2021 Biennial IADI Research Conference

Navigating the New Normal for Financial Stability, Deposit Insurance and Bank Resolution

IADI International Association of Deposit Insurers

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2021 Biennial IADI Research Conference Proceedings

The International Association of Deposit Insurers (IADI) hosted its sixth Biennial Research Conference on 10-12 May 2021, at the Bank for International Settlements (BIS) in Basel, Switzerland. The conference was titled “Navigating the New Normal for Financial Stability, Deposit Insurance and Bank Resolution” and was attended by over 450 participants from close to 100 jurisdictions. Paper presenters covered topics such as the persistent impacts of banking crises, Fintech and changes in depositor behavior emanating from the Covid-19 pandemic, deposit insurance pricing and coverage, and a look at deposit protection, resolution and crisis management in the European Union (EU). The conference featured six papers chosen from 45 paper submissions received in response to a Call for Papers. Each paper was presented by the author and reviewed by a discussant.

Welcoming and Opening Remarks

The attendees were welcomed by David Walker, Secretary General, IADI, who emphasised that the conference provides a unique forum to take stock of and explore the implications of issues influencing financial stability, deposit insurance and bank resolution. He said this was the first IADI research conference held virtually due to the Covid-19 pandemic. In addition to the paper presentations, the conference included distinguished guest speakers such as Andrew Metrick from Yale University, Fernando Restoy from the Financial Stability Institute and Martin Merlin from the European Commission to share their insights. In the Regulator’s Roundtable portion of the conference, Eva Hüpkes from the Financial Stability Board, Peter Routledge from the Canada Deposit Insurance Corporation and Marc Dobler from the International Monetary Fund would share their views. IADI Senior Policy and Research Advisor Bert Van Roosebeke would summarise the Conference.

Yury Isaev, President and Chair of the Executive Council of IADI and General Director of the Deposit Insurance Agency of the Russian Federation delivered the Opening Remarks. He stressed the importance of working with the research community and the Association’s partner international financial institutions on exploring the new risks and examining the effects of new developments and international initiatives on deposit insurance, bank resolution and financial stability issues. As a result, IADI has committed to enhancing its research and policy development efforts as part of IADI’s new 5-year Strategic Plan, including revising the IADI Core Principles for Effective Deposit Insurance Systems.

Keynote Address

Andrew Metrick, Janet L. Yellen Professor of Finance and Management at the Yale School of Management delivered the keynote address on the causes and consequences of financial crises, the regulation of systemic risk and the use of resolution tools to manage crises. He stressed that the Covid-19-crisis is still an incipient crisis and that its outcome will depend on the success in transition back to normality. He gave insights in ongoing efforts in the Yale program on financial stability. The focus thereof is to understand public intervention answers to previous crises by collecting case study information on public measures, causes and tool kits (particularly tools going beyond lender of last resort, bail-in and liquidity injections). Eventually this should allow deriving lessons-learned for future policymakers and while doing so, ensure an appropriate trade-off between moral hazard and safeguarding financial stability. It was acknowledged that each crisis may be different, but there may be worst practices that are to be avoided in future crises, or put in place only under special conditions and with exit strategies.

On another point, Andrew Metrick stressed concerns about shadow banking and possible leakage, which may cause crisis in the traditional financial sector. Finally, he called for additional research efforts in crisis management.

Paper 1: Fighting Failure: The Persistent Real Effects of Resolving Distressed Banks

Chair: Claudio Borio, Head of the Monetary and Economic Department, Bank for International Settlements

Authors: Ivan T. Ivanov, Federal Reserve Board, Washington and Stephen A. Karolyi, Tepper School of Business, Carnegie Mellon University Pittsburgh

Discussant: Alistair Milne, Professor of Financial Economics, School of Business and Economics, Loughborough University

