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FROM THE LIBRARY SHELF

Edited by Phyllis Schiller Myers
Virginia Commonwealth University

PRINCIPAL-AGENT THEORY

Coalitions, Incentives, and Risk Sharing, by Hideshi Itoh (Kyoto University, Japan)

This paper analyzes the effects of coalitional behavior in principal-multiagent relationships with moral hazard and identifies cases where the principal prefers agents to form a coalition via side contracting. It is shown that the principal can implement given efforts, via non-individualistic incentive contracts, at a lower cost when the agents can monitor each other's efforts perfectly and hence coordinate their effort choice than when the agents behave independently. Permitting the principal to utilize more complex communication mechanisms does not alter the result, for there is no coalition-proof revelation mechanism improving the principal's welfare. *Journal of Economic Theory,* August 1993, 60(2): 410-427. (Reprinted with permission of Academic Press.)

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RISK PERCEPTION AND ECONOMIC BEHAVIOR

Frank Knight on Risk, Uncertainty, and the Firm: A New Interpretation, by Richard N. Langlois and Metin M. Cosgel (University of Connecticut)

We attempt to interpret Frank Knight by taking him on his own terms. Among our conclusions are the following. (1) Knight's distinction between risk and uncertainty is not solely a distinction between insurable and uninsurable risk. (2) Knight's explanation for the existence of firms does not reduce to a moral-hazard theory, except perhaps in the broadest and least-interesting sense. And (3) Knight's treatment of the problem of the separation of ownership from control is not as obviously wrong as commentators have made it out to be. *Economic Inquiry,* July 1993, 31(3): 456-465. (Reprinted with permission of *Economic Inquiry.*)

Income Effects and the Value of Health, by William N. Evans (University of Maryland) and W. Kip Viscusi (Duke University)

Although valuations of risk should increase with income, hedonic wage studies have not been well suited to assessing this relationship. Using survey data on consumer valuations of product safety, this paper analyzes the role of income effects for several utility functions. The methodology developed in this paper assesses the effect of income on the certainty equivalent value of the health effect (income elasticities range from 0.18 to 0.39) and on the risk-money tradeoff for small changes in risk (income elasticities range from 0.17 to 0.38). Health status is a normal economic good. *Journal of Human Resources,* Summer 1993, 28(3): 497-518. (Reprinted with permission of the *Journal of Human Resources.*)

10 CONSUMPTION-SAVINGS BEHAVIOR

The Use and Abuse of Consumer Credit: Application of Psychological Theory and Research, by Howard Tokunaga (San José State University)

This study explored whether theory and research in consumer behavior, psychology, and substance abuse can distinguish between consumers who can or cannot use consumer credit effectively. The goal of this study was to develop an integrative profile of people with credit-related problems, with particular interest paid to the additional predictive ability of psychological variables beyond that provided by background characteristics and adverse life events. Unsuccessful credit users ($N = 69$) displayed greater external locus of control, lower self-efficacy, viewed money as a source of power and prestige, took fewer steps to retain their money, displayed lower risk-taking and sensation-seeking tendencies, and expressed greater anxiety about financial matters than successful users ($N = 62$). Furthermore, it was found that psychological variables significantly increased the ability to identify group membership correctly. Recommendations are made regarding how the development of credit-related problems may be studied in order to predict and perhaps prevent their occurrence. *Journal of Economic Psychology,* June 1993, 14(2): 285-316. (Reprinted with permission of North-Holland Publishing Company.)

11 UTILITY THEORY

The Effect of Attribute Ranges on Weights in Multiattribute Utility Measurements, by Rüdiger von Nitzsch (Universität zu Köln [Cologne], Germany) and Martin Weber (Universität Mannheim, Germany)

Multiattribute utility theory requires a specific relation between the range of outcomes of each attribute and the weight for that attribute. The greater the range, the greater the weight has to be. Experimental results show that subjects do not adjust their judgments properly if the range is varied. For the two methods tested the adjustment is smaller than required by theory. The bias was smaller for a regression procedure than for the direct ratio method. Weights based on an intuitive range were not found to be superior to those elicited over different ranges. *Management Science,* August 1993, 39(8): 937-943. (Reprinted with permission of *Management Science.*)

Relative Standing Comparisons, Risk Taking, and Safety Regulations, by Kai A. Konrad (University of Munich, Germany) and Kjell Erik Lommerud (University of Bergen, Norway)

We study the question of how relative standing comparisons, or "status seeking," influence risk taking. When utility is separable in consumption and status the following results apply. With non-systematic risks, more concern for status leads to more (less) risk taking when, in a sense made precise in the paper, the utility function is less (more) concave in status than in pure consumption. With systematic risk, risk taking always increases with the concern for status. However, status seeking always implies socially excessive risk taking, thus suggesting a role for public regulation of risky choices. *Journal of Public Economics,* July 1993, 51(3): 345-358. (Reprinted with permission of North-Holland Publishing Company.)

