Australian National University

2017 Banking and Financial Stability Meeting

Monday 31 July

11:30pm-12:30pm Registration and lunch

Session 1 **Chair:** Takeshi Yamada, ANU

12:30pm-1:15pm
Title: Bank capital and bank stock performance
Presenter: Christa Bouwman, Texas A&M
Discussant: Martien Lubberink, Victoria University of Wellington

1:15pm-2:00pm **4-Slide Presentations**

Title: Countercylcical CoCos
Presenter: Ed Lin, Deakin University

Title: Do the Basel III capital reforms reduce the implicit subsidy of systematically important banks? Australian evidence
Presenter: James Cummings, Macquarie University

Title: Implicit interest and financing
Presenter: Meijun Qian, ANU

2:00pm-2:15pm Coffee break

Session 2 **Chair:** Nhan Le, ANU

2:15pm-3:00pm
Title: Disclosure, runs and bank capital raising
Presenter: Jean Helwege, UC Riverside
Discussant: Kelly Liu, ANU

3:00pm-3:45pm
Title: (Why) do central banks care about their profits?
Presenter: Vasso Ioannidou, University of Lancaster
Discussant: Kun Li, ANU

3:45pm-4:15pm Afternoon tea break

Session 3	**Chair:** Ding Ding
4:15pm-5:30pm	**Key Note Address:** Andrew Winton, U. Minnesota **Title:** Bank capital in theory and practice.
6:30pm	Dinner @ Monster Kitchen, Hotel Hotel

Tuesday 1 August

8:30am-9:00am	Coffee
Session 4	**Chair:** Phong Ngo, ANU
9:00am-9:45am	**Title:** Liquidity provision and the transmission of systemic risk **Presenter:** Zhongyan Zhu, Monash University **Discussant:** Jean Helwege, UC Riverside
9:45am-10:30am	**4-Slide Presentations** **Title:** Signed spillover effects building on historical decompositions **Presenter:** Mardi Dungey, U. Tasmania **Title:** The impact of loan loss provisioning on bank capital requirements **Presenter:** Harry Scheule, UTS **Title:** Not all shareholders (care to) improve bank transparency **Presenter:** Shams Pathan, U. Queensland
10:30am-11:00am	Morning tea break
Session 5	**Chair:** Qiao Qiao Zhu, ANU
11:00am-11:45pm	**Title:** Information cascades in investment efficiency in peer-to-peer markets **Presenter:** Chang Mo Kang, UNSW **Discussant:** Kentaro Asai, ANU
11:45am-12:30pm	**Title:** MBS Ratings and the Mortgage Credit Boom **Presenter:** James Vickery, NY Federal Reserve **Discussant:** Nadia Massoud, Melbourne Business School
12:30pm-1:30pm	Lunch and farewell

Abstracts

Bank capital and bank stock performance

Christa Bouwman, Hwagyun (Hagen) Kim and Sang-Ook (Simon) Shin

Conventional asset pricing theories assert that once the effect of bank capital on systematic (priced) risk is accounted for, capital should not affect bank stock returns. Our results, however, suggest otherwise. Specifically, our in-sample tests and out-of-sample trading strategies show that high-capital banks have higher average risk-adjusted stock returns than low-capital banks in bad times; there is no difference in other times. The results are robust to alternative specifications (e.g., different bad times and capital definitions and the use of alternative asset pricing models) and to controlling for non-synchronous trading, performance-type delistings, short-sale constraints, and trading costs.

Countercyclical CoCos

Po-Hsiang Huang, Shih-Cheng Lee and Chien-Ting (Ed) Lin

We present a new variant of the contingent convertible capital instrument (CoCos), countercyclical CoCos (CC-CoCos), to enhance financial stability and resilience. Using the countercyclical capital buffer framework of Basel III, we show that banks' capital can be increased by converting CCCoCos into common equity and writing down their principal during periods of credit expansion prior to a financial crisis. As a result, the potential transfer of risk from banks to taxpayers and government bailouts is reduced. Using credit-to-GDP ratio, recommended as the primary indicator by the Basel Committee for Banking Supervision, for triggering the conversion of CC-CoCos, it avoids the death spiral risk present in conventional CoCos. In addition, it mitigates the problems of opacity, manipulation, and multiple pricing related to accounting or market value-based triggers. Finally, the value of conversion terms and write-down of CC-CoCos provide a clear cost for investors and therefore an understanding of the risk and return tradeoff.

