



International Conference Theoretical and Applied Econometrics

July 18, 2019

Department of Economics and
Finance

Hong Kong Shue Yan University



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We would like to thank the Research Grants Council of the Hong Kong Special Administrative Region, China for supporting this conference under the INTER-INSTITUTIONAL DEVELOPMENT SCHEME (IIDS). This conference is fully supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project no. UGC/IIDS15/B02/18)

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Welcome

It is our pleasure to welcome you to the International Conference: Theoretical and Applied Econometrics. The Department of Economics and Finance at Hong Kong Shue Yan University is delighted to host this conference.

This conference is part of the INTER-INSTITUTIONAL DEVELOPMENT SCHEME (IIDS) of the “*Recent developments in Theoretical and Applied Econometrics Analysis*” (Project no. UGC/IIDS15/B02/18). Modern research in economics and finance demands sophisticated econometric skills and models. This IIDS project intends to provide participants insight on recent developments in econometrics in three areas:

1. Automatic Model selection strategies,
2. Nonlinear econometric methods and
3. Dynamic panel data analysis

The IIDS project consists of three workshops, three seminars and an international conference.

The workshops (April to June 2019):

1. Automatic Model Selection with Applications
2. Practice in nonlinear co-integration and causality tests
3. Considerations in Working Panel Dynamic Model

The seminars (April to June 2019):

1. Automatic Selection of Multivariate Dynamic Econometric Models
2. Do both demand-following and supply-leading theories hold true in developing countries?
3. Panel Parametric, Semi-parametric and Nonparametric Construction of Counterfactuals

International conference: Theoretical and Applied Econometrics
(18 July 2019)

THE INTERNATIONAL CONFERENCE THEORETICAL AND APPLIED ECONOMETRICS



- This conference aims to provide an international forum for sharing research interests and cutting-edge knowledge in econometric methods and applications of econometrics to different fields.
- It will also bring academics, researchers and students together to exchange and share their research experiences and results regarding theoretical and applied econometrics.
- Moreover, it will provide an opportunity for participants to submit and present their original research papers in econometrics.

Internet Access

There is a free WiFi accessible on campus:

Name: HKSYU_RC

Venue

Hong Kong Shue Yan University

BRAEMAR HILL CAMPUS

Address: 10 Wai Tsui Crescent, Braemar Hill, North Point, Hong Kong

Tel: +852 25707110

Research Complex, RLB303



Direction

KOWLOON MOTOR BUS (KMB)

108 at Kai Yip Bus Terminus

CITYBUS/NEW WORLD FIRST BUS

25 at Central (Pier 5)

25A at Wan Chai (HKCEC Extension)

27 at North Point Ferry Pier

85 at Siu Sai Wan (Island Resort)

PUBLIC LIGHT BUSES (GREEN MINI-BUSES)

25 at Causeway Bay MTR Station

49M at Tin Hau MTR Station

Keynote



Professor Wing-Keung WONG

Chair Professor of Finance, Department of Finance, Fintech Center, and Big Data Research Center, Asia University, Taiwan.

Prof Wong has published more than two hundred papers and is in the list of top economists of RePEc and Asian economists. He has more than five thousand citations in Google scholar, around three thousand citations in ResearchGate and more than six hundred citations in Web of Science. He also ranked in the top 1% by Social Science Research Network in 2017 by both downloads and citations. Citation: 6741 (3734 since 2014), h-index: 46, (32 since 2014) and i10-index: 143, (117 since 2014) by Google Scholar citation. His research interests include financial economics, econometrics, mathematical finance and economics, investment theory, risk management, behavioral finance and economics, operational research, stochastic dominance theory, time series analysis, Bayesian theory and decision theory.

Keynote Talk

Are the Combinations of Health Care sector and T-Bill one of the best choices for investment?

