FROM THE LIBRARY SHELF

Edited by Phyllis Schiller Myers
Virginia Commonwealth University

DISPUTE RESOLUTION

Dispute Resolution in Workers' Compensation, by Leslie I. Boden (Boston University School of Public Health and Workers Compensation Research Institute)

This paper examines evidence about whether workers' compensation adjudicators "split the difference" between the parties' positions. It uses data from a workers' compensation system that provide information about the parties' final offers in both settled and adjudicated cases. Estimates of an "equitable settlement" model fit the data quite well (R^2=.87). They are consistent with the hypothesis that only the parties' positions affected the adjudicator's decision and that the parties' positions had equal weight. Adjudicators did not rely less on more disparate positions. Still, other factors had a strong impact on the parties' positions, which in turn affected the final ratings. *The Review of Economics and Statistics*, August 1992, 74(3): 493-502. (Reprinted with permission of North-Holland Publishing Company.)

An Experimental Comparison of Dispute Rates in Alternative Arbitration Systems, by Orley Ashenfelter (Princeton University), Janet Currie (Massachusetts Institute of Technology), Henry S. Farber (Princeton University), and Matthew Spiegel (Columbia University)

This paper reports the results of a systematic experimental comparison of the effect of alternative arbitration systems on dispute rates. By using a common underlying distribution of arbitrator "fair" awards in the different arbitration systems we are able to compare dispute rates across different arbitration procedures while holding fixed the amount of objective uncertainty the bargainers face. The three main findings indicate that (i) dispute rates are inversely related to the monetary costs of disputes, (ii) the dispute rate in a final-offer arbitration system is at least as high as the dispute rate in a comparable conventional arbitration system, and (iii) dispute rates are inversely related to the uncertainty costs of disputes, indicating that some bargainers behave as if they were risk averse. *Econometrica*, November 1992, 60(6): 1407-1433. (Reprinted with permission of *Econometrica*.)

THEORY OF CONTRACTS

Incomplete Contracts and Signalling, by Kathryn E. Spier (Harvard University)

This article presents a principal-agent model in which asymmetric information leads to contractual incompleteness. I show that in the presence of transactions costs, incompleteness may act as a signal of the principal's type. Two types of transactions costs are considered: those incurred ex ante (drafting costs) and those incurred ex post (enforcement or verification costs). I prove that in the presence of either of these costs, asymmetric information leads to more contractual incompleteness than full information does. *RAND Journal of Economics*, Autumn 1992, 23(3): 434-443. (Reprinted with permission of the *RAND Journal of Economics*.)

The Social Value of Hidden Information in Adverse Selection Economies, by Keith J. Crocker (Pennsylvania State University) and Arthur Snow (University of Georgia)

When agents possess imperfect hidden knowledge at the time contracts are negotiated, the social value of agents having access to additional hidden knowledge before contracts are implemented is positive to the extent that incentive-constrained agents are sorted more finely, but is negative to the extent that incentive-constraining agents impose more stringent signalling requirements on others. Hence, the intuition developed by Hirshleifer (1971), Marshall (1974), and Milgrom and Stokey (1982), that privately acquired information has neither positive nor negative social value when agents possess no prior hidden knowledge, does not apply when agents possess imperfect hidden knowledge during contractual negotiations. *Journal of Public Economics*, August 1992, 48(3): 317-347. (Reprinted with permission of North-Holland Publishing Company.)

Ordering of Risks in Life Insurance, by Bart Kling and Henk Wolthuis (University of Amsterdam, Netherlands)

Until now, applications of ordering of risks in individual life insurance have been based on the future lifetime of the insured, some of which are partly reconsidered and extended in this contribution. For instance ordering of risks is used to investigate assumptions about the distribution of the future lifetime, or to find actuarial inequalities. It is shown that ordering of risks in individual life insurance can be extended to comparing loss functions which have distribution functions that are in fact transformations of one and the same distribution function of the future lifetime of the insured. As an application this approach to ordering of risks will be used to discriminate between actuarially equivalent insurances and also to generalize earlier results on optimal insurance plans. *Insurance: Mathematics and Economics*, August 1992, 11(2): 139-152. (Reprinted with permission of North-Holland Publishing Company.)

