REPORT ON THE
2022 PhD CONFERENCE
IN ECONOMICS AND BUSINESS

16th November – 18th November 2022

Perth, Western Australia

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The PhD Conference in Economics and Business is an annual event that brings together students and academics from most Australian universities, as well as some overseas institutions. It was first initiated in 1987 by the Business School of the University of Western Australia. The conference is currently co-organised by the Australian National University, Monash University, the University of Melbourne, the University of Queensland, the University of Western Australia and the University of New South Wales. The location of the conference alternates between these six universities.

The basic objective of the conference is to help with the training of promising doctoral students by giving them the opportunity to gain feedback on and exposure for their research. It also enables PhD students to meet with their peers and to make contact with senior academics and researchers with similar interests, as well as acting as an informal job market whereby students can demonstrate their abilities and attract attention to their prospects.

The format of the conference has remained true to the original concept whereby each student is assigned a discussant to comment on their research paper. The discussants include an impressive list of senior researchers with extensive experience in supervision. They are specially chosen to match the subject matter of the papers. An important feature of the conference is the outstanding quality of the feedback given to the students by the discussants. Additionally, the conference is a productive combination of research in both economics and finance.[1]

The 35th PhD Conference was held at the UWA Business School in November 2022 and involved 32 students from 12 universities and 32 discussants from a number of universities and government institutions throughout Australia. A number of extremely interesting papers were presented and it was clear from the quality of the students and discussants that the future of research in economics and finance is indeed exciting. The conference program and abstracts are given below. The photograph on the previous page is of the participants at the opening session.

Four prizes were determined by all participants voting using www.surveymonkey.com, and the winners were:

Best Student Presentation:
>Bhagya Gunawardena (The University of Queensland)
>Adam A. Dzulkipli (Monash University)
>Michaela Haderer (The University of Sydney)

Best Discussant
>Terry Walter (University of Wollongong)
>Faisal Sohail (The University of Melbourne)

The Appendix gives the prize winners from earlier years.

Mei Han was the Conference Coordinator and she did an outstanding job in dealing with all aspects of the arrangements and ensuring that participants were well catered for. On the conference days, Mei Han was assisted by Indeewari Colombage, Harrison Guo, Apphia Jin, Erica Lukas, Yulin Ma, Kesavarajah Kathan Mayandy, Mubin Mubin, Fiona Gisela Roeslim, Kiky Srirejeki, Sistine Sun, Farhad Farhad and Tiange Zheng. Ken Clements served as an advisor. We would like to extend our sincere thanks to all members of the conference team for their hard work.

The University of Melbourne will host the 2023 Conference.

Michael Jetter
Conference Convenor

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[1]For details of the history of the conference, see K. W. Clements and R. G. Gregory "Future Economists and the Role of the PhD Conference." UWA Economics Discussion Paper 20.23.

THE PROGRAM

OPENING ADDRESS

Ken Clements

Emeritus Professor, Business School

University of Western Australia

SESSION 1: Empirical Microeconomics: Role Models and Labour Force Participation

Chair: Luciana Fiorini (UWA)

Bhagya Gunawardena (UQ)

Same-Gender Peer Role Models in Education

Discussant: Romain Gauriot (Deakin)

Andrew Carter (ANU)

Does the early release of retirement savings prolong labour market participation for workers approaching retirement? Evidence from Australia's `Transition to Retirement Income Streams' program

Discussant: Garry Barrett (USYD)

SESSION 2: Repugnance & Illicit Drug Use

Chair: Ken Clements (UWA)

Ben Grodeck (Monash)

No (Intention to) Profit; No Repugnance? Evidence from Online Experiments

Discussant: Evan Calford (ANU)

Tao Sun (UoM)

High(ly) Substitutable? (Il)legal Marijuana and Opioid Use

Discussant: Xueyan Zhao (Monash)

SESSION 3: Empirical Microeconomics: Health

Chair: Alison Preston (UWA)

Adam Dzulkipli (Monash)

Compulsory Schooling and Adverse Outcomes of Maltreated Children

Discussant: Kevin Staub (UoM)

Huan Wang (UoM)

The Economic and Human Capital Effects of Antiretroviral Therapy at Scale in Malawi

Discussant: Mohamad Khaled (UQ)

SESSION 4: Monetary Policy

Chair: Jakob Madsen (UWA)

Shan Ying (MQ)

The Role Of Monetary Policy Uncertainty In Transmitting Monetary Policy Shocks

Discussant: Christopher Gibbs (USYD)

Michaela Haderer (USYD)

An Estimated DSGE Model of the Euro Area with Expectations about the Timing and Nature of Liftoff

Discussant: Matthew Read (RBA)

SESSION 5: Empirical Microeconomics: Culture and Well-Being

Chair: Elisa Birch (UWA)

Ruoxi Wang (MQ)

The impact of consumption stimulus policy on cultural participation: Evidence from China

Discussant: Aaron Barkley (UoM)

Andilip Afroze (QUT)

How much is too much? Work-health balance in Indonesia

Discussant: Gigi Foster (UNSW)

SESSION 6: Mean-Risk Models & Credit Supply

Chair: Dirk Baur (UWA)

Nikolai Sheung-Chi Chow (ANU)

Modified Mean-Variance Analysis, Portfolio Optimization and Prospect Theory

Discussant: Tom Smith (MQ)

Juan Zurita (UTS)

Banks' Equity Distribution and Economic Growth

Discussant: Shawn Chen (UWA)

SESSION 7: Empirical Microeconomics: PTSD, Risk-Taking, and Labour Choices

Chair: Sam Tang (UWA)

Haiying Yin (Monash)

Time Does Not Heal All Wounds: PTSD Symptoms and Financial Risk-Taking

Discussant: Susan Thorp (USYD)

Huyen Hoang (UNSW)

Sectoral Labour Choice and Household Welfare in Emerging Economies: The Case of Vietnam

Discussant: Claudio Labanca (Monash)

SESSION 8: Industrial Organisation

Chair: Leandro Magnusson (UWA)

Xiaolong Zhang (UNSW)

Congestion and Prices

Discussant: Antonio Rosato (UQ)

Yuqing Liu (UQ)

A Minskyite Model Of Financial Crises

Discussant: Yijuan Chen (ANU)

SESSION 9: Empirical Microeconomics: Children, Labour Supply, and Renewable Energy in Agriculture

Chair: Abu Siddique (UWA)

Dyah Pritadrajati (ANU)

The Effectiveness of Kindergarten in Promoting Female Labour Supply: Evidence from Regressio Discontinuity Design in Indonesia

Discussant: Liang Choon Wang (Monash)

Zeenatul Islam (Curtin)

Evaluating financial understanding in renewable agricultural technology adoption

Discussant: Anke Leroux (Monash)

SESSION 10: Finance: Investment Flexibility & Empire Building

Chair: Lee Smales (UWA)

Zhaofeng Xu (Monash)

Inflexibility and Corporate Bond Yield Spreads

Discussant: Terry Pan (MQ)

Yuyun Huang (UWA)

Does External Labor Market Activeness Affect the Agency Problem?

