JUN YANG

Department of Finance
Kelley School of Business
Indiana University
1309 E 10th Street, Bloomington, IN 47405
(812)855-3395
Email: jy4@indiana.edu

EDUCATION

Ph.D. in Finance, Washington University in Saint Louis, December 2004
Ph.D. in Operations Management, The Chinese University of Hong Kong, 1998
M.S. in MIS, Tsinghua University, 1994
B.S. (highest honors) in MIS, and Electronics and Computer Technology, Tsinghua University, 1991

AREAS OF INTEREST

Corporate Finance, Corporate Governance, Financial Institutions, Financial Contracting, Executive Compensation

TEACHING EXPERIENCE

- Indiana University - Kelley School of Business

  F305: Intermediate Corporate Finance, Spring 2007, Spring 2006

- Saint Louis University - John Cook School of Business

  F301: Principles of Finance, Fall 2002

- Chinese University of Hong Kong { Faculty of Business Administration

  Simulation (graduate level), Summer 1999

  Decision Sciences and Information Systems, Spring 1999 and Fall 1998

  System Modelling and Simulation, Fall 1997

WORKING PAPERS

- \Economics and Super Managers", joint with Nina Baranchuk and Glenn MacDonald

  We study an agency model with a novel combination of features { agents (CEOs) di®er in their ability, ¯rms choose both the scope of the CEO's activities and their incentives, and there is free entry by ¯rms. The outcome is an industry equilibrium in which ¯rms are heterogenous in scope and output. That is, ¯rms hiring more able CEOs complement higher ability with greater scope and stronger incentives, resulting in greater output. Pay has a strong \superstars" element in the sense that motivating higher ability CEOs to accept a job involving more e®ort and greater risk of managing greater scope, requires much greater rewards.

  The model is a simple one that makes strong assumptions; this allows us to analyze it very completely and arrive at sharp conclusions. For example, we ¯nd that an increase in demand for the industry's product, e.g., a booming economy or opening of foreign economies,

increases both the overall level and skewness of the cross section distribution of CEO compensation. The model suggests a variety of other empirical predictions.

Some preliminary empirical work suggests the model may prove quite useful for understanding some interesting trends in compensation. For example, our model provides an explanation for the recent increased level and dispersion in CEO compensation that is rooted in product market competition and rational board reaction to changes in the ¯rm's environment.

- **\Renegotiation-proof Contracting, Disclosure, and Incentives for Efficient Investment"**, joint with Nina Baranchuk and Philip Dybvig

In general, disclosure by ¯rms would seem to be valuable for reducing the information asymmetry that is a cause of investment ine±ciency in ¯rms. However, the e®ect of disclosure is subtle, especially when the link to ¯rm value is endogenous and depends on incentives within the ¯rm. We analyze various disclosure regimes and determine which ones are e®ective in eliminating the Myers-Majluf ine±ciency in a model with optimal renegotiation-proof contracts. Disclosing only accepted contracts does not solve the Myers-Majluf problem, but either full transparency of all compensation negotiations or additional disclosure of a forward-looking announcement does. The model is robust to the presence of renegotiation in equilibrium and is also robust to changing who o®ers any renegotiation. The analysis helps to illuminate optimal disclosure regulation. For example, it tells us that allowing forward-looking disclosure is bene¯cial provided we are in an environment that produces

costly and unobservable effort jointly affects the lifetime of the project. The compensation contract specifies how to divide cash flows of the project among the three agents over time. We show that the optimal timing of compensation reflects the timing of effort: compensation for the up-front effort precedes compensation for continuous effort. Specifically, there exists a known critical date before which the agent with up-front effort claims all cash flows and after which the two agents with continuous effort exclusively split the cash flows. Deferring compensation for agents exerting effort over time improves their incentives without impairing the incentive for up-front effort. The exact pattern of compensation between the two agents with continuous effort depends on the relative severity of the agents' moral hazard problems. In particular, if their moral hazard problems are equally severe, then the two agents equally split the cash flow once it becomes available.

- **"Inside the Black Box: The Role and Composition of Compensation Peer Groups"**, joint with Michael Faulkender

  This paper documents the features of compensation peer groups and demonstrates that they play a significant role in determining CEO compensation. Anecdotally, we know that compensation peer groups have had a growing role in determining executive compensation but only recently have firms begun voluntarily disclosing the members of these peer groups. To empirically test their role, we hand-collect a sample of 83 of the S&P 500 firms that provided explicit lists of compensation peer firms in their fiscal 2005 disclosures. Results show that inclusion of the group's median compensation more than triples the portion of the variation in CEO cash compensation that can be explained, dominating measures such as size and firm performance. The average peer group has more than eleven firms in it with just over half of them coming from the same 3-digit SIC as the firm. Univariate analysis suggests that firms forego lower paid potential peers in their same industry in favor of higher paid peers outside of their industry when constructing the peer groups. In multivariate regression analysis, this result carries through as we find that even after controlling for industry and relative size, peer group composition is significantly affected by the level of compensation of the potential peers. Firms appear to select high paid peers as a mechanism to increase CEO compensation and this effect is strongest in firms with low GIM index values, low E-scores, and low blockholder ownership. We conclude that in firms with weak internal governance, CEOs are most able to create benchmarks (compensation peer group compositions) that help generate higher compensation for themselves. Given that disclosure of peer group composition had until recently been voluntary, our results are likely to underestimate the extent to which peers are selected by characteristics seemingly unrelated to managerial performance or their reservation wage.