Health care sector plays an increasingly important role in the stock market because it is growing nearly in the entire period and has low correlation with the business cycle. On the other hand, T-Bill is also an important asset in investment because it has positive return and small variance. In this paper, we employ the mean-variance (MV) rules and stochastic dominance (SD) approach to investigate the portfolio performance with and without both health care sector and T-Bill in the US over the period from September 1986 to May 2017. The results show that all the portfolios with health care asset and 6-M TB significantly dominate the corresponding portfolios without health care and 6-M TB, regardless whether a short sale is allowed. This study also concludes that the combinations of health care sector and 6-M TB not only reduce risk but also gain better return and all risk-averse investors prefer to invest in portfolios with health care sector and 6-M TB, regardless whether they buy long or sell short the market.

By employing the mean-variance (MV) rules and stochastic dominance (SD) approach, this paper investigates the portfolio performance with and without both health care sector and T-Bill in the U.S. market over the period from September 1986 to May 2017. The results show that all the portfolios with health care asset and 6-m TB significantly dominate the corresponding portfolios without health care and 6-m TB, regardless whether a short sale is allowed. This study also concludes that the combinations of health care sector and 6-m TB not only reduce risk but also gain better return; all risk-averse investors prefer to invest in portfolios with health care sector and 6-m TB, regardless whether they buy long or sell short the market.

Programme (18 July, 2019)

9:30 am	Registration (RLB303)
10:00 am	Opening (RLB303)
10:15 am- 11:00 am	Keynote Are the Combinations of Health Care Sector and T-Bill One of the Best Choices for investment? <i>Professor Wing Keung WONG</i>
11:00 am	Coffee Break
11:15 am – 12:30 pm	Session 1 (RLB303) Technical efficiency of the Chinese Health Care Sector: The Choice between Market-orientation and Government- orientation <i>Xinju HE, Sung Ko LI, and Valentin ZELENYUK</i> The Spillover Effect of Surgeons on Expanding the Use of Kidney-Exchange Networks <i>Bobby W. CHUNG and Ghanbariamin ROKSANA</i> What Do We Know About Housing Supply? The Case of Hong Kong <i>Edward TANG, Charles LEUNG and Joe NG</i> Chair: Edward TANG
12:30 pm	LUNCH Play Café at Academic building 5/F
2:00 pm – 3:45 pm	Session 2A (RLB303) External Shocks or Internal Causes? The Property Markets of Two Asian Financial Centers

	<p><i>Joe, NG Charles LEUNG and Jun YU</i></p> <p>Are Institutions the Cause or the Outcome of Economic Growth? Evidence in Developing and Developed Countries</p> <p><i>Chun Kei TSANG and Sung-Ko LI</i></p> <p>Greater Bay Area: Price Convergence of Product</p> <p><i>Kai Yin WOO, Shu Kam LEE and Jacky WONG</i></p> <p>One belt One Road: Nonlinear PPP</p> <p><i>Kai Yin WOO, Shu Kam LEE, and Paul SHUM</i></p> <p><i>Chair: Chun Kei TSANG</i></p>
<p>2:00 pm – 3:45 pm</p>	<p>Session 2B (RLB302)</p> <p>The Effect of Minimum Wage on Youth Employment</p> <p><i>Thomson SITOMPUL and Paksi C.K. WALANDOUW</i></p> <p>Analyzing the Relationship between Sources of Financing and Economic Growth in China</p> <p><i>Suet Ching CHAK</i></p> <p>Happiness and Overweight: Panel Data Analysis on the Differences between Male and Female</p> <p><i>Wan Ling CHU and Wai Kee Thomas YUEN</i></p> <p>Wine and Happiness: Panel Data Analysis</p> <p><i>Wai Kee Thomas YUEN</i></p> <p><i>Chair: Suet Ching CHAK</i></p>

