Research Assessment Exercise 2020 Impact Case Study

University: The Hong Kong Polytechnic University Unit of Assessment (UoA): Economics and Finance (UoA21)

Title of case study: Financial Markets and Corporate Policies

(1) Summary of the impact

A key aspect of our research in Finance is to understand how financial markets and corporate policies are interrelated. Financial markets generate pricing information on firms' cash flows through buying and selling firms' shares. This pricing information is essential for firms to make informed investment, financing, and payout decisions. The pricing information is also useful for investors, regulators, and policy makers. In this case study, we highlight and present some evidence for the impact that the team's research has had on professional practitioners in corporate finance beyond academia. This impact has been achieved through key professional publications, and more directly, through the use of our research in securities fraud litigations, which help to protect the integrity of capital markets and especially small individual investors.

(2) Underpinning research

We include three research papers of Dr Gang Hu, [R1, R2, and R3]. In [R1], Dr Hu's team has been motivated by the fact that, in 2012, one in four federal securities class action lawsuits filed in the U.S. involved Chinese Reverse Merger companies (CRMs). However, these lawsuits sometimes have encountered difficulties in court due to insufficient direct evidence of accounting fraud. His team proposes a new method for fraud detection: using Chinese companies that are dual listed in the U.S. and China to establish a benchmark for the normal GAAP difference between the two countries. Using this methodology, they find that only a small fraction of the discrepancies between delisted CRMs' financial statements filed in the U.S. and those filed in China can be attributed to GAAP difference. This suggests that the remaining discrepancies, which are large and unexplained, are indeed due to accounting fraud. Therefore, it is reasonable to conclude that delisted Chinese Reverse Merger companies enticed U.S. investors with favorable and fraudulent accounting and financial data.

Dr Hu's other two papers focus on institutional investors' trading behavior. In [R2], his team compares brokerage commissions paid by institutional investors before and after a stock split and assesses the private information held by them. They also relate the informativeness of institutional investors' trading to brokerage commissions paid. Their study shows that institutions make abnormal profits net of brokerage commissions by trading in splitting stocks, and that the information asymmetry faced by firms goes down after stock splits. Overall, their empirical results support the information production theory of stock splits.

In [R3], Dr Hu and his co-authors focus on year-end trading by institutional investors to address the allegation that institutional investors try to mislead investors by placing trades that inflate performance (portfolio pumping) or distort reported holdings (window dressing). Consistent with pumping, institutions tend to buy stocks in which they already have large positions. They find no evidence of window dressing, as institutions are not more likely to buy stocks with high past returns or sell stocks with low past returns at year- or quarter-end.

Dr Nan Yang's work [R4], "Managerial Myopia and the Mortgage Meltdown," analyses the idea proposed by many prominent policy makers that managerial short-termism lies at the root of the subprime crisis of 2007–2009. Prior scholarly research largely rejects this assertion. Using a more comprehensive measure of Chief Executive Officer (CEO) incentives for short-termism, his team uncovers evidence that short-termism indeed plays a role. Firms whose CEOs were contractually allowed to sell their stocks at an earlier date had more subprime exposure, leading to a higher probability of financial distress and lower risk-adjusted stock returns during the crisis, as well as higher fines and settlements for subprime-related fraud.

In [R5], Dr Qianqian Du and her co-authors examine enterprises funded by government-sponsored venture capitalists (GVCs). They find that enterprises funded by both GVCs and private venture capitalists (PVCs) obtain more investment than enterprises funded purely by PVCs and much more than those funded purely by GVCs. In addition, markets with more GVC funding have more VC funding per enterprise and more VC-funded enterprises, suggesting that GVC finance is largely responsible for the augmentation rather than the displacement of PVC finance.

In [R6], Dr JC Lin and his co-author explain that firms with high R&D intensity offer their investors higher stock returns. They show that (1) high R&D capacity relative to firm valuation makes R&D-intensive firms become attractive takeover targets, and that (2) the higher takeover probability leads their investors to face higher takeover risk and thus require higher returns.

(3) References to the research

R1. Chen, Yimiao, **Gang Hu**, Ling Lin and Min Xiao, 2015, "GAAP Difference or Accounting Fraud? Evidence from Chinese Reverse Mergers Delisted from U.S. Markets." *Journal of Forensic and Investigative Accounting* 7(1): 122-145. http://hdl.handle.net/10397/55858

R2: Thomas J. Chemmanur, **Gang Hu**, and Jiekun Huang, 2015, "Institutional Investors and the Information Production Theory of Stock Splits," *Journal of Financial and Quantitative Analysis* 50, 413-445. https://doi.org/10.1017/S0022109015000162

R3: **Gang Hu**, R. David McLean, Jeffery Pontiff, and Qinghai Wang, 2014, "The Year-End Trading Activities of Institutional Investors: Evidence from Daily Trades," *Review of Financial Studies* 27, 2014, 1593-1614. https://doi.org/10.1093/rfs/hht057

R4: Adam Kolasinski and **Nan Yang**, 2018, "Managerial Myopia and the Mortgage Meltdown", *Journal of Financial Economics* 128, 466-485. https://doi.org/10.1016/j.jfineco.2017.03.010

R5: James A. Brander, **Qianqian Du**, Thomas Hellmann, 2015, "The Effects of Government-Sponsored Venture Capital: International Evidence," *Review of Finance* 19 (2), 571–618. https://doi.org/10.1093/rof/rfu009