Discussant: Terry Walter (UoW)

SESSION 11: Health Economics: Body Mass Index & Online Healthcare

Chair: Shawn Chen (UWA)

Aarushi Dhingra (UQ)

Body Mass Index and Healthcare Expenditure: Where to Draw the Line?

Discussant: Simon Chang (UWA)

Yanan Wu (ANU)

Substitution and Complementarity: An Economic Analysis of Online and Offline Health Care

Discussant: Siqi Pan (UoM)

SESSION 12: Networks

Chair: Michael Palmer (UWA)

Yangqi Zhang (UNSW)

Estimation of Social Network Models using Approximate Bayesian Computation

Discussant: Tim Kam (ANU)

Chien-Hsiang Yeh (ANU)

Uniqueness of Equilibria in Interactive Networks

Discussant: Onur Ozgur (UoM)

SESSION 13: Empirical Finance: High Frequency Trading & CEO Incentives

<u>**Chair**</u>: **Frank Liu (UWA)**

Madeleine Barrow (Monash)

Mini-Flash Crashes and the Bulk-Volume Probability of Informed Trading

Discussant: Rachida Ouysse (UNSW)

Sheng Huang (UoM)

Blockholder and CEO Wealth-Performance Sensitivity

Discussant: Ray da Silva Rosa (UWA)

SESSION 14: Theory: Skill Composition & Robots

Chair: Jakob Madsen (UWA)

Rae Rho (UOA New Zealand)

Worker Skill Composition, Competition and Innovation: Theory and Evidence

Discussant: Elena Capatina (ANU)

Matthew Woolf (ANU)

The Robots Are Coming! Inter-Generational Mobility, the Robot Tax, and a Universal Basic Incoi

Discussant: Catherine de Fontenay (Productivity Commission)

SESSION 15: Empirical Finance & Microeconomics: Mergers & Acquisitions &Firm Performance during COVID-19

Chair: Michael Jetter (UWA)

Maryam Shariatmadari (UWA)

Do Target Firms Strategically Disseminate Information? Evidence from Mergers and Acquisitions the United States

Discussant: Hasin Yousaf (UNSW)

Sulistiyo K. Ardiyono (ANU)

COVID-19 Pandemic, Firms' Responses, and Unemployment in the ASEAN-5

Discussant: Leandro Magnusson (UWA)

SESSION 16: Networks & Variable Selection Methods

Chair: Simon Chang (UWA)

Damian Lenzo (UWA)

The Effect of Supply Base Diversification on the Propagation of Shocks

Discussant: Faisal Sohail (UoM)

Ryan Thompson (Monash)

Sparse Statistical Learning with Structure: Advances in Computation and Theory

Discussant: Rodney Strachan (UQ)

ABSTRACTS

SESSION 1: Empirical Microeconomics: Role Models and Labour Force Participation

Same-Gender Peer Role Models in Education

Bhagya Gunawardena
The University of Queensland

There is evidence that the gender of high-order school par4cipants (teachers, principals, etc) impacts students. It remains an open ques4on whether same-group peers' gender affects the classmates' educa4onal outcomes. We study effect of having a samegender top performer on peers' outcomes in a seBng with random classroom assignments and salient recogni4on of the top performer in each classroom. The top performer in each classroom serves as a teacher assistant and is thus recognized as a peer role model. We iden4fy the impact of being exposed to a peer role model of the same gender on academic performance, track choice, and university outcomes using novel rich data from high school students in Greece.
Further, we analyze the likelihood of fellow peer students mimicking the same-gender top performer's choices. We find that female students quasi-randomly assigned in classrooms with a same-gender top performer score higher in STEM and are more likely to study STEM in high school and college. The top performer's gender seems to be irrelevant for males.
Moreover, we find that students are more likely to conform with same-gender top performers (than opposite gender top performers) when these same-gender top performers choose unconven4onal (gender dominated) track specializa4ons. Our findings shed light on the idea that same-gender top performers in the classroom can act as role models and encourage students to choose gender dominated fields, and poten4ally reduce occupa4onal segrega4on in the long run.

Does the early release of retirement savings prolong labour market participation for workers approaching retirement? Evidence from Australia's `Transition to Retirement Income Streams' program

Andrew Carter
Australian National University

Australia's Transition to Retirement Income Streams (TRIS) program aims to prolong labour force participation for older workers (age 55 to65 years) by offering early access to a worker's compulsory retirementsavings (superannuation). Using a difference-in-difference design, our results suggest a small labour supply response which increases after the program's initial years. The size of the effects appear consistent with the program adoption profile which was low initially. For this reason, our estimates should be viewed as a lower bound for the true effects. We find individuals with higher incomes are more likely to adopt TRIS. At least half of program participants appear to be employing strategies to minimise tax, a behavioural response which seems at odds with the program's intent.

SESSION 2: Repugnance & Illicit Drug Use

No (Intention to) Profit; No Repugnance? Evidence from Online Experiments

Ben Grodeck
Monash University

We study whether and why people feel repugnance towards *harmless* transactions that profit off others' misfortune, without causing the misfortune. Examplesinclude second-hand markets for life insurance, short selling, and prediction markets for terrorist attacks. Repugnance in these contexts can be a constraint on

market efficiency. In a series of online experiments (N>2000), we find evidence of repugnance, measured using costly second-and third-party punishment, towards the party who profits from others' negative (or even positive) outcome that is merely determined by luck. Intentionsplay a role only for second-but not third-party punishment. Overall, repugnance is mainly outcome-based: people dislike profit- making from other's (mis)fortune.

