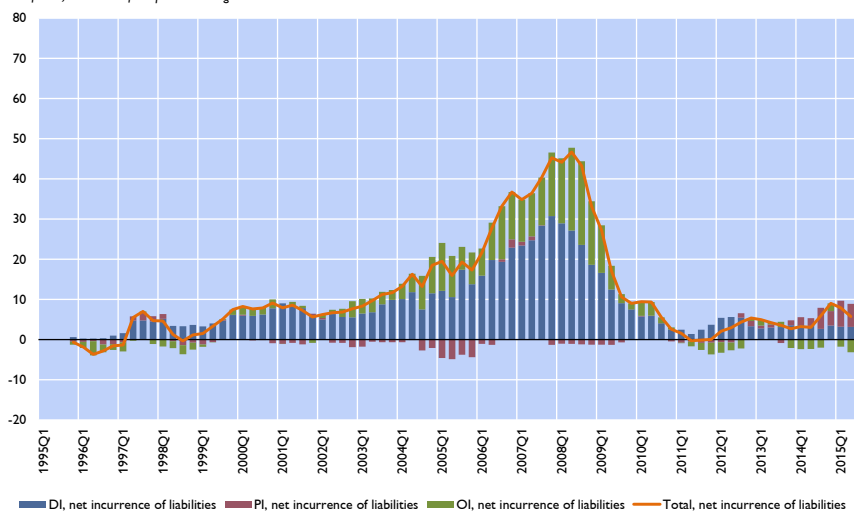
DI, net incurrence of liabilities PI, net incurrence of liabilities OI, net incurrence of liabilities Total, net incurrence of liabilities
Source: IMF, Eurostat.

Romania - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

DI, net incurrence of liabilities PI, net incurrence of liabilities OI, net incurrence of liabilities Total, net incurrence of liabilities
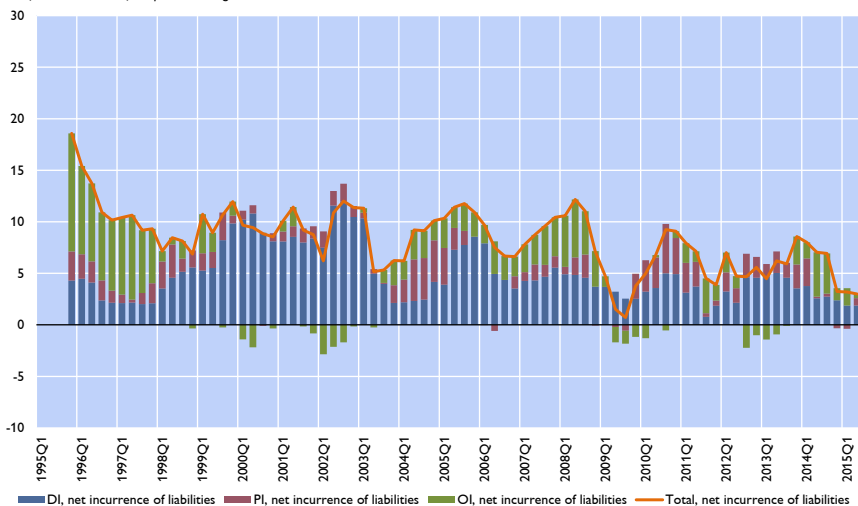*Source: IMF, Eurostat.*
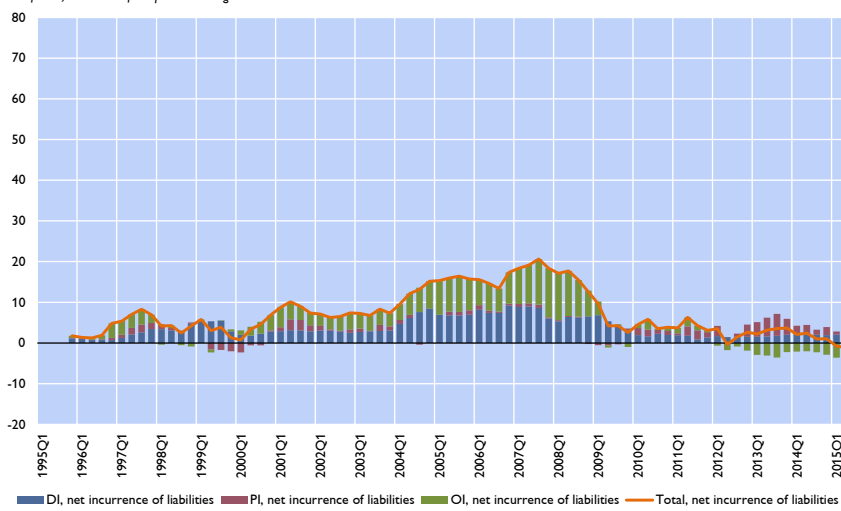
Evolution of gross capital inflows over time (2)

