



## 2016–2017 Real Estate Finance & Investment Symposium

Joseph T.L. Ooi<sup>1</sup>  · Thies Lindenthal<sup>2</sup> · David C. Ling<sup>3</sup>

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This issue includes six papers presented at the 2016 and 2017 Real Estate Finance and Investment Symposium held in Cambridge, UK (2016) and in Singapore (2017). The joint organisers of the symposium are the University of Cambridge (Department of Land Economy), the University of Florida (Bergstrom Real Estate Center) and the National University of Singapore (Institute of Real Estate and Urban Studies).

This Introduction briefly describes the articles included in the special issue.

In “Corporate Diversification and the Cost of Debt: Evidence from REIT Bank Loans and Mortgages,” Irem Demirci, Piet Eichholtz, and Erkan Yönder use data on the bank loans and mortgages of Real Estate Investment Trusts (REITs) to link loan and mortgage spreads to diversification employing an extensive set of control variables. They investigate diversification in two dimensions: property type and the location of individual properties owned by 147 U.S. REITs between 1995 and 2014. Investigating the relationship between bank loan spreads and firm diversification using the Dealscan database, they find that a one standard deviation decrease in a firm’s property type Herfindahl Index lowers bank loan spreads by 6.86 basis points. Their findings on geographical diversification reveal that a one standard deviation decrease in a firm’s geographical Herfindahl index increases loan spreads by 7.36 basis points. Overall, the authors find that loan spreads diminish as REITs diversify by asset type and focus geographically. The authors also evaluate the impact of diversification on commercial mortgages using data from SNL. Consistent with their commercial loan results, they find that firms with greater collateral diversification by property type obtain lower

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✉ Joseph T.L. Ooi  
rstooitl@nus.edu.sg

Thies Lindenthal  
htl24@cam.ac.uk

David C. Ling  
david.ling@warrington.ufl.edu

<sup>1</sup> Department of Real Estate, National University of Singapore, Singapore, Singapore

<sup>2</sup> Department of Land Economy, University of Cambridge, Cambridge, UK

<sup>3</sup> Bergstrom Real Estate Center, University of Florida, Gainesville, FL, USA

mortgage spreads. However, they do not find a statistically significant effect of geographical diversification in mortgage pricing.

The second paper by Martin Hoesli, Stanimira Milcheva, and Alex Moss asks “Is Financial Regulation Good or Bad for Real Estate Companies?” They investigate how three regulatory reforms undertaken in the aftermath of the global financial crisis have affected returns of listed real estate companies. Basel III regulates and potentially limits the availability of bank debt to real estate companies. The European Market Infrastructure Regulation (EMIR) could also influence the cost of debt capital while the Alternative Investment Fund Management Directive (AIFMD) might drive up compliance costs and affect the size of the potential investor base. The paper paints a detail-rich picture, with different responses to the three regulations: Basel III and EMIR do not aim at real estate companies directly and have a relatively mild effect on sector’s performance while AIFMD benefits mainly larger companies as they can engage in regulatory arbitrage opportunities. “Overall, [the authors] see that different regulation can have opposite effects on companies and it is important to look at them separately”.

Market efficiency implies that any new information regarding an asset is reflected fully and instantaneously into its current market value. However, attention constraints may cause related information to diffuse slowly across investors, thereby generating predictable returns. The third paper “Investors’ Limited Attention: Evidence from REITs” explores the valuation consequences of investors limited attention in commercial real estate markets, focusing specifically on the tenant-landlord relationship in the context of REITs. Honghui Chen, David Harrison and Mahsa Khoshnoud contend that if investors fully consider key economic linkages, the market prices of REITs will respond to any performance shocks to their core tenants. Chen, Harrison and Khoshnoud however find the stock performance of commercial property tenants strongly predicts the future returns of their landlord REITs. Specifically, a trading strategy of buying stocks of REITs whose tenants had the most positive returns in the previous month, and selling short REITs whose tenants had the most negative returns, yields abnormal returns of 5–6% per year. Their results, which are robust to a series of further tests, provide evidence that is consistent with the presence of limited investor attention in the REIT markets.

Tobler’s first law of geography postulates that “Everything is related to everything else, but close things are more related than things that are far apart” (Tobler 1979). The fourth paper by Bing Zhu and Stanimira Milcheva investigate “The Pricing of Spatial Linkages in Companies’ Underlying Assets” is exactly in this spirit. They explain returns of real estate companies by modelling the spatial proximity of the companies’ assets. They find that Tobler’s law holds: Spatial linkages across real estate assets explain some of the variation in abnormal returns of the holding companies, controlling for exposure to systematic factors and firm characteristics. The findings are not only statistically but also economically significant: The authors show that a trading strategy that exploits the information contained in the spatial linkages of the underlying assets is viable.

An important consequence of the financial crisis that began in 2007 was a decline in the perceived reliability of CRA ratings of mortgage-backed securities (MBS) and collateralized debt obligations (CDOs). In “Reputation, Information, and Herding in Credit Ratings: Evidence from CMBS,” Xudong An, Larry Cordell, and Joe Nichols present evidence of herding behavior among the CRAs. This anchoring on consensus

ratings tends to produce herding, and the authors show through the model that more herding behavior occurs when the value placed on public consensus is higher. An, Cordell, and Nichols use ratings data that comes directly from Moody's, S&P and Fitch, and includes nearly 600,000 quarterly observations from about 18,000 CMBS bonds. The rating actions they study are from 1998 to 2016, which encompasses a full boom, bust and recovery cycle. The authors find, for example, that an upgrade (downgrade) of a CMBS bond in the previous quarter by a CRA peer is a significant determinant of the current quarter CRA rating upgrade (downgrade) of a competitor, controlling for other factors. They also find that a split rating in any quarter is associated with higher likelihood of a rating change and that a CRA is more likely to upgrade (downgrade) a CMBS bond when its last rating of the bond was lower (higher) than its peers, suggesting that CRAs try to align their ratings with others.

The sharp surge in house prices in the U.S. housing market and the subsequent crash in 2007 have been well documented in the literature. Property values in China has experienced a similar price surge since 2009. This raises concerns about whether China is destined to have a crash as well. In their paper "A Tale of Two Countries: Comparing the U.S. and Chinese Housing Markets", Rose Lai and Robert Van Order analyse house prices in China from 2009 to 2016 and the U.S. from 1999 to 2016 to compare whether the price surge observed recently in China show similar trend as the boom in the U.S. housing market before the crash in 2007. Lai and Van Order estimate similar models for the two countries, across cities and time, to compare their long- and short-run dynamics. Although both the U.S. and China market experienced similar share increases in house prices, the paper finds they have different price-rent dynamics. In the U.S., prices were growing much faster than is justified by past subsequent rents. Chinese house prices on the other hand were driven by rent increases. The adjustment process in the U.S. markets showed strong momentum, while house prices in the Chinese markets have been generally mean reverting. The paper concludes that recent price rise in China has had more to do with scarcity than with irrational exuberance.

## Reference

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