High(ly) Substitutable? (Il)legal Marijuana and Opioid Use

Tao Sun
University of Melbourne

Identification and estimation of complementarities across substances is essential to understand and assess intended and unintended consequences of(proposed) changes in substance market regulations, including impacts on use, health, and tax revenues. This paper proposes a multi-product choice model for the joint use of illicit substances when an individual's choice set isrestricted by the illegality of a substance and access to an illicit substance might be correlated with use decisions. We apply our model to data from the National Survey on Drug Use and Health, which contains information on substance use for US individuals aged 12 or older. We find that access into recreational marijuana is not random, which is consistent with earlier work. Furthermore, our preliminary results suggest that recreational and medical marijuana are independent in demand for consumers. Importantly, we also find that researchers would incorrectly conclude the products are complements in use if selection into access is not controlled for. Our results, therefore, shed light on why the literature has found conflicting results regarding the substitutable nature of the products.

SESSION 3: Empirical Microeconomics: Health

Compulsory Schooling and Adverse Outcomes of Maltreated Children

Adam A. Dzulkipli
Monash University

Abused and neglected children have a high risk of adverse outcomes in adolescence and adulthood, including mental illness, substance abuse, injury, criminality,and teenage pregnancy. Interventions to ameliorate the negative effects of child maltreatment could produce substantial welfare gains. However, rigorous evidence on which interventions are effective at assisting child maltreatment victims remains limited.We use a compulsory education reform in South Australia, which raised the school- leaving age from 16 to 17, to test whether additional schooling improves the outcomes of maltreated children. Using regression-discontinuity techniques and linked administrative records, we demonstrate that the reform (i) reduced the probability that maltreated children visited the emergency department, particularly at age 16 and amongst males; and (ii) reduced the probability of maltreated girls becoming pregnant atage 16. These findings suggest that more compulsory schooling can improve health outcomes among maltreated children, and may reduce the negative economic and health consequences associated with youth pregnancies.

The Economic and Human Capital Effects of Antiretroviral Therapy at Scale in Malawi

Huan Wang
The University of Melbourne

Antiretroviral therapy (ART), a treatment of HIV, can dramatically improve people's health and increase life expectancy in HIV prevalent areas. Could this then have any spill-over effects on health investments in children and their health outcomes? This paper exploits an ART scale-up in rural Malawi.Using a staggered difference-in-difference model and two nationally representative survey data sets, we find positive impacts on both preventive and curative health investments. Given ART availability, children were morelikely to receive all vaccinations and be delivered in medical facilities.

Echoed with such increase in neonatal investments, we find a reduction in infant mortality. Households with ART access also increased their medicalexpenditure on children by almost a half. However, no effects are found onchildren's health.

SESSION 4: Monetary Policy

The Role of Monetary Policy Uncertainty In Transmitting Monetary Policy Shocks

Shan Ying
Macquarie University

This paper investigates the role of policy uncertainty associated with Federal Open Market Committee (FOMC) communications plays in transmitting policy shocks. Our measure of monetary policy uncertainty is based on short-term rate option prices but is orthogonal to the scale of policy shocks. We find evidence to suggest this measure is positively related to the uncertain sentiment in FOMC announcements, to the disagreement on future policy paths among FOMC members and has a lower reading when calendar-based forward guidance is communicated. We find policy uncertainty primarily moderates the impact of forward guidance shocks on long-term government bond yields. Our results suggest this moderation process is delivered through changes in the term premium component rather than the expected component of yields.

An Estimated DSGE Model of the Euro Area with Expectations about the Timing and Nature of Liftoff

Michaela Haderer
University of Sydney

I investigate the implications of the zero lower bound (ZLB) in a structural New- Keynesian model for the euro area. The medium-scale DSGE model accommodates forward guidance by treating the expected durations of the ZLB constraint as a free parameter in estimation. A constructed survey measure of professional forecasters' expectations for the future path of the policy rate delivers well-identified estimates of the expected durations at the ZLB. The nature of the expected durations shows that unconventional monetary policy in the form of forward guidance becomes increasingly important towards the end of the 2004-2019 sample period. Furthermore, when the central bank is expected to be passive in its response to inflation after liftoff, the expansionary effects of forward guidance are weaker with deflationary pressures on the economy.

SESSION 5: Empirical Microeconomics: Culture and Well-Being

The impact of consumption stimulus policy on cultural participation: Evidence from China

Ruoxi Wang
Macquarie University

In 2013, the Beijing city government introduced a policy to stimulate the local consumption of cultural goods and services such as movies, performing arts, reading, audio and video etc, which intends to develop sustainable growth of cultural consumption and enrich cultural experiences for Beijing citizens. This paper explores the effects of this policy on cultural activities attendance relying on the filtered and matched data from the Chinese General Social Survey from 2011 to 2017. Controlling for individual socio-demographic characteristics, the propensity score matching method is applied to the dataset. The estimates of the difference-in-difference model show that the policy has significantly increased the frequencies of performing arts and movie attendance in Beijing. In particular, individuals featured with non-university educational

backgrounds, relatively lower income or urban residential status tend to be positively impacted by the policy. Among various stimulus measures, the cultural easy card, cultural carnivals and vouchers have positive effects on the annual frequencies of performing arts attendance. Our findings are robust to different model specification tests.

How much is too much? Work-health balance in Indonesia

Andilip Afroze
Queensland University of Technology

This thesis examines the well-being of people in the context of developing economies based on three studies. The first study is on the impact of antipoverty programmes. It analyses heterogeneity in the effect of Bangladesh'ssocial safety net programmes among different income groups and the program's role in generating resilience to natural disasters. It applies multiple regression discontinuity design (MRDD), and Inverse probability weighted regression adjustment (IPWRA) in comparing the beneficiaries' labour market performance and welfare indicators with the non-beneficiaries. This study helpsdesign efficient social protection programs for people living in extreme poverty.

The second study explores the impact of the labour outcome on health by assessing the threshold point of working hours when health starts to deteriorate using the two-stage probability least square (2SPLS). It explores gender-specific workhour thresholds for physical and mental health, including longer-term health issues such as vision problems, hypertension, diabetes, asthma, arthritis, digestive disease, high cholesterol and the CED-D scale for depression symptoms in Indonesia. The study aims to promote decent work by reassessing an ideal working time, ensuring work-life balance and better healthfor all gender.

