

## RESEARCH PROJECTS

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### The Succession of Family Firms in Asia

✉ FAN P. H. Joseph • Ming JIAN\* • Yin Hua YEH\*

☐ 1 January 2006

❖ Research Grants Council (Earmarked Grants)

This project studies the following questions on succession of family firms in 3 Asian economies (Hong Kong, Singapore, and Taiwan):

- (1) How successful are family firm successions?
- (2) What determine the success (or failure) of succession?
- (3) What determine the choice between an heir and an unrelated successor?

(CU05716)

### Political Connections and Corporate Financing in China

✉ RUI Meng • FAN P. H. Joseph

☐ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

Prior research has found that country-level institutional factors play important roles in affecting corporate financing choices. Corruption is one such institutional factor. We propose to investigate the impact of political rent seeking on corporate financing behaviors in China - a country suffering from corruption problems and high corporate sector debt. We will use both cross-sectional and time-serial approaches to examine how political connectedness of firms shapes three corporate finance

characteristics: (1) capital structure, (2) debt maturity, and (3) access to bank loans and bond markets. Complementary to previous cross-country studies, our proposed single-country setting provides a more controlled experiment and an opportunity to examine the issues in depth. Since the effects of political rent seeking and corruption in corporate finance is by no mean unique to China, the evidence from China will provide useful implications to other emerging markets and transitional economies plagued by similar institutional problems.

Both investigators have worked on the corporate governance in China for the past three years. Rui recently has three papers accepted for publication by Journal of Corporate Finance, Journal of Management Studies and Journal of Accounting and Public Policy. (BS05662)

### Accounting Quality and Corporate Structures of Chinese Listed Firms: The Effects of Market Institutions and Political Influences

✉ WONG Tak Jun

☐ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

A recent China study by Fan, Wong, and Zhang (2004) finds that in regions where markets, legal systems and property rights protection are well developed and government has weak incentives to interfere with business, the listed firms generally have more layers in the corporate structure, limiting the control of government as an ultimate shareholder. However, in regions with weak market institutions and strong political influences on the economy, the listed firms have fewer corporate layers, which provide convenience for government control through direct ownership. The opposite is true for firms

with private ultimate shareholders. The lack of development in market institutions is associated with more layers in the corporate structure, which are used for hiding the identity and wealth of the private owners and shielding them from government predation. In this proposal, we would try to compare, between government-controlled versus privately-controlled listed firms, how corporate layers are associated with accounting quality as proxied by 1) earnings-return relation, and 2) the choice of auditors. For government-controlled listed firms, we expect that more (fewer) corporate layers are associated with less (more) government intervention, and thus their accounting quality would likely be higher (lower). On the contrary, we expect that the increase (decrease) in corporate layers of privately-controlled firms is associated with lower (higher) accounting quality, because private owners have stronger (weaker) hiding incentives.

(BS05416)

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### **Ownership Divergence, Price Leading Earnings, and Investor Protection**

✉ WU Yuwu Woody • LEE Seok Hwang\*

□ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

The objective of this study is to examine the effect of stock ownership structure and investor protections on timeliness of earnings in the international setting. The concentration of ownership and the divergence between cash rights and voting rights may create an incentive for the ultimate controlling shareholders to expropriate minority shareholders. To mask their wealth expropriation activities and avoid external monitoring and potential legal penalty, controlling shareholders are likely to withhold or misrepresent

information. This suggests that the stock prices of firms with concentrated ownership and greater degree of divergence between cash flow and voting rights likely reflect less information about future performance of these firms. Using a comprehensive firm-level ownership data for nine East Asian economies and thirteen Western European countries, this study investigates the effects of ownership concentration and separation of controlling owners' control rights from cash flow rights on the price-leading-earnings relation. This issue is of interest because ownership and control structure both affect the timeliness of earnings. This study further examines whether the negative impacts of cash flow-control rights divergence on the timeliness of earnings are less severe in countries with high level of investor protection.

(BS05400)

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### **Economic Determinants of Insider Trading Profitability and Economic Consequences of Insider Trading**

✉ YANG Yong

□ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

This project uses cross-sectional analyses to examine factors that affect the profitability of insider trading, such as the precision of insiders' and outsiders' information and corporate restrictions on insider trading. The empirical evidence will shed light on the issue whether, in the presence of litigation risk inherent in exploiting superior inside information, the profitability of insider trading is associated with the precision of insider information and the disclosure quality of insiders' firms. Employing both direct and indirect approaches to infer the corporate

restrictions on insider trading, I plan to investigate the impact of corporate restrictions on insider trading profitability. I will examine the robustness of the results by controlling for the potential endogeneity between insiders' choice of trading profitability level and their decision on disclosure quality and corporate restrictions on insider trading. I will further investigate the impact of insider trading on a firm's cost of equity capital by inspecting the relation between the profitability of insider trading over a fiscal year and their firms' cost of equity capital measured at the end of that fiscal year. These results are aimed to improve our understanding about the cross-sectional variation of the profitability of insider trading and the information mechanism underlying the semi-strong efficient market.

(BS05636)

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### **Institutional Environments and perceived Disclosure Credibility: Global Evidence**

✉ YOUNG Danqing • RUI Meng • WANG Qian#

☐ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

Separating management functions from ownership in modern corporations creates the problem of information asymmetry between managers and outside investors, which may potentially lead to a breakdown in the functioning of the capital market (Healy and Palepu, 2001). Demand for corporate disclosure, therefore, arises to mitigate this information problem. The effectiveness of corporate disclosures in reducing information asymmetry depends on 1) disclosure level, and 2) investors perceived disclosure credibility. While a

substantial and well-organized body of work has been done regarding the first factor, little empirical evidence, to our knowledge, has been documented regarding the second. The purpose of this study, therefore, is to address an important question of what affects perceived disclosure credibility.