3:45 pm	Coffee Break
4:00 pm – 5:45 pm	<p>Session 3A (RLB303)</p> <p>Inflation Dynamics: A Comparative Study of Mainland China and Hong Kong <i>Tsz Hin, Ronald HUNG and Yum K. KWAN</i></p> <p>Is Sophia The Robot A Legal Person? <i>Chau Sheung Rosa PANG</i></p> <p>An Empirical Study on Child Mortality Rate – Application of Regression Analysis Ngai Sang, Kenrick YEUNG, Yu Hong WONG, Tat Yu Owen LEUNG and Yik Man LAI</p> <p>Economic and Political Inequality in Southeast Asia: 1998-2017 <i>Ka Lok, Daniel CHAN</i></p> <p><i>Chair: Ngai Sang, Kenrick YEUNG</i></p>
4:00pm – 5:45pm	<p>Session 3B(RLB302)</p> <p>東盟與中國自由貿易協定對兩地區發展的影響。 <i>楊偉文</i></p> <p>基于协整模型的股票配对交易策略研究。 <i>魏霽月</i></p> <p>Global Warming, Climate Change and World Environmental Degradation <i>Edward TANG</i></p>

The Rank Tests for Nonlinear Cointegration: Examining the Price convergence of household products in Canada

Kai Yin WOO,, Shu Kam LEE and Alan CHAN

The Rank Tests for Nonlinear Cointegration: Examining the price competition between the two supermarket giants in Hong Kong

Kai Yin WOO, Shu Kam LEE and Fuk-kin Joe WONG

Chair:楊偉文

Presentation Guidelines

All rooms are equipped with a computer, running Microsoft Office 2016 (Word, Excel and PowerPoint). Please bring your PowerPoint presentation on a USB memory stick. Please make sure to load the presentation to the computer in the relevant session room well in advance of your presentation. If you would like to bring your own notebook, it can be connected via HDMI to our system.

Chairs and presenters are asked to be in the room 5 minutes before the scheduled start time so you can load the presentation PowerPoint to the computer. Oral presentations should typically be no more than 20 minutes. This will leave roughly 15-20 minutes for questions at the end of each session.

Abstracts

Abstracts are presented in the running order of the programme.

**Technical efficiency of the Chinese health care sector:
The choice between market-orientation and government-orientation**

Xinju HE, Sung Ko LI and Valentin ZELENYUK

Abstract

China has been switching back and forth between market-oriented and government-oriented policies in the health care sector. Both government and academics have not reached a consensus in selecting the optimal strategy. This paper investigates the impacts of these two policies on the technical efficiency of the Chinese health-care sector from year 2009 to 2014. We measure the technical efficiency of representative hospitals in several directions with respect to Kuosmanen's (2005) empirical production frontier. For easy comparison, the formulae in the unified framework of Färe et al. (2019) are adopted. To lessen the curse of dimensionality, we follow Daraio and Simar's (2007) suggestion to reduce the dimension of variables. It was found that, on average, the technical efficiency of the Chinese health-care sector was more or less constant over the studied period when desirable outputs are involved. When only undesirable outputs are considered, the technical efficiency has been improving over the studied period. The truncated-regressions with bootstrap showed that market-oriented ownership reform did not worsen the technical efficiency of the health care sector. In contrast, financial support from the government could always improve the technical efficiency. Considering the low ratio of financial support to the health care sector in current government spending in China, we

recommend the Chinese government to allocate more resources to subsidize health care organizations.

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Key words: Chinese health care sector, Technical efficiency, Principal component analysis, Market-oriented policy, Government-oriented policy

The Spillover Effect of Surgeons on Expanding the Use of Kidney-Exchange Networks

Bobby W. CHUNG¹ and Ghanbariamin, ROKSANA

Abstract

National kidney-exchange networks expand the number of transplants by finding matches for incompatible patient-donor pairs within a large national pool. This paper provides the first empirical evidence on the role of surgeons in expanding the adoption by hospitals of the National Kidney Registry (NKR), the largest kidney-exchange network in the United States. We use a unique dataset from the Scientific Registry of Transplant Recipients to define links between hospitals based on the presence of common surgeons. We find that one more adoption of the NKR from connected hospitals increases the probability of the focal hospital to adopt NKR by about 4 percentage points. The magnitude is robust in the IV estimation using the intransitive nature of links. This effect is stronger for hospitals with surgeons that have performed a large number of transplant surgeries, defined as super surgeons, and for hospitals that have more than one mutual surgeon.