Finally, this thesis links child health status with labour market aspects. Hence, the third study seeks an empirical link between work effort and the nutritional health of children in Indonesia. By applying the instrumental variable approach, this study empirically explores the nuances in the relationship between quantityand quality of children when quality is defined as nutritional health and looks for gender disparities. The findings of this study have policy implications for employment generation schemes such as food-for-work.

Overall, this PhD research contributes to mitigating the knowledge gap in the milieu of the research questions thereof, which can be implemented by devisingnew policies to improve the lives of underprivileged communities.

SESSION 6: Mean-Risk Models & Credit Supply

Modified Mean-Variance Analysis, Portfolio Optimization and Prospect Theory

Nikolai Sheung-Chi Chow
Australian National University

We consider the use of mean-variance analysis in investment decisions. Mean-variance analysis provides a simple tool to rank investments by comparing the expected returns and return variances of those investments. The rule itself is simple and elegant, when we compare two risky investments, if one has a higher mean return and lower variance of return than the other, then the former must be preferred to the latter. However, the rule does not tell us what to do if we compare two investments in which one of them has both a higher mean and a higher variance, a common occurrence in the real world. Some empirical studies show that people prefer a higher variance in return is actually not unusual when people face losses. This kind of phenomenon is hard to explain within the standard expected utility framework, which assumes risk-averse everywhere on the outcome domain. This also implies that mean-variance analysis as a toll will have limitations when losses are involved since the expected utility framework lies at its foundation. In this paper, we make use of the S-shaped value function proposed in prospect theory which implies risk-seeking behaviour on the loss domain. We explore the connection between mean-variance analysis and the S-shaped value function by utilising the

concept of "prospect stochastic dominance". Our results show that incorporating partial moments in mean-variance analysis enable us to apply the suitably modified tool to choices over investments with normally distributed returns by investors who have S-shaped value functions and so exhibit a preferences for investments that involves losses that have both a higher variance as well as a higher mean.

Banks' Equity Distribution and Economic Growth

Juan Zurita
University of Technology Sydney

The impact of credit supply on economic growth is affected by banking characteristics. Heterogeneity in the lending channel has impact on how banks allocate their resources into their business lines. In this paper we provide empirical evidence of banking heterogeneity in the United States between 2009 and 2020. Using a myriad of publicly available data on bank's balance sheet, and mortgage and business lending, we provide novel empirical evidence on how changes in the level of bank capitalization affects the impact of credit supply on economic activity. Our preliminary results show that metropolitan areas exposed to lenders with higher level of bank capitalization experience higher levels of economic growth and employment. Consistent with economic theory, we find evidence that this effect varies depending on whether we consider mortgage or business lending. JEL No. D22, D53, E44, G1, G2, G21, J21, J4, O4

SESSION 7: Empirical Microeconomics: PTSD, Risk-Taking, and Labour Choices

Time Does Not Heal All Wounds: PTSD Symptoms and Financial Risk-Taking

Haiying Yin
Monash University

I explore whether posttraumatic stress disorder (PTSD) symptoms are associated with financial risk taking using a panel of nationally representative surveys from the Dutch population. I find an inverted-U relation between the severity of PTSD symptoms and investments in risky assets such as stocks. The propensity of individuals to invest in risky assets increases with PTSD symptom levels up to a point and then decreases when PTSD symptom levels are too high. Further, while I find a nonmonotonic relation between PTSD symptoms and subjective risk preferences, I do not find evidence that PTSD symptoms correlate with beliefs about future stock returns. The results suggest that traumatic events can affect financial risk-taking behavior via preferences through a psychological channel.

Sectoral Labour Choice and Household Welfare in Emerging Economies: The Case of Vietnam

Huyen Hoang
University of New South Wales

This study sheds light on the impact of sectoral labour choices between formal and informal labour on household consumption and welfare in emerging economies. It focuses on Vietnam with rich and up-to-date household survey datasets from the Vietnam Household Living Standards Survey (2014-2018). It answers two main questions: (1) What are the determinants of sectoral labour choice? (2) What are the impacts of sectoral labour choice on the household consumption and welfare? The propensity score matching (PSM) method is employed as a main model to correct the problem of endogeneity, especially selection bias. Furthermore, the instrumental variable (IV) and multinominal endogenous switching regression (MESR) model are used as the relevant methods for robustness check. The findings reveal that the decision to choose employment largely depends on level of education, gender and marital status. The results of average treatment effects show that joining in low-skill informal sector would lead to a

low spending on household's food consumption while high-skill employment would induce a high level of non- durable consumption. Interestingly, both high and low-skill informal workers would lead to higher housing wealth compared to those in low-skill formal group, basically showing that informal workers compensate the high employment risk by investing in safe assets, while those in the formal sector diversify their assets portfolio more. More professional training support programs and social security policy from the government should be designed to facilitate the sectoral transition from informal to formal in order to enhance household welfare and the sustainability of the economy.

SESSION 8: Industrial Organisation

Congestion and Prices

Xiaolong Zhang
University of New South Wales

Congested roads, crowded facilities, slow internet connection, and more generally congestion reduces consumer utility. While choosing a product or a service in such settings, consumers notonly consider price, but also congestion disutility associated with consumption. How do prices react when congestion increases, say, due to an increase in market size or an increase in consumers' sensitivity to congestion? In a standard oligopoly setting with constantmarginal costs, price does not vary with the market size. In the presence of congestion, however, we find that prices can stay the same, decrease, or increase depending on the market environment, and industry and firm characteristics. Prices decline in an industry if the number of competitors is small, and if the demand function is suitably concave. When firms differ in costs, prices can go down for low-cost firms and simultaneously go up for high-cost firms. These findings hold both when the market size increases and when consumers become more sensitive to congestion. Source of congestion matters in the presence of free entry. Prices unambiguously decline when congestion increases due to an increase in market size. The opposite is true when the increase in congestion is due to increased sensitivity to congestion, although, unlike the case of market expansion, which induces entry, increased congestion can prompt entry or exit of firms.