12 RUIN THEORY

Asymptotic Ordering of Risks and Ruin Probabilities, by Claudia Klüppelberg (ETH-Zürich, Switzerland)

We introduce asymptotic orderings of distributions which imply orderings of ruin probabilities in the range of the Cramér case through some intermediate cases to large claims distributions. This allows us to give bounds for ruin probabilities where it is not possible to give exact estimates. *Insurance: Mathematics and Economics,* June 1993, 12(3): 259-264. (Reprinted with permission of North-Holland Publishing Company.)

13 HEALTH CARE AND INSURANCE

The Financing of Health Care in Developing Countries, by Michael Cichon and Colin Gillion (International Labour Office)

The authors set up a framework permitting analysis of the difficulties of financing and organizing the provision of health care in developing countries. They describe the operation and interaction of the components of the typical pluralistic structure (universal public system, small private system and schemes for formal sector workers) and review constraints on resource allocation and planning, management and administration. Acknowledging the need to accept a second-best formula in the foreseeable future, they propose strategies to increase resources and achieve distribution to the whole population via a three-tier solution offering different but mutually reinforcing levels of service, with an independent supervisory body. *International Labour Review,* 1993, 132(2): 173-186. (Reprinted with permission of *International Labour Review.*)

Managed Care Is Not the Answer, by Madelon Lubin Finkel

Managed health care costs have been a problem for over 20 years. Recent attempts to control costs have resulted in the new and predominantly unregulated industry of managed care. Managed care has become synonymous with enrollment in a health maintenance organization (HMO), preferred provider organization (PPO), or third-party managed care review program. Because the current U.S. health care system seems to be inefficient and expensive, it is argued that in the long term, managed care will not be able to contain overall health care spending. *Journal of Health Politics, Policy & Law,* Spring 1993, 18(1): 106-112. (Reprinted with permission of *Journal of Health Politics, Policy & Law.*)

The Struggle for the Soul of Health Insurance, by Deborah A. Stone

The politics of U.S. health insurance is a struggle over which a vision of distributive justice should govern--the solidarity principle or the logic of actuarial fairness. Actuarial fairness is central to American private health insurance. It is both an antiredistributive ideology and a method of organizing mutual aid by fragmenting communities into ever-smaller, more homogeneous groups, leading ultimately to the destruction of mutual aid. Medical underwriting is the information technology used for implementing actuarial fairness. Despite significant changes in the political context of health insurance which are leading toward restraints on underwriting, the logic of actuarial fairness is so deeply embedded in the structure of competitive markets in insurance and so deeply consonant with social divisions in U.S. society that eradicating it will take more than any current reform proposals contemplate. *Journal of Health Politics, Policy & Law,* Summer 1993, 18(2): 287-317. (Reprinted with permission of *Journal of Health Politics, Policy & Law.*)

A Model of Consumers' Preventive Health Behaviors: The Role of Health Motivation and Health Ability, by Christine Moorman (University of Wisconsin-Madison) and Erika Matulich (Texas Christian University)

The article develops and tests a model of the individual and joint effects of various consumer characteristics on health information acquisition behaviors (e.g., using media sources) and health maintenance behaviors (e.g., restricting diet). Theory development overviews the interdisciplinary literature on health and proposes that health motivation independently influences consumers' preventive health behaviors while the effect of health ability on health behaviors is moderated by the level of health motivation. This theory is tested in a survey of 404 consumers. Results indicate that the interaction of health ability and health motivation affects consumers' health behaviors. However, mixed results suggest that high levels of ability and motivation are not always critical precursors of health behaviors; instead, the impact of these characteristics depends on the particular health behavior and the specific health ability characteristic. Implications for theory and practice are discussed. *Journal of Consumer Research,* September 1993, 20(2): 208-228. (Reprinted with permission of the *Journal of Consumer Research.*)

