

### University of Otago

# 2015 (Nov) PhD Workshop

Department of Accountancy and Finance, Otago Business School

Initiator: Professor Jin Zhang Facilitator: Dr. Helen Roberts

Organizer: Fang Zhen

## Program for 2015 (Nov) PhD Workshop

Department of Accountancy and Finance, Otago Business School 1:00pm-3:00pm, November 11<sup>th</sup>, 2015, Commerce Boardroom

PhD Presentations	
1:05 pm to 1:11 pm	Presenter: Syrus M. Islam Supervisors: Prof. Ralph Adler, Dr. Carolyn Stringer, Dr. Rakesh Pandey, and Prof. David Lont Title: On Validating Early-Stage Performance Measurement Models: An Interventionist Study
1:11 pm to 1:17 pm	Presenter: Fang (Livvy) Zhen Supervisors: Prof. Jin Zhang, Prof. Timothy Crack, and Dr. Eric Tan Title: CBOE SKEW and Realized Third Cumulant
1:17 pm to 1:23 pm	Presenter: Nhu Nguyen Supervisors: Prof. Jin Zhang, and Dr. Numan Ulku Title: Asset Pricing Tests: Evidence from Vietnam
1:23 pm to 1:29 pm	Presenter: Ming Kuang Tan Supervisors: Prof. Ralph Adler, and Dr. Rakesh Pandey Title: Creating a Modified Monopoly for Enhancing Student's Understanding of Basic Accounting Concepts
1:29 pm to 1:35 pm	Presenter: Matt McCarten Supervisors: Dr. Ivan Diaz-Rainey, Dr. Helen Roberts, and Dr. Eric Tan Title: Lobbying and Securities Class Actions Pre- and Post-SOX
1:35 pm to 1:41 pm	Presenter: Max Yap Supervisors: Dr. Michael Falta, Prof. Roger Willett, and Prof. Ralph Adler Title: Accounting Systems and Public Healthcare: Agent-Based Modelling and Simulations
1:41 pm to 1:47 pm	Presenter: Haileslasie Gebremariam Supervisors: Dr. Helen Roberts, and Dr. Rosalind Whiting Title: Microfinance Institutions Transparency

1:47 pm to 1:53 pm

Presenter: Xinfeng (Edwin) Ruan

Supervisor: Prof. Jin Zhang

Title: Asset Pricing in a Pure Exchange Economy with Heterogeneous Investors

Presenter: Sebastian Gehricke

Supervisor: Prof. Jin Zhang

Title: Modeling VXX

Mix and Mingle		
2:00 pm to 3:00 pm	Afternoon Tea	

#### **Abstracts**

On Validating Early-Stage Performance Measurement Models: An Interventionist Study Syrus M. Islam, PhD in Accounting

#### **Abstract**

Without validating the performance measurement model (PMM), it cannot be ascertained whether the PMM has been designed appropriately. However, empirical research on validating PMMs is remarkably scant. It is also little known whether and how to validate early-stage PMMs – those that are followed for a shorter period of time, say, around two years and are yet to be fully operational. Drawing on the work of Malina, Nørreklit, and Selto (2007) and Huelsbeck, Merchant, and Sandino (2011), this study employs the constructive research approach – a strong form of interventionist research and reports the development and application of an innovative tool, the PMM Validation Tool (PMMVT), to systematically validate early-stage PMMs. This study shows that validation of early-stage PMMs is particularly beneficial, since organizations get an opportunity to check their overall PMM's accuracy at an early stage, instead of wasting resources to pursue wrong purposes. The findings also suggest that finality and logical relations, as opposed to cause-and-effect relations, may dominate in most PMMs, especially in the service-oriented organizations. Overall, this study adds to the PMM design literature and to the nascent literature on the underlying relations in PMMs and (early-stage) PMMs validation. This study also has both proven and potential practical contributions.

**CBOE SKEW and Realized Third Cumulant** 

Fang Zhen, PhD in Finance

**Abstract** 

The CBOE SKEW is a new index launched by the Chicago Board Options Exchange (CBOE) in

February 2011. Its term structure tracks risk-neutral skewness of the S&P 500 index (SPX) for

different maturities. The observable public information of the SKEW could be useful in

forecasting future stock returns. In this paper, we perform an informational efficiency test of the

option market, forecasting the third cumulant (i.e., third central moment) of the distribution of

the S&P 500 cumulative logarithmic returns with the information embedded in the CBOE

SKEW and VIX indices.