A Minskyite Model Of Financial Crises

Yuqing Liu
The University of Queensland

This paper is the first to present Minsky's financial instability hypothesis in a formal model with cycles that are endogenous, rather than responses to exogenous shocks. In the model, there are entrepreneurs and investors. Entrepreneurs may be either Good or Bad. A matched pair (a firm) may undertake a costly audit, which reduces the risk that a Bad entrepreneur incurs a disaster and exposes a Bad entrepreneur with some probability. There is a constant flow of Bad entrepreneurs into the market, and Bad entrepreneurs exit as a result of disaster, detection, and retirement. When there are only a few Bad entrepreneurs, auditing is not worthwhile, and when there are many, all firms audit. There is an intermediate range in which firms prefer to audit, or not, according to whether other firms audit. Without auditing, the fraction of Bad entrepreneurs increases, and eventually there may be a sudden transition to all firms auditing, which is a financial crisis that causes a recession. Depending on parameters, a lender of last resort may be able to prevent crises.

The Effectiveness of Kindergarten in Promoting Female Labour Supply: Evidence from Regression Discontinuity Design in Indonesia

Dyah Pritadrajati
Australian National University

Preschool is expected to reduce barrier for mothers to work, making iteasier for them to combine paid work and childcare responsibilities. This paper examines the effects of preschool enrolment, particularly kindergarten, on female labour supply in Indonesia, a country with a large informal sector including for childcare. Identification is based on sharp and fuzzy regression discontinuity (RD) designs exploiting the age eligibility rule for kindergarten enrolment. I find no evidence that kindergarten enrolment affects labour force participation, employment, work hours, or job searching, for all females and mothers. However, working mothers with children enrolled in kindergarten are on average 15.9 percentage points less likely to be in formal employment. The negative effect on formal employment is primarily driven by married mothers, those with primary education and below, and those in the bottom 40 percent of the expenditure distribution. Despite limited effects among mothers, kindergarten enrolment increases participation of single females without children inthe labour force and employment by more than 30 percentage points, indicating significant crowding out of informal childcare.

Evaluating financial understanding in renewable agricultural technology adoption

Zeenatul Islam
Curtin University

Given the increasing trend of energy-intensive modern agriculture and the accumulated greenhouse gas emissions, it is of paramount importance that low-carbon energytechnology takes off to improve the energy-water-food nexus. Therefore, this project broadly evaluates the efficacy and compatibility of renewable technology-use in agriculture. This project uses the case of solar technology in irrigation in Bangladesh since irrigation is the mostenergy-intensive farm operation and the country has an extensive irrigation network. The underlying motivation is that technology diffusion in agriculture is endogenous, hence it is required to assess the heterogeneity of social, economic, and environmental factors in a comprehensive framework of adoption scenario. It is observed that there is a lack of conceptual,methodological, and empirical approaches to assessing the energy efficiency of irrigation technology. Precisely, it is not yet ascertained if farmers' i) financial understanding, ii) pro- environmental behaviour, and iii) coordination in an irrigation contract are impacted by technology adoption. Therefore, this project employs two choice experiments and a natural field experiment to assess and evaluate the impact of renewable energy in irrigation technologyand ascertain the causal inference of its adoption. This project uses a field survey of 800 farming households, including 400 solar and 400 non-solar user farmers in 12 major administrative areas in Bangladesh. The hypotheses are tested as follows, compared to non- solar users, solar users utilize i) more financial understanding, ii) pro-environmental motivation, and iii) group-wise coordination in an irrigation contract. This project expects to contribute to the progress of academic scholarship and policy formulation about any efficient and sustainable technology diffusion in agriculture.

SESSION 10: Finance: Investment Flexibility & Empire Building

Inflexibility and Corporate Bond Yield Spreads

Zhaofeng Xu
Monash University

My study documents that firms' investment inflexibility (i.e., their inability to adjust their productive scale in response to productivity shocks) is positively and significantly associated with bond yield spreads. I find that contraction inflexibility (i.e., firms contract their scale in response to negative productivity shocks) plays a moresignificant role in explaining bond yield spreads than expansion inflexibility. In addition, I find that the impact of inflexibility on bond pricing is strengthened for firms with higher distress risk. Further, I use a regression discontinuity design that explores variation in laboradjustment costs through close-call union elections to validate my main findings. I find consistent results of the positive relation between inflexibility and bond yield spreads in the regression discontinuity design tests. Overall, my results suggest that investment inflexibility is an important determinant of bond pricing.

Does External Labor Market Activeness Affect the Agency Problem?

Yuyun Huang
The University Western Australia

This study investigates whether and how external labor market activeness affects managerial empire building. Using the staggered inevitable disclosure doctrine (IDD) recognition by U.S. state courts to capture a lower level of external labor market activeness, we find managers engage in less empire building activity in IDD recognized states. Such effect is more pronounced for firms with financial distress, greater in-state competition, and higher earnings management. A mediation analysis suggests that the restraining effect of IDD on empire building is via manager job mobility. We rule out the alternative explanation that the lower empire building is caused by managerial incentives to pursue a quiet life. Overall, our results indicate that the inactive external labour market raises managers' concern for their own future job prospects, and therefore strengthens the interest alignment between managers and shareholders.

SESSION 11: Health Economics: Body Mass Index & Online Healthcare

Body Mass Index and Healthcare Expenditure: Where to Draw the Line?

Aarushi Dhingra
The University of Queensland

This paper examines whether there are specific ranges of body mass index (BMI) values that are associated with variation in child healthcare cost. In Australia, 1 in 4 children are overweight or obese, this is concerning as obesity is related to various physical and mental health problems. As a result, large proportions of healthcare cost are found to be associated with obesity. To find a relationship between BMI and child healthcare cost, most previous literature apply pre-determined BMI thresholds based on generic growth charts. This paper hypothesises that these charts could be defined further, in relation to assessing child healthcare cost. Đethod: This paper applies a rich source of linked data, survey data from the Longitudinal Study of Australian Children linked to administrative claims data from Medicare Benefit Schedule and Pharmaceutical Benefit Scheme. It applies a novel grid-search technique to estimate threshold effects in nonlinear models, where the thresholds will capture several possible discontinuities and non-linearity in the BMI and healthcare cost relationship.

