Committee on the
Global Financial System

BIS

Changing patterns of capital flows

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Outline

In September 2019, the CGFS established a Working Group (WG) on capital flows, to analyse

(a) changing patterns in the **composition** and **dynamics** of capital flows,

(b) macroeconomic and, in particular, the **financial stability implications** of these changes.

Key message: "Old risks in new clothes"

Changes in the **pipes** that channel capital flows (from bank- to more market-based finance) shape the **composition** and **dynamics** of flows-- with implications for **risks**.

Changes **altered** rather than reduced **risks** associated with exceptionally large or volatile capital flows.

Outline

Chapter 1: Trends since the Great Financial Crisis (GFC)

Chapter 2: Drivers of gross capital inflows and sudden stops

Chapter 3: Benefits and risks

Chapter 4: Policy tools and lessons

The analysis is based on recent policy reports, academic literature, roundtable discussions with private-sector representatives, own empirical analyses and central bank surveys.

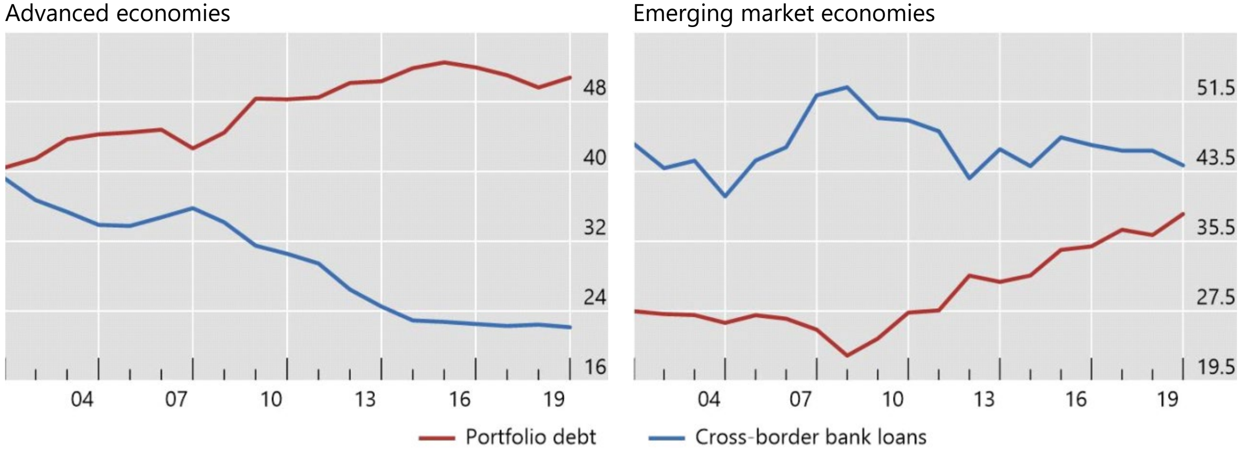
I. Trends since the GFC

Flow patterns and composition

- Increasing share of flows through **portfolio investors** rather than **banks**.
- **US dollar** still dominant as a funding and investment currency.
- Growing **interlinkages** among EMEs (China)
- Rising importance of **public-sector** borrowers and investors.
- **Multinational** companies increase the complexity of flows.

Banks' declining role

As a percentage of total external debt



Sources: IMF, *International Investment Position Statistics*; IMF, *World Economic Outlook*; BIS locational banking statistics (by residence); CGFS Working Group calculations.

I. Trends since the GFC

Volatility: mixed evidence

Regular volatility (top panels)

- Inflows to AEs more volatile than EMEs,
- Country-level dispersion larger for AEs
- No clear pre/post GFC pattern

