BANCO DE ESPAÑA

The international expansion of Financial Conglomerates: Financial Stability implications

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Outline of the presentation

- *A Taxonomy on International banks activity*
- *Asset side: The (potential) gains for diversifying the exposure*
- *Currency mismatches: taking a look on the hedging markets*
- *General effects: spillovers from monetary and macroprudential policy*

A Taxonomy on International banking activity

BUSINESS MODELS IN GLOBAL BANKING

McCauley et al. (2010, BIS QR), Gambacorta and Van Rixtel (2013, BIS WP), Muñoz de la Peña and Van Rixtel (2015, BdE REF), Gambacorta et al. (2017, BdE WP):

Structure of lending:

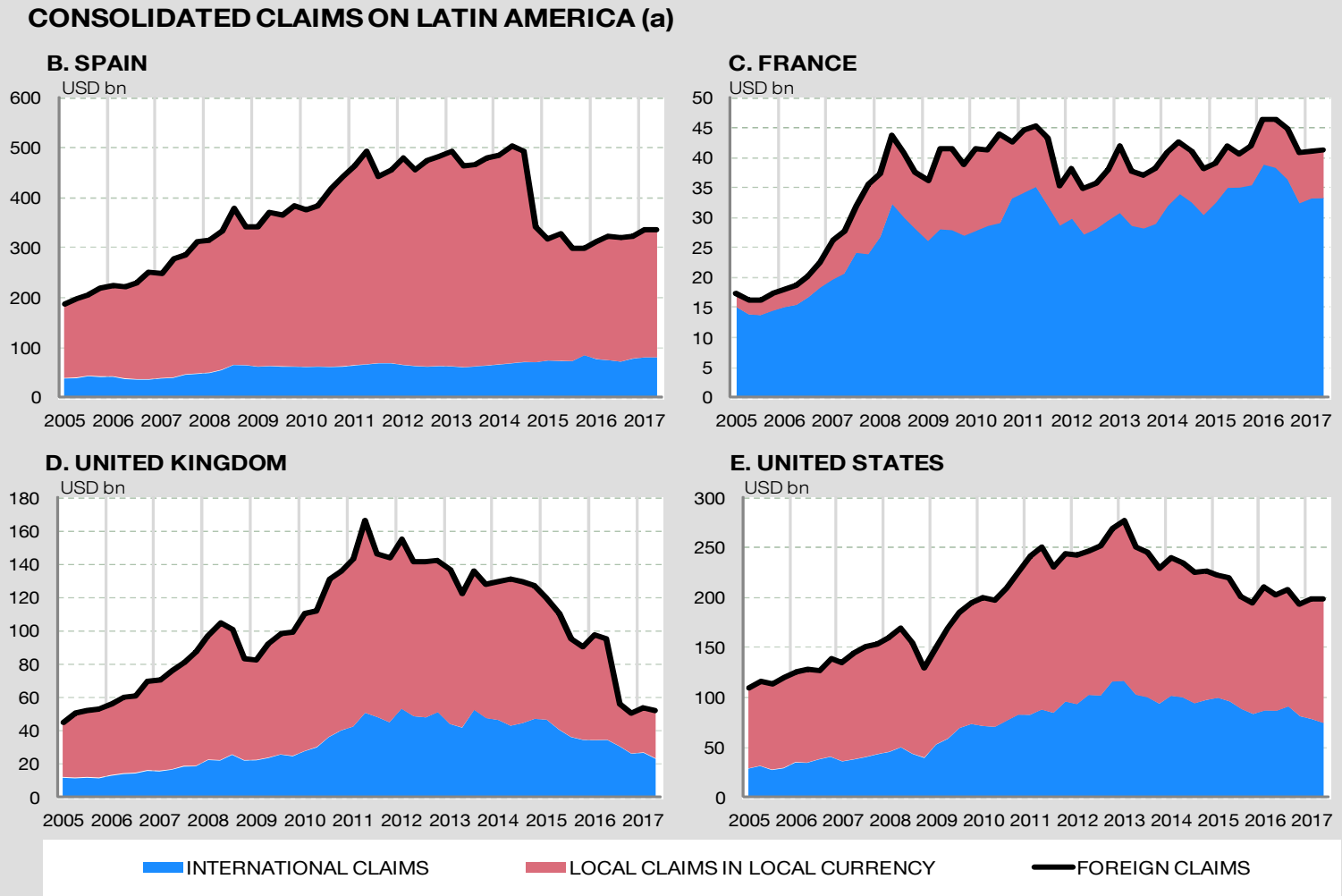
- *International banks*: banks conducting mainly cross-border business from their HQ and financial centers (German, Swiss, Japanese banks).
- *Multinational banks*: banks maintaining large foreign offices in multiple jurisdictions; large local operations in host countries (Spanish banks).