The procedure searches for thresholds simultaneously and selects the optimal values, number and position of the thresholds. For given levels of observed BMI values, the approach selects the optimal combination over all possible breakpoints and positions in this relationship. The information criterion approach is then used to select the optimal number of sub-populations from a range of potential models. Furthermore, the inverse hyperbolic sine transformation is applied to the healthcare cost. within the healthy-weight range of BMI growth charts defined by the Centers for Disease Control and Prevention (CDC). Although, for younger age cohorts these thresholds are closer to the underweight cut-offs and for the older age cohorts these are closer to the risk of overweight cut-offs defined by the CDC. The estimated number of thresholds are lower compared to those indicated in the growth charts. Therefore, use of generic growth charts may lead to different estimates of disease prevalence and hence, healthcare cost.

Conclusion: To evaluate health and health-related cost, policymakers, health practitioners, and researchers have placed much emphasis on BMI. This paper applies novel grid-search techniques to examine whether there are specific ranges of BMI values that are associated with variation in child healthcare cost. Results show a positive relationship between BMI and healthcare cost which, varies at different BMI thresholds for different age cohorts.

Substitution and Complementarity: An Economic Analysis of Online and Offline Health Care

Yanan Wu
Australian National University

The advantages of online healthcare are palatable. On the patient side, online healthcare saves the time, search cost and transportation cost of patients, and thus allow illness to be diagnosed and treated earlier. On the provider side, as online patients have more choice of healthcare providers, the increased competition my drive hospitals to improve their service quality. Previous studies, however, have yet to provide and analytical framework comprehensive enough for us to evaluate the impact of online healthcare on the healthcare sector. This gap in the knowledge needs to be filled because, without knowing the impact of online healthcare on the healthcare sector, policies aimed at fostering online healthcare may lead to *under-* or *over-*provision of online healthcare, and, in the meantime, may cause sub-optimal offline healthcare.

This paper aims at filling this gap. Specifically, we investigate the following questions: (i) How will online healthcare affect offline healthcare, such as the quality of the offline healthcare service and the volume of offline patients? In turn, how will the presence of offline healthcare affect online healthcare, such as the quality of online healthcare and the volume of online patients? (ii) Will online healthcare lower overall healthcare expenditure and improve overall patient welfare? (iii) What kind of patients will benefit more from online healthcare? Are there any ways in which patients may suffer from the introduction of online healthcare?

SESSION 12: Networks

Estimation of Social Network Models using Approximate Bayesian Computation

Yangqi Zhang
University of New South Wales

We propose using the Approximate Bayesian computation (ABC) method to estimate parameters in social network models. Compared with estimators derived from network degree distribution, ABC is a likelihood-free Bayesian inference method that can incorporate other network statistics in addition to the degree distribution. Simulations show that including other network statistics can increase the accuracy in estimating the parameters. Given that there are numerous network statistics in network models, we also adopt various summary selection techniques in ABC to extract informative statistics and propose a lasso type method to handle the case when summary statistics are high-dimensional. Extensivesimulations suggest that selection methods based on entropy or information criteria outperform others; the number of triangles, degree-cluster correlation and degree tails are informative to

estimate parameters in network models. We apply the ABC method and selection techniques to an empirical citation network.

Uniqueness of Equilibria in Interactive Networks

Chien-Hsiang Yeh
Australian National University

This paper extends the unified network model, proposed by Acemoglu et al. (2016b), such that interaction functions can be heterogeneous, and the sensitivity matrix has less than of equal to one spectral radius. We show the existence and (almost surely) uniqueness of equilibrium under both eventually contracting and non-contracting assumptions. Applying the equilibrium in the study of systemic risk, we provide a measure to determine the key player who causes the most significant impact if removed from the network.

SESSION 13: Empirical Finance: High Frequency Trading & CEO Incentives

Mini-Flash Crashes and the Bulk-Volume Probability of Informed Trading

Madeleine Barrow
Monash University

As electronic trading has become widespread, regulators and market participants have raised concerns regarding financial market stability. Flash crashes haveprompted particular unease. These extreme price movements are transitory and quickly mean revert, suggesting that they may not be caused by new fundamental information. The Volume Probability of Informed Trading (VPIN) has been suggested as a means to warn of impending flash crashes, yet its forecasting accuracy has not been evaluated on a cross-section of mini-flash crashes. We examine bulk volume VPIN (BV-VPIN) levels prior to more than 1,000 mini-flash crashes and find that the BV-VPIN is elevated and behaves distinctly from existing risk metrics. However, due to the high number of false positives that BV-VPIN signals generate, we recommend that practitioners adopt caution when using the BV-VPIN metric in the mini-flash crash context.

Blockholder and CEO Wealth-Performance Sensitivity

Sheng Huang
The University of Melbourne

Higher CEO incentives can both reduce the conflict between management and shareholders, thereby making blockholder monitoring less necessary ("substitutability"), and increase the ability to punish recalcitrant CEOs through blockholder's exit, thereby making blockholder monitoring more effective ("complementarity"). The present study examines which of the two effects dominates in general. Extending the model of Admati and Pfleiderer (2009), I show that the blockholder's incremental payoff from entering and monitoring a firm decreases with the managerial incentives. Empirically, I find that higher CEO incentives lead to lower blockholding in a firm. The results are consistent with the substitutability between CEO incentive contracts and blockholder monitoring in corporate governance. FASB and SEC regulation changes in 2006 had significant impacts on the use of equity- based CEO compensation. I utilize the regulation changes as a source of plausibly exogenous variations in CEO incentives to mitigate the endogeneityconcern in the examination of a firm's CEO incentives and blockholding.

SESSION 14: Theory: Skill Composition & Robots

Worker Skill Composition, Competition and Innovation: Theory and Evidence

Rae Rho
University of Auckland, New Zealand

I build a model of product market competition and innovation, in which heterogeneously skilled workers perform innovative activities within a firm. I propose a new formula to capture worker skill composition, which determines a firm's innovative capacity and reflects an interaction between workers of different skill types in an organisational setting. The model highlights that worker skill composition varies with skill endowment, particularly when firms can benefit from knowledge spillovers. As a result, the skill spread between worker types and profit incentive effects of competition generate an inverted-U shape relationship between worker skill composition and competition.