We define perceived disclosure credibility as the extent to which disclosures affect information users' decisions, such as analysts' decisions on earnings forecasts and investors' decisions on stock prices. We examine whether a country's institutional environment regarding investor protection affects perceived credibility of corporate disclosure in that country. Based on theoretical and empirical evidence from finance and accounting literature, we predict that perceived disclosure credibility will be higher in countries with common law as the origin of the legal system, extensive investor protection laws, more effective law enforcement, and more developed equity markets.

(BS05391)

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### **Business Cycle and the Accruals Anomaly**

✉ ZHANG Yinglei

☐ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

Motivated by Chordia and Shivakumar's work (2002; 2005a,b), I will investigate whether the Accruals effect is related to the macroeconomic factors. This approach utilizes the very fundamental concept of risk—common (macroeconomics level) factor to examine whether and how the Accruals effect varies with the good vs. the bad economic state.

First, I will investigate the time variation in profits from the Accruals strategy between the recession and

the expansionary periods. Second, following Liew and Vassalou (2000), I will examine the relation between the Accruals strategy payoff and future GDP growth using univariate and multivariate regression analysis. Third, I will adopt the conditional CAPM framework to directly measure the expected (predicted) returns using standard macroeconomics variables. If the Accruals effect is a reflection of underlying macroeconomics factors, one will expect the effect (1) is stronger during the expansionary period (2) is positively related to future GDP growth and (3) largely vanishes after controlling the time varying expected returns.

The results of this study will provide evidence of the relative importance of common versus firm-specific sources of the Accruals payoff. If the payoff is related to a common factor source in the predictable way, it will point towards the rational-risk based explanation. Otherwise, it is more favorable to the behavioral arguments.

(BS05881)

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**Please refer to previous issues of this publication for more details of the following ongoing research at the department:**

Edition      Title/Investigators

2004-05      An International Comparison of Corporate Financial Policy (BS03533)

✉ FAN P. H. Joseph

2002-03      Professionals' Duties and Liabilities in China: The Case of Certified Public Accountants (CU02277)

✉ JIANG Zhaodong • WANG Liyan\*

2003-04      The Audit Effect on Information Asymmetry and Valuation in the Capital Markets (BS03814)

✉ LAM Chee Keung • YAW Mensah\*

2003-04      How Do Taxes Affect Dividend-Valuation? (BS03445)

✉ RUI Meng • WANG Steven\*

2004-05      The Effectiveness of Audit Committee in Relation to its Structure, Role and Functions: Asia Pacific Region Evidence (BS04442)

✉ TONG WU Yew Jen Marian • NG Yick Man Andy

2003-04      Audit Markets and Legal Environments around the World (BS02693)

✉ WONG Tak Jun • CHOI Jong Hag\*

2004-05      The Study of Related Party Transactions in China (BS04963)

✉ WONG Tak Jun • Ming JIAN\*

2002-03      Concentrated Stock Ownership and Price-Leading-Earnings Effects in East Asia (BS02631)

✉ WU Yuwu Woody • HWANG Lee Seok#

2003-04      Concentrated Stock Ownership and Price-Leading-Earnings Effects in East Asia (BS03663)

✉ WU Yuwu Woody • LEE Seok Hwang\*

2004-05      Ownership Structure, Investor Protection and Analyst Following (CU04437)

✍ WU Yuwu Woody • HAW In-mu# •  
Lee Seok Hwang\*

2003-04 The Association between Accounting Standards, Corporate Restructuring and the Informativeness of Accounting Earnings: Evidence from Japan (BS03493)

✍ YOUNG Danqing • FERGUSON  
Michael John

## RESEARCH PROJECTS

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### **Learning Shallow Natural Language Patterns: Toward a Direct Inference from Chinese Financial News Articles**

✉ CHAN Wai Kwong Samuel • FRANKLIN  
James\* • LAI Tom\*

□ 1 January 2006

❖ Research Grants Council (Earmarked Grants)

Although most quantitative financial data are largely analyzed by the traditional techniques of artificial intelligence or data mining, the abundance of on-line electronic financial news articles has opened up new possibilities for intelligent systems that can extract and organize relevant knowledge automatically in a usable format. Information extraction (IE) is widely recognized as one of the more successful technologies that has arisen from the field of computational linguistics, but most of the typical IE systems require a hand-built dictionary of templates and are then subject to ceaseless modification to accommodate new patterns that are observed in the text. In this research, we propose a novel intelligent system for knowledge discovery from texts (KDT) that deals with the issues of shallow language pattern learning and language inference. A conceptual representation of sentence meaning will be investigated in conjunction with the patterns that are extracted. The system that is described will be implemented, and an evaluation of not less than 1,500 financial news articles will be undertaken to justify its significance.

(CU05706)

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### **Knowledge Management and Firm Performance: An Empirical Study**

✉ CHEUNG Wai Man • LIANG Ting Peng

□ 1 May 2006

❖ CUHK Research Committee Funding (Direct  
Grants)

In the past several years, knowledge management has gained much attention and is considered critical to the success of many organizations. Many firms have adopted various mechanisms to facilitate the creation, organization, sharing, and application of key knowledge. Much research has also investigated the enablers and process of knowledge management, but it is still not very clear how the adoption of knowledge management affects firm performance. In particular, research on firm performance often considers knowledge management to be a generic technique without taking into account the idiosyncratic nature of different industries and firms. In this research, we target at finding answers to two problems: (1) whether the adoption of KM can help improve organizational performance, and (2) how knowledge management may effect differently in different organizations, i.e., whether it is more useful for one kind of company (e.g. a design house) than for another (e.g. a PC assembler). For this purpose, we will conduct empirical studies to investigate the effect of adopting knowledge management on the managerial and financial performance of an organization and how firm characteristics such as knowledge complexity, uncertainty, IT readiness, and leadership style may moderate the effect of knowledge management. Two theories will be used to develop the instrument for identifying firm-specific factors that may moderate the effect of knowledge management adoption: transaction cost economics and resource-based view. The findings

can contribute toward a better understanding of the value of different knowledge management activities in different firms.