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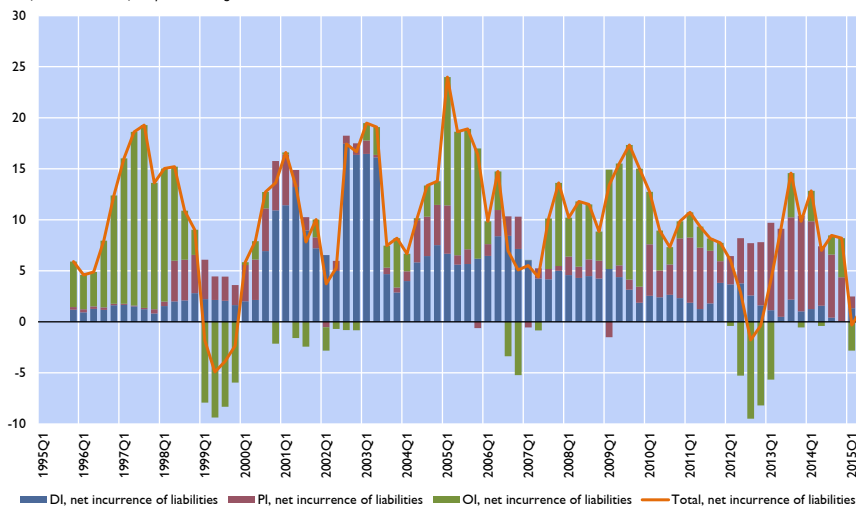**Czech Republic - Net incurrence of DI, PI and OI liabilities**

% of GDP, cumulative four-quarter moving sums

■ DI, net incurrence of liabilities ■ PI, net incurrence of liabilities ■ OI, net incurrence of liabilities — Total, net incurrence of liabilities

Source: IMF, Eurostat.

Slovakia - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

■ DI, net incurrence of liabilities ■ PI, net incurrence of liabilities ■ OI, net incurrence of liabilities — Total, net incurrence of liabilities

Source: IMF, Eurostat.

Poland - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

■ DI, net incurrence of liabilities ■ PI, net incurrence of liabilities ■ OI, net incurrence of liabilities — Total, net incurrence of liabilities
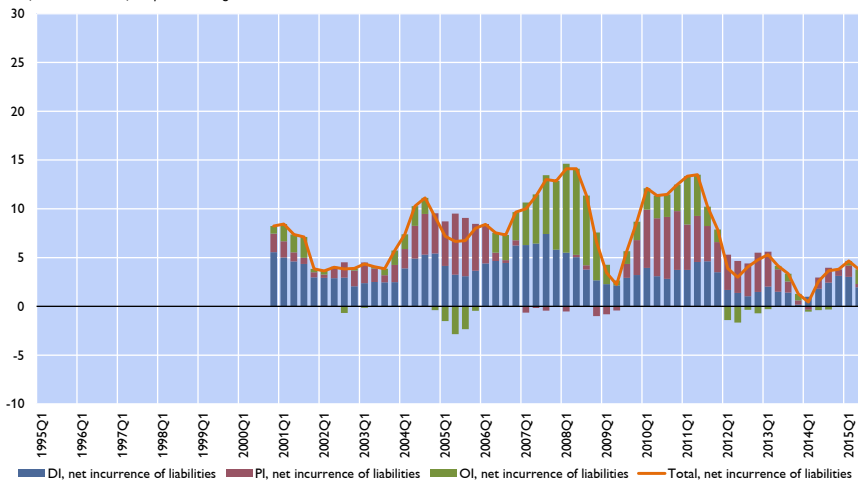
Source: IMF, Eurostat.