14 SOCIAL INSURANCE

How Large Are the Subsidies Provided by the System of Financing Unemployment Insurance? by Louise Laurence (Towson State University)

The method presently used to finance state unemployment compensation incorporates a tax incentive designed to stabilize employment—the firm's assigned tax rate varies with the amount of unemployment. States have imposed floors and ceilings on the tax rates inhibiting the stabilizing effect and creating a cross-subsidization from firms with stable employment to firms with unstable employment. Past efforts to accurately measure the cross-subsidization have been hampered by the unavailability of data at the individual firm level. This study uses longitudinal data on individual firms to analyze cross-subsidization by industry. *The Quarterly Review of Economics and Finance,* Fall 1993, 33(3): 233-245. (Reprinted with permission of *The Quarterly Review of Economics and Finance.*)

International Labour Standards: A Framework for Social Security, by Albrecht Otting (International Labour Office)

The first of three articles focusing on the state of social security in developing countries, this presents the ILO's relevant international labour standards. Recalling first their inter-world war emphasis on social insurance and the more prescriptive approach of the time, the author then rehearses the reasons which proved most convincing in the achievement of the post-war consensus on compulsory social insurance. International labour standards then grew to encompass the social security concept and to propose the objective of a comprehensive, basic but flexible level of social security attainable everywhere, regardless of the degree of economic development. Finally, he considers the compatibility of different approaches to social security with ILO standards' basic requirements. *International Labour Review,* 1993, 132(2): 163-171. (Reprinted with permission of *International Labour Review.*)

Pension Reform in Developing Countries, by Subramaniam N. Iyer (International Labour Office)

The status of institutionalized pension schemes in developing countries is reviewed. Despite their great diversity, developing countries are all characterized by a low state of social security development relative to that of industrialized countries. Institutionalized arrangements largely emerged in the post-independence era. They generally exclude large proportions of the population and present serious operational shortcomings. This article explores the reasons why this disappointing situation has developed despite the various international declarations and (specifically) the ILO's standards. It describes the structure of existing systems, reviews experience and analyses the reasons preventing their healthier development. Finally, an agenda for reform is proposed, based on a three-tier structure. *International Labour Review,* 1993, 132(2): 187-207. (Reprinted with permission of *International Labour Review.*)

Unemployment Insurance and Market Structure, by Nicolas Marceau (Université Laval, Québec, Canada)

This paper examines the impact of unemployment insurance (UI) on employment and unemployment in an industry in which the prices can vary due to some market power. Some non-conventional results are obtained. It is shown that, if there is free entry and exit, average industrial employment may be a decreasing function of the experience rating because the number of firms in the industry is itself a decreasing function of this parameter. This contradicts the conventional view which was arrived at using models of a perfectly competitive industry with no entry, and according to which employment should be an increasing function of the experience rating. The general conclusion is that, for industries with different degrees of market power, the same UI scheme has different impacts on employment and unemployment. *Journal of Public Economics,* September 1993, 52(2): 237-249. (Reprinted with permission of North-Holland Publishing Company.)

Workers' Compensation and the Distribution of Occupational Injuries, by John W. Ruser (Office of Economic Research, U.S. Bureau of Labor Statistics)

This paper studies the impact of workers' compensation income benefits on injury rates and on the distribution of injuries by severity. I develop econometric models for correlated counts of injuries that are estimated on a longitudinal data set of 2,798 manufacturing establishments. I find that higher benefits increase the frequencies of most nonfatal injuries, but reduce the frequency of fatalities. Also, higher benefits increase the probability that a given injury involves days away from work, but reduces the chance that it is a fatality or a minor injury. *Journal of Human Resources,* Summer 1993, 28(3): 593-617. (Reprinted with permission of the *Journal of Human Resources.*)

Problems with Expanding Medicaid for the Uninsured, by Jeffrey A. Buck and Mark S. Kamlet

Many proposals for financing health care for the uninsured recommend expanding the Medicaid program. These proposals often advocate extending a Medicaid to all those under the poverty level and standardizing program benefits. However, the proposals have ignored important problems that must be resolved if the plans are to be successfully implemented, the most serious being the fiscal impacts that such proposals would have on states. The current Medicaid matching formula fails to reflect either the size of a state's Medicaid program or its ability to pay for it. As a result, the proportional fiscal effort that expansion proposals would require of states would greatly exceed that required of the federal government. Besides fiscal problems, significant differences exist between Medicaid and private plans in the areas of benefits, cost sharing, managed care, cost containment, and provider payment. *Journal of Health Politics, Policy & Law,* Spring 1993, 18(1): 1-25. (Reprinted with permission of *Journal of Health Politics, Policy & Law.*)

