

# Financial institutions after the crisis: facing new challenges and new regulatory frameworks

Paris, December 2, 2015

Banque de France,

Conference Center, Auditorium 31 rue Croix des Petits Champs, 75001 PARIS

The Autorité de Contrôle Prudentiel et de Résolution is very pleased to host the international conference on the "Financial institutions after the crisis: facing new challenges and new regulatory frameworks".

The financial crisis has led to the implementation of more stringent regulations for capital, liquidity and the structure of financial institutions. The conference aims at provoking a fruitful debate between academics and practitioners, from central banks, supervisory and regulatory authorities, as well as from the private sector, in order to examine the potential impacts that these regulations might have had on their organizational structure, their business models and their risk taking behaviors.

Please find under this <u>link</u> the call for papers for this conference.

#### Organizers:

Henri Fraisse, Mathias Lé and Sophie Tryhoen (Autorité de Contrôle Prudentiel et de Résolution)

## Program

### Wednesday, December 2, 2015

8:30 - 9:00 Registration & Welcome Coffee

9:00 - 9:15 Welcome address: Robert Ophèle, deputy Governor of Banque de France

#### 9:15 - 11:00 Session A: Bank Organizational Structures and Macroprudential Policies

Chairman : Frédéric Visnovsky (Autorité de Contrôle Prudentiel et de Résolution)

The Transmission of Real Estate Shocks Through Multinational Banks

Ata Can Bertay (World Bank)
Discussant: Nicholas Coleman

On a Tight Leash: Does Bank Organizational Structure Matter for Macroprudential Spillovers?

Piotr Danisewicz, Dennis Reinhardt and Rhiannon Sowerbutts (Bank of England)

Discussant: Silvia Bressan

The Funding of Subsidiaries Equity, "Double Leverage," and the Risk of Bank Holding Companies (BHCs)

Silvia Bressan (Modul University Vienna)

Discussant: Gong Cheng

11:00 - 11:15 Coffee & Pastries

#### 11:15 - 12:25 Session B: Liquidity and Bank Lending

Chairman: Johan Hombert (HEC)

Fire Sales, Inefficient Banking and Liquidity Ratios

Axelle Arquié (European University Institute, Max Weber Fellow)

Discussant: Andreas Barth

#### Internal Liquidity Management and Local Credit Provision

**Nicholas Coleman**, Ricardo Correa (**Federal Reserve Board**), Jason Goldrosen (Harvard University) and Leo Feler (Johns Hopkins University)

Discussant: Taylor Begley

12:25 - 14:15 Break

#### 14:15 - 16:00 Session C : Bank Business Models and Bank Risk Management

#### Chairman: Vasso Ioannidou (Lancaster University / CEPR)

The Strategic Under-Reporting of Bank Risk

**Taylor Begley (London Business School)**, Amiyatosh Purnanandam (University of Michigan) and Kuncheng Zheng (Northeastern University)

Discussant : Ata Can Bertay

What Happened to Profitability? Shocks, Challenges and Perspectives for Euro Area Banks

Gong Cheng and Dirk Mevis (European Stability Mechanism)

Discussant: Natalya Martynova

Bank Profitability and Risk-Taking

Natalya Martynova (De Nederlandsche Bank), Lev Ratnovski (IMF), and Razvan Vlahu (De Nederlandsche Bank)

Discussant: Enrico Onali

16:00 - 16:15 Coffee & Pastries

#### 16:15 -17:25 Session D :Bail-In, Bail-Out and Market Discipline

#### Chairman : Olivier de Bandt (Autorité de Contrôle Prudentiel et de Résolution)

Monitoring Matters: Debt Seniority, Market Discipline and Bank Conduct

Piotr Danisewicz (Bank of England) Danny Mcgowan (University of Nottingham), **Enrico Onali (Aston University)** and Klaus Schaeck (Lancaster University)

Discussant: Axelle Arquié

Implicit Guarantees and Market Discipline: Has Anything Changed Over the Financial Crisis?