Structure of funding:

- *Centralized*: banks using cross-border funding managed from HQ and international financial centers (Japanese, German, Belgian banks).
- *Decentralized*: banks fund their operations locally in the host countries where they operate (Spanish banks).

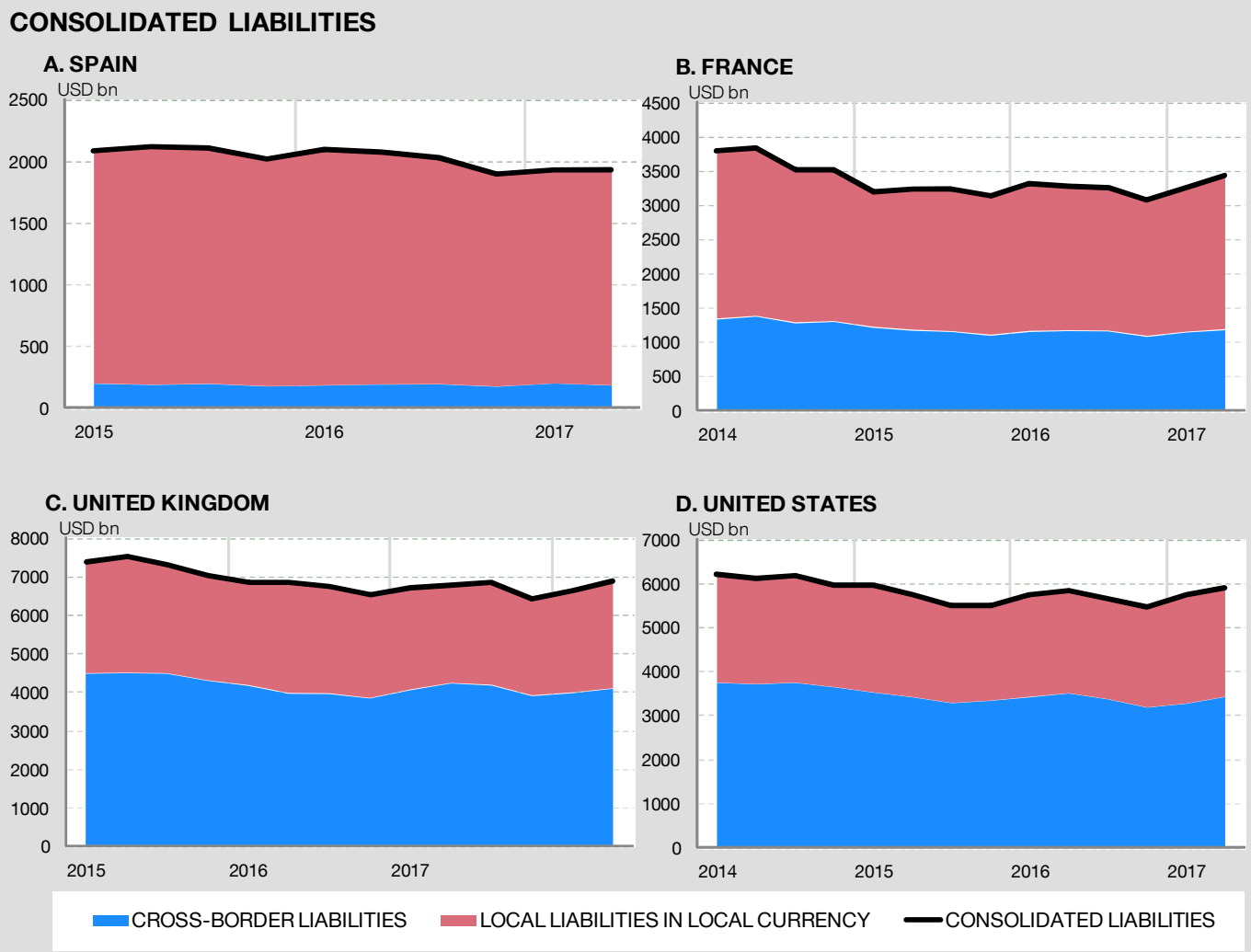
Different combinations possible (Gambacorta and Van Rixtel, 2013): French banks multinational lending model, funding strongly centralized.