R6: **Ji-Chai Lin** and Yanzhi Wang. 2016. The R&D Premium and Takeover Risk. *The Accounting Review* 91(3) 955-971. https://doi.org/10.2308/accr-51270

(4) Details of the impact

Dr Hu's work [R4] proposes a new method to differentiate GAAP difference from accounting fraud in Chinese Reverse Merger companies delisted from U.S. stock markets. This study was directly motivated by Dr Hu's expert testimony experiences in securities fraud litigation cases. For example, in re Longtop Financial Technologies Ltd. Securities Litigation, in United States District Court, Southern District of New York, U.S. District Judge Shira A. Scheindlin accepted Dr Hu's damages estimation, and awarded US\$882 million plus interests to defrauded investors, resulting in one of the largest judgements among similar cases [S1]. Dr Hu obtained proprietary data from the Rosen Law Firm in New York City for this study. This work was later cited in other similar litigations, for example, in re China XD Plastics Company Limited Securities Litigation, in United States District Court, Southern District of New York, 2016 [S2]. It was also cited in "Global Capital Markets: A Survey of Legal and Regulatory Trends", edited by P.M. Vasudev, Susan Watson [S3].

Dr Hu's work [R2] on stock splits and Dr Yang's work [R4] on managerial myopia and the mortgage meltdown were respectively selected [S4] and featured [S5] in the Harvard Law School Forum on Corporate Governance and Financial Regulation. The Harvard Law School Forum on Corporate Governance and Financial Regulation is co-sponsored by the Harvard Law School Program on Corporate Governance, the Program on Institutional Investors, and the Program on Law and Finance. The Forum is the top online resource for discourse on corporate governance, and its posts have been widely cited in over 350 law review articles and regulatory materials. Commenting on the influence of the Forum for an article, Delaware Chief Justice Leo Strine observed that "[i]t is amazing to see the [Forum] become required reading among the intelligentsia ... of corporate governance."

Dr Hu's paper [R3] on the year-end trading activities of institutional investors was selected and featured in the *CFA Digest* published by the CFA Institute [S6], in which it answers the question "How is This Research Useful to Practitioners?". The CFA Institute is the world's largest association of investment professionals. It has over 164,000 members in more than 140 countries, and has 151 local member societies worldwide. Its mission is to lead the investment profession globally by promoting the highest standards of ethics, education, and professional excellence for the ultimate benefit of society.

Dr Du's work [R5] on Government-sponsored VCs was cited in the European Investment Fund's (EIF) working paper series entitled "European Small Business Finance Outlook", published in December 2018 [S7]. This working paper series provides an overview of the main markets relevant to EIF. Her work [R5] was also included in *Handbook of the Economics of Finance* SET: Volumes 2A & 2B: Corporate Finance and Asset Pricing, edited by George M. Constantinides, Milton Harris, and Rene M. Stulz, published in 2013 [S8].

Dr Lin's work [R6] on R&D premium and takeover risk was presented as a keynote speech at the Don X CEO Luncheon organized by PolyU's Faculty of Business in April 2015. Most participants in this event were practitioners and corporate executives. They asked questions on how this research is useful for their R&D and business activities on M&As. The event, including excerpts of the keynote speech, is available on YouTube [S9].

(5) Sources to corroborate the impact

S1: Reported by Law360, "Longtop Investors Awarded \$882M In Auditing Fraud Action," November 14, 2013. https://www.law360.com/articles/488867/longtop-investors-awarded-882m-in-auditing-fraud-action

- S2: Cited in re China XD Plastics Company Limited Securities Litigation, in United States District Court, Southern District of New York, 2016. http://securities.stanford.edu/filings-documents/1052/XPCL00_01/2016126_r01k_14CV05308.pdf
- S3: Cited in "Global Capital Markets: A Survey of Legal and Regulatory Trends", edited by P.M. Vasudev, Susan Watson. https://www.worldcat.org/title/global-capital-markets-a-survey-of-legal-and-regulatory-trends/oclc/1002130352
- S4: Harvard Law School Forum on Corporate Governance and Financial Regulation. https://corpgov.law.harvard.edu/2013/07/17/institutional-investors-and-the-information-production-theory-of-stock-splits/
- S5: Harvard Law School Forum on Corporate Governance and Financial Regulation. https://corpgov.law.harvard.edu/2017/08/02/managerial-myopia-and-the-mortgage-meltdown/
- S6: *CFA Digest*. <a href="https://www.cfainstitute.org/research/cfa-digest/2014/12/the-year-end-trading-activities-of-institutional-investors-evidence-from-daily-trades-digest-search/cfa-dige
- S7: European Investment Fund (EIF) working paper series entitled "European Small Business Finance Outlook", December 2018. https://www.econstor.eu/bitstream/10419/191254/1/1045736562.pdf
- S8: *Handbook of the Economics of Finance* SET: Volumes 2A & 2B: Corporate Finance and Asset Pricing, edited by George M. Constantinides, Milton Harris, and Rene M. Stulz, 2013. https://books.google.com.hk/books?isbn=0444594655
- S9: Keynote speech at the Don X CEO Luncheon organized by PolyU's Faculty of Business in April 2015. https://www.youtube.com/watch?v=SBCfNWgVeTY