Ivan T. Ivanov presented a paper that investigates the effects of bank resolutions on the real economy. It studies the effects of resolving distressed banks using quasi-experimental variation in resolutions introduced by a threshold-based rule of the US Federal Deposit Insurance Corporation (FDIC) Improvement Act. It also uses the threshold-based variation in resolution propensity in a " fuzzy" regression discontinuity framework to estimate the effect of resolutions on employment and establishment growth in the locations where the distressed banks operate. The paper reveals negative and economically significant impacts of resolutions on local employment and establishment growth. These effects are concentrated in small, less urban counties, and translate to large declines in small and med-sized enterprise lending and increases in corporate bankruptcies. The larger acquiring banks restrict lending to the same small businesses with which the failing bank had relationships. This may be explained with “soft information” that is available in a larger extent to the smaller bank that has been put into resolution. The findings suggest that the current resolution policy has costly negative externalities to the local economies where failing banks operate, which may not be considered when setting the “least cost” resolution strategy.

Discussant Alistair Milne felt the paper impressive and valuable as it presents evidence of a local economy externality from bank resolution. He noted that resolution is not the only cause for the loss of capacity in relationship, which should instead be a broader issue. He suggested the paper have more clarity in dependent variable Yi, further robustness tests on contamination by economy-wide macro-developments, additional literature on bank credit supply, and parameterisations on the quadratic polynomial on equity are of independent interest.

Paper 2: Insurance Pricing, Distortions, and Moral Hazard: Quasi-Experimental Evidence from Deposit Insurance

Chair: Claudio Borio, Head of the Monetary and Economic Department, Bank for International Settlements

Author: George Shoukry, Senior Financial Economist, FDIC

Discussant: Malgorzata Iwanicz-Drozdowska, Professor of Finance, Warsaw School of Economics (Poland)

George Shoukry presented the paper which sought to analyse the effects of differential pricing on insured firms' behaviour and evaluate whether risk-based pricing is effective at mitigating ex ante moral hazard risk in practice. It exploits a quasi-experiment in which FDIC deposit insurance premiums were changed for all US banks with staggered timing, generating differentials between banks in both the levels and risk-based "steepness" of insurance premiums. Results found evidence that differentials in premiums resulted in distortions, including regulatory arbitrage, also provided strong incentives to curb moral hazard. In addition, firms that faced stronger pricing incentives to become (or remain) safer were more likely to subsequently do so that similar firms that faced weaker pricing incentives. The results point to the effectiveness of risk-based pricing and the need that it be governed with robust laws and regulatory controls.

Discussant Malgorzata Iwanicz-Drozdowska noted that while links between deposit insurance pricing and moral hazard have been studied in the past, most have not been as detailed as this. She identified the quasi-experimental approach and unique dataset to be strengths of this piece. However, the case study was also very specific (suggesting potential limitations in how broadly conclusions can be applied) and utilises somewhat dated information from the 1990s. A key caveat is the implementation of the Net Stable Funding Ratio under the Basel III framework. This significant change in regulatory setting has undoubtedly influenced dynamics concerning the shift of funding sources under deposit insurance pricing regimes. Possible extensions to this research include exploration of contemporary datasets, considering alternative risk measures over longer horizons, and highlighting cross-country perspectives.

Distinguished Guest Speaker

Distinguished Guest Speaker, Fernando Restoy, Chairman of the Financial Stability Institute, delivered a presentation titled "How to improve funding of bank resolution in the banking union: the role of deposit insurance". He began his speech by pointing out a key issue: there is a lack of an effective funding mechanism to facilitate orderly market exit, indicating three problems with the current resolution framework in the EU, namely, i) inefficiency, ii) lack of consistency and iii) lack of an effective mechanism for mid-sized banks.

Fernando Restoy briefly introduced four existing funding mechanisms (i.e. Bailout, Creditor bail-in, National Deposit Guarantee Schemes (DGS) and the Single Resolution Fund (SRF)), referring to some characteristics of each instrument, and went on to indicate issues involved in the current approach, which does not allow for effective funding strategies for small and mid-sized banks.

Restoy proposed three ideas for a comprehensive reform: i) modify financial caps for DGS funding in resolution, ii) adjust the Minimum Requirement for own funds and Eligible Liabilities (MREL) requirements to allow for more realistic transfer strategies and iii) ease conditions for access to SRF. Specifically, he emphasised the importance of removing deposit insurers' super-preference and replacing it with a general preference, redefining the MREL requirements for banks pursuing sale of business strategies and recalibrating minimum bail-in conditions for SRF access.