CONSOLIDATED CLAIMS:CROSS BORDER VS LOCAL



SOURCE: BIS Consolidated Banking Statistics (Published series).
(a) Aggregate of Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela.

CONSOLIDATED LIABILITIES: CROSS BORDER VS LOCAL FUNDING



SOURCE: BIS Locational and Consolidated Banking Statistics (Published series)..

CHANGING BUSINESS MODELS ON INTERNATIONAL FUNDING

Gambacorta, Schiaffi and Van Rixtel (2017), BdE DT No.1736:

- Structural shift from the use of cross-border funding to local funding obtained by offices abroad after the second quarter of 2007. Move towards the multinational, decentralized business model of global banking, similar to the one used by Spanish internationally active banking groups.

- After the second quarter of 2007, also the composition of cross-border liabilities changed: Cross-border funding through inter-office accounts of the same banking group and from central banks increased, while funding from banks not belonging to the same group and from non-banks decreased.

- The short-term adjustment of banks' funding models occurred through changes in their cross-border liabilities, while local liabilities in host countries remained fairly stable.

POLICY IMPLICATIONS OF BUSINESS MODELS

- International exposure of banking did not have an homogenous or static model

- Cross border claims vs Local claims:
  - **Local vs consolidated capital requirements**
  - **Exposure limited by the participation vs total exposure**
  - **Resolution plans**

- Cross border vs local funding:
  - **Headquarters support limited**
  - **Resilience of international activity**
  - **FX and maturity risk management**

DIVERSIFYING ABROAD

COSTS AND BENEFITS OF DIVERSIFICATION

- According to theory, global banks' geographical diversification has costs and benefits in terms of financial stability *(Saunders and Walters,1994; DeYoung and Roland, 2001; Stiroh, 2004)*

- Traditional portfolo theory: risk-adjusted returns should be higher at more diversified banks, if returns are not correlated *(Diamond, 1984)*

- However, diversification may lead to higher risk, increased market power and there may be spillover and contagion effects *(Denis et al. 1997)*

- Empirical assessment, mostly pre-crisis, regional (not international), and with US data have yielded mixed results.

GEOGRAPHIC DIVERSIFICATION OF EXPOSURES

- We have gathered evidence using data for Spanish banks (Argimon, 2017) :

1) Geographic diversification results in higher resilience for banking groups: **the more diversified a banking group is, the lower its risk**
2) The economic conditions of jurisdictions where banking groups expand to are relevant for resilience: **the less synchronized the business and financial cycles, the lower the risk**
3) The internationalization model of banking groups affects its resilience:

- In particular,
  - **The more decentralized and multinational, the higher the resilience.**
  - **More decentralized and multinational banks reinforce the positive impact of diversification on resilience and mitigate the negative impact of synchronization**

LESSONS FROM INTERNATIONAL DIVERSIFICATION IN THE CRISIS

And during the crisis:

1. Spanish **global banks did better in terms of ex-post risk than its more home oriented peers** during the crisis

2. Banking groups with high proportion of claims in economies with **highly correlated cycles performed worse** in terms of risk during the crisis

3. **Higher diversification has a positive impact on resilience** during the crisis

4. During the crisis **more decentralized and multinational banks performed better** in terms of risk than the rest

POLICY IMPLICATIONS

- The findings support the diversification hypothesis that provides for benefits in the international diversification of banks,
  - Channeled through the lower synchronization with the countries in which affiliates operate
  - Reinforced by the concentration in different areas
  - Dependent on the internationalization model followed by the banking group