EMPLOYEE BENEFITS

Risk-Free Incentive Contracts: Eliminating Agency Cost Using Option-Based Compensation Schemes, by Thomas Hemmer (University of Washington)

This paper demonstrates that options can be used to eliminate agency costs in the formal agency model. When an agent's action can determine the mean of future cash flows assumed to follow a binomial random walk, the principal can design a compensation package using options which are hedged by other components of the compensation package to be risk-free *only* if the agent takes the action desired by the principal and therefore risky if the agent is shirking. Thus, a risk- (and effort-) averse agent can be given incentives to take the action desired by the principal without sacrificing optimal risk sharing, even when the agent's action cannot be observed, either directly or indirectly. *Journal of Accounting and Economics,* October 1993, 16(4): 447-473. (Reprinted with permission of North-Holland Publishing Company.)

The Effect of Education on Participation in Flexible Spending Accounts, by Vickie L. Hampton, Karrol A. Kitt, Sue A. Greninger, and Thomas M. Bohman

In order to better understand employee benefit decisions, this research identified factors associated with the decision to participate in a flexible spending account (FSA) for medical expense reimbursement. Participation was positively related to income and to education. A logistic regression of the likelihood of participation on family income and education showed that participation increased with income, but at all income levels, participation increased with education. The independent effect of education suggests the need to more clearly communicate the benefits of such programs to those with less education. *Financial Counseling and Planning,* 1993, 4: 95-110. (Reprinted with permission of *Financial Counseling and Planning.*)

The Elusive ESOP–Productivity Link: Evidence from U.S. Firm-Level Data, by Subal C. Kumbhakar (University of Texas at Austin) and Amy E. Dunbar (University of Texas at San Antonio)

This paper investigates whether employee participation in ownership or profit-sharing in publicly held firms through an ESOP or profit-sharing plan was positively associated with productivity measures. The sample consists of firms that adopted such plans during 1982 through 1987. Production function models augmented with age variables for ESOP, and profit-sharing plans were estimated using panel data procedures. The productivity effect increased with the age of the ESOP at the rate of 1.8 to 2.7 percent per annum and with the age of the profit-sharing plan at the rate of 3.9 to 4.6 percent per annum. *Journal of Public Economics,* September 1993, 52(2): 273-283. (Reprinted with permission of North-Holland Publishing Company.)

Pensions, Bonding and Lifetime Jobs, by Steven G. Allen, Robert L. Clark, and Ann A. McDermed (North Carolina State University)

A well-known, if underappreciated, finding in the mobility literature is that turnover is much lower in jobs covered by pensions than in other jobs. This could result from capital losses for job changes created by most benefit formulas, the tendency of turnover-prone individuals to avoid jobs covered by pensions, or higher overall compensation levels in such jobs. A switching bivariate probit model of pension coverage and turnover is developed to estimate the effect of each of these factors. The results show that capital losses are the main factor responsible for lower turnover in jobs covered by pensions, but self-selection and compensation levels also play an important role. This is the first direct evidence that bonding is important for understanding long-term employment relationships. *Journal of Human Resources,* Summer 1993, 28(3): 463-481. (Reprinted with permission of the *Journal of Human Resources.*)

16 PENSIONS AND RETIREMENT

The Role of Pensions in Retirement Income: Trends and Questions, by Virginia P. Reno

A discussion is presented of the role of pensions in the income of the elderly; private pension coverage, vesting, and types of plans among active workers; how the shift toward defined contribution plans poses new problems in assessing the role of private pensions in providing retirement income security; and expected pension receipt rates for the future elderly. Pension receipt among the elderly is expected to continue to grow over the next 20-30 years because of past growth in coverage and vesting. Microsimulation models are a relatively new tool for forecasting the future distribution of pension income. The models offer a framework for considering the research questions that, if answered, would help improve understanding of the impact of the pension system on future income security. *Social Security Bulletin,* Spring 1993, 56(1): 29-43. (Reprinted with permission of *Social Security Bulletin.*)

17 PENSION FUND PERFORMANCE

The Investment Performance of U.S. Equity Pension Fund Managers: An Empirical Investigation, by T. Daniel Coggin (Virginia Retirement System), Frank J. Fabozzi (Fabozzi and Associates), and Shafiqur Rahman (Portland State University)