**Andreas Barth** and Isabel Schnabel (Gutenberg School of Management and Economics) Discussant: **Laurent Weill (Strasbourg University)** 

Time allocation: Presentation: 20 minutes - Discussion: 8 minutes - Open discussion: 7 minutes

#### **Abstracts**

### 1- The Transmission of Real Estate Shocks Through Multinational Banks

Ata Can Bertay (World Bank)

#### Abstract

This paper investigates the credit supply of banks in response to domestic and foreign real estate price changes. Using a large international dataset of multinational banks, we find evidence of a significant transmission of domestic real estate shocks into lending abroad. A 1% decrease in real estate prices in home country, in particular, leads to a 0.2-0.3% decrease in credit growth in the foreign subsidiary. This response, however, is asymmetric: only negative house price changes are transmitted. Stricter regulation of activities of parent banks can reduce this effect, indicating a role for regulation in alleviating the transmission of real estate shocks. Further, the analysis of the impact of real estate shocks on foreign subsidiary funding indicates that shocks are transmitted through changes in long-term debt funding and equity.

## 2- On a Tight Leash: Does Bank Organizational Structure Matter for Macroprudential Spillovers?

Piotr Danisewicz, Dennis Reinhardt and Rhiannon Sowerbutts (Bank of England)

#### **Abstract**

This paper examines whether the organizational form of multinational banks' foreign affiliates affects cross-border spillovers of macroprudential regulation. We compare changes in the growth of lending provided by foreign banks' branches versus subsidiaries in the United Kingdom in response to changes in capital requirements, lending standards and reserve requirements in foreign banks' home countries. Our results suggest that a tightening of capital requirements abroad reduces UK branches' interbank lending growth by 6.3pp more relative to subsidiaries. We link this effect to the higher degree of control which parent banks hold over operations of their branches compared to subsidiaries. Greater control over affiliated foreign branches which - unlike subsidiaries do not have their own board of directors - allows parent banks to swiftly adjust their lending provision. Supporting this hypothesis, a set of further tests illustrates that the response of foreign affiliates operating under a branch structure is stronger where parent banks are more likely to delegate more decision making authority to the board of directors of their subsidiaries. Several robustness tests controlling for confounding events, and falsification tests support the existence of a causal link between differential effects of capital requirements tightening on banks' cross-border lending.

## 3- The Funding of Subsidiaries Equity, "Double Leverage," and the Risk of Bank Holding Companies (BHCs)

Silvian Bressan (Modul University Vienna).

#### **Abstract**

"Double leverage" is the circumstance in which the parent company issues debt and acquires shares in the equity of subsidiaries (Board of Governors of the Federal Reserve System, 2012). The concern of financial authorities is that such practice reduces the group capital, and bring risk to the firm. The paper is an extensive discussion on this regulatory issue, and provides quantitative evidence on the impact from double leverage on the risk undertaken by Bank Holding Companies (BHCs). For a large sample of United States BHCs we observe that firms exhibit a huge appetite for risk while they raise in the so-called "double leverage ratio." Several tests do suggest the existence of causality. Our view is that, by double leveraging BHCs can exploit a shortfall in the consolidated capital, and are tempted to risk more. Based on our findings we give suggestions for a more effective monitoring of banking groups.

#### 4- Fire Sales, Inefficient Banking and Liquidity Ratios

Axelle Arquié (European University Institute, Max Weber Fellow)

#### **Abstract**

In a Diamond and Dybvig setting, I introduce a choice by households between the liquid contracts of banks (from which households can withdraw before assets mature) and the illiquid contracts of "funds" (from which households cannot withdraw early), allowing to uncover a new externality of fire sales. Fire sales occur when banks need to sell assets at a depreciated price to face withdrawals by impatient depositors, i.e. households hit by the aggregate liquidity shock. Funds buy assets from banks as households cannot withdraw early from their illiquid contracts. The banking sector is both too risky (banks do not invest enough in reserves) and too large (households invest too much in the liquid contracts of banks) with respect to constrained efficiency. The insurance between patient and impatient households is not efficient because with incomplete markets the price effect of fire sales implies redistribution between patient and impatient that is not internalized by agents. Liquidity ratios cannot restore constrained efficiency.

## 5- Internal Liquidity Management and Local Credit Provision

Nicholas Coleman, Ricardo Correa (Federal Reserve Board), Jason Goldrosen (Harvard University) and Leo Feler (Johns Hopkins University)

#### Abstract

Using a unique branch-level dataset of Brazilian banks, this paper studies the patterns of internal liquidity management and how these business practices affect bank lending. Our results suggest first that net due to positions increase during times of financial stress, but this increase is driven by domesticallyfunded banks, in other words, by banks that are relatively isolated from the stress. Second, headquarter cities of banks tend to have negative due to positions implying that these areas lend money internally to other branches in the banking group. This result is consistent with the headquarter locations raising funds abroad or via wholesale markets and then supplying it to its branches. This negative correlation between the due to position and headquarter locality remains during a period of financial stress and is the same for private and government banks. Third, private banks shift their internal funds during a stress period to richer areas. Lastly, we find that internal liquidity management plays an important role for banks' ability to lend, especially for those exposed to financial stress. Taken together, this paper provides the first branch-level evidence of the way that banks ration liquidity both in normal times and in times of stress, and the impact this has on bank lending.