¹Bobby W. Chung, Ph.D, Post-doctoral Researcher, School of Labor and Employment Relations, University of Illinois (Urbana-Champaign)

Session 1 (RLB303) 11:15am – 12:30pm

**What Do We Know About Housing Supply?
The Case of Hong Kong**

Edward TANG, Charles LEUNG and Joe NG

Abstract

The house price in Hong Kong is well-known to be "unaffordable." This paper relates the macroeconomy and the housing market of Hong Kong and argues that the housing supply plays a vital role in explaining the phenomenon. This paper also shows that there are some practical challenges in understanding the housing supply of Hong Kong, including the potentially complicated ownership structure of real estate development. While the discussion centers on the situation of Hong Kong, its lesson may also apply to the housing markets in other small open economies.

Session 2A (RLB303) 2:00pm to 3:45pm

**External shocks or internal causes?
The property markets of two Asian financial centers**

Joe NG, Charles LEUNG and Jun YU

Abstract

Property markets in small open economies are subject to both external and internal shocks, whose importance would also affect the best policy responses. We build Bayesian VAR models to distinguish the contributions of external and internal shocks for two Asian financial centers. We find signs of flipping activities in the Hong Kong housing market but not Singapore. In particular, the U.S. aggregate demand shock and monetary policy shock will lead to positive responses of the real housing price and the vacancy rate in Hong Kong. For Singapore, we find that the U.S. aggregate demand shock has no significant effect on the real housing price and the vacancy rate, while the U.S. monetary policy shock will lead to a decreasing in the housing price and an increase in the vacancy rate. Our results survive several robustness checks.

Keywords: Bayesian VAR, small open economies, external and internal shocks, property markets flipping

JEL classification: C11, F41, R30

Authors: Joe Ng (City University of Hong Kong), Charles Leung (City University of Hong Kong)
Jun Yu (Singapore Management University)

Acknowledgement: We are grateful to Nan-Kuang Chen, Fred Kwan, for helpful discussion, and City University of Hong Kong for financial support. Part of the research is conducted when Leung visits the Hoover Institution, whose hospitality is gratefully acknowledged.

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**Are Institutions the Cause or the Outcome of Economic Growth?
Evidence in Developing and Developed Countries**

Sung-Ko LI* and Chun-Kei TSANG**

Abstract

Researchers of economic development believe that there is a causal relationship between institutions and economic growth. However, the direction of causality is still under debate. If institutions are a cause of economic growth, then development strategy should emphasize the improvement of institutions. On the other hand, if institutions are the outcome of economic growth, then allocating resources to improve institutions explicitly may not be needed for development. Although numerous studies in the literature have provided different theories and explanations about the relationship between institutions and economic growth, there is still a huge research gap in both theoretical and empirical studies on this important topic.

This paper aims to answer the question "Are institutions the cause or the outcome of economic growth?". Our results are significant because, to our best knowledge, such information in empirical studies with panel dataset has not been fully documented in the literature. Borrowing from the literature on endogenous growth models, this paper expresses various possible relationships between institutions and economic growth as special cases of a general growth model. Using the Institution Pillar of Global Competitiveness Index, we found statistically significant causality from institutions to economic growth in developed countries.

However, the causality in developing countries is from economic growth to institutions. This suggests different model settings should be adopted in studying institutions for countries in different development stages.