RISK PERCEPTION AND ECONOMIC BEHAVIOR

Income Tax Deductions for Losses as Insurance, by Louis Kaplow (Harvard University)

The federal income tax allows deductions for some categories of personal losses, notably for casualty losses (such as destruction of one's home or car) and medical expenses above a threshold. The latter, even with lower marginal rates and further restrictions brought about by the 1986 tax reform, involves more than a $3 billion annual revenue loss (Office of Management and Budget, 1990).

Deductions like these act as a partial insurance: individuals receive a tax benefit equal to their marginal rate multiplied by the magnitude of their loss. However, this form of insurance is unnecessary when private insurance is available. Moreover, as will be emphasized here, these deductions have a perverse effect because they are allowed only for the uninsured portion of losses. This induces individuals to be less protected against risk in the aggregate than if the implicit insurance provided by the tax system were unavailable; if the tax rate is sufficiently high, individuals would forgo insurance coverage altogether. It will be demonstrated that a tax system with no deductions for personal losses Pareto dominates the current system.

These conclusions are demonstrated in Section I using a simple model in which risk-averse individuals may purchase actuarially fair insurance against loss and individual behavior does not affect the risk of loss (no moral hazard). Section II considers the applicability of the results when one allows for moral hazard, administrative costs, and other imperfections. It also discusses the applicability of traditional notions of tax equity. *The American Economic Review*, September 1992, 82(4): 1013-1017. (Reprinted with permission of *The American Economic Review*.)

Some Observations on Insurance, Bankruptcy and Input Demand, by John Quiggin (University of Maryland)

The effects of insurance on input demand have been central to the debate over crop insurance policy, and are of interest in assessing the moral hazard problem facing insurers in general. In this paper, the effects of insurance on input demand are characterized and related to a schema by which inputs can be assessed as risk-reducing, risk-increasing and risk-constant. The results are extended to analyze the impact of bankruptcy provisions. *Journal of Economic Behavior and Organization*, June 1992, 18(1): 101-110. (Reprinted with permission of North-Holland Publishing Company.)

On Utility Function Estimation of Racetrack Bettors, by Antti J. Kanto (University of Vaasa, Vaasa, Finland), Gunnar Rosenqvist (Swedish School of Economics and Business Administration, Helsinki, Finland) and Arto Suvas (University of Vaasa)

Racetrack betting makes possible the empirical study of people's behavior in decision making under uncertainty and risk in laboratory-like but still natural conditions. Hence, it gives an opportunity to empirically test the classical assumptions of rational behavior. In this paper it is found that empirical data from a Finnish racetrack do not support risk-aversion or risk-neutrality of bettors. This gives rise to the question of under exactly which cultural and other circumstances various assumptions regarding attitudes toward risk actually apply. *Journal of Economic Psychology*, September 1992, 13(3): 491-498. (Reprinted with permission of North-Holland Publishing Company.)

Comparative Statics Under Multiple Sources of Risk With Applications to Insurance Demand, by Georges Dionne (Université de Montréal) and Christian Gollier (Groupe HEC, Jouy-en-Josas, France)

In this paper we propose an answer to the following problem of comparative statics in models with multiple sources of risk: How a risk averse agent will change his coinsurance demand when the distribution of the insurable loss is shifted? To answer the question, we first comment on Jack Meyer's results and then we show how an alternate approach leads to more definitive comparative statics. *The Geneva Papers on Risk and Insurance Theory*, June 1992, 17(1): 21-33. (Reprinted with permission of Kluwer Academic Publishers.)

Beneficial Changes in Random Variables Under Multiple Sources of Risk and Their Comparative Statics, by Jack Meyer (Michigan State University)

The consequence of a change in a random parameter are determined for a decision model with more than one source of randomness. The two cases of independent and stochastically dependent sources of risk are discussed. Four comparative static theorems are given. These state the effect of first degree stochastically dominant shifts or risk decreases for one random variable while the other random variable is held fixed. Deterministic transformations are used to represent random parameter changes. The results are presented in the context of the coinsurance demand model with a risky insurable asset and background risk. *The Geneva Papers on Risk and*

Insurance Theory, June 1992, 17(1): 7-19. (Reprinted with permission of Kluwer Academic Publishers.)