They give rise to considering the possibility of:

- **Incorporating the benefits of international diversification into the regulatory/supervisory framework.**
- **Promoting a neutral regulation relating international position (resolution framework or TLAC) .**
- **Reconsidering the level of granularity on international exposure to develop stress test.**

Currency mismatches: taking a look on the hedging markets

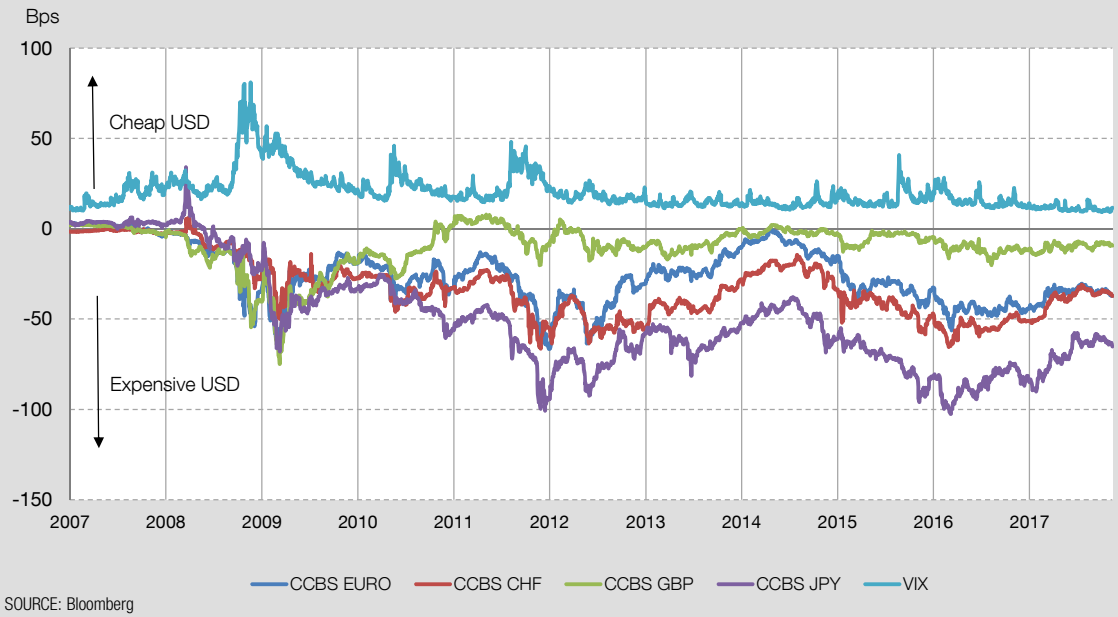
US dollar funding by non-us Banks: A potential source of financial instability

- International banking exposure could lead to important currency mistmaches: relevance of FX markets for Financial Stability
- The cross-currency basis (CCB) could be a good measure of global dollar-funding pressures→ a **negative basis** implies a **premium** in swap markets for borrowing US dollars.
  - E.g. If the basis of USD/EUR swaps is negative, borrowing USD in the currency swap market is more expensive than directly obtaining USD in the dollar cash market.
  - A negative CCB implies also a deviation from covered interest parity (CIP).
    - *Deviations of CIP have been common since 2008 due to higher distress and counterparty risk at that time. However, since mid-2014 they have been driven mainly by large demand and supply imbalances in the FX and currency swap markets i.e. monetary policy divergences and stricter regulatory requirements for banks (e.g. Du et al., 2017).*