He concluded his presentation by indicating that any attempts to try to improve the current crisis management framework in the European banking union and complete the banking union with fully effective deposit insurance scheme will be subject to vulnerabilities associated with many links between bank risks and domestic resources to cope with them if they materialise.

Paper 3: Coverage Levels in Deposit Insurance: to Increase or not to Increase

Chair: Diane Ellis, Director of Insurance and Research Department, Federal Deposit Insurance Corporation (USA)

Author: Juan Carlos Quintero, Asset Management Deputy Director, Fogafin (Colombia)

Discussant: Riccardo De Lisa, Professor of Banking & Finance, UniCa (Italy)

Juan Carlos Quintero presented the paper which studies the impact on welfare of changes in coverage levels within deposit insurance schemes. It builds on previous literature by adding the possibility of bailouts for too-big-to-fail banks and incorporating a time lag between deposit payout and recoveries. Banks are also able to adjust deposit rates, and with the subsequent effect on welfare able to be captured. The methodology is applied to the 2017 increase in Colombia's coverage level. Results suggest that the benefits of increasing the coverage level outweighed the costs, although net effects are modest in size and sensitive to some parameters. Bailouts have mixed effects but tend to increase costs associated with increasing coverage levels.

Discussant Riccardo De Lisa reiterated that the paper made a useful contribution to the literature on coverage level optimisation and their impact on social welfare. There is otherwise not a great deal of research on coverage level optimisation. The incorporation of too-big-to-fail considerations, along with lagged effects, and enabling deposit rates to change facilitate a model that is quite realistic and therefore helpful to policymakers. This is complemented by a contemporary application from Colombia in 2017. The paper could be improved by considering asset diversity in recovery rate assumptions and/or incorporating alternative recovery distributions for creditors. Finally, the author might consider bank balance sheet impacts in response to changing coverage levels, and any subsequent effects on the probability of default.

Paper 4: Dynamic Banking and the Value of Deposits

Chair: Diane Ellis, IADI Training and Technical Assistance Council Committee and FinTech Technical Committee Chairperson and Director of Insurance and Research Department, FDIC

Authors: Patrick Bolton, Columbia University, Imperial College, CEPR, NBER; Ye Li, Ohio State University; Neng Wang, Columbia Business School, NBER and Jinqiang Yang, Shanghai University

Discussant: Larry Wall, Executive Director, Center for Financial Innovation and Stability, Federal Reserve Bank of Atlanta and IADI Advisory Panel Member

Ye Li presented the paper which analyses the impact on bank valuation and asset-liability management of deposits. It acknowledges that deposits may be a cheap and key source for financing banks' lending and trading activities. However, banks cannot fully control the inflow of deposits and thus their leverage, which may be challenging especially to low capitalised banks, which may be forced to issue equity facing uncertainty in deposit stocks and lending risks. The paper allows for some steering of deposit inflows through deposit rates, but assumes a lower bound for remuneration of zero. Also, it assumes that issuing new bank equity will be costly. The paper explains why deposit influx can hurt bank valuation given lower bank capital because of loan loss provisions in the Covid-crises.

Discussant Larry Wall noted that until the Covid pandemic, conventional wisdom was that bank valuation increased with deposits. However, during the pandemic, banks have noted the downsides of high inflows of deposits. He commended the goal of the paper in offering a model explaining the negative impact of high deposits on bank valuation. However, some of the model's assumptions do not match with experience. To account for that, some revisions to the model were suggested. This included changes regarding the modelling of low loan demand and costs for those banks refusing deposits.

