

# Evaluation of the Effects of Financial Regulatory Reforms on SME Financing

IFC SME Finance Forum Webinar
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#### Overview

- Background: evaluations
- SME financing trends
- Evaluation approach and challenges
- Evaluation findings
- Next steps



#### SMEs form the backbone of economies

- Significant heterogeneity in definitions across jurisdictions
- Account for a large share of employment and value-added
- A wide range of public sector policies are in place across
   FSB jurisdictions to support SME financing

#### Sources of financing for SMEs are diverse

- Internal sources of financing plays an important role, particularly for micro and small firms
- Bank lending is the prevalent form of external financing
- Significant heterogeneity across jurisdictions in the type of banks that typically provide SME financing, largely reflecting the structure of the banking sector



#### SME lending growth has resumed in recent years...

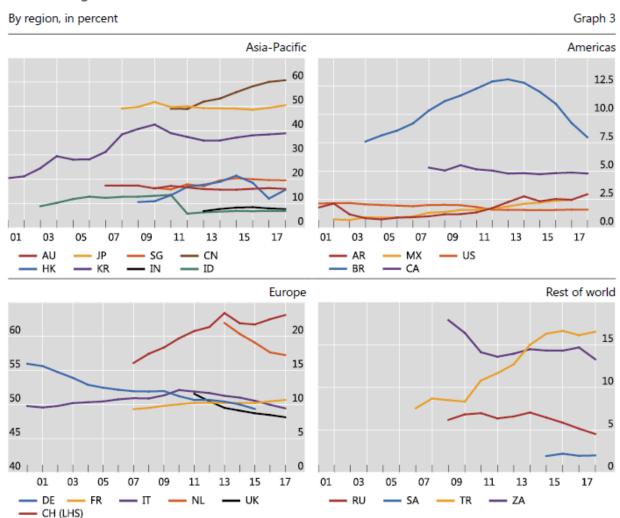
- Bank lending volume increased after falling during the financial crisis for a number of jurisdictions
- Different trends across jurisdictions volume remains below pre-crisis level in some of them
- SME lending rates have also followed the overall decline in interest rates in most jurisdictions

#### ... also confirmed by surveys on access to SME finance

- Improved particularly in advanced economies
- Still seen as a major issue in emerging economies and for micro and young firms





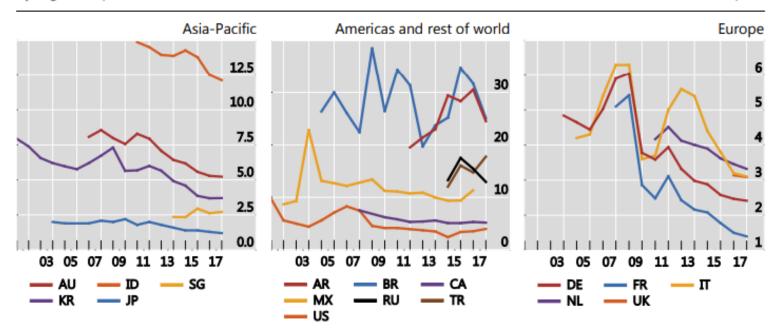


Note: For IT, the SME aggregate refers to bank loans to firms with <20 employees.

Source: FSB questionnaire on SME financing.

#### Interest rates for SME loans

By region, in percent Graph 4



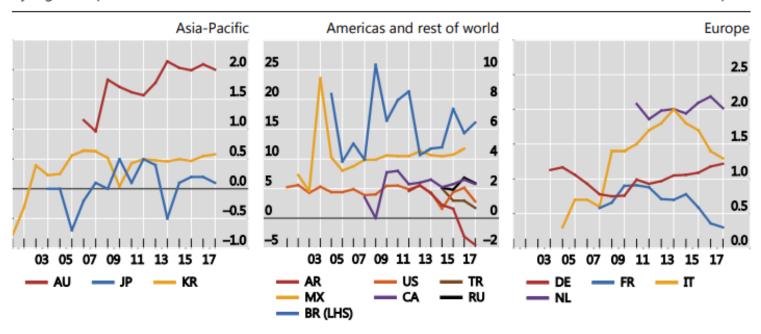
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Source: FSB questionnaire on SME financing.



Interest rate spread between loans to SMEs and loans to large corporates

By region, in percent Graph 5



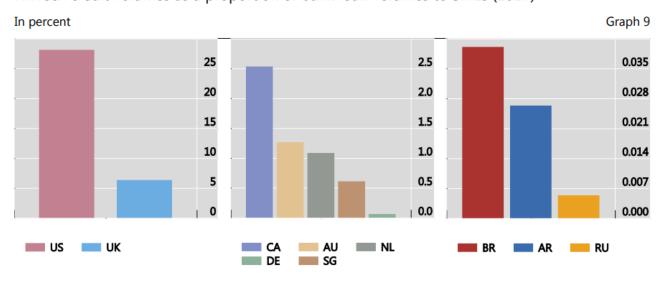
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Source: FSB questionnaire on SME financing.



- Alternative sources of financing have increased, albeit from a low base
  - FinTech has become economically relevant in some jurisdictions (UK, US, CN)

FinTech credit volumes as a proportion of bank loan volumes to SMEs (2017)



Note: US total bank loan volume data is based on 2016 figures.

Sources: Cambridge Centre for Alternative Finance; national data; FSB calculations.