Turkey - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

■ DI, net incurrence of liabilities ■ PI, net incurrence of liabilities ■ OI, net incurrence of liabilities — Total, net incurrence of liabilities
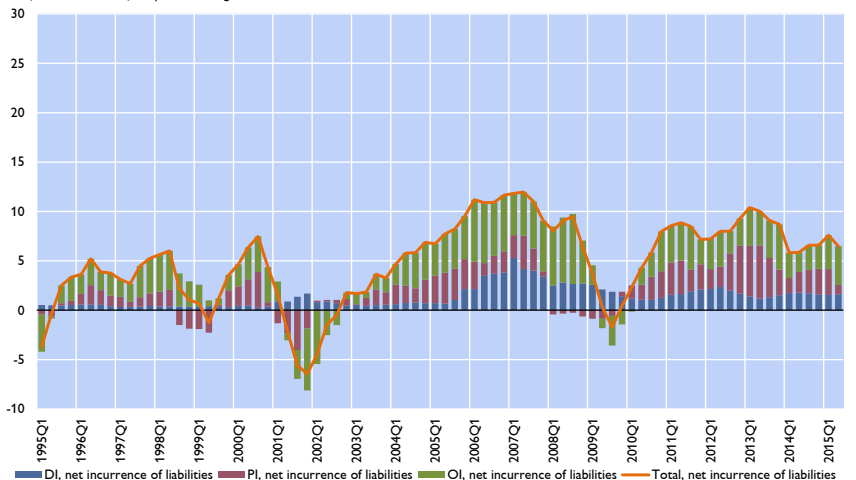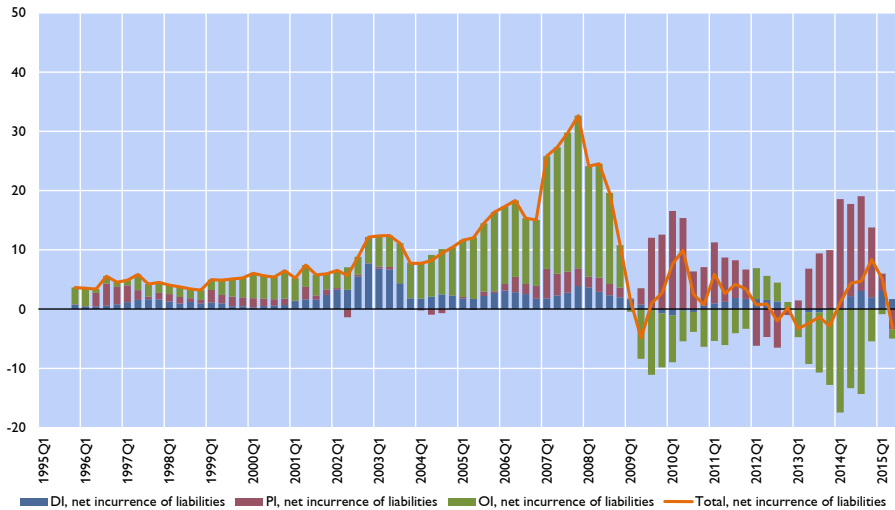
Source: IMF, Eurostat.

Evolution of gross capital inflows over time (3)

Slovenia - Net incurrence of DI, PI and OI liabilities

% of GDP, cumulative four-quarter moving sums

◼ DI, net incurrence of liabilities ◼ PI, net incurrence of liabilities ◼ OI, net incurrence of liabilities — Total, net incurrence of liabilities

Source: IMF, Eurostat.