(BS05555)

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#### **A Pilot Study to P2P Negotiation in Semantic Web**

✍ DU Timon Chih Ting

□ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

Web content is currently designed for human consumption rather than computer manipulation. The consequence is that a user has to make a tremendous amount of efforts to find needed information from millions of search results based on the keywords selected. A new approach, the Semantic web, structures the meaningful content of Web pages into semantic data. In this way, a user can write a paragraph (rather than keywords) to describe what they are looking for. Then the search engine uses the semantics behind that paragraph and the profile or search history of the user to search against semantic data and produce highly relevant results.

The proposed study will use Semantic web architecture to investigate the automatic negotiation process, for which recent research does not pay sufficient attention to obtaining higher satisfaction of the negotiators. The study will focus on developing a negotiation system to a level of deriving an agreement that is better than the expectations of both parties using negotiation power. To limit the scope of the study, the process will be built on a peer-to-peer (P2P) framework to represent a 2-player negotiation. A proof-of-concept prototype will be built to conduct various experiments.

(BS05566)

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#### **The Effect of Imitation Behaviour on Technology Adoption: A Case of ERP System**

✍ LAI Siu King Vincent • DU Timon Chih Ting

□ 1 January 2006

❖ Research Grants Council (Earmarked Grants)

The traditional theories of information technology (IT) assume that all adoption processes are systematically conducted and follow a rational path. However, we believe that apart from the logical aspect discussed in previous studies, there is always an irrational side in most decision-making processes. In the proposed project, we will investigate the imitation effect on technology adoption using Enterprise Resource Planning (ERP) systems as an example. This approach will offer a completely new perspective on IT adoption as a less rational behavior, even for critical ERP investment at the organizational level.

Along with this investigation of the imitation-adoption relationship, our research will evaluate the moderating effect of experience on imitation behavior. We believe that imitation behavior will be strongest when an organization is considering ERP for initial adoption. However, when an organization has accumulated 'experience' of ERP over time, its adoption of subsequent ERP modules will probably follow a more rational decision process, as explained by traditional adoption theories.

Our project will also explore the effect of imitation behavior on different types of adopters. We anticipate that at different stages of ERP diffusion, earlier ERP adopters, rather than 'followers', will be less influenced by imitation because they are mostly IT innovators and tend to put more resources into investigating the suitability and effect of ERP implementation.

(CU05725)

**An Investigation of the Relationships between Health Generation, Capital Accumulation, and Long-Run Economic Growth**

✉ LI Hongyi • Liutang GONG\* • Heng fu ZOU\*  
 □ 1 January 2006  
 ❖ Research Grants Council (Earmarked Grants)

We study a fundamental macroeconomic relationship between health, capital accumulation, and long-run economic growth. Health, just like education, is one of the most important components in human capital. In recent years there is great research interest in the investigation of the effect of health on economic growth. We propose a new theoretical model considering health capital generation, physical capital accumulation, and long-run economic growth. We extend traditional growth models to allow for the consideration of health capital generation. Using the new model, we study the dynamics of physical capital accumulation and health capital generation. We find that there is a cyclical relationship between the physical capital stock and health capital stock. There are also multiple equilibriums for the physical capital stock, the health capital stock, the consumption level, and the expenditure on health care. We also investigate the policy implications of consumption tax and income tax on the long-run health capital, physical capital, and economic growth. The empirical analysis testing these theoretical hypotheses is also conducted using a panel data that facilitates international comparisons involving major industrialized and developing countries.  
 (CU05726)

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**Please refer to previous issues of this publication for more details of the following ongoing research at the department:**

<u>Edition</u>	<u>Title/Investigators</u>
2003-04	Analyzing Query and Passage using Shallow Semantic Annotation in Chinese Question Answering System (BS03816) ✉ CHAN Wai Kwong Samuel
2004-05	Generating Explanatory Hypotheses from Financial Texts: A Feasibility Study (BS04761) ✉ CHAN Wai Kwong Samuel
2004-05	A Natural Language Front-End: Synergy between a Chinese Treebank and Verb Dictionaries in a Connectionist Model (CU04438) ✉ CHAN Wai Kwong Samuel • FRANKLIN James* • LAI Tom*
2004-05	A Technical Feasibility Study of a String-to-Structure Mapping in Generating Explanatory Hypotheses from Financial Texts (BS04323) ✉ CHAN Wai Kwong Samuel
2003-04	Government Land Sale, Housing Market, and Business Cycle (CU03128) ✉ CHEUNG Kwok Hung Francis • NI Shawn*
2004-05	Job Shop Scheduling of Minimizing Weighted Tardiness Using A Hybrid Genetic Algorithm (BS04772) ✉ CHEUNG Wai Man • LEUNG Chi Kin Lawrence