Distinguished Guest Speaker

Distinguished Guest Speaker Martin Merlin, Director of Bank, Director, Bank, Insurance and Financial Crime at the Directorate-General for Financial Stability, Financial Services & Capital Markets Union of the European Commission

Mr Merlin set the scene for the upcoming overhaul of the European Bank Crisis Management and Deposit Insurance Framework. Looking back, he mentioned the establishment of a common backstop for the Single Resolution bund (SRF) at the European Stability Mechanism (ESM), which will be activated as of 2022. Nevertheless, he said an equilibrium has not been reached yet, as the third pillar of the EU Banking Union is still missing and issues regarding the provision of liquidity in resolution remain.

Mr Merlin confirmed the European Commission's intention to put forward legislative proposals by the end of 2021. These will cover both deposit insurance and resolution. On deposit insurance as third pillar of the Banking Union, it remains to be seen whether the European Deposit Insurance Scheme (EDIS) will be designed as a hybrid, liquidity supporting scheme or as a scheme mutualising losses in the steady state. The Eurogroup is discussing these options, also in the wider context of risk reducing measures and may adopt a working plan in June. Regarding resolution, Mr Merlin mentioned the need to safeguard the availability of adequate resolution tools for all banks, irrespective of their size and business model. The predictability of the resolution framework is low, given national differences in national insolvency procedures and credit hierarchy, but also in the handling of the public interest test. Other issues that will be considered in the legislative overhaul include state aid and the role of deposit insurance funding in resolution. On a final note, Mr Merlin affirmed that the Commission sees the FDIC as an exemplary institutional set-up for depositor insurance and resolution, but pointed to political constraints in the European Union in reaching such an outcome.

PAPER 5: Stress Testing Banks' Digital Capabilities: Evidence from the COVID-19 Pandemic

Chair: Yvonne Fan, IADI Core Principles and Research Council Committee Chairperson and Executive-Vice President, Central Deposit Insurance Corporation, Chinese Taipei

Authors: Allen Kwan and Chen Lin, University of Hong Kong, Vesa Pursiainen, University of St. Gallen, Switzerland and Mingzhu Tai, University of Hong Kong

Discussant: Sebastian Doerr, Economist, Innovation and the Digital Economy, Monetary and Economic Department, BIS

Vesa Pursiainen presented the paper, which studies banks' digital capabilities and the role they played at early stages of COVID-19 pandemic. The outcome analysis is therefore that banks with better IT showed a large reduction in physical branches' visits and correspondingly a large increase in website traffic. The paper states that such banks demonstrate the continuous shift from offline physical branches to online banking, seem to originate larger

Paycheck Protection Program loan volumes (PPP loans) and show higher deposit growth rates.

Discussant Sebastian Doerr addressed the authors with a number of considerations to optimise the research. Although the authors' approach to measure IT capabilities – depending on banks' use of 14 self-selected technologies – is clear, more details are needed for a better understanding as to why these technologies had been selected as an indicator. The discussant also pointed out that proof of the direct liaison between the quality of bank's IT, frequency of branch visits and volume of web site traffic are missing and suggested further exploration to disentangle changes in demand from changes in technology.

PAPER 6: Completing the European Banking Union: Capital Cost Consequences for Credit Providers and Corporate Borrowers

Chair: Yvonne Fan, IADI Core Principles and Research Council Committee Chairperson and Executive-Vice President, Central Deposit Insurance Corporation, Chinese Taipei

Authors: Michael Koetter, Thomas Krause, Eleonora Sfrappini, Halle Institute for Economic Research and Lena Tonzer, Martin Luther University, Halle-Wittenberg, Germany

Discussant: Dalvinder Singh, Professor, University of Warwick, UK and IADI Advisory Panel Member

Eleonora Sfrappini presented the paper, which exploits the staggered implementation of the Bank Recovery and Resolution Directive (BRRD) across 15 European Union (EU) member states to study the impact on banks' capital cost. It also analyses whether EU banks passed-on any such changes in their weighted average cost of capital (WACC) in syndicated loan markets to corporate borrowers, and assesses the extent to which changes in banks' WACC around the implementation of the BRRD into national law are transmitted to the real economy. The paper shows that WACC hikes are lowest in the core countries of the European Monetary Union (EMU) compared to formerly stressed EMU and non-EMU countries. It concludes that the establishment of clear rules for the resolution and restructuring of distressed banks paired with more stringent supranational supervision and resolution authorities credibly enhanced the stability and resilience of financial systems in the EMU. The paper also points out that only EMU banks located in core countries that exhibit higher WACC are those that also increase firms' borrowing cost and contract credit supply, which indicating that, conditional on controlling for corporate credit demand, spreads of firms connected to banks in core EMU countries respond significantly to changes in banks' funding cost.