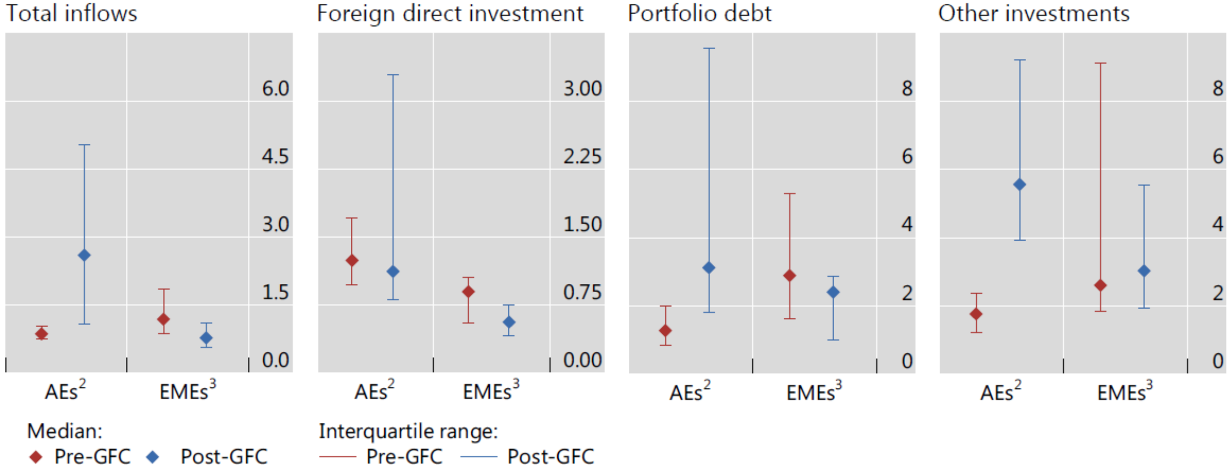
Sudden stops (bottom panels)

- Did not become more frequent.
- «Capital flows moved more in **ripples** than in waves» Forbes and Warnock 2020

Capital inflow volatility by region and type

Coefficient of variation: quarterly inflows between 2000-07 and 2010-19[1]

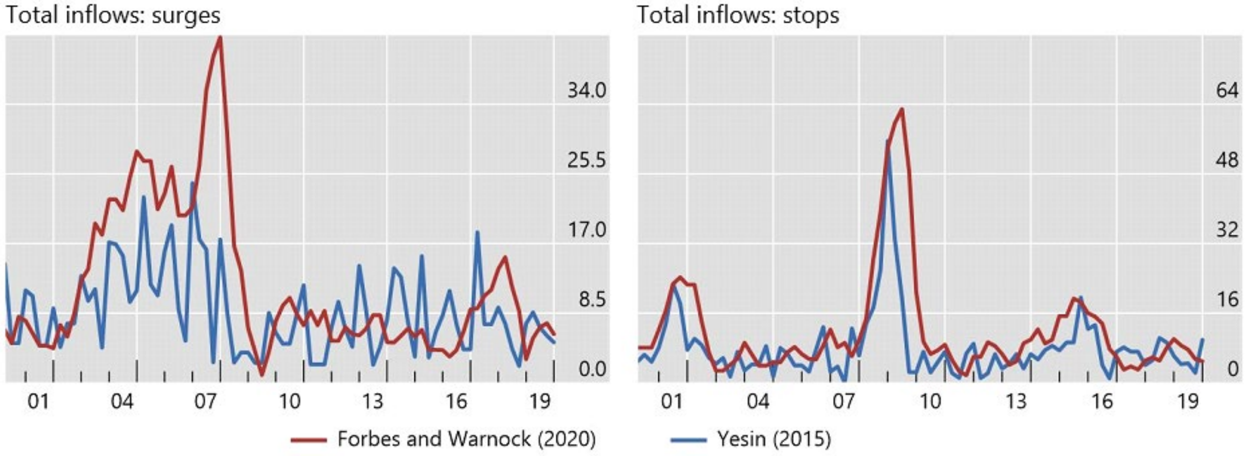
Graph 1.7



Incidence of extreme movements in capital flows to AEs and EMEs[1]