The Robots Are Coming! Inter-Generational Mobility, the Robot Tax, and a Universal Basic Income

Matthew Woolf
Australian National University

What impact do technological progress and automation have on economic growth and inequality? This question looms large as we grapple with increasingly sophisticated technologies that both drive innovation and also threaten jobs across many industries. In this paper, we examine this question in an R&D growth framework with human capital, inter-generational mobility, and inequality. We examine the effectiveness of a universal basic income (UBI) funded via an income taxand/or a robot tax in reducing levels of inequality. Crucially, while the model predicts inequality will increase whether UBI is implemented or not, a UBI successfully reduces the level of inequality at the balanced growth path. Furthermore, whether the policy is funded via an income tax or robot tax has implications on the growth rate of productivity in the economy. Whereas an income tax will reduce inequality and growth, a robot tax will reduce inequality and increase growth.

Simulations are included to provide a brief sketch of the US economy inthe past, present, and future.

SESSION 15: Empirical Finance & Microeconomics: Mergers & Acquisitions & Firm Performance during COVID-19

Do Target Firms Strategically Disseminate Information? Evidence from Mergers and Acquisitions in the United States

Maryam Shariatmadari
The University Western Australia

Consistent with Merton (1987), we demonstrate that US target firms strategically manage their media releases prior to the public announcement of a deal to increase their visibility and, in-turn, the probability of receiving an acquisition offer. We also find that strategic media management by target firms postpublic announcement of a deal increases their likelihood of completing a takeover deal. A unit increase in positive daily press releases between the public announcement and completion day of a deal increases average shareholder wealth from $1.11 billion to $3.09 billion. We also find evidence that a unit increase in the daily average number of positive press releases by target firms translates to a 38 percent increase in premium. These results contribute to the literature by demonstrating that target firms can materially influence the likelihood of an acquisition - and the associated premium - through effective media management.

COVID-19 Pandemic, Firms' Responses, and Unemployment in the ASEAN-5

Sulistiyo K. Ardiyono
Australian National University

Extensive studies have explored the impact of the Covid-19 pandemic on firms' performance, but none have discussed the role of firms' operating flexibility on employment. Using the ASEAN-5 firms' data from Q1-2018 to Q3-2021, this study analyses the links between the Covid cases, mobility restriction, and firms' performance, their evolution over time, and the contribution of operating flexibility on firms' profit and employment. As expected, the revenue and profit of firms in the country with a higher number of cases and a higher degree of restriction are lower, which is then translated into employment.

Every 10 per cent revenue decline causes employees reduction by approximately 1 per cent. Further, the impact is influenced by the firms' flexibility to adjust their costs. Firms with inefficient inventory management hire fewer workers by around 5 per cent. It is argued that the structural-driven supply-chain inefficiencies in some countries have worsened and prolonged the firms' losses and unemployment.

SESSION 16: Networks & Variable Selection Methods

The Effect of Supply Base Diversification on the Propagation of Shocks

Damian Lenzo
The University Western Australia

In a broad class of macroeconomic models with production networks, it is difficult to discern which input-output linkages between producers amplify microeconomic shocks to shape aggregate outcomes. We measure the influence of any inter-producer relationships by constructing a "counterfactual" network that omits these links. We then compare the aggregate impact of microeconomic shocks in the actual and counterfactual economies. Notably, our approach only requires observed data on intermediate and final goods expenditure. We discuss two applications as proof of concept. First, we provide a closed-form expression for network spillovers, representing the indirect effect of microeconomic shocks on GDP, excluding the direct impact of the shocks. Empirically, the extent of network spillovers explains differences in cross-country GDP growth for 43 economies between 2000 and 2014. Second, we extend our framework to quantify how countries' input-output networks contribute to aggregate volatility. We find GDP volatility would have been 7.5% lower, on average, if the input-output production structures of all countries in our sample were hypothetically identical to the United States.

Sparse Statistical Learning with Structure: Advances in Computation and Theory

Ryan Thompson
Monash University

Sparse regression and classification estimators capable of group selection have application to an assortment of statistical problems, from multitask learning to sparse additive modeling to hierarchical selection. This work introduces a class of group-sparse estimators that combine group subset selection with group lasso or ridge shrinkage. We develop an optimization framework for fitting the nonconvex regularization surface and present finite-sample error bounds for estimation of the regression function. Our methods and analyses accommodate the general setting where groups overlap. As an application of group selection, we study sparse semiparametric modeling, a procedure that allows the effect of each predictor to be zero, linear, or nonlinear. For this task, the new estimators improve across several metrics on synthetic data compared to alternatives. Finally, we demonstrate their efficacy in modeling supermarket foot traffic and economic recessions using many predictors. All of our proposals are made available in the scalable implementation grpsel.

APPENDIX: PhD CONFERENCE PRIZES, 1995-2022

Year	Prize	Winner	Affiliation
1995	Best Student Presentation	Preston, A.	University of Western Australia
	Best Discussant	Martin, V.	University of Melbourne
	Special Prize for Special Contribution as a Discussant	Gregory, R.	Australian National University
1996	Most Innovative Topic	Picton, M.	Monash University
	Special Prize for the First Non-Australian-and-New Zealand Student	Muckle, N.	University of Nottingham
	Special Recognition for Contributions as a Discussant	Grant, S.	Australian National University
	Best Discussant	McLaren, K.	Monash University
	Special Recognition for Contributions as a Discussant	Woodbridge, G.	Australian Competition & Consumer Comission
1997	Best Student Presentation	Vaithianathan, R.	University of Auckland
	Honourable Mention for Quality Student Presentation	Swift, R.	Griffith University
	Honourable Mention for Quality Student Presentation	Leong, K.	University of Western Australia
	Honourable Mention for Quality Student Presentation	Balatbat, M.	University of Sydney
	Special Mention for Contribution as a Discussant	Woodland, A.	University of Sydney
	Best Discussant	Griffiths, B.	University of New England
	Special Mention for Contribution as a Discussant	Twite, G.	University of New South Wales
1998	Best Student Presentation	Tang, KK.	Australian National University
	Best Discussant	Doiron, D.	University of Sydney
1999	Poynton and Partners Business Economics Prize	Yelten, S.	University of Chicago
	Honourable Mention	Chang, H-C.	Australian National University
	Best Student Presentation	Dennis, R.	Australian National University
	Certificate of Commendation	Ma, S.	University of Adelaide
	Certificate of Commendation	Salim, V.	University of Western Australia
	Honourable Mention	Martin, V.	University of Melbourne
	Best Discussant	Fiebig, D.	University of Sydney