Russia - Net incurrence of DI, PI and OI liabilities

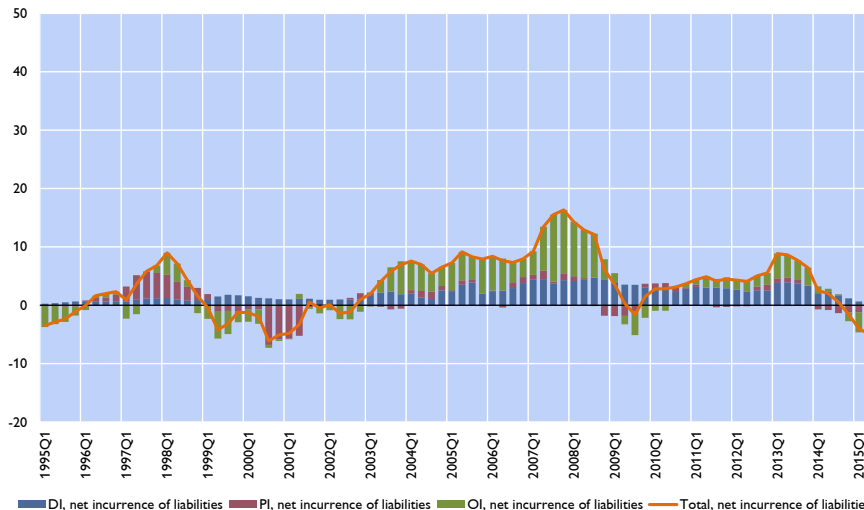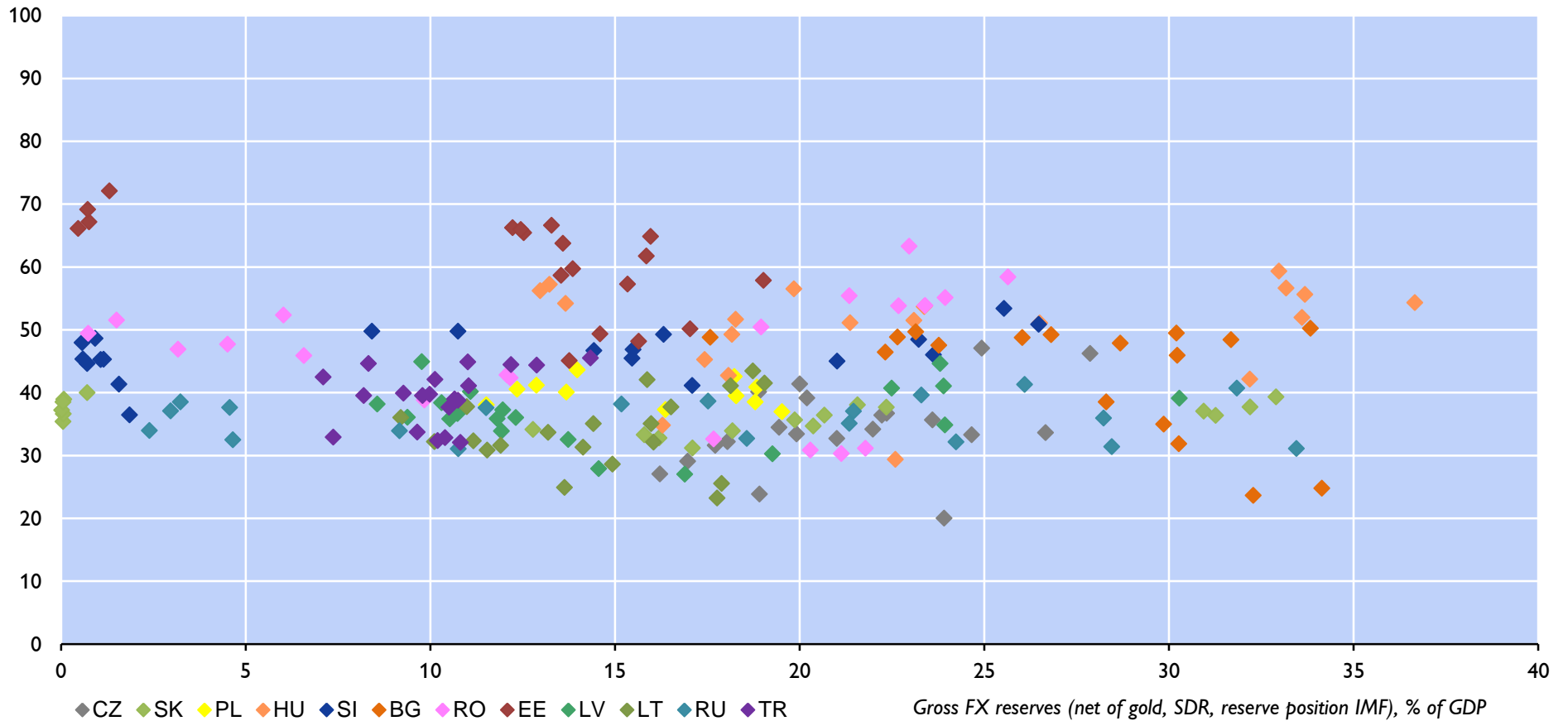*% of GDP, cumulative four-quarter moving sums*