In per cent

Graph 1.8



II. Drivers of capital flows

Push factors

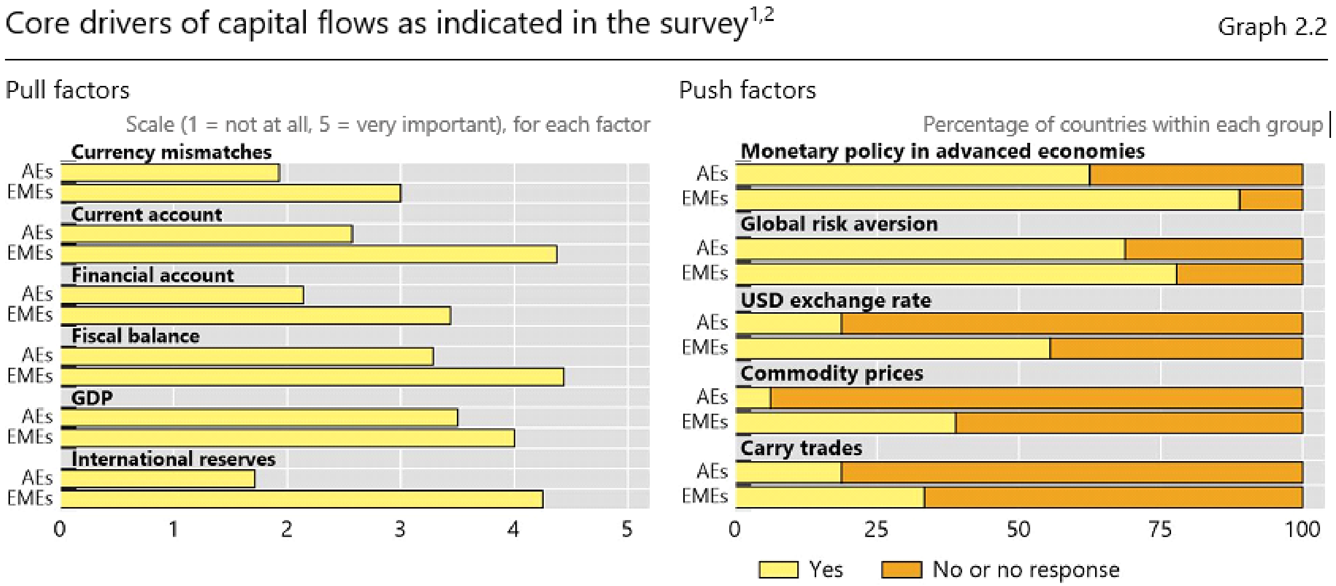
- Exogenous to the recipient
- Motivate investors to seek opportunities abroad

Find: Can trigger sudden stops.

Pull factors

- Cyclical or structural
- Country characteristics that attract international capital

Find: Can shape the specific allocation of funds.



Pipes, infrastructure of the global financial system

Find: Changed significantly *Index-tracking investment strategies, role of fund managers*

- ➢ *Sensitivity to push and pull factors changed*
- ➢ *More contagion (eg TH)*

II. Drivers of regular patterns: capital inflows to 33 EMEs

Push factors

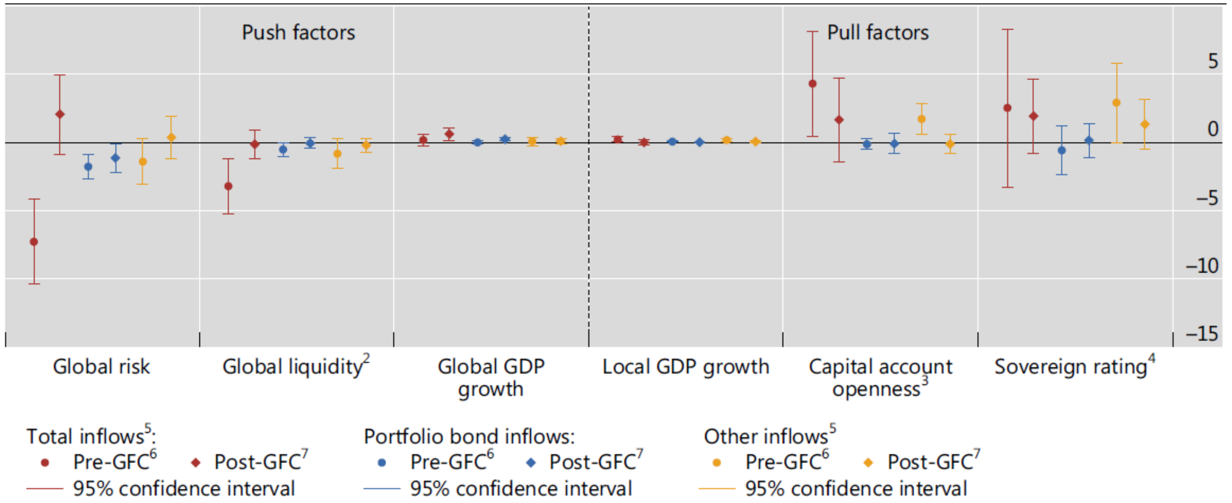
- Global push factors became **less** important.
- eg *marginal* changes in **US monetary policy** insignificant against the backdrop of unprecedented levels of **global liquidity.**