UTILITY THEORY

A Mixed Fan Hypothesis and Its Implications for Behavior Toward Risk, by William S. Neilson (Texas A&M University)

In order to accommodate recent experimental evidence which questions the validity of the fanning out hypothesis, a mixed fan hypothesis is proposed. The hypothesis combines fanning out for the less-preferred region of probability triangles with fanning in for the more preferred region, and is defined over general probability spaces. The relevance of fanning hypotheses for economic analysis is illustrated with an asset demand example, and a new method for testing for fanning behavior is proposed. *Journal of Economic Behavior and Organization*, October 1992, 19(2): 197-211. (Reprinted with permission of North-Holland Publishing Company.)

A Simple Axiomatization of Nonadditive Expected Utility, by Rakesh Sarin (University of California-Los Angeles) and Peter Wakker (University of Nijmegen, The Netherlands)

This paper provides an extension of Savage's subjective expected utility theory for decisions under uncertainty. It includes in the set of events both unambiguous events for which probabilities are additive and ambiguous events for which probabilities are permitted to be nonadditive. The main axiom is cumulative dominance, which adapts stochastic dominance to decision making under uncertainty. We derive a Choquet expected utility representation and show that a modification of cumulative dominance leads to the classical expected utility representation. The relationship of our approach with that of Schmeidler, who uses a two-stage formulation to derive Choquet expected utility, is also explored. Our work may be viewed as a unification of Schmeidler (1989) and Gilboa (1987). *Econometrica*, November 1992, 60(6): 1255-1272. (Reprinted with permission of *Econometrica*.)

MATHEMATICAL AND STATISTICAL MODELS

Stochastic Discounting, by H. Bühlmann (ETH-Zentrum, Zürich, Switzerland)

Some basic principles for a trend approach of stochastic discounting are given. In addition it is indicated how the effect of uncertainty in the distributional parameters can be introduced. *Insurance: Mathematics and*

Economics, August 1992, 11(2): 113-127. (Reprinted with permission of North-Holland Publishing Company.)

RUIN THEORY

On the Probability of Ruin for Infinitely Divisible Claim Amount Distributions, by Hans U. Gerber (University of Lausanne, Switzerland)

It is assumed that the claim amount distribution is a member of a two parameter family of infinitely divisible distributions, for example that it is a gamma or an inverse Gaussian distribution. Then, for given relative security loading, the probability of ruin is a monotone function of the parameters in two ways. A numerical illustration is given in the case where the claim amount distribution is gamma; it is also shown how the probability of ruin can be calculated, if the shape parameter is an integer. *Insurance: Mathematics and Economics*, August 1992, 11(2): 163-166. (Reprinted with permission of North-Holland Publishing Company.)

HEALTH CARE AND INSURANCE

Adverse Selection, Moral Hazard, and Wealth Effects in the Medigap Insurance Market, by J. R. Wolfe and J. H. Goddeeris

Using data from a longitudinal study of the recently retired, the authors attempt to separate the moral hazard effect of Medicare supplementary (Medigap) insurance on health-care expenditures from the adverse selection effect of poor health on Medigap coverage. They find evidence of adverse selection, but its magnitude is unlikely to create serious efficiency problems. Taking adverse selection into account reduces the estimate of the moral hazard effect. In addition, the authors find a strong positive wealth effect on the demand for supplementary insurance. *Journal of Health Economics*, 1991, 10(4): 433-459. (Reprinted with permission of the *Journal of Economic Literature*.)