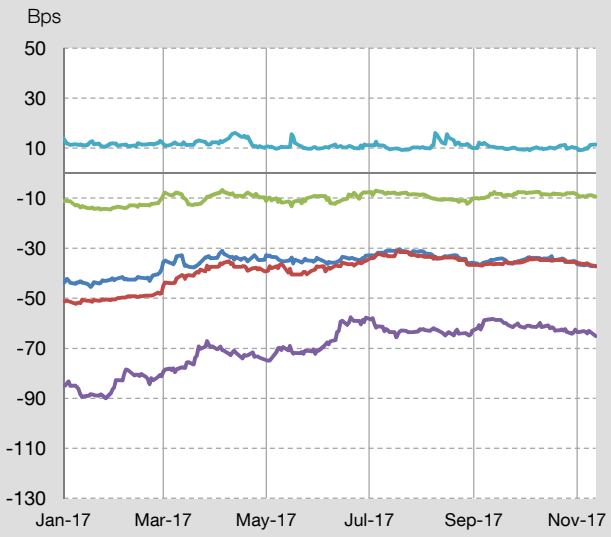
US DOLLAR FUNDING BY NON-US BANKS: A POTENTIAL SOURCE OF INSTABILITY

- Cross-currency basis is still negative, so global dollar funding pressures persist as of today.

5 YEAR CROSS-CURRENCY BASIS SWAPS FOR VARIOUS CURRENCIES AND VIX



SOURCE: Bloomberg

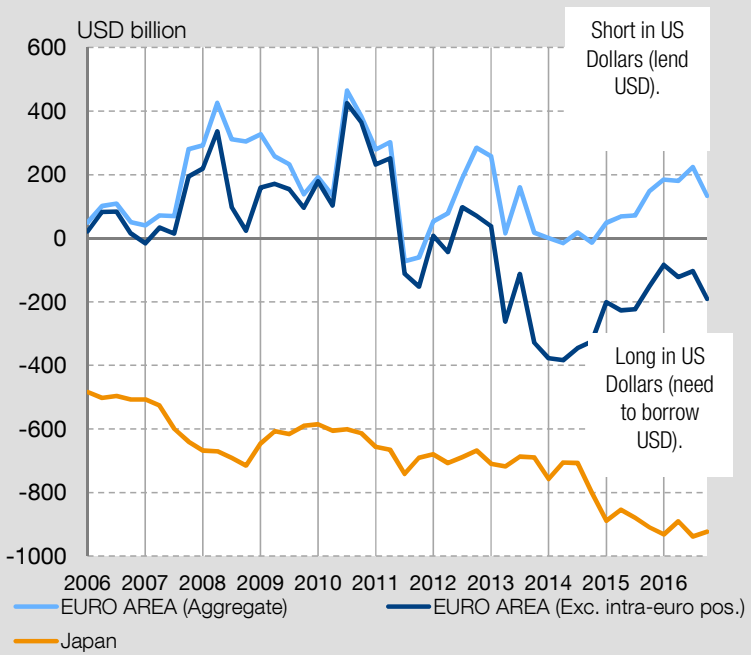


SOURCE: Bloomberg.

SOURCE 1: LARGE USD FUNDING GAP

- Many non-US banks have huge **USD on-balance sheet mismatches** → USD demand from non-US banks drives down the basis.
- Importance of the **lender of last resort in case of market distress:** USD central bank swap lines were key to alleviate USD funding pressures during the great financial crisis.

NET DOLLAR LIABILITIES, BY BANKING SYSTEM (a)



SOURCE: BIS Locational Banking Statistics by nationality and Consolidated Banking Statistics, immediate counterparty basis.
(b) Excluding inter-office positions.

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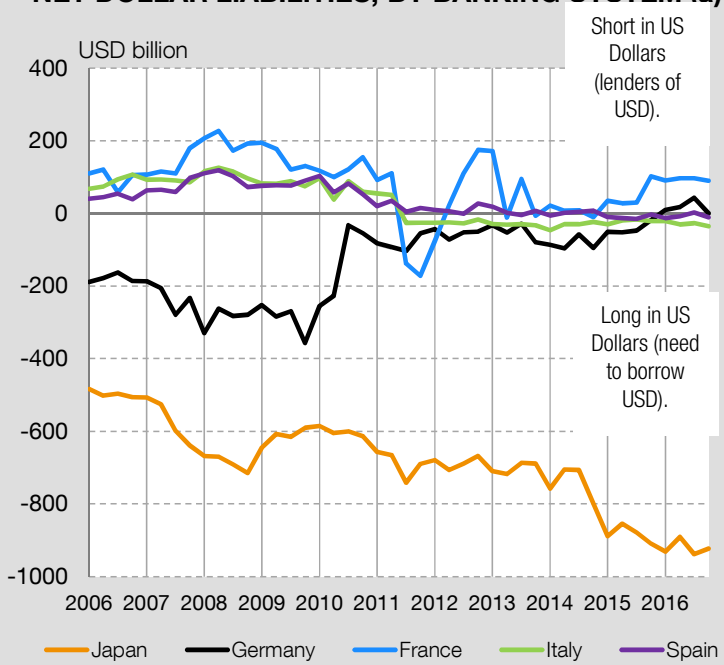

SOURCE: BIS Locational Banking Statistics by nationality and Consolidated Banking Statistics, immediate counterparty basis.
(a) Excluding inter-office positions.