Keywords: Institutions; Economic growth; Endogenous growth models; Panel Granger causality test; Global Competitiveness Index

JEL classifications: O43, O11, O47

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Session 2A (RLB303) 2:00pm to 3:45pm

Greater Bay Area: Price Convergence of Product

Kai Yin WOO, Shu Kam LEE and Jacky WONG

The development of the Guangdong-Hong Kong-Macau Greater Bay Area (GBA, 粵港澳大灣區) purports to increase trade flow and promote economic integration between Hong Kong, Macau and the other nine cities in Guangdong Province – Dongguan (東莞), Foshan (佛山), Guangzhou (廣州), Huizhou (惠州), Jiangmen (江門), Shenzhen (深圳), Zhaoqing (肇慶), Zhongshan (中山) and Zhuhai (珠海). The principal goal of this GBA is to develop a functionally integrated productive and competitive city cluster within which each GBA city can interact harmoniously and complementarily. This GBA initiative, like the European Union, is an ideal experimental platform for regional economic convergence and economic union in which the mobility of both goods and people are perfect in the longer term. The theory of purchasing power parity is a widely accepted conceptual framework for designing and operationalising empirical tests to assess economic convergence criteria. In this paper, we apply Threshold Vector Error Correction Model to study the PPP and the degree of regional price convergence in the GBA. It is observed that due the existence of transaction costs, the effect of linear convergence is weak but strong evidence of nonlinear price convergence is found. The implication is that efforts should be put on reducing transaction costs.

Session 2A (RLB303) 2:00pm to 3:45pm

One belt One Road: Nonlinear PPP

Kai Yin WOO, Shu Kam LEE, and Paul SHUM

The Chinese Government has proposed the 'Belt and Road Initiative' (BRI) in order to increase trade flows and economic prosperity among the Belt and Road (BR) member countries. The BRI may call for enlargement of economic cooperation as manifested by forming an economic or monetary union in the long term. It is therefore essential to choose a subset of member countries that fulfills the criteria for joining the potential economic or monetary union. The validity of purchasing power parity (PPP) implies well-integrated goods markets and is a pre-condition for further economic convergence. While the presence of transaction costs causes nonlinearities in the adjustment mechanism, our empirical study applies a three-regime threshold autoregressive (TAR) cointegration method for analysis. Our results support the existence of a PPP relationship with China for 12 sampled Asian member countries. Chinese policymakers can prioritize these BR countries for closer economic cooperation. Also, this TAR cointegration method can estimate the unobservable proportional transaction costs from the thresholds. The results reveal BR countries with large thresholds as targets to curtail transaction costs of trading in order to enhance the efficiency in international goods arbitrage and the degree of trade integration along the BR routes.

The Effect of Minimum Wage on Youth Employment

SITOMPUL Thomson^{1*} and Paksi C.K. WALANDOUW²

Abstract

Unlike the previous study in the minimum wage, which focused on total employment and economic sector, this paper examine its effect on one demographic variable (age). The aim of this study is to analyze the impact of minimum wages on youth employment in Indonesia. We analyze the impact on teenage youth employment and total youth employment. This study contributes to the limited literature on youth employment as the impact of minimum wage in developing countries, especially in Indonesia. Using cross section district data from the 2015 on OLS method of regression, we find that the districts/cities that have a higher district minimum wage has lower covered youth employment and total youth employment. The higher the district minimum wage, the lower the covered youth employment. Surprisingly, the minimum wages reduced covered youth employment significantly more than total employment.

Keywords: Minimum wage, Youth employment, Covered youth employment

JEL Classification Code: E24, J13, J23, J31, J460

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Acknowledgements

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Analyzing the relationship between Sources of Financing and Economic Growth in China.