Pull factors

- Traditional drivers **lost** significance (many EMEs “graduated”)
- **Sovereign** ratings became more important (=> pipes)

Panel analysis of EME inflow patterns

Regression coefficients[1] Graph 2.2



$$(Inflows/GDP)_{it} = \alpha + \beta'\boldsymbol{Pull}_{it} + \delta'\boldsymbol{Push}_t + \nu_i + \epsilon_{it}$$

*Caveat: Drivers **interact**, a machine learning analysis suggests that **interactions increased** post-GFC.*

II. Drivers of sudden stops: capital inflows to 33 EMEs

Push factors

- Changes in US monetary policy can trigger sudden stops.

Pull factors

- Little impact.

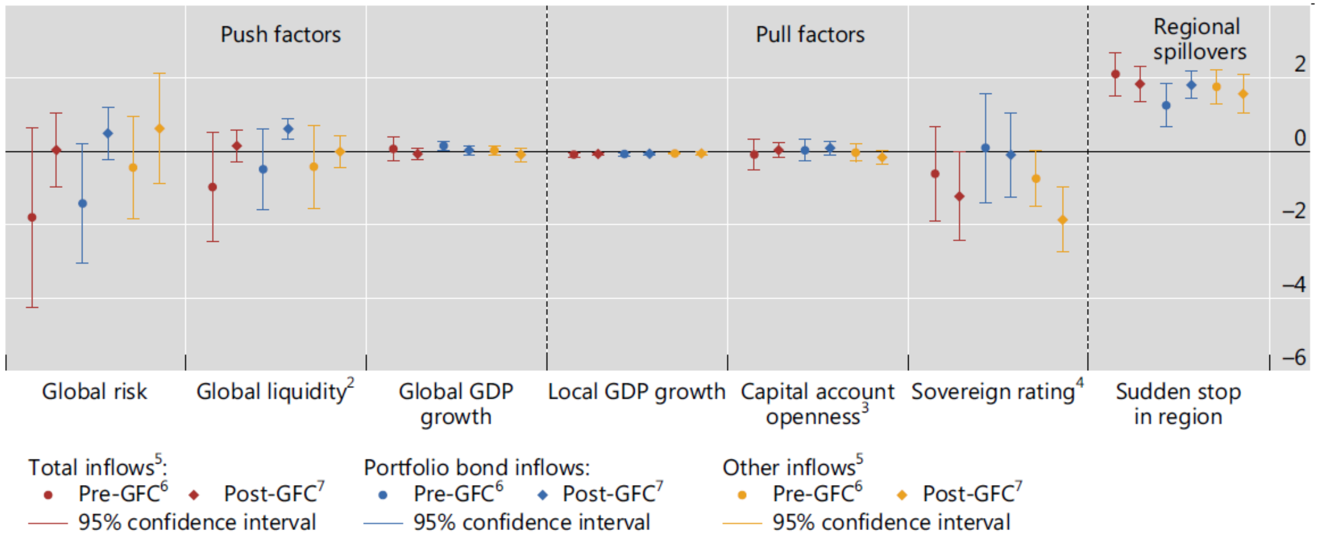
Regional Spillovers

- Sudden stops in the **region** raise the likelihood of a local sudden stop.

Sudden stop analysis of EME capital inflows

Estimates based on a cloglog analysis[1]

Graph 2.3



$$\Pr(Stop_{it} = 1) = \Phi(\alpha + \beta' \boldsymbol{Pull}_{it} + \delta' \boldsymbol{Push}_t + \nu_i + \epsilon_{it})$$