#### 6- The Strategic Under-Reporting of Bank Risk

Taylor Begley (London Business School), Amiyatosh Purnanandam (University of Michigan) and Kuncheng Zheng (Northeastern University)

#### **Abstract**

We show that banks significantly under-report the risk in their trading book when they have lower equity capital. Specifically, a decrease in a bank's equity capital results in substantially more violations of its self-reported risk levels in the following quarter. The under-reporting is especially high during the critical periods of high systemic risk and for banks with larger trading operations. We exploit a discontinuity in the expected benefit of under-reporting present in Basel regulations to provide further support for a causal link between capital-saving incentives and under-reporting. Overall, we show that banks' self-reported risk measures become least informative precisely when they matter the most.

## 7-What Happened to Profitability? Shocks Challenges and Perspectives for Euro Area Banks

Gong Cheng and Dirk Mevis (European Stability Mechanism)

#### **Abstract**

This paper analyses the evolution of bank profitability before and after the Global Financial Crisis and the subsequent European crisis. To accomplish this, we constructed a dataset that includes financial statement information from 310 euro area banks. Using the dataset, we first document the general trends in bank profitability with a particular focus on country and bank heterogeneity. We find that bank profitability was hit by multiple shocks that varied by bank type and location. Based on this, we then use econometric analysis to examine the drivers behind the evolution of bank profitability by discriminating among factors relative to macroeconomic conditions, bank funding and portfolio structures, and new banking regulations in the euro area.

#### 8-Bank Profitability and Risk-Taking

Razvan Vlahu, Natalya Martynova (De Nederlandsche Bank) and Lev Ratnovski (IMF)

#### Abstract

Traditional theory suggests that more profitable banks should have lower risk-taking incentives. Then why did many profitable banks choose to invest in untested financial instruments before the crisis, realizing significant losses? We attempt to reconcile theory and evidence. In our setup, banks are endowed with a fixed core business. They take risk by levering up to engage in risky "side activities" (such as market-based investments) alongside the core business. A more profitable core business allows a bank to borrow more and take side risks on a larger scale, offsetting lower incentives to take risk of given size. Consequently, more profitable banks may have higher risk-taking incentives. The framework is consistent with cross-sectional patterns of bank risk-taking in the run up to the recent financial crisis.

## 9- Monitoring Matters: Debt Seniority, Market Discipline and Bank Conduct

Klaus Schaeck (Lancaster University), Piotr Danisewicz (Bank of England) Danny Mcgowan (University of Nottingham) and Enrico Onali (Aston University)

#### **Abstract**

We examine if debtholders monitor banks and if such monitoring constrains risk-taking. Leveraging an unexplored natural experiment in the U.S. that changes the priority structure of claims on banks' assets, we provide novel insights into the debate on market discipline. We document asymmetric effects for monitoring effort depending on whether a creditor class moves up or down the priority ladder. Conferring priority to depositors causes declines in deposit rates but increases interest rates for nondeposit liabilities, suggesting greater incentives for junior debtholders to exert monitoring effort. Consistent with the idea that senior claims require lower risk premiums, banks increasingly rely on deposit funding following changes in the priority structure. More intensive monitoring also influences conduct: subordinating non-depositor claims reduces risk taking. Our results inform the debate about bail-ins and highlight that changes in the priority structure are a complementary tool to regulation which has received little attention in prior work.

## 10- Implicit Guarantees and Market Discipline: Has Anything Changed Over the since the Financial Crisis?

Andreas Barth and Isabel Schnabel (Gutenberg School of Management and Economic)

#### Abstract

This paper provides a quantitative assessment of the long-run effect of implicit bailout guarantees and analyzes how the effect of market discipline has changed over the financial crisis. By using bank-specific information on CDS spreads as well as ratings regarding the financial strength and regarding the probability for receiving external support, we confirm the existence of cost advantages for banks that benefit from implicit guarantees. We further highlight the significantly heterogeneous effect of the intrinsic creditworthiness of a financial institution: Banks are punished for excessive risk-taking the more the lower the probability for external support. Moreover, we show that banks' individual strength and banks' support were priced heterogeneously over the various episodes of the financial crisis.