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| <p>2004-05 Investigating Distributed Document Management in Semantic Web (BS04306)<br/> <i>✍</i> DU Timon Chih Ting</p>   | <p>2004-05 Bootstrapping Stationarity Test Based on M-Estimators (CU04443)<br/> <i>✍</i> LI Hongyi • XIAO Zhijie*</p>  |
| <p>2004-05 A Privacy and Security Framework for EPC Network Infrastructure (BS04840)<br/> <i>✍</i> DU Timon Chih Ting • CHEUNG Wai Man • CHU Sung Chi • WONG Wai Chi Mavis</p>                                | <p>2003-04 Corporate Performance and Time Evolution of the Chinese Stock Markets: A Symbolic Data Analysis Approach (BS03705)<br/> <i>✍</i> MOK Man Kwong Henry • WANG Huiwen*</p>                           |
| <p>2002-03 The Impact of Public Investment in Infrastructure in China - A Comparative Analysis of Financing Methods (CU02286)<br/> <i>✍</i> FUNG Ka Yiu Michael • HO Wai Ming* • ZHU Li Jing*</p>             | <p>2004-05 A Theoretical Model for Volatility Smile and Skew (BS04327)<br/> <i>✍</i> MOK Man Kwong Henry • CHANG Eric Chieh (Finance)# • Wong Carrie*</p>  |
| <p>2004-05 Macroeconomic Effects of Public Pension Reform in China (BS04358)<br/> <i>✍</i> FUNG Ka Yiu Michael</p>  | <p>2002-03 Hong Kong - Pearl River Delta (HK-PRD) Economic Integration (BS02973)<br/> <i>✍</i> NG Fung Yee Linda • TUAN Chyau</p>  |
| <p>2003-04 An Investigation of Competitiveness of Manufacturing Companies in Selected Industries of Mainland China (BS03954)<br/> <i>✍</i> LEE Tien Sheng • ZHAO Xiande</p>                                   | <p>2003-04 An Investigation of Operations Strategy in Mainland China and Hong Kong (CU03146)<br/> <i>✍</i> ZHAO Xiande • LEE Tien Sheng • SUM Chee Chuong*</p>   |
| <p>2002-03 Air Cargo Logistics Integration and Consolidation on a 4th Party B2B Platform: Issues and Models (CU02288)<br/> <i>✍</i> LEUNG Chi Kin Lawrence • CHEUNG Wai Man • CHU Sung Chi • HUI Yer Van*</p> | <p>2004-05 An Investigation of Process Integration in Supply Chains (BS04689)<br/> <i>✍</i> ZHAO Xiande • HUI King Man (Marketing) • AU Yuk Fai Kevin (Management) • YEUNG Hoi Yan Jeff • LEE Tien Sheng</p> |
| <p>2003-04 Health, Income Inequality, and Economic Growth (BS03860)<br/> <i>✍</i> LI Hongyi</p>   |  |

## RESEARCH PROJECTS

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### **Disturbances and Shifts in Human Longevity Trend: Implication for Planning Health Services and Financing Retirement Security**

✉ CHAN Wai Sum • CHEUNG Siu Hung  
(Statistics)

☐ 15 October 2005

❖ Research Grants Council (Earmarked Grants)

The twentieth century has witnessed unprecedented improvement in longevity around the world. Prospects of longer life have led to concern over their implications for social, financial, health care and retirement system. A review of history of human mortality reveals great variability in the rate of change, whether because of epidemics, trends in smoking, changes in public health policies, or cycles in medical developments. In this research project, we seek to model the disturbances, temporary changes and level shifts of the historical human mortality improvement trend. Methods of constructing mortality projections, which include possible impacts of these disturbances, will be investigated. Simultaneous prediction intervals for the human longevity trend will be examined.

Being one of the world's longest life expectancy regions (84.3 for women, 78.6 for men in 2003), Hong Kong society is ageing faster than many other countries now. Centenarians (people living to 100 and beyond) represent one of the fastest growing age groups of the Hong Kong population. Currently, there are slightly less than 700 centenarians in Hong Kong. When combined with demographic, economic, social security and health data, the results from this project can provide scenarios for the short

and medium range about impacts of mortality improvement on health, disabilities, retirement security, demand of medical services, long-term care and other related matters in Hong Kong.

(CU05741)

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### **A Dark Side of Privatization: Creation of Large Shareholders and Exploration**

✉ HE Jia

☐ 1 March 2006

❖ CUHK Research Committee Funding (Direct Grants)

By examining the world largest share issue privatization taking place in the largest emerging economy, China, this project provides lessons as to what makes privatization work (or fail). We recognize that privatization is typically associated with the creation of large shareholders. We will empirically demonstrate that, given the institutional environment, the incentive and ability of the large shareholders to expropriate depend critically on the firm organization forms which are shaped by privatization process.

(BS05470)

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### **Does Aggregate Sentiment Drive Momentum Profit?**

✉ LIU Ming

☐ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

The momentum strategy that buys past winners and sells past losers earn abnormal returns for a period of up to 12 months after the inception of the strategy. This abnormal profit is at odds with the standard risk

and return paradigm and presents a serious challenge to the market efficiency theory as indicated by many recent studies (See Jegadeesh and Titman (2001, 2002) for references).

This project explores whether momentum profits relate to movement in aggregate sentiment. In Barberis, Shleifer, and Vishny's (BSV, 1998) model of investor sentiment, traders have a conservative bias and underreact to new evidence of growth in earnings. In the alternative model of Daniel, Hirshleifer and Subrahmanyam (DHS, 1998) momentum occurs because traders overreact when public information reconfirms their previous and private information. In both models investor sentiment is the driving force for momentum profits. Sentiment, with only one risky asset built in, can be interpreted as either aggregate or stock-specific. In other words, both aggregate-level sentiment and stock-specific sentiment are capable of driving momentum profits.

We will take the consumer's sentiment index reported in the University of Michigan survey as a proxy for aggregate sentiment. We will examine if that aggregate sentiment relates to the variation of momentum profits. The project will then explore whether the aggregate-sentiment movements explain away the average momentum profits using sentiment-mimicking portfolio. Lastly, we examine whether our findings on sentiment and momentum relates to previous empirical results of the macroeconomic predictability of momentum profits.

