One question, three takeaways

- Why combine IT with FX intervention and macroprudential measures?

- Three takeaways
  - EMEs are more sensitive to capital flows and exchange rates
  - This worsens two potential monetary policy trade-offs
  - FX intervention and macroprudential measures can help
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
  - This worsens two potential monetary policy trade-offs
  - FX intervention and macroprudential measures can help
EMEs adopt inflation targeting but not free floating

Inflation targeting regimes rise... ...but so do FX reserves

Use of macroprudential tools

EMEs:
- Inflation targeting
- FX anchor
- Other

Inflation targeting EMEs

Inflation targeting AEs

# of measures

USD trn

%
Inflation, growth and credit in inflation targeting economies

Inflation

Real GDP growth

Real credit growth

EMEs

AEs
EMEs face large exchange rate and capital flow swings
Exchange rate pass-through is higher in EMEs
Financial markets are not as developed in EMEs as in advanced economies

Size of institutional investors

Trading in FX derivatives

EMEs

AEs
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
  - Currency mismatches
  - The financial channel of the exchange rate

- This worsens two potential monetary policy trade-offs

- FX intervention and macroprudential measures can help
Foreign currency debt and foreign ownership raise vulnerabilities in EMEs

Foreign currency debt

% of GDP

USD trn

By borrower (lhs):
- EMEs
- Asian EMEs
- Other EMEs

By currency (rhs):
- USD
- CHF/EUR/GBP/JPY

Foreign ownership in EME local sovereign bond markets

% of total

EMEs
Asian EMEs
Other EMEs

06 07 08 09 10 11 12 13 14 15 16 17 18
The self-reinforcing currency mismatch loop

Loosen financial conditions
Appreciation
Capital inflows

Tighten financial conditions
Depreciation
Capital outflows
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
- This worsens two potential monetary policy trade-offs
  - Stabilising inflation and output at the same time
- FX intervention and macroprudential measures can help
In EMEs, exchange rate appreciation goes hand in hand with...

...lower bond yields...

...and stronger domestic credit expansion
First monetary policy dilemma
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
- This worsens two potential monetary policy trade-offs
  - Stabilising inflation and output at the same time
  - Stabilising the economy today vs stabilising it tomorrow
- FX intervention and macroprudential measures can help
Behaviour of selected variables around crises
Country group medians, in standard deviations

Advanced economies

EMEs

- Domestic financial cycle
- Capital inflows (debt)
- Real effective exchange rate
Second monetary policy dilemma
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
- This worsens two potential monetary policy trade-offs
- FX intervention and macroprudential measures can help
FX intervention mutes the financial channel of the exchange rate

FX intervention leans against appreciation, offsetting capital inflows...

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<th>Impact on the exchange rate</th>
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**Impact on the exchange rate**

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<th>Impact on credit growth</th>
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FX intervention

Capital flows

....and dampens credit expansion, offsetting the same flows
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
- This worsens two potential monetary policy trade-offs
  - FX intervention and macroprudential measures can help
    - But FX intervention is no panacea
Roadmap

- EMEs are more sensitive to capital flows and exchange rates
- This worsens two potential monetary policy trade-offs
- FX intervention and macroprudential measures can help
  - But FX intervention is no panacea
  - Need for a macro-financial stability framework
Thank you!