Physician Response to Fee Changes with Multiple Payers, by T. G. McGuire and M. V. Pauly

This paper develops a general model of physician behavior with demand inducement encompassing the two benchmark cases of profit maximization and target-income behavior. It is shown that when income effects are absent, physicians maximize profits, and when income effects are very strong, physicians seek a target income. The model is used to derive own and cross-price expressions for the response of physicians to fee changes in the realistic context of more than one payer under the alternative behavior assumptions of profit maximization and target income behavior. The implication for public and private fee policy, and empirical research on physician response to fees, are discussed. *Journal of Health Economics*, 1991, 10(4): 385-410. (Reprinted with permission of the *Journal of Economic Literature*.)

The Doctor as a Double Agent: Information Asymmetry, Health Insurance, and Medical Care, by Å. Blomqvist

In a model incorporating uncertainty and state-dependent utility of health services, as well as information assymetry between patients/buyers and physicians/sellers, two types of equilibria are compared: (1) when consumers have conventional third-party insurance and doctors are paid on the basis of fee-for-service; and (2) when insurance is through an HMO that provides health services through its own doctors. Conditions are found under which contractual or legal incentives can overcome the information asymmetry problem and bring about an efficient allocation of resources to health services provision. *Journal of Health Economics*, 1991, 10(4): 411-432. (Reprinted with permission of the *Journal of Economic Literature*.)

Organizing the Health Insurance Market, by Peter Diamond (Massachusetts Institute of Technology)

This paper presents a new approach to organizing universal health insurance. First the government divides the entire population into many large groups. Then, the government creates a Federal Health Insurance System (HealthFed), modeled on the Federal Reserve System, to fill the role now played by the benefits office of a large firm. The HealthFed would create a short menu of alternatives, solicit bids for insuring the entire group, and price alternatives. There would be redistribution between groups and pricing of alternatives to reflect optimal social insurance principles. There would be no connection between health insurance and employment. *Econometrica*, November 1992, 60(6): 1233-1254. (Reprinted with permission of *Econometrica*.)

GOVERNMENT INSURANCE PROGRAMS

Deposit Insurance, Regulation, and Moral Hazard in the Thrift Industry: Evidence from the 1930s, by Richard S. Grossman (Wesleyan University)

This paper compares risk-taking of insured and uninsured thrifts operating under strict and less-strict regulatory regimes during the 1930's. Analysis of balance-sheet data indicates that while newly insured thrifts undertook less risk than their uninsured counterparts, possibly because of screening by deposit-insurance authorities, moral hazard emerged gradually. Insured institutions operating under relatively permissive regulatory regimes were more prone to undertake risky lending activities than their more tightly regulated counterparts. Given the current system of deposit insurance, the results suggest that effective regulation and supervision will play a key role in maintaining thrift stability in the 1990's. *The American Economic Review*, September 1992, 82(4): 800-821. (Reprinted with permission of *The American Economic Review*.)

Risk-Based Deposit Insurance: An Incentive Compatible Plan, by Rowena A. Pecchenino (Michigan State University)

This paper develops a model of a risk-based deposit insurance regulatory regime in which the insurer induces banks to reveal truthfully the riskiness of their portfolios and to protect adequately their creditors from loss. This scheme reduces the limits on stockholder liability, responds to changes in market conditions, and provides depositors with timely information on bank risk. *Journal of Money, Credit and Banking*, November 1992, 24(4): 499-510. (Reprinted with permission of the *Journal of Money, Credit and Banking*.)

A Note on the Existence and Characteristics of Fair Deposit Insurance Premia, by Sarah B. Kendall (Loyola University of Chicago)

This paper treats the fair deposit insurance premium as a fixed point of the value of insurance per dollar of deposits. Using the standard model of the value of deposit insurance and treating the premium as an up-front cost to a bank it is shown that the fixed-point premium exists and is unique under fairly general conditions. It is shown that ignoring the premium as an up-front cost may lead to underestimation of the fair premium. In addition, the fixed-point model suggests that premium rates should vary with the ratio of deposits to total liabilities. *Journal of Banking and Finance*, April 1992, 16(2): 289-297. (Reprinted with permission of North-Holland Publishing Company.)