(BS05888)

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**Assessing Real-Time Exchange Rate Predictability: Profitability and Statistical Significance**

✉ VALENTE Giorgio

☐ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

The economics of exchange rates is an area within international finance which has generated and continues to generate excitement and interest among academics, policy makers, and practitioners. One reason for this interest is the existence of several issues related to observed exchange rate behavior that remain unresolved despite an extensive body of research that has attempted to provide conclusive evidence on them. The focus of this research proposal is to assess one of these issues: the ability of empirical models to predict nominal exchange rates in real time. A key feature of our approach is that we will consider both the models proposed in the extant macroeconomic literature and the ones inspired by the more recent microstructural (i.e. trading-based) approach to exchange rate determination. Further, our assessment will be made from a statistical perspective, by looking more seriously into the issue of data mining, surprisingly unexplored in this literature, and most importantly from an economic perspective by carrying out asset allocation exercises.

These two metrics of analysis and evaluation are innovative and promising for at least two reasons. First, an extensive literature has documented that there are econometric and statistical problems associated with the empirical work usually carried out to analyze these issues. Focusing on economic, as opposed to statistical, significance, will allow us to abstract from these problems which plague statistical inference in this context. Second, the focus on economic significance allows us to translate the set up of the problems to an asset allocation framework, where an investor employs an exchange rate forecasting model to make decisions on how to maximize utility and optimally allocate her wealth.

This means that the value of exchange rate model or hypothesis can be assessed directly on the basis of a well-specified loss or utility function.

(BS05369)

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**Estimating Portfolio Value-at-Risk with Multivariate Mixture Time Series Models**

✉ WONG Chun Shan

□ 1 January 2006

❖ Research Grants Council (Earmarked Grants)

Financial institutions are in the business of managing risk. In the past decade, our understanding of risk has much improved, and particular advances have been made in the field of value-at-risk. The main purpose of the value-at-risk system is to assess market risks, which are due to changes in market prices. Value-at-risk measures the worst expected loss over a given horizon under normal market conditions at a given confidence level. There are two major uses of value-at-risk in risk management. The first is the determination of market risk capital, and the second is the apprising of senior management of the financial risks of trading and investment operations. An accurate and reliable estimation of the value-at-risk is extremely important for both of these applications. Several methods for the estimation of portfolio value-at-risk have been adopted for their simplicity, rather than their superior performance. Recently, new stochastic models have been proposed in the literature, and may be useful in the estimation of portfolio value-at-risk. The class of multivariate mixture time series models is particularly promising in this respect. In this research, applications for the multivariate mixture time series models in the estimation of portfolio value-at-risk will be developed. It is expected that the financial industry will benefit from the superior

approach to the estimation of portfolio value-at-risk that will be developed in this research.

(CU05733)

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**An Empirical Study on H-Share and Red-Chip IPOs**

✉ ZHANG Hua

□ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

Since 1993, around 200 Mainland firms have made their initial public offerings (IPOs) in international capital markets, mainly through listing shares in Hong Kong. Most of those firms are former state owned enterprises (SOEs) and partially privatized through what so called share issue privatizations (SIPs). In this proposed project, I plan to investigate: 1) operating performance of those firms before and after IPOs; 2) the initial and long-term share price performance of the IPO firms (that is, do investor benefit from the privatizations?). The proposed project is interesting because I will study a sample is different from either private IPOs or SIPs that have been studied in the literature. It is a sample of IPOs by state owner(s) in which equity capital is raised in developed markets outside its own boarder, which is different from domestic A-share IPOs in China where the state owner(s) might have political consideration when set IPO prices since investors are political constituents. The results from our study can shed lights on the observed divergence in post-issue performance between private IPOs and SIPs.

(BS05551)

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**A New Approach to Principal-Agent Models**

<i>✍</i> ZHOU Yuqing • MIRRLEES James Alexander (Economics)	<u>Edition</u>	<u>Title/Investigators</u>
<p>☐ 15 September 2005</p> <p>❖ Research Grants Council (Earmarked Grants)</p> <p>The principal-agent model is widely used in business disciplines such as accounting, economics and finance, among others. It offers an ideal framework for studying contracting design problems and non-market institutional arrangements in the presence of asymmetric information. The co-investigator of the project, James Mirrlees, was an earlier pioneer in this field, and was awarded his Nobel Prize for formalizing the principal-agent problem. However, the general characteristics of the optimal contracts in the principal-agent model are still not well understood. The mathematical problems arising from the principal-agent model are new, and the current literature only provides partial answers to some special cases. Our joint project intends to develop a general mathematical approach to the principal-agent model. This theoretical undertaking, if successful, will improve our understanding of various contractual or institutional arrangements in practice and will have important policy implications. Our model development will be divided into three steps. First, we characterize the optimal contracts and provide empirically testable results in the static case. Second, we generalize the results derived from the static case to the dynamic one. Finally, various practical issues arising from applications to economics and finance will be addressed.</p> <p>(CU05756)</p>	<p>2004-05</p> <p>2004-05</p> <p>2003-04</p> <p>2003-04</p> <p>2003-04</p> <p>2004-05</p> <p>2004-05</p>	<p>Estimation of Stock Return Volatility with High-Frequency Data (BS04746)</p> <p><i>✍</i> CHOW Ying Foon</p> <p>Consultant Work for the Wealth Management Platform (WMP) of CITIC Ka Wah Bank Limited (BS04923)</p> <p><i>✍</i> CHOW Ying Foon</p> <p>A Comparative Study of Asymmetric Information and Family Ownership (CU03152)</p> <p><i>✍</i> FONG Wai Ming • LANG Hsien Ping Larry</p> <p>Insiders and Outsiders: The Choice between Informed, Arm-Length Straight Debt, and Convertible Bonds (BS03377)</p> <p><i>✍</i> HE Jia</p> <p>Investors' Behavior in an Emerging Capital Market in a Transition Economy: The Case of China (CU03483)</p> <p><i>✍</i> HE Jia</p> <p>Qualified Foreign Institutional Investors (QFIIs) (CU04447)</p> <p><i>✍</i> HE Jia</p> <p>Firm's Choice of Financing Means Under Private Benefits of Control (BS04354)</p> <p><i>✍</i> HE Jia</p> <p>An Empirical Investigation of A Class of Defaultable Term Structure Models (BS03646)</p> <p><i>✍</i> LI Tao</p>
<hr/> <p><b>Please refer to previous issues of this publication for more details of the following ongoing research at the department:</b></p>		