The Fama-French Five Factor Model: Evidence from Vietnam

Nhu Nguyen, PhD in Finance

Abstract

Fama and French (2015a) introduce new asset pricing model with five factors that captures

profitability and investment patterns, in addition to traditional size and value characteristics

(Fama and French, 1993). We document evidence that the Fama-French five-factor model

(2015a) can explain more asset-pricing anomalies than traditional CAPM and the three-factor

model (Fama and French, 1993) and show that importance of the value factor is not lessened by

inclusion of the profitability and investment factors in the Vietnamese stock market. We also

discover that in Vietnam where the government owns large stake in major large listed

companies, traditional asset pricing models fail to capture average returns on state-owned

enterprises (SOE).

Creating a Modified Monopoly for Enhancing Student's Understanding of Basic

**Accounting Concepts** 

Ming Kuang Tan, PhD in Accounting

Abstract

A deep understanding of basic concepts is vital for developing analytical and conceptual thinking

skills, and helping student to fully comprehend the discipline. Literature in educational

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psychology contends that memorizing facts and rules do not improve understanding (Driscoll, 2005). To develop a deep understanding, the instruction need to be designed in a such way that allow students to engage in solving complex and real world problems. Simulation game is one method fostering higher-order or deep thinking (Kapp, Blair, & Mesch, 2014; Reigeluth, 2005). A number of studies have reported the effectiveness of simulation games to learn particular accounting topics (e.g., Everaert & Swenson, 2014; van der Laan Smith, 2013). However, much less is known about how Monopoly, a business simulation game, is used to develop understanding of basic accounting concepts. The purpose of this study is to examine the effectiveness of modified Monopoly for enhancing student's understanding of basic accounting concepts. An experimental design will be used to investigate this issue.

#### **Lobbying and Securities Class Actions Pre- and Post-SOX**

Matt McCarten, PhD in Finance

#### Abstract

This paper examines the impact lobbying has on the time it takes to detect managerial misconduct and the size of the penalties associated with securities class actions before and after the enactment of SOX. Prior to SOX we find managers of firms that lobbied were able to evade detection for longer and were marginally less likely to have to settle a class action filed against them. After SOX lobbying no longer has an impact on the time it takes to detect misconduct or the outcome of the case. The findings indicate that the enactment of SOX has improved the accountability of lobbying firms.

#### Accounting Systems and Public Healthcare: Agent-Based Modelling and Simulations

Max Yap, PhD in Accounting

#### Abstract

The aim of this study is to demonstrate how policy choices, accounting systems, and human decision processes interact in healthcare systems, via the agent-based simulation of providers, payers, and patients in healthcare systems.

#### MFI transparency in Sub-Saharan Africa

Haileslasie Gebremariam, PhD in Finance

#### Abstract

Microfinance institutions (MFIs) are financial institutions that provide financial services to the poor and financially excluded. Funding is critical for MFIs to achieve their dual objective (outreach and financial sustainability). MFI transparency is being recognized as an important factor for access to funding. My study gives empirical evidence on what factors affect MFI transparency and examines how transparency improves access to funding and MFI performance.

#### Asset Pricing in a Pure Exchange Economy with Heterogeneous Investors

Xinfeng Ruan, PhD in Finance

#### **Abstract**

In this paper, we provide the first complete solution to the problem of asset pricing in a pure exchange economy with two types of heterogeneous investors: an institutional/retail one with lower/higher risk-aversion. Using a perturbation method with heterogeneity as a small parameter, we solve the equilibrium and obtain analytical approximate formulas for the optimal consumption-sharing rule, pricing function, Sharpe ratio, risk-free rate, stock price and optimal trading strategies. We then analyse the properties of the equilibrium and derive some testable hypotheses, which enhance our understanding on the economics of financial market.

#### **Modeling VXX**

Sebastian Gehricke, PhD in Finance

#### **Abstract**

In this paper, we study the VXX exchange traded note, that has been actively traded on the New York Stock Exchange in recent years. Using Zhang, Shu and Brenner's (2010) analytical approximate formula for VIX futures prices, we develop the first theoretical model for the VXX that links SPX, VIX and VXX. We confirm that the large negative VXX returns are mainly due to the cumulative negative roll yield of VIX futures. We then provide a simple yet robust estimation of the market price of variance risk using historical VXX returns. The model can be used to price VXX options.