◼ DI, net incurrence of liabilities ◼ PI, net incurrence of liabilities ◼ OI, net incurrence of liabilities — Total, net incurrence of liabilities

Source: IMF, Eurostat.

Role of FX reserves

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Importance of gobal financial factors versus level of foreign exchange reserves (1995-2014)

Share of the variance of total gross capital inflows explained by global financial factors

◆CZ ◆SK ◆PL ◆HU ◆SI ◆BG ◆RO ◆EE ◆LV ◆LT ◆RU ◆TR

Gross FX reserves (net of gold, SDR, reserve position IMF), % of GDP

Source: Authors` estimates, IMF, NCBs, Eurostat

Role of exchange rate flexibility

Importance of goba financial factors versus exchange rate volatility (1995-2014)

Share of the variance of total gross capital inflows explained by global financial factors

◆ CZ ◆ SK ◆ PL ◆ HU ◆ SI ◆ BG ◆ RO ◆ EE ◆ LV ◆ LT ◆ RU ◆ TR

Standardized time-varying volatility of the REER (based on stochastic volatility model)

Source: Authors` estimates, IMF, NCBs, Eurostat

Role of output volatility

⊝NB

Importance of gobal financial factors versus output volatility (1995-2014)

Share of the variance of total gross capital inflows explained by global financial factors

Standardized time-varying volatility of real GDP growth
(based on stochastic volatility model)

◆ CZ ◆ SK ◆ PL ◆ HU ◆ SI ◆ BG ◆ RO ◆ EE ◆ LV ◆ LT ◆ RU ◆ TR

Source: Authors` estimates, IMF, NCBs, Eurostat

Role of public indebtedness

Importance of gobal financial factors versus level of public debt (1995-2014)

Share of the variance of total gross capital inflows explained by global financial factors

Consolidated gross government debt as % of GDP

◆CZ ◆SK ◆PL ◆HU ◆SI ◆BG ◆RO ◆EE ◆LV ◆LT ◆RU ◆TR

Source: Authors` estimates, IMF, NCBs, Eurostat

Role of external indebtedness

Importance of gobal financial factors versus level of external debt (1995-2014)

Share of the variance of total gross capital inflows explained by global financial factors