#### Multi-pronged approach to arrive at robust results

- Stocktake questionnaire to FSB jurisdictions
- Input from stakeholders (roundtable, call for public feedback, targeted interviews with market participants)
- Literature review
- Empirical analysis (2 aggregate data studies, 2 multicountry studies, 11 jurisdiction-specific studies)
- Reforms covered in empirical analysis
  - Initial Basel III capital and liquidity requirements agreed in 2010 and largely implemented

#### Other reforms reviewed only qualitatively

- G20 reforms that are still at early implementation stage (finalized Basel III reforms, accounting standards)
- Other national/regional regulations



## Empirical analysis: Did reforms affect <u>supply</u> of bank lending to SMEs or alter <u>allocation</u> across types of SMEs?

- Did <u>SME lending at the "most affected" banks</u> slow following reforms?
- 2. If so, was SME lending <u>more affected</u> than corporate lending generally?
- 3. Did SME lending <u>terms</u> interest rates, collateral requirements and cost (interest rates) <u>tighten</u> after the reforms?
- 4. Did the reforms alter the <u>allocation</u> of credit across different types of SME borrowers or lenders?



#### No comprehensive global SME financing database

Used range of cross-country and within-country datasets

#### Large number of entities

- National drivers, difference in granularity of data collected
- Institutional differences driving financing choice (especially in emerging markets)

## Reforms coincided with other concomitant factors affecting SME financing

- Isolate supply (bank) and demand (SME) effects by exploiting heterogeneity across banks
- Common empirical framework for all analyses
- Fixed effects and control variables used to partly control for demand-side effects and macro variables



Table 2: Key dimensions and identification tools of the empirical analyses

	Coverage in Estimation Sample	Unit of observation	SME Outcome variable of interest	Demand absorbed by	Heterogeneity to proxy reform exposure
Cross-country analyse	es				
FSB survey	13 AEs+ 8 EMDEs 2010-2017	Country-time	Aggregate bank lending to SMEs	Macro control variables at the country-time level	Banking system characteristics at the country-time level
	2010-2017			Separate country and time fixed effects.	
Capital IQ	9 AEs+EMDEs	Firm-time	SME debt (total, short term, long term) and investment	Country-by-time fixed effects and firm fixed effects.	Time-varying firm characteristics – More exposed firms within each country.
	2010-2017				
ECB SAFE survey	8 euro area members	Firm-time Bank-firm time	SMEs reply being "credit-constrained"	Firm-level control variables and fixed effects (country-by-time or separate country and time).	Time-invariant bank characteristics – More exposed banks (at euro area and at country level).
	2010-2016				
BCBS	18 AEs+EMDEs	Bank-time	Individual banks' SME loan portfolio	Macroeconomic control variables	Individual bank's exposure to the reforms – More exposed banks.
	2011-2018				
Within-country analys	ses				
Supervisory bank reports <sup>47</sup>	10 jurisdictions, AEs+EMDEs	Bank-time	Individual banks' SME loan portfolio (total, long term, short term)	Macroeconomic control variables, bank and time fixed effects, or bank and region-by-time fixed effects	Individual bank's exposure to the reforms
Of which, also on credit registries data	6 jurisdictions	Bank-firm-time	Bank-firm loan relationships (total, short term, long term, collateralised, indicative or charged interest rates)	bank-by-firm fixed effects, and sector-by-time fixed effects	Individual bank's exposure to the reforms.
	AEs+EMDEs				



## **Evaluation findings**

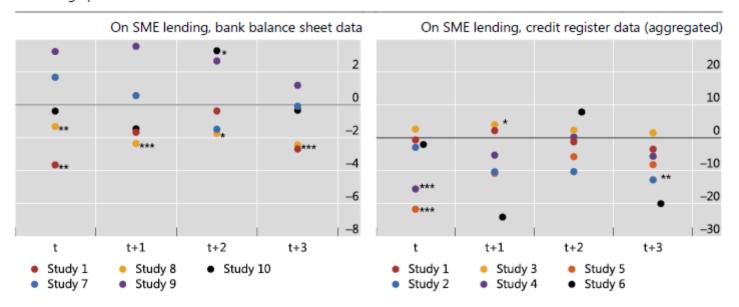
- No material persistent negative effects on SME financing in general, although some differentiation across jurisdictions
  - Some evidence that more stringent risk-based capital requirements slowed the pace and in some jurisdictions tightened the conditions of SME lending for the "most affected" banks...
  - but effects are not homogeneous across jurisdictions and are generally found to be temporary
  - No evidence that leverage ratio, liquidity requirements or capital surcharges for systemic banks had significant effects
- No one-size-fits-all pattern for all jurisdictions
  - Type of impact and relative strength also depend on stage of economic cycle, way that reforms were implemented etc.



## **Evaluation findings**

RBC: Transitory effects on SME lending growth at the bank level

#### Percentage points



This table shows the estimation results for specification (BNK 1) Each dot represents one particular satellite study. \*\*\*, \*\* and \* denote the significance levels of 1%, 5% and 10%, respectively.

Sources: National credit registers and central banks.



## **Evaluation findings**

- Consistent with literature on effects of bank capital regulations and stakeholder feedback
  - SME financing largely driven by other factors, such as public policies and macroeconomic conditions
- Some evidence of reallocation of bank lending towards more creditworthy firms after the reforms
  - But this effect is not specific to SMEs
- Cost vs benefits
  - Important to weigh costs (which appear limited and transitory) against wider benefits of the reforms in terms of enhanced financial resilience (in terms of reducing the likelihood and severity of financial crises)



### Next steps

- Ongoing engagement with stakeholders
  - Welcome further opportunities to engage
- Consultation closes 7 August
  - Welcome feedback, including supporting evidence
  - Responses will inform the final report
- Final report to be published in November