- **"Is there a Social Circle Premium in CEO Compensation"**, joint with James Ang and Gregory Nagel We analyze the role of social circles on CEO compensation and find that CEO compensation indeed contains a social circle premium. Applying the social comparison with relative wealth, we explain why CEO may demand pay in excess of what could be explained by economic variables, such as performance, size, labor market demand, growth opportunities, and etcetera. CEOs and their spouses socially interact with other CEOs and social elites in their social circles. They would invariably make status comparisons, including wealth comparisons, which in turn would lead to greater demand for wealth. Whether their reasoning is out of fairness, keeping up with the Joneses, or no looking back, CEOs would demand a social circle premium. Specifically, we predict that (1) the average pay premium of CEOs in a social circle increases with the size of social circles; (2) pay differentials in a

social circle increase with pay ranks and the size of social circles; (3) those CEOs who are ranked higher in social circles should receive more pay in excess of economic performance when the size of social circles increases; and (4) singleton CEOs who have no peers in their social circles should not receive any social circle premium. Our empirical ¯ndings con¯rm all the four predications above. For example, we ¯nd that the average compensation for S&P 500 CEOs in a social circle of 31 peer CEOs (the 75th percentile of social circles) exceeds that in a circle of 6 peers (the 25th percentile of social circles) by $1.09 million.

- \Timing of Effort and Reward: Three-sided Moral Hazard in a Two-Period Model"

  A two-period version of the previous paper. The advantage is that a complete solution is available although the economic intuition is less clear.

- \A Critical Long View of Capital Markets and Institutions: Realized Returns from Corporate Assets, 1950-2003", joint with James Ang and Gregory Nagel

  It is often taken for granted that: 1) capital markets and institutions allocate funds to ¯rms with high returns; 2) the net gains to the economy from investments by corporations have improved in the last 30-50 years due to technological innovations; and 3) the discipline role of markets and institutions ensures that corporate assets funded with external funds earn higher returns. However, corporate real assets are long lived, and realized returns have to be tracked over a long period to verify these assertions. In this study, we perform large-scale calculations of the realized returns on assets to all ¯rms available in the Compustat database for periods of 10, 20, 30, 40, and 50 years. Our methodology relies only on realized, not expected, cash °ows between the ¯rms and all their fund providers. We found several new and surprising results. Realized returns on corporate assets over long periods are, on the whole, lower than expected by the fund providers. They also su®er a long-term decline, and have been below the yields of 10-year Treasury Bonds since 1973. Additionally, ¯rms that received more external ¯nancing (from capital markets and institutions) report even lower realized long-term returns. A wealth transfer from an increasingly important class of non-interest bearing liabilities augments the realized returns on equity. These unexpected results may stimulate a fresh debate on the role and long-term performance of capital markets and institutions.

WORK IN PROGRESS

- \Portfolio Management", joint with Phil Dybvig

- \The Value of Executive Stock Options", joint with Ohad Kadan and Hong Liu

- \Does Pension Status Affect Credit Default Swap Rate?", joint with Levent Guntay and Irina Stefanescu

- \Mutual Fund and Hedge Fund Managers", joint with Vikas Agarwal, Niki Boyson, and Veronika Pool

- \Strategic Choices of Entry Modes in Cross-Border Banking: Syndications or Acquisitions?"

PUBLICATIONS

- **J. Yang**, H. Yan, and M. Taksar, 2000, \Optimal Production and Setup Scheduling: a One-Machine, Two-Product System," *Annal of OR on Optimization Techniques and Application*, 98, 291-311.

- **J. Yang**, H. Yan and S. Sethi, 1999, \Optimal Production Planning in Pull Flow Lines with Multiple Products," *European Journal of Operational Research*, 119, 582-604.

- F. Cheng, H. Yan, and **J. Yang**, 1998, \Production Scheduling of Continuous Flow Lines with Setup Times and Costs," *Production and Operations Management*, 7, 387-401.

SCHOLARLY ACTIVITIES

Referee: *AER, JPE, Journal of Economic Theory, Journal of Financial Intermediation, Journal of the European Economic Association, Journal of Corporate Finance,* and *The Financial Review*

Presentation:

2008

- American Finance Association (AFA) annual meeting, New Orleans

2007

- Journal of Financial Intermediation Conference on Financial Contracting: Theory and Evidence, Mannheim, Germany

- China International Conference in Finance (three papers on program, discussing two papers, and charing one session)

2006

- AFA annual meeting, Boston (Two Papers on Program)

- UT Dallas

- FIRS annual meeting, Shanghai

- Journal of Banking and Finance meeting, Beijing

- the Third Annual Conference on Corporate Governance, Saint Louis

- Tsinghua University, Beijing

- Shanghai Jiao Tong University, Shanghai

- Shanghai Finance and Economics University, Shanghai

2005

- Indiana University

- Notre Dame

- Georgia Institute of Technology

- UC Irvine

- University of Cincinnati

- Florida State University

- Iowa State University

- University of South Florida

2004

- European Finance Association (EFA) annual Meeting

- University of Georgia

- Georgia State University

- University of Houston

- San Diego State University

- California State at Fullerton.

Discussion:

- 2007 China International Conference in Finance, Chengdu

- 2006 Financial Intermediation Research Society (FIRS) annual meeting, Shanghai

- 2004 FMA annual Meeting, New Orleans

- 2002 Western Finance Association (WFA) annual meeting, Salt Lake City

HONORS

1991   Top 2% of 2,200 graduates, Tsinghua University

1989-91   Top 2% of 12,000 students, Tsinghua University

1986-93   Merit-Based Scholarship, Tsinghua University