Do the Basel III capital reforms reduce the implicit subsidy of systematically important banks? Australian evidence

James Cummings and Yilan Guo

This study examines whether systemically important banks realise an implicit subsidy when raising wholesale debt funding and evaluates the effectiveness of the Basel III capital reforms in reducing the subsidy. Our estimations suggest that, before the reforms, systemically important banks realise a subsidy of around 26-32 basis points when they raise senior unsecured borrowings and that, after the reforms are implemented, the subsidy is reduced by approximately one-half. We find evidence that the default protection provided by a stronger capital base substitutes for the protection provided by implicit government guarantees in lifting investor confidence in a systemically important bank.

Implicit interest and financing
Franklin Allen, Meijun Qian and Jing Xie

Social or business connections create implicit interests between borrowers and lenders. We model how implicit interest influences credit allocation, cost, and renegotiation between the borrower and the lender in case of delinquency. The optimal solution illustrates that financing with implicit interest achieve three clear advantages compared to financing without implicit interest: lower financing cost, higher managerial efforts, and better economic outcomes for both the borrower and the lender. The models predictions are consistent with anecdotes and empirical evidence that financing through social and business network is prevalent and often associated with good economic results. The model also demonstrates that, if the social network mechanism triggers potential personal and physical collateral damage in case of delinquency, such financing would instead underperform
financing through formal institutions.

Disclosure, runs and bank capital raising
Huong Dieu Dang and Jean Helwege

In a financial crisis, banks often must raise equity financing at a time when their prospects are weak and investors heavily discount the value of their risky assets. By increasing disclosure at such times, banks may benefit from a more precise estimation of firm risk and thus a lower cost of capital. But such disclosure may also reveal that bank capital is dangerously low, which could eliminate opportunities to issue equity or trigger a bank run by uninsured depositors. We investigate the costs and benefits of greater disclosure with a sample of large commercial banks during the subprime crisis. Our findings suggest that disclosure has a slightly positive impact on the likelihood of raising equity, but greater disclosure also leads to withdrawals of uninsured deposits. The overall impact on bank health is somewhat negative.

(Why) do central banks care about their profits?
Igor Goncharov, Vasso Ioannidou, and Martin Schmalz

We document that central banks are significantly more likely to report slightly positive profits than slightly negative profits. The discontinuity in the profit distribution is (i) more pronounced amid greater political or public pressure, the public's receptiveness to more extreme political views, and agency frictions arising from governor career concerns, but absent when no such factors are present, and (ii) correlated with more lenient monetary policy inputs and greater inflation. These findings indicate that profitability concerns, while absent from standard theoretical models of central banking, are both present and effective in practice, and inform a theoretical debate about monetary stability and the effectiveness and riskiness of non-traditional central banking.

Bank capital in theory and Practice
Andrew Winton

Bank equity ("capital") levels and requirements have been a bone of contention for a long time. However, academic research on these issues was very narrowly focused until the 1990s, when we began to see theories of the functions and costs of bank capital that were grounded in underlying models of what banks do. A few years later, empirical researchers began to take these theories to the data. Finally, from the time of the financial crisis of 2007-2009, a number of theorists have created general equilibrium models based on these theories with the goal of calibrating optimal capital requirements. In this talk, I will review the highlights of this stream of research and assess what remains to be done.

Liquidity Provision and the Transmission of Systemic Risk
Christian Lundblad and Zhongyan Zhu

We build a new dataset, covering borrowing activities through bank loans, revolvers, corporate bonds and commercial paper, on the network of debt financing. A liquidity provision amount is calculated for each financial institution, yielding the identification of the central financial institutions that play a dominant role in aggregate liquidity provision. While we confirm that liquidity shortages were widespread during the crisis and common measures of systemic risk elevated for most financial institutions, using this comprehensive dataset, we are able to explore the potential channels through which a liquidity shock in the debt market is transmitted to the equity market for both financial and non-financial firms sector and to the real economy. We find that crisis risk exposures vary across both financial institutions and non-financial firms for reasons beyond their own direct interbank connections, beyond the implications of the traditional lending channel narrative that focuses on bank dependence via formal, contractual links to impaired institutions. Further, crisis risk exposures are not significantly lower for those firms that exhibit multiple banking connections or have access to alternative public debt markets. Rather, we find that measured crisis risk exposures are elevated when firms are instead connected to the largest, central liquidity provision institutions that play the dominant role in aggregate liquidity provision. The often hypothesized means of diversifying funding risk appear to be limited during this period.