III. Benefits and risks

Benefits

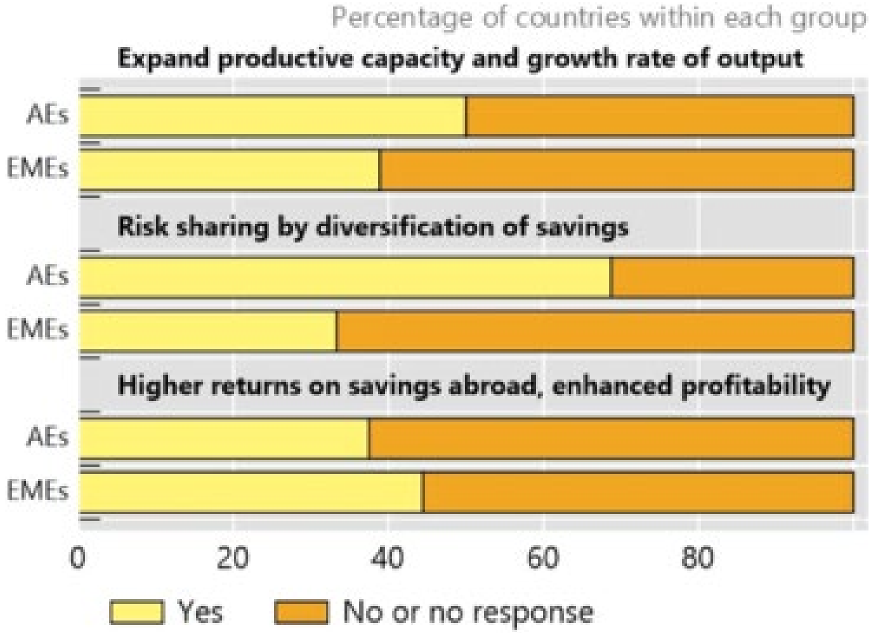
- More definite conclusions on **benefits** than in the 2009 CGFS report, partly based on more data and better identification techniques.
- Both AEs and EMEs highlight **real** and **financial** benefits in the survey.

Risks, two examples:

a) Corporate loan markets in EMEs

b) Sudden stops have real effects

Survey: Describe the main benefits related to capital flows

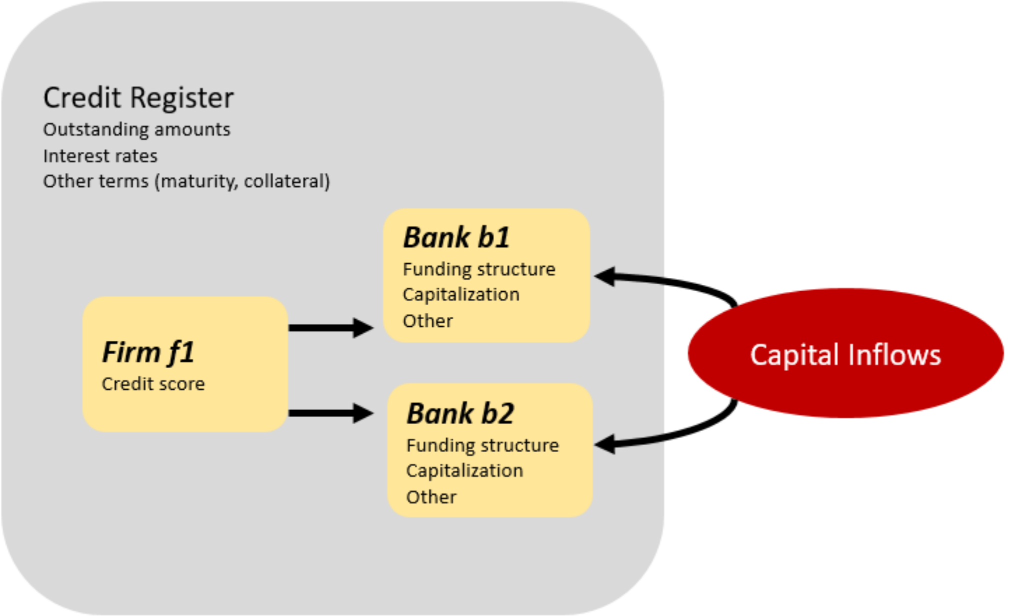


III. Benefits and risks

III.a What is the impact of capital flows on corporate lending in EMEs?

If capital inflows lower bank funding constraints.

- Which **banks** lend more, the most vulnerable?
- Can the **least creditworthy firms** borrow more?