This paper presents an empirical examination of the selectivity and market timing performance of a sample of U.S. equity pension fund managers. Regardless of the choice of benchmark portfolio or estimation model, the average selectivity measure is positive and the average timing measure is negative. However, both selectivity and timing appear to be somewhat sensitive to the choice of a benchmark when managers are classified by investment style. Meta-analysis revealed some real variation around the mean values for each measure. The 80 percent probability intervals for selectivity revealed that the best managers produced substantial risk-adjusted excess returns. We also found a negative correlation between selectivity and timing, but we argue that the observed negative correlation in our data is largely an artifact of negatively correlated sampling errors for the two estimates. *Journal of Finance,* July 1993, 48(3): 1039-1055. (Reprinted with permission of the *Journal of Finance.*)

18 INSURER MANAGEMENT

Optimal Claim Behaviour for Vehicle Damage Insurances, by N. P. Dellaert and J. B. G. Frenk (Erasmus University Rotterdam, Netherlands) and L. P. van Rijsoort (Coopers & Lybrand, Utrecht, Netherlands)

In this paper we analyze the optimal claim behaviour of a risk sensitive policyholder having vehicle damage insurance. It is proved that the optimal decision is to claim for damages only if their amount exceeds a certain limit. Moreover, we also derive the optimal stopping rule to terminate the insurance. Finally, some computational results are presented. *Insurance: Mathematics and Economics,* June 1993, 12(3): 225-244. (Reprinted with permission of North-Holland Publishing Company.)

Using Expected Loss Ratios in Reserving, *by Daniel* Gogol (General Reinsurance Corporation, Stamford, Connecticut)

The required loss reserve for a recent time period is estimated by using the recent loss experience plus two probability distributions. One distribution is of ultimate losses for the recent period, based on prior experience and rate adequacy changes. The other distribution is of the ratio of the estimator based on recent experience to the true ultimate loss. *Insurance: Mathematics and Economics,* June 1993, 12(3): 297-299. (Reprinted with permission of North-Holland Publishing Company.)

19 LIABILITY RULES

The Management of Disputes: Automobile Accident Compensation in Japan, by Takao Tanase

We often ask why the Japanese are nonlitigious and look into the unique culture that may explain it. It is more appropriate to ask why Japan has maintained a complex industrialized society without much reliance on law. For the nonlitigious society does not come about spontaneously. Instead, it was made possible only by careful management. I elaborate this process of management through the detailed analysis of automobile accident compensation disputes in Japan. *Law & Society Review,* 1990, 24(3): 651-691. (Reprinted with permission of *Law & Society Review.*)

20 INSURANCE RATING MODELS

Pricing Equity-Linked Life Insurance with Endogenous Minimum Guarantees, by Anna Rita Bacinello (University of Trieste, Italy) and Fulvio Ortu (University of Trieste, Italy, and University of Chicago)

This paper analyses the problem of pricing insurance contracts in which the benefits are linked to the realization of a portfolio of equities and a minimum amount guaranteed is provided. Building on the models of Brennan and Schwartz (1976, 1979) and Delbaen (1990) for endowment policies, we extend them to the case in which the minimum guarantees are *endogenous,* i.e., they are functions of the premium(s) paid. In this framework we give sufficient conditions for both the single and the periodic premium to be *well defined* and present some significant examples of endogenous minimum guarantees satisfying these conditions. We also consider the problem of pricing insurance contracts different from the endowment one, and conclude with some numerical results. *Insurance: Mathematics and Economics,* June 1993, 12(3): 245-257. (Reprinted with permission of North-Holland Publishing Company.)

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INSURANCE RATE-MAKING

A Bayesian Analysis of a Simultaneous Equations Model for Insurance Rate-Making, by David P. M. Scollnik (University of Calgary, Canada)

In this paper, a simultaneous equations model for insurance rate-making is considered from a Bayesian vantage point under an improper prior specification. Theoretical results are derived concerning the posterior and predictive analyses of this model, and we discuss how these analyses may proceed by way of the Gibbs sampler with an explicit additional data augmentation step. Both the Type 2 Tobit model and the seemingly unrelated regression equations model play a part in the discussion alluded to above. *Insurance: Mathematics and Economics,* June 1993, 12(3): 265-286. (Reprinted with permission of North-Holland Publishing Company.)