Year	Prize	Winner	Affiliation
2000	Best Student Presentation	Romalis, J.	MIT
	Honourable Mention	Melatos, M.	University of Sydney
	Best Discussant	Bewley, R.	University of New South Wales
	Honourable Mention	Chapman, B.	Australian National University
2001	Runner Up Best Presentation	Lan, Y.	University of Western Australia
	Best Paper in Industrial Economics	Dodds, S.	Queen's University
	Best Paper in Finance	Duncan, P.	University of Newcastle
	Best Presentation	Joiner, A.	Monash University
	Runner Up Best Paper in Finance	Pham, P.	Monash University
	Runner Up Best Presentation	Suzuki, T.	Australian National University
	Runner Up Best Presentation	Kim, D-K.	University of New South Wales
	Runner Up Best Discussant	Heaney, R.	Australian National University
	Best Discussant	Anderson, H.	Monash University
2002	Runner Up Best Presentation	Fogarty, J.	University of Western Australia
	Best Presentation	Kam, T. C. Y	University of Melbourne
	Runner Up Best Presentation	Thai, C.	University of New South Wales
	Runner Up Best Discussant	Kompas, T.	Australian National University
	Best Discussant	Gans, J.	University of Melbourne
2003	Best Presentation	Thorp, S.	University of New South Wales
	Best Finance Presentation	To, T. D.	University of Technology, Sydney
	Best Finance Presentation	Hall, J.	University of Queensland
	Best Paper in Industrial Economics	Kohpaiboon, A.	Australian National University
	Runner Up Best Presentation	McHugh, Z.	Queensland University of Technology
	Best Paper in Industrial Economics	Welch, E.	Australian National University
	Best Discussant	Bennett, J.	Australian National University
	Runner Up Best Discussant	Kingston, G.	University of New South Wales
	Runner Up Best Discussant	Martin, G.	Monash University

Year	Prize	Winner	Affiliation
2004	Best Presentation	Wade, K.	La Trobe University
	Runner Up Best Presentation	Schlichting, D.	University of Sydney
	Best Discussant	Clements, K.	University of Western Australia
	Runner Up Best Discussant	King, S.	Australian Competition & Consumer Comission
	Runner Up Best Discussant	Dixon, P.	Monash University
2005	Best Finance Presentation	Forrester, D.	University of New South Wales
	Best Presentation	Johnston, D.	University of Melbourne
	Best Economic Presentation	Pacheco, G.	University of Auckland
	Best Discussant	Thorp, S.	University of Technology Sydney
2006	Runner Up Best Presentation	Headey, D.	University of Queensland
	Best Presentation	Roessler, C.	University of Melbourne
	Best Discussant	Leigh, A.	Australian National University
	Runner Up Best Discussant	Vahid, F.	Australian National University
2007	Best Presentation	Chen, Y.	University of Melbourne
	Best Presentation	Valencia, V.	University of Melbourne
	Best Discussant	Dixon, P.	Monash University
2008	Best Presentation	Rohde, N.	University of Queensland
	Runner Up Best Presentation	Nowak, S.	Australian National University
	Best Discussant	Clements, K.	University of Western Australia
2009	Best Presentation (Economics)	Verani, S.	University of California, Santa Barbara
	Best Presentation (Economics)	Gao, G.	University of Western Australia
	Best Presentation (Economics)	Evans, S.	Australian National University
	Best Presentation (Finance)	Etheridge, D.	University of Western Australia
	Best Presentation (Finance) - Runner up	Levy, A.	University of New South Wales
	Best Discussant	Foster, D.	Australian National University
	Best Discussant - Runner up	Adams, R.	University of Queensland

APPENDIX: PhD CONFERENCE PRIZES, 1995-2022 (continued)

Year	Prize	Winner	Affiliation
2010	Best Student Presentation	de Braganca, G. F.	Victoria University of Wellington
	Best Student Presentation	Ng, J.	Monash University
2011	Best Presentation in Economics	Wang, B.	Macquarie University
	Best Discussant	Jensen, P.	University of Melbourne
	Best Discussant	Sheen, J.	Macquarie University
2012	Best Student Presentation (Economics)	Collins, J.	University of Western Australia
	Student with Most Potential (Finance)	Liu, Z.	University of Queensland
	Best Student Presentation (Finance)	Wang, J.	University of Sydney
	Best Discussant (Economics)	Cobb-Clark, D.	University of Melbourne
	Best Discussant (Economics)	Strachan, R.	Australian National University
	Best Discussant (Finance)	Thorp, S.	University of Technology Sydney
	Best Discussant (Finance)	Walter, T.	SIRCA
2013	Best Student Presentation	Hall, J.	University of New South Wales
	Best Discussant	Ray, R.	Monash University
2014	Best Student Presentation	Burfurd, I.	University of Melbourne
	Best Discussant	Williams, J.	University of Melbourne
	Best Discussant	Clements, K.	University of Western Australia
2015	Best Presentation	Gauriot, R.	Queensland University of Technology
	Best Discussant	Foster, G.	University of New South Wales
2016	Best Presentation, Economics	Delacrétaz, D.	University of Melbourne
	Best Presentation, Finance	Zhang, E.	University of New South Wales
	Best Discussant, Economics	Frijters, P.	University of Queensland
	Best Discussant, Finance	Walter, T.	University of Sydney
	Best Discussant, Finance	Dungey, M.	University of Tasmania

APPENDIX: PhD CONFERENCE PRIZES, 1995-2022 (continued)

Year	Prize	Winner	Affiliation
2017	Best Paper in Finance	Drummond, P.	Australian National University
	Best Paper in Economics	Koh, B.	University of Melbourne
	Best Discussant	Foster, G.	University of New South Wales
2018	Best Presentation	Deutscher, N.	Australian National University
	Best Discussant	Jetter, M.	University of Western Australia
2019	Best Paper	Griselda, S.	University of Melbourne
	Best Discussant	Johnston, D.	Monash University
2020	Best Presentation	Shashi Karunanethy	University of Melbourne
		Yuejun Zhao	Monash University
	Best Discussant	Sascha Becker	Monash University
		Denzil Fiebig	University of New South Wales
2021			
2022	Best Presentation	Gunawardena, B.	University of Queensland
		Dzulkipli, A.	Monash University
		Haderer, M.	University of Sydney
	Best Discussant	Walter, T.	University of Wollongong
		Sohail, F.	University of Melbourne