SOURCE 2: USD MATURITY MISMATCHES & CONCENTRATION RISK

- USD on-balance sheet mismatches are a proxy of currency swap reliance of non-US banks. FX and currency swaps create a new set of specific risks such as:
  - **Concentration risk:** Evidence of market power from US MMF on repo market with Japanese Banks (Aldasoro et al. BIS 2017)
  - **Rollover risk:** A non-US bank with a long-term US dollar denominated-asset may decide to hedge it with a shorter-term FX swap and roll it over until the asset matures. This creates **USD maturity mismatches:**
    - *USD maturity mismatches contributed to the USD shortage during the great financial crisis (McGuire and von Peter, 2009)*
    - *USD maturity mismatches can create future liquidity problems in case of market distress (Borio et al., 2017).*
    - *Foreign currency mismatches of advance economy banks are still large (IMF, 2017).*

SOURCE 3: IMPACT ON FX HEDGING MARKETS FROM POLICY CHANGES

- **Unwinding** of the Fed's balance sheet could:
  - Increase monetary policy divergences and raise the demand for USD assets.
  - Reduce the supply of USD worldwide:
    - *This could increase USD funding costs and support a stronger USD in the short and medium term.*
    - *Alternative USD providers located in EMEs would be significantly affected (Arai et al., 2016 and Nakaso, 2017).*
    - *Risks would be higher due to USD maturity gap of non-US banks (IMF, 2017).*
- Tax plans to incentivize **repatriation of USD located abroad by US firms** could further reduce the global supply of USD.
  - US firms holding cash abroad could be important lenders of USD (IMF, 2017).

OTHER CONSIDERATIONS ON FX FUNDING

- In Romo González (2016) we show that European banks issued USD long-term debt for "opportunistic reasons" (i.e. to take funding advantage from CIP deviations), particularly during the crisis periods (i.e. 2008-2012)

  …creating exposure to FX even with banks that do not need to cover US dollar assets.

- Large issuance of USD bonds could mitigate the problems by reducing 1) funding costs 2) the USD funding gap and 3) the USD maturity gap for non-US banks…

  …however, as shown in this study, only the most international oriented and stronger banks have access to USD markets and/or are able to benefit from CIP deviations.

General effects: spillovers from monetary and macroprudential policy

CROSS-BORDER TRANSMISSION OF POLICIES (PRUDENTIAL&MONETARY)

Inwards transmission:

Through home global Banks (foreign affiliates of home global Banks)

Through domestic affiliates of foreign global banks

Outwards transmission:

Through home global banks

SPILLOVERS OF NATIONAL POLICIES THROUGH INTERNATIONAL BANKING

Findings of IBRN on spillovers through banking groups

Prudential policy changes

- ✓ Have effects on bank lending growth abroad
- ✓ Heterogeneity of effects, depending on policy instrument, country, banking group characteristics..
  - ✓ Emerging markets have lower probability of significant inward transmission of foreign prudential policies
- ✓ On average, effects are not large. Spillovers of foreign regulation into home lending arise through hosted affiliates of foreign banks

Monetary policy changes

- ❖ Effects on lending to the private sector abroad
- ❖ Transmission of US policy more generalized than policy in other countries
- ❖ Weight of foreign activity most relevant for effect

POLICY IMPLICATIONS

- The findings demonstrate the need to incorporate considerations on the international spillovers of prudential instruments when discussing macroprudential policy

- Affects the role and potential for reciprocity in macroprudential policy

As for MP:

- Potential relevance of liquidity and solvency in the transmission of monetary shocks would support enhancing them

Thanks for your attention