Discussant Dalvinder Singh complimented the paper. He noted that banks overall increased the relative weight of equity and reduced leverage. Besides, the threat of 'likely to fail' increased the need for higher equity levels, and increase in bank capital costs have been pushed on to corporate borrowers. He concluded that the overall resilience of the EU banking system has been improved and this has reduced the probability of state bailout.

Regulators’ Roundtable: What is the New Normal for Regulators and Deposit Insurers?

Moderator: David Walker, Secretary General, IADI

Speakers:

- Eva Hüpkes, Head of Regulatory and Supervisory Policies, Financial Stability Board (FSB)
- Peter Routledge, President and CEO, Canada Deposit Insurance Corporation (CDIC)
- Marc Dobler, Deputy Division Chief, International Monetary Fund (IMF)

Eva Hüpkes highlighted some of the many achievements made by the FSB since the 2008 Global Financial Crisis including putting in place the FSB Key Attributes and the Total Loss-Absorbing Capacity (TLAC) standard. Ongoing efforts are in part focussed on improving bail-in execution processes and making further progress on implementing the TLAC standard. She stressed that recovery and resolution planning remains important, particularly in the context of new and emerging challenges for policy makers and regulators. Such challenges include the emergence of Fintech, the expansion of digitisation in financial services, increased outsourcing to tech companies, and the rise of crypto assets. Finally, financial risks emerging from climate change were highlighted as potentially challenging operational resilience moving forward.

Remarks from Peter Routledge focussed on rising volatility and uncertainty currently at play in the global financial system. He drew attention to three major sources: potential destabilisation of corporations via climate change, business disruption driven by financial services digitisation (including increased digital currency uptake and the rising incidence of cyberattacks), and the current prolonged period of low interest rates. He challenged regulators to adapt and embrace uncertainty, providing relevant examples of recent initiatives at CDIC. These include recruitment of an increasingly diverse workforce, centralisation of enterprise risk management in the CDIC business model, significant investment in technology, and establishment of working groups to better gauge the impact of Fintech implications on the Canadian economy.

Marc Dobler from the IMF framed his presentation by noting that banks came into the COVID-19 pandemic with higher levels of capital and liquidity, and appear resilient thus far. However, the distribution of capital is uneven among jurisdictions, leading to a potentially asynchronous and uneven recovery. He also noted that sovereign exposures have increased significantly during the pandemic, as has the general level of liquidity stress among smaller firms. Corporates emerging from the pandemic appear highly leveraged and likely dependent on continued public support. Such support has been a balancing act between reaping benefits today, while weighing against future costs and risks. The IMF has recommended that jurisdictions make use of capital and liquidity buffers, ease macroprudential tools, suspend capital distributions, and revise the automatic reclassification of restructured loans.

Concluding Remarks

Presenter: Bert Van Roosebeke, Senior Policy and Research Adviser, IADI

In his concluding remarks, Bert Van Roosebeke highlighted importance of the IADI Research Conference, which brings together academics and practitioners to discuss ongoing research work in the area of financial stability, bank resolution and deposit insurance. Reflecting on the conference, the paper submissions covered themes such as costs of resolution, coverage levels, the COVID-19 pandemic and the upcoming overhaul of the European regulatory framework on deposit insurance and resolution. Other papers and the Regulators’ Roundtable focused on issues such as moral hazard and the high degree of uncertainty we are faced with, as policy measure accommodating the pandemic may be unwound in the near future. Bert informed the audience about the recent and upcoming research initiatives taken by the IAD regarding climate, digitisation and least-cost in resolution. Closing his remarks, he thanked the IADI Secretariat, speakers and discussants at the conference and others involved in the preparations for the research conference.