Legend: CZ · SK · PL · HU · SI · BG · RO · EE · LV · LT · RU · TR

Gross external debt as % of GDP

Source: Authors` estimates, IMF, NCBs, Eurostat
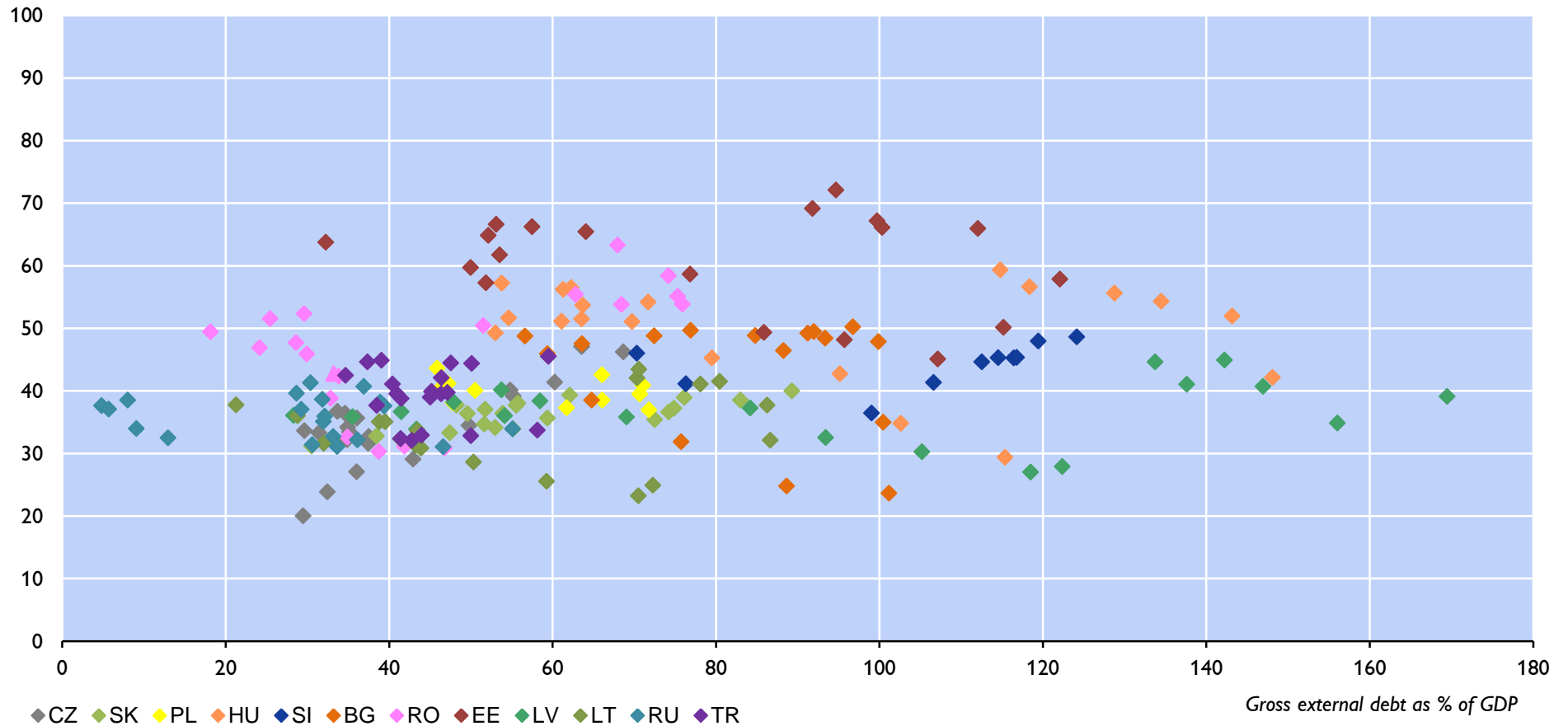
Role of financial depth

Importance of global financial factors versus level of financial depth (2002-2014)

Share of the variance of total gross capital inflows explained by global financial factors

Total assets of the banking sector as % of GDP

◆CZ ◆SK ◆PL ◆HU ◆SI ◆BG ◆RO ◆EE ◆LV ◆LT ◆RU ◆TR

Source: Authors` estimates, IMF, NCBs, Eurostat