Credit registries from Latin America (BR, CL, CO, MX, PE)

- Disentangle demand and supply effects
- Meta analysis based on satellite analyses

Findings

- The **riskiest** firms borrow from banks with more **wholesale** funding and banks with the **riskiest loan portfolio**.
- Higher capital inflows **strengthen** these effects.

=> **Risks** could build up in the riskiest market segment!

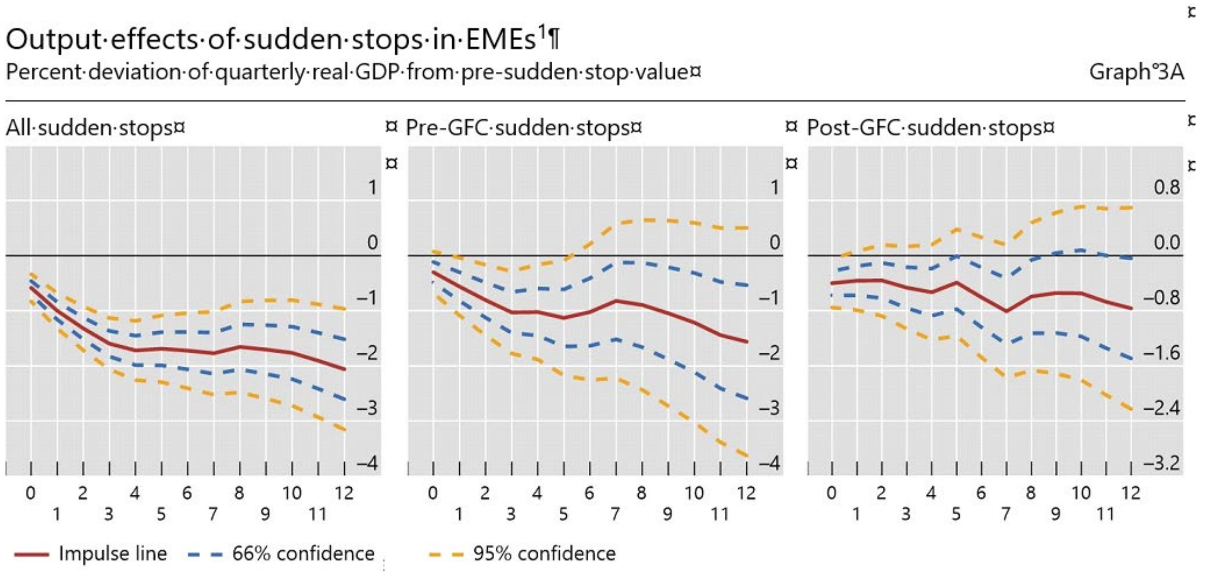
III. Benefits and risks

III.b What is the impact of sudden stops on output?

Sudden stops inflict **significant damage**.

One year after a sudden stop, real GDP is 1.8% below its initial level, remains 2% lower **three** years later.

After GFC **less** pronounced **decline** in GDP.



(Based on the local projection method developed by Jordá (2005) to estimate the effect of sudden stops on real GDP, conditional on GDP in the four quarters prior to the event.)

IV. Policy issues and lessons

Key policy conclusions

a) Policies that address short-term vulnerabilities are **no substitute** for long-term reforms.
   - Even with strong structural policies and sound fundamentals, additional policy **tools** can help **mitigate** capital flow-related **risks**.

b) There is **no** "one-size-fits-all" prescription.
   - Small open economies tend to **combine** CFMs, MPMs and FX intervention to strengthen monetary policy autonomy.
   - Side effects exist.

c) International **cooperation** remains key.
   - The **pipes** channelling capital are **interconnected** and operate **globally.**
   - Critical role of the **GFSN** in preventing and mitigating the effects of crises.

Summary and conclusions

Key message: "Old risks in new clothes"

Trends: Shift from bank-based to *market-based funding*, but there is *no* clear evidence that capital flows have become more volatile.

Drivers: Changes in the *pipes* impacted the drivers and can trigger *spillovers*.

Risks and Benefits: *Benefits* became more clear with better *data* and more sophisticated *tools*, *risks remain*. Example: corporate lending in Latin America

Policy lessons: There are no substitutes for structural reforms, no one-size-fits all prescriptions, and international cooperation remains key.

Thank you very much!

The full report is available on the CGFS website.

https://www.bis.org/publ/cgfs66.htm

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