2004-05	Strategic Trading and Asymmetric Information (BS04376) ✉ LI Tao	2003-04	Actuarial Applications of Mixture Gaussian Time Series Models (CU03136) ✉ WONG Chun Shan • CHAN Wai Sum*
2003-04	Efficient Estimation of Equity Risks (CAPM Beta) With Sorting on Multiple Instruments (CU03133) ✉ LIU Ming • CHOW Ying Foon	2004-05	Catastrophic Risk Management in China: The Case of Flood Risk (BS04459) ✉ YEH Jia Hsing
2004-05	Momentum Profits Before and After Portfolio Formation (BS04410) ✉ LIU Ming	2002-03	Ultimate Ownership of Anglo Saxon Corporations: Berle and Mean Revisited (CU02293) ✉ YOUNG Leslie • LANG Hsien Ping Larry
2004-05	Calendar Effects and the Role of Feng Shui in Market Trading (BS04694) ✉ McGUINNESS Paul Brian • T. Thomas Alexander BIRTCH (Faculty Office of Business Administration)#	2003-04	Share Repurchases in Japan: Long-term Price Performance and Strategic Trading (BS03925) ✉ ZHANG Hua
2003-04	Securitization, Capital Structure and Financial Intermediation (CU03135) ✉ THOMAS Hugh Alun Lloyd		

## RESEARCH PROJECTS

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Please refer to previous issues of this publication for more details of the following ongoing research at the department:

2004-05 Determinants of Business Strategy and Performance: A Comparative Study of the Hotel (BS04554)  
✍ TSE Eliza Ching Yick • Chu Kent Man\* • Mak Kan Wing Brian\*

Edition      Title/Investigators

2004-05 Institutional Investors, Herding, and Firm Performance (BL04570)  
✍ LEUNG Wai Kin

## RESEARCH PROJECTS

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### **Effects of Organizational Ethical Climate and Individual Equity Sensitivity on Objective and Subjective Career Success: A Multilevel Analysis**

✍ CHOW Hau Siu Irene • LAU Pak Lung Victor

📅 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

Career success has received a lot of attention in organizational research, because employees' individual success can eventually contribute to organizational success. Historically, career success has been conceptualized in terms of objective and subjective domains. Objective career success is observable; it is often measured in terms of salary and promotions. Subjective career success is latent and refers to individuals' appraisals to their career experiences. Researchers have found several important predictors of objective and subjective career success, which can be categorized into four types: human capital, organizational sponsorship, socio-demographic status, and stable individual differences. These predictors can be further classified into two systems: contest mobility (all people can compete for upward mobility) and sponsor-mobility (only those who are chosen by the power can compete for upward mobility).

Although the literature has advanced our knowledge of career success, all these predictors have focused only on personal and interpersonal factors, while the organizational or contextual factors have been underestimated. Despite the importance of context, multilevel analyses of career success combining both individual-level and organizational-level effects have

been minimal. In this study, using a multilevel approach, we focus on the influences of both organizational ethical climate (organizational-level) and individual equity sensitivity (individual-level) on employees' objective and subjective career success. To minimize potential common method variance, we will collect data from multiple sources (self- and peer-ratings). Findings will reveal important insights and stimulate ethical climate, justice, and career success research in future.

(BS05496)

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### **The Effects of Motive Satisfaction, Organizational Fairness and Employee Resilience on Organizational Identification and Employee Performance**

✍ HUI Chun

📅 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

A commonly used definition of organizational identification is a perceived oneness with an organization and the experience of the organization's successes and failures as one's own (Mael & Ashforth, 1992). Organizational identification provides important insights into management challenges such as change management and why people contribute to organizations. Most of the literature has centered on the antecedents and outcomes of organizational identification in North American contexts. Along with the economic reform and the restructuring and downsizing of organizations in this region, including the state-owned enterprises in China, the more fluid and malleable employment relationships now replace the once stable and static forms. Therefore, there is a need to examine why people identify with

organizations in such changing contexts. We construct a contingency model of organizational identification by theorizing the interactive effects of motive satisfaction, organizational fairness and employee resiliency on organizational identification and employee performance. This study has important implications on what contributes to organizational identification during organizational change, as amplified in a changing economy like China. In addition, we examine the longitudinal effects of organizational identification and offer implication in organizational changing contexts.

(BS05398)

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**Exploring Faultline Dynamics: Effects of Triggers, Subgroup Size, and Task Divisibility**

✍ LAU Chi Sun Dora

□ 1 January 2006

❖ Research Grants Council (Earmarked Grants)

Group faultlines, a relatively new concept, refer to "hypothetical lines that may split a group into subgroups based on one or more attributes" (Lau & Murnighan, 1998: 328). For instance, a group with two male accountants and two female clerks has a strong faultline while a group with two accountants and two clerks, both of opposite gender, has a weak faultline. Early research on faultlines has been supportive but many basic propositions have not been studied. In this study, we propose to examine effects of three factors, namely faultline trigger, subgroup size, and task divisiveness, on faultline dynamics. We expect that faultline triggers will accentuate subgrouping tendencies and therefore result in group conflict and negative team dynamics. Faultline teams with equal subgroup size are expected to have more overt conflict than those with unequal subgroup size. Finally, when tasks with

non-divisible components are assigned to strong faultline teams, they will experience difficulties because of its subgrouping nature. Results from this study will inform us on how to manage work teams with natural faultlines, such as international joint ventures and global virtual teams.