CHAK Suet Ching¹

Abstract

China's remarkable success in IT has speeded up development in its financial systems that would make financing proceedings more efficiently than before. There are three basic sources of financing: borrowing from banks, issue of shares or bonds to the public through the stock markets (IPO) and foreign direct investment (FDI inflow). In China, it is definitely a bank-based financial market which accounts for more than 70% of total financing. On the contrary, the FDI has fallen below 5% but is still an important source of foreign currency and technology transfer to China. This paper aims to exam the relationship between financing and the economic growth of China. The gross domestic product (GDP) will be compared to five groups of financial variables including money supply (M2), interest rate, FDI, IPO and aggregate financing to the real economy (flow). All the raw data are converted into logarithm. However, the time series of M2 and interest rate are given up after they have been found no granger-cause GDP and vice versa. A VEC model is built after completing ADF, Granger Causality and Johansen Cointegration Tests. The result shows China's LnGDP(-1) is the variable that affects LnGDP the most with a high parameter of 0.6, and followed by lnFDI's 0.38. However, the parameters of aggregate financing and IPO are less than 0.5%. These figures are not consistent to the proportion of the original data. After further investigations, we find out two reasons to

the aggregate financing. First, large amounts of deposits and lending have shifted to shadow banking and electronic-payment accounts operated by non-banking financial institutions. It becomes worse that money borrowers including the state-owned and commercial banks made use loan for trading in the financial products instead of flowing into the real economy. Bank of Settlement (BIS) worked out that "Credit to government and state-owned enterprises to China's GDP" has climbed up to 252.7% at the end of the third quarter of 2018, higher than the global average's 231.2%. The debt to equity ratio of the state-owned manufacturing enterprises have already moved up to 67% so far. High debt ratio means the ability to further borrowing becoming more difficult and finance costs going up higher. Under these circumstances, we therefore recommend a strategy to the highly geared entity. They should try to generate more income from overseas countries, for instances, increasing exports and IPO in overseas markets. These will achieve the objective of raising funds for domestic enterprises' innovation and expansion. More importantly, these will not push up the credit ratio to GDP and avoid deteriorating the financial risk.

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Session 2B (RLB302) 2:00pm to 3:45pm

Happiness and Overweight: Panel data analysis on the differences between Male and Female.

CHU Wan Ling and YUEN Wai Kee

Abstract

Globalization of slimming norm tends to spread the perception that being fat is a source of unhappy especially for the case of female. This paper examines the association between overweight and happiness using global parallel panel data and compares the differences between male and female. Using generalized least squares to estimate the fixed effect panel data models, the empirical results show that happiness increases with percentage of overweight. Happiness tends to make people grow plump for both male and female. Increase in GDP per capita increases the percentage of overweight in a country and the effect is higher for male than female. Social support increases the percentage of overweight in low/middle income countries but reduces the percentage of overweight in high income countries for the case of female. Life expectancy increases the proportion of overweight but it is significant only for the case of male. Overweight and positive affect are negatively related and the impact is higher for male than female. Negative affect are positively associated with overweight. The association between happiness and overweight for female in high income countries tends to exhibit a different pattern in comparing with low or middle income countries.

Session 2B (RLB302) 2:00pm to 3:45pm

Wine and Happiness: Panel Data Analysis

YUEN Wai Kee

Abstract

The harmful effect of alcohol is well known, worldwide over 5% of all deaths related to the harmful use of alcohol, this represent around 3 million death each year. However, alcohol is also known as the cultural, social practices and a form of lifestyle globally. This makes the control of the harmful use of alcohol extremely difficult. If people are happy with their consumption of alcohol, it is difficult to convince them not to trace their happiness. This paper examines the association between happiness and the consumption of three types of alcohol (Beer, Wine and Spirits) with a fixed effect panel data model using global data from 2010 to 2015. The empirical result shows that apart from happiness, income, social support and life expectancy also take a role in affecting alcohol consumption. Indeed, different region have different preference in the consumption of alcohol. Europeans tend to enjoy wine with the association between wine and happiness being the largest while beers tend to bring happiness and enjoyment to people in Western Pacific and America. Although spirits take up the largest portion (over 44.8%) of worldwide, the association between happiness and spirits are weak.

