Egon & Joan von Kaschnitz Lecture
A Case for An Integrated Policy Framework (IPF)

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Roadmap

• Current issues in emerging market capital flows
• A case study: Indonesia
• Countries’ experience and characteristics
• Key modeling ingredients and preliminary results
• Policy and practical challenges
Large inflows to EMs partly driven by global factors

Nonresident portfolio flows to EMs
(U.S. billions; three-month rolling sums)

Sources: Haver Analytics; IMF, GFSR October 2019; and IMF staff estimates.

Change in EMBIG spreads and its drivers
(basis points)

Sources: Haver Analytics; IMF, GFSR October 2019; and IMF staff estimates.
Growing benchmark driven investments has also increased the sensitivity of portfolio flows to global factors.

**Estimated foreign holdings of local currency sovereign debt**
*(share of total in percent)*

**Sensitivity of benchmark-driven debt flows to global factors**
*(percent of invested assets)*

Sources: IMF, GFSR April 2019.
Sustained capital inflows contribute to the build-up of vulnerabilities

Portfolio inflows to EMs
(U.S. billions)

Cumulative portfolio debt  Cumulative portfolio equity

Change in asset-to-equity ratio following
US monetary policy easing (*in percent*)

Source: IMF, FFA database.

EMs more resilient to currency movements than in the past

Selected EMDEs: Assets and liabilities by currency 1/
(percent of GDP)

Estimated exchange rate pass-through
(percent)


1/ Simple cross-country averages of 18 EMEs included in the External Sector Report are reported. Net FC measures size of the external balance sheet scaled by GDP.
A case study: Indonesia (i)

Two main episodes of sudden stops in capital inflows: Taper tantrum (Q2-Q3, 2013) and 2018 EM stress (Q2 2018)

Source: IIF, Haver Analytics and IMF staff estimates

Indonesia - Portfolio Equity & Debt Flows
(LHS in USD Million; RHS standardized values)

International Reserves and Exchange Rate

Source: IIF, Haver Analytics and IMF staff estimates
Policy responses include FX intervention, rate hikes as well as macroprudential measures

A case study: Indonesia (ii)

Monetary Policy
(In percent)

Credit Growth and Macroprudential Policy
(In percent and index, y-o-y growth rate)

Source: Haver, Analytics; CEIC; IMF staff calculations
Countries have used various policy tools for macro management

Inflow Episode

Number of macroprudential and capital flow management measures, 2010-11 (number of measures)

Policy rates changes since March 2018 (percentage points)

Outflow Episode

Foreign exchange intervention, March-October 2018 (cumulative; percent of GDP)

Sources: Alam and Others (2019); Haver Analytics; Bloomberg, L.P.; IMF, Balance of Payments; and IMF staff estimates.
Country characteristics vary along several dimensions

Currency of export invoicing
(percent of total)

Non-financial corporate foreign currency debt
(in percent of GDP; 2018)

FX market turnover
(in percent of GDP; 2016)

Sources: Gopinath (2016); IMF staff calculations; and BIS.
Countries with higher external debt tend to intervene more

$y = 5.76x + 30.11$

$R^2 = 0.45$

Note: FXI is calculated using BOP proxies.
Key Modeling Ingredients

**Shocks**
- Real: Productivity, Commodity price
- Financial: World interest rate, Debt limit, Capital flows

**Country Characteristics**
- Currency of trade invoicing
- Commodity export share
- Financial frictions

**Policy Options**
- Monetary policy/Exchange rate flexibility
- FX intervention
- Macroprudential policy
- Capital flow management measures
Country Characteristics Matter

• Example:
  – Three different countries
  – Same risk-off shock → Appetite for country’s debt and net capital flows decline

• Country A:
  – No financial frictions
  – Deep FX markets → No or very limited effectiveness of FXI

• Country B:
  – Borrows in FX → Significant currency mismatches
  – Deep FX markets → No or very limited effectiveness of FXI

• Country C:
  – Borrows in FX → Significant currency mismatches
  – Shallow FX markets → FXI effective
Country A: No financial frictions

- No reason to limit ER adjustment after negative shock → Mundell–Flemming

- If DCP: ER flexibility less potent in stabilizing economy → still Mundell–Flemming

- No role for heterodox policies
  - They do not address the source of imperfect stabilization (sticky dollar prices).
- Just because you have an instrument does not mean you should use it.
Country B: Currency mismatches + Deep FX markets

- Exchange rate depreciations have negative balance sheet effects

- FXI would help if effective, but limited traction (deep markets) \(\rightarrow\) MP to limit ER depreciation

- CFM and macroprudential policies (t=0) can limit mismatches and improve outcomes.
  - Less need to stimulate the economy (since less overborrowing)
  - Less need to defend the exchange rate (since lower currency mismatches)

- DCP \(\rightarrow\) higher CFMs, because of larger ER movements for trade reasons.

- **Policy tools interact in complex ways.** Hence, we need an integrated model.
Country C: Currency mismatches + Shallow FX markets

- FXI effective because of shallow FX markets
- MP freed up

\[
\begin{align*}
\text{Shock hits} & \quad t = 0 \\
\text{FXI limits ER depreciation/MP cuts} & \quad t = 1 \\
\text{interest rate} & \\
\text{Limited balance sheet effects} & \\
\text{Stimulate domestic demand} & \\
\text{Output gap partially closed} & \\
\end{align*}
\]

- \(\rightarrow\) FXI limit ER depreciation/MP stabilize domestic demand

- Again, macroprudential measures and CFMs can improve outcomes.
Preliminary insights

1. Not just the number but the workings of instruments matter
   • Not all instruments affect all imperfections
   • Instruments typically affect multiple imperfections

2. PCP countries receive full benefits from exchange rate flexibility

3. Since exchange rate adjustment is a weaker tool, DCP countries achieve less macro stabilization and may need larger exchange rate movements. DCP alone does not change the M-F prescription

4. Prudential capital controls become optimal when there is a possibility of not being able to borrow. DCP countries impose higher capital controls because of the larger exchange rate movements desired based on trade considerations

5. FX intervention can increase monetary autonomy when foreign exchange markets are shallow and monetary transmission channel is at least partially functional
Additional Policy and Practical Challenges

• Governance and credibility
  • Use of multiple tools may be difficult to coordinate across separate policy authorities
  • If multiple tools/mandates housed at the central bank, need to carefully design communication strategy to avoid undermining monetary policy credibility

• Moral hazard and market development
  • Expectation of policy interventions may stimulate excessive risk-taking and/or hinder the long-term development of FX markets and government institutions

• Challenges in estimating effectiveness of the policy tools for different shocks and country characteristics
What is the IPF?

Linking Shocks, Characteristics, Policies and Objectives

- Shocks
- Cyclical/Structural Characteristics
- Policies
- Growth and Stability

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