Signed spillover effects building on historical decompositions
Mardi Dungey, John Harvey and Pierre Siklos

The spillover effects of interconnectedness between financial assets is decomposed into both sources of shocks and whether they amplify or dampen volatility conditions in the target market. We use historical decompositions to rearrange information from a VAR which includes sources, direction and signs of effects building on the unsigned forecast error variance decomposition approach of Diebold and Yılmaz (2009). A spillover index based on historical decompositions has simple asymptotic properties, permitting the derivation of analytical standard errors of the index and its components. We apply the methodology to a panel of CDS spreads of sovereigns and financial institutions for the period 2003-2013 and are able to observe both the direction of spillovers and whether they amplify or dampen volatility in the target market.

The impact of loan loss provisioning on bank capital requirements
Steffan Kruger, Daniel Rosch and Harry Scheule

This paper shows that the revised loan loss provisioning based on the International Financial Reporting Standards (IFRS) and the Generally Accepted Accounting Principles (GAAP) imply a reduction of Tier 1 capital which levies an additional burden on banks. The paper finds in a counterfactual analysis that these changes are more severe (i) during economic downturns, (ii) for credit portfolios of low quality, (iii) for banks that do not tighten capital standards during downturns, and (iv) under a more lenient definition of significant increase of credit risk (SICR) under IFRS. Hence, the provisioning rules further increase the procyclicality of bank capital requirements. Adjustments of the SICR threshold or capital buffers are suggested as ways to mitigate negative effects on the banking industry.

Not all shareholders (care to) improve bank transparency
Shams Pathan and Mamiza Haq

We provide a comprehensive assessment on the effect of short-term (ST) and long-term (LT) shareholders on three considerations of bank transparency – disclosure quality, private information gathering, and auditor fees. We find that in contrast with ST shareholders, LT shareholders improve bank transparency as they associate with increased disclosure quality, reduced private information gathering, and paying less abnormal fees to auditors. We also notice that in contrast with ST shareholders, LT shareholders relate to greater stock liquidity and less use of private information intermediaries such as analyst following. These results are robust to approaches to demonstrate causality, for example, indexing, and alternative proxies. Overall, our results suggest that heterogeneity in investor horizon is critical to increase bank transparency, potentially enhancing the ability of markets to monitor banks.

Information Cascades and Investment Efficiency in Peer-to-Peer Markets
Oleg, Chuprinin, Maggie Hu and Chang-Mo Kang

Using bid-level data from a large U.S. p2p lending platform, we show that the p2p market does not aggregate investors' information efficiently. This inefficiency distorts the relation between project quality and the amount of capital the project attracts. The information cascade mechanism is responsible for this effect. When early lenders act on noisy information, this noise is amplified by followers instead of being cancelled out. This result holds even when herding is rational, but limited rationality, such as naïve interpretation of equilibrium variables, further distorts capital allocation. We find evidence of such limited rationality and show that propensity to herd is a persistent lender characteristic. Overall, we establish that the transparency of prior capital commitment inherent in p2p markets can result in reduced investment efficiency.

MBS Ratings and the Mortgage Credit Boom
Adam Ashcraft, Paul Goldsmith-Pinkham and James Vickery

We study credit ratings on subprime and Alt-A mortgage-backed securities (MBS) deals issued between 2001 and 2007, the period leading up to the subprime crisis. We find evidence of significant time-variation in risk adjusted credit ratings, including a progressive decline in standards around the MBS market peak between the start of 2005 and mid-2007. Conditional on initial ratings, we observe underperformance (high mortgage defaults and losses, and large rating downgrades) amongst deals with observably higher risk mortgages based on a simple model estimated using ex-ante data, and deals with a high fraction of opaque low-documentation loans. These findings hold over the entire sample period, not just for deal cohorts most affected by the crisis