**Inflation Dynamics:
A Comparative Study of Mainland China and Hong Kong.**

HUNG Tsz Hin, Ronald¹ and Yum K. KWAN²

Abstract

Vigorous debates have been lasting on whether the inflation dynamics should follow pure backward-looking (Sticky Information) or pure forward-looking (Sticky Price) version New Keynesian Phillips Curve. Previous researches on this issue seldomly compare the validity of these two models, especially in Asian regions. Drawing on the quarterly data from Mainland China and Hong Kong during 1994 to 2017, we find (1) In both cases, pure-backward looking model explains inflation dynamics much better than the pure-forward looking one; (2) Price setters in Mainland China take shorter time on price adjustment than that in Hong Kong; (3) However, both models fail to explain the inflation dynamics well before 2005, but pure backward-looking model performs relatively better in the whole period, in terms of the lower measurement error and correct prediction trend. To the best of our knowledge, our findings, which suggest the Sticky Information model, plays an important role in Asia. This finding is different from previous American and European studies which promote the pure forward-looking model.

Keywords: Inflation dynamics, New Keynesian Phillips curve, nominal rigidity, stick price, sticky information

JEL Classification: E12, E31, E52

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Is Sophia The Robot A Legal Person?

PANG Chau Sheung Rosa¹

Abstract

Sophia the Robot was made by Dr David Hanson of the Hong Kong-based Hanson Robotics. In October 2017, Sophia became the first robot to receive citizenship of any country. Should a robot enjoy any legal status independent of its human creators? If so, what kind of legal status would that be? Should the robot enjoy its/her/his “rights”? This paper is a comparative study of the robotic law and policy in some major jurisdictions such as the EU and the USA in relation to the legal status of robots. The study uses research methodology based on comparative law method, concepts of lesson drawing and policy transfer from political science, and socio-legal approaches. The paper suggests a twofold stance. First, policy makers should seriously consider the possibility of establishing new forms of responsibility and liability for the activities of robots in contracts and business law, e.g., new forms of agency. Second, any hypothesis of granting robots full legal person status has to be carefully considered in the foreseeable future.

Keywords: robot, legal person, robotic law and policy

¹PANG Chau Sheung Rosa (Shanghai University of Finance and Economics)

**An Empirical Study on Child Mortality Rate – Application of
Regression Analysis**

**YEUNG Ngai Sang, Kenrick, WONG Yu Hong, LEUNG Tat Yu Owen and
LAI Yik Man**

Abstract

This paper focus on analyzing child mortality rate [Mortality rate (under-5)] with using regression analysis. Finding best predictors and used as independent variables in a regression equation with the problem of missing data. This paper performs modern method - Bootstrap Inference When Using Multiple Imputation, which can increase the accuracy of the imputation process. This paper shows some important statistical concepts which can allow OLS regression can violate the normality assumption and how quantile regression can reduce the effect of outliers.

Key words: OLS regression, bootstrapping, multiple imputation, quantile regression

Economic and political inequality in Southeast Asia: 1998-2017

CHAN Ka Lok, Daniel¹

Abstract

Inequality is always one of the hottest focus in the fields of economics, political science and sociology. From economic inequality to political inequality, Based on Mills (1956), Domhoff (2006) and Zingales (2017) agreed that money offers power to lobby the government and establishes think tanks and media, which create civil liberties and participation. Besides, possessing political power can develop economic power, which is seen as vicious circle. On the other hand, Meltzer and Richard (1981), the poor will demand for income redistribution when economic inequality grows. When grievance is high, the means of civil disobedience and rebellion would be triggered to be adopted. In other words, economic inequality may boost the incentive of political engagement and thus reduce political inequality.

In the study of Cole (2018), this is primary attempt to investigate the relationship between economic and political inequality using a global scale. It affirmed that income inequality adversely influenced the goal of political equality and this conclusion applied to most countries around the globe, including both democratic and non-democratic as well as both developed and developing countries. Also, existing research is limited by single country cases and inter-subunit comparison in highly-developed countries (Acemoglu and et al., 2008; Gilens, 2012; Rosset and et al., 2013; Solt, 2008). Thus, in order to help provide contribution to the field of regional studies (Southeast Asian studies) and have better

comparison results, only six Southeast Asia nations under post-Asian Financial Crisis period are chosen.