(CU05742)

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**Institutionalization and Internationalization: International Diversification Strategies of Chinese Business Groups during Institutional Transition**

✍ LAU Chung Ming

□ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

Prior research on international diversification has focused primarily on multinational enterprises (MNEs) from developed economies, such as the United States and other developed nations. As an increasing number of outward FDI are from MNEs in emerging economies, new theories and empirical efforts are needed to better understand the motivations of these MNEs to diversify internationally. This study contributes to the theory development of MNEs by examining the characteristics of outward FDI by business groups from emerging economies such as China. Using the resource-based view (RBV) of the firm and organizational learning theory, we suggest that the motives of business groups' outward FDI from emerging economies vary by host country context. Business groups from emerging economies are more likely to enter developed economies rather than other emerging economies primarily for exploring new resources and capabilities, and enter less developed economies rather than developed economies to exploit existing group advantages. The arguments

are based on the group economies realized through related and unrelated diversification. The proposed study further suggests that social capital is a moderator that would influence the effects of exploratory and exploitative international diversification strategies on group performance. Because of the rising importance of business groups in emerging economies, understanding international diversification of business groups would lead to improved MNE theory. This study is an attempt to integrate the product diversification and international diversification literatures through organizational learning theory.

(BS05906)

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**Government Ownership, Business Group's Control Mechanisms, and Corporate Innovations during Institutional Transition**

✉ YIU Wing Yee

□ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

The central premise of this study is that during the period when pre-existing institutions have not been fully abolished and new effective institutions take time to become established, both existing formal institutions and emerging informal institutions work in complementary way to facilitate the economic growth of a country. The emergence of diversified business groups (as a new organizational form based on *informal* institutions), and governments (as a *formal* institution) substitute for market failures in such an institutional context which is in transition. The first part of the study focuses on examining the relationship between formal institutions and innovation orientations during an institutional transition stage. Specifically, it examines how

central and local governments facilitate different types of innovation strategies in the transitional economy of China. Drawing from theoretical perspectives in economics, organizational theory, and strategic management, this study proposes that firms under central government influence will pursue more long-term exploratory product innovations, while firms under local government influence will likely pursue more near-term exploitative product innovations. The second part of the study examines the relationship between informal institution and innovation types. In particular, it examines how internal control mechanisms of business groups facilitate the different types of innovations among member firms. Finally, combining the two parts of the study, interactions effects are hypothesized between (formal) government influence factors and business group's (informal) control mechanisms on member firms' innovation orientations.

(BS05380)

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**Please refer to previous issues of this publication for more details of the following ongoing research at the department:**

<u>Edition</u>	<u>Title/Investigators</u>
2004-05	Outsourcing Strategic Source of Organizational Success or Failure (BS04768) ✉ AHLSTROM David Christopher • BRUTON Garry* • KUANG Yeh*
2003-04	Social Networks and Trust: The Interplay Between Trust-Enabling Institutions and Individual Action (BS02680) ✉ AU Yuk Fai Kevin

2003-04	Constructing Trust-Enabling Institutions: A Grounded Theory Approach (CU03144) ✉ AU Yuk Fai Kevin • VERTINSKY Ilan*	Employee Extra-Role Performance (CU04458) ✉ HUI Chun
2003-04	Cultural Intelligence Measurement Project (BS03385) ✉ AU Yuk Fai Kevin	2003-04 Trusting and Being Trusted at Work: The Chinese Context (CU03147) ✉ LAU Chi Sun Dora • Sandra L. ROBINSON*
2004-05	The Effects of Lean Production Work Practices on Occupational Stress: A Case of Hong Kong Owned Manufacturers in the Pearl River Delta (BS04529) ✉ BIRTCH CHEUNG Fung Tung Flora • T. Thomas Alexander BIRTCH (Faculty Office of Business Administration)#	2004-05 Strategic Orientation and Corporate Entrepreneurship of Firms in Transitional Economies: The Case of Poland and China (BS04453) ✉ LAU Chung Ming • BRUTON Garry Don#
2004-05	Gender Differences in Networking: The Impact of Identity, Justice, and Rank (BS04380) ✉ CHOW Hau Siu Irene	2001-02 Population Dynamics of International Market Expansion (BS01994) ✉ MAKINO Shige • CHAN Man Kuen Christine#
2004-05	Chief Executive Officer Values, Human Resource Systems, and Firm Outcomes (CU04457) ✉ FU Pingping • TSUI Shuk Ying Anne* • HUI Chun • WU Wei Ku* • LI Yongjuan* • LI Lan*	2003-04 Legitimation and Competition Process of International Market Entry (BS03648) ✉ MAKINO Shige • CHAN M Christine*
2003-04	Innovation, Attention to Detail and Outcome Orientation: How to Manage Them (BS03550) ✉ HUI Chun	2003-04 What Strategies Should Small and Medium-Sized Enterprises Use: A Comparison of Technology Industries and Traditional Industries (CU03139) ✉ QIAN Gongming • Chuck C. Y. KWOK* • LI Lee*
2004-05	The Roles of Extra-Roles of Employees: A Multi-Level Role-Based Study of	2003-04 Institutional Transitions and Diversification Strategies in China (CU03148) ✉ WANG Yu Long Denis • PANG Mike*

2003-04 Development of Effective Emotional Intelligence (EI) Training Programs for Hong Kong Students & Employees (BS03665)

✍ WONG Chi Sum • LAW Kenneth S\* • WONG Ping Man\*

2003-04 Government, Business Groups, and Innovation Strategies during Institutional Transition in China Tunneling: Innovation Diffusion among Member Firms in a Business Group (BS03429)

✍ YIU Wing Yee • HOSKISSON Robert E\*

## RESEARCH PROJECTS

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### **The Dynamic Effects of Regret and Performance Uncertainty on Consumer Satisfaction and Choice Intention**

✍ JIA Jianmin • GAO Chongyan

☐ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

Regret has been frequently cited as an important construct for understanding consumer satisfaction and subsequent behaviors. The impact of regret, however, has been largely examined in a static situation. This research project focuses on the dynamic updating of consumer choice intention based on regret and disconfirmation when expectations of alternatives are viewed as distributions and uncertainty is involved. A Bayesian updating model involving multiple alternatives is developed to draw some insights on these issues and to form testable hypotheses. Based on several experiments, we will show that the impact of regret on choice intention is contingent on expected performance as well as performance uncertainty of both chosen and forgone alternatives. We expect that consumer experience and risk attitude also play a role in determining choice intention in our framework.

(BS05996)

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### **Data Mining Project for Credit Card Center of CITIC Industrial Bank (China)**

✍ LAU Kin Nam • JIA Jianmin • FAN Kin Keung  
Dennis (Finance)

☐ 8 August 2005

❖ CITIC Industrial Bank (China)

All types of credit card data will be integrated and analyzed to derive customer scores for marketing and risk purposes.

(BS05578)

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### **A Data Mining and Sales Forecast Project for CRC Retail Stores**

✍ LAU Kin Nam • JIA Jianmin

☐ 1 May 2006

❖ Resource Link Network Limited

This project involves the winning and analysis of daily sales/inventory data provided by CRC retail stores. Sales forecast models will be developed and applied to enhance the inventory and performance management of stores.

(AL05303)

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### **An Experimental Study on Corporate Governance, Institutional Development and Economic Growth**

✍ TANG Fangfang

☐ 1 February 2006

❖ CUHK Research Committee Funding (Direct Grants)

In recent years, there is a surge in research on institutional development. A series of papers (e.g., Engermann and Sokoloff (1997, 2000), Acemoglu, Johnson and Robinson (2000, 2001, 2002, 2003, 2004), Rajan and Zingales (2003), Morck Stangeland, and Yeung (2000), and Morck, Wolfenzon and Yeung (2004)) suggest using a political economy framework to understand corporate governance, institutional development and economic growth. In most general terms, the approach is composed of two

basic building blocks: (i) individuals' preference for institutional development, e.g., establishment and enforcement of laws that protect property rights, is determined by their net gains in each possible type of institutional regime; and (ii) the actual institutional regime is a political economy equilibrium outcome that depends on the way preferences are taken into account in establishing an equilibrium. The empirical exploration of the approach so far relies on either cross country regression studies or historical studies. But cross country regression results do not readily lead to causal interpretation while historical studies face severe data constraints. We propose using the experimental approach to empirically explore this causality issue. It will open a new avenue by an innovative methodology to investigate the relationship between finance, growth and institutional development. This approach will overcome the fatal shortcomings of the field data which could not be used to test causality links. Our proposed approach will be an originally new method in the research of this field. The importance lies both in the profound implications of the topic and in the new methodology introduced.

(SS05752)

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**The Effects of Trust Assurance Seals on Online Shopping**

✉ TSE Ching-biu Alan

☐ 1 January 2006

❖ CUHK Research Committee Funding (Direct Grants)

The use of trust assurance seals has been touted as an effective alternative to alleviate consumers' risk perception of online shopping in the online shopping environment, but the mechanism of how trust seals boost shoppers' willingness to shop online is largely

unknown. Using theories in perceived risk and perceived control, we developed a model that examines the effects of trust assurance seals and site reputation on consumers' perceived credibility, privacy & security risk perception, and perceived control, as well as how these perceptions, in turn, affect their willingness to provide personal information and shop online.

(BS05547)

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**Please refer to previous issues of this publication for more details of the following ongoing research at the department:**

<u>Edition</u>	<u>Title/Investigators</u>
2004-05	Service Relationship and Consumer Reaction to Service Failure: A Cross-Cultural Study (CU04461) ✉ HUI King Man • AU Yuk Fai Kevin (Management) • ZHAO Xiande (Decision Sciences and Managerial Economics)
2003-04	A Measure of Loss Aversion and Reference-Dependence Models of Consumer Choice (CU03149) ✉ JIA Jianmin
2004-05	The Effect of Customer Satisfaction Uncertainty on the Service Quality Evaluation (BS04550) ✉ JIA Jianmin • GAO Chongyan
2004-05	Escalation of Commitment: A Regret Perspective (CU04462) ✉ KWONG Yuk Yee Jessica • WONG Kin Fai Ellick*

- 2004-05 Data Mining Project (Phase 2): Customs, Oriented Selling and Marketing (BS04770)  
✍ LAU Kin Nam • JIA Jianmin • FAN Kin Keung Dennis (Finance)
- 2004-05 Customer Relationship Management Orientation: The Construct, Antecedents, Consequences, and Moderators (BS04401)  
✍ TSE Ching-biu Alan • SIN Yat Ming Leo
- 2002-03 The Impact of Internet on Competition - The Cases of Air Tickets and Stock Trading (CU02310)  
✍ TANG Fangfang • CHOW Ying Foon (Finance) • ZHANG Junxi\*