In this study, it would analyze if economic inequality affects the structure of political power, or vice versa. For method, panel data regression analyses with control variables were employed to identify causal effects (Wooldridge, 2013).

Reference

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東盟與中國自由貿易協定對兩地區域發展的影響。

楊偉文¹

摘要

本文嘗試分析「東盟與中國自由貿易協定」對東盟十國政經的影響，按過去歷史資料分析東盟十國跟中國的政經關係，嘗試把相關數據進行量化層級分類的分析，把十國與中國關係分為「與中國關係良好」，「與中國關係中性」和「與中國關係緊張」等三組「關係群」，建立東盟十國與中國的政經關係分析框架，闡述自由貿易協定對三組不同級別的東盟國家帶來的影響，藉這「政經框架」評估東南亞與中國政經關係的未來發展。

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基于协整模型的股票配对交易策略研究

魏霁月¹

摘要

本文首先概述了国内外学者的研究成果，阐述了配对交易的相关概念以及与之相关的数学模型，随后选取了2017年至2018年每个交易日上证50指数的成分股收盘价作为样本数据，运用最小距离法选出相关系数较小的5对股票对，运用协整模型训练并测试后得到投资结果最好的股票对（交通银行，光大银行）。文章在研究中还发现简单对所有股票对套用相同的阈值并不能得到较好的投资结果，在根据股票对（兴业银行，国泰君安）的特征修改了相应阈值后，投资结果得到了明显的提高。

关键字： 配对交易 最小距离法 协整模型

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Session 3B (RLB302) 4:00pm to 5:45pm

Global Warming, Climate Change and World Environmental Degradation

Edward TANG

Abstract

Climate change has been a long-lasting global issue. Despite its urgency, international communities are rather slow to work out a feasible solution. In this paper, we start with an overview of pollution around the world, and then proceed to the discussion of environmental justice. Finally, it explains that there are weak political and economic incentives for countries to bind a coherent agreement on climate change. The chapter is also illustrated by the examples around the world.

Session 3B (RLB302) 4:00pm to 5:45pm

The Rank Tests for Nonlinear Cointegration: Examining the Price convergence of household products in Canada

Kai Yin WOO, Shu Kam LEE and Alan CHAN

This article examines the price convergence of beverage products within Canada in order to assess the efficacy of intranational cross-border movements of foodstuffs. Since the cointegrating relationship between product prices may not be exact or linear, we adopt the rank tests for analysis which do not require prior knowledge and specification of the linear or nonlinear functional form. Our results validate the price convergence of almost all products within Canada. Furthermore, a subset of the cointegration relationships exhibits nonlinear longrun price co-movements.

The Rank Tests for Nonlinear Cointegration: Examining the Price Competition between the Two Supermarket Giants in Hong Kong

WONG F.K. Joe, LEE S.K. and WOO K.Y

Abstract

The grocery industry in Hong Kong has increased its concentration over the last two decades. High concentration may give rise to market power, which in turn causes anti-competitive behaviour and high grocery prices that lower the standard of living among consumers in Hong Kong, especially those in low-income households. The growing dominance of supermarket chains has therefore brought public concern over exploitation of market power in the HK retail grocery industry. Using cointegration analysis, this paper examines the price convergence and competition of grocery products between the two largest supermarket giants in Hong Kong, Wellcome and ParknShop. Since the cointegrating relationship between supermarket prices may not be exact or linear, we adopt the non-parametric rank tests for analysis which do not require prior knowledge and specification of the linear or nonlinear functional form. The results confirm the existence of price convergence and competition. Also, there is some evidence of nonlinear cointegration relationships between supermarket prices, which may be caused by transaction costs, nonlinear price interaction behaviors, and game theoretic strategies.

Keywords: rank tests; Hong Kong supermarkets; nonlinear cointegration; price convergence

JEL: C1, D0

NOTE

NOTE

Glad to see you at conference



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