SOCIAL INSURANCE

Social Security Rules and Marginal Tax Rates, by Martin Feldstein (Harvard University and National Bureau of Economic Research) and Andrew Samwick (National Bureau of Economic Research)

The analysis in this paper shows how current social security benefit rules have created a variety of social security net marginal tax rates that differ by age, sex, marital status, and income in ways that reduce the equity and efficiency of the social security program. The existing pattern of marginal tax rates distorts the incentive for each individual to work at different ages and the division of work within the household.

Although the net marginal rate of social security taxes is very low for some employees and actually negative for a substantial number of employees, the full statutory 11.2 percent rate without any offsetting benefits applies to young workers, to workers who will collect as dependent spouses, and to the very poor. Marginal tax rates decline sharply with age and increase dramatically with income. For workers of a given age and income level, single workers face higher tax rates than workers with dependent spouses, and male workers face higher tax rates than female workers. Modifications of existing rules which could reduce some of the distorting incentives without changing the basic structure or overall cost of the social security program are discussed. *National Tax Journal*, March 1992, 45(1): 1-22. (Reprinted with permission of the *National Tax Journal*.)

Social Security, Longevity, and Moral Hazard, by James B. Davies (University of Western Ontario) and Peter Kuhn (McMaster University)

Recently, several authors have argued that social security can have positive effects on savings and welfare when individuals possess hidden information about their longevity, that is when there is adverse selection in annuity markets. This paper considers the related problem of the effects of social security when individuals can take hidden *actions* to affect their longevity, that is when there is moral hazard in annuity markets. In contrast to the adverse-selection models, we show that social security never raises welfare in a pure moral hazard economy. As well, social security may either increase or reduce longevity, depending on the characteristics of the health-related goods consumed. It is suggested that a complete analysis of social security needs to consider both adverse selection and moral hazard. *Journal of Public Economics*, October 1992, 49(1): 91-106. (Reprinted with permission of North-Holland Publishing Company.)

Medicare Physician-Payment Reform and the Resource-Based Relative Value Scale: A Re-creation of Efficient Market Prices? by James R. Baumgardner (Duke University)

Criticism of the original customary, prevailing, and reasonable (CPR) fee system for determining Medicare payments for physician services has led Congress to adopt a resource-based relative value scale (RBRVS) method for the determination of physician fees. This new system is being phased in during the early 1990's. Medicare accounts for 18 percent of payments to physicians in the United States. Medicare fee schedules constitute an important form of government regulation, and the ramifications of RBRVS merit attention.

The new RBRVS system has its own shortcomings. The focus of this paper is the reliance of RBRVS on the survey responses of physicians to the question of how much "work" a particular procedure entails. *The American Economic Review*, September 1992, 82(4): 1027-1030. (Reprinted with permission of *The American Economic Review*.)

On the Time Consistency of the Government's Social Security Benefit Policy, by Raymond G. Batina (Washington State University)

It is shown that the government's social security benefit policy may be time-inconsistent when a worker's future benefit depends on his labor earnings history. When the *future* benefit is tied to *current* labor supply, the benefit will distort the worker's labor supply decision ex ante of retirement but not ex post. Any excess burden associated with the government's benefit policy is taken into account in the open loop policy game, but is ignored in the closed loop game. This will generally imply that the benefit will be larger under the closed loop rule, *ceteris paribus*. *Journal of Monetary Economics*, June 1992, 29(3): 475-486. (Reprinted with permission of North-Holland Publishing Company.)

Incentives, Redistribution and Social Insurance, by Jean-Charles Rochet (Université de Toulouse)

We extend the familiar income taxation model à la Mirrlees, so as to include income uncertainty, due for instance to a risk of illness. Following a line of research initiated by Blomqvist and Horn [1984] we prove that the existence of a Social Health Insurance system may be justified even when the insurance market is efficient. Moreover, if there is a negative statistical dependence between probability of illness and labor productivity, then the optimum of a Utilitarianist Social Welfare function implies that Social Insurance provides a complete coverage for every household. *The Geneva Papers on Risk and Insurance Theory*, June 1992, 16(2): 143-165. (Reprinted with permission of Kluwer Academic Publishers.)

Analysis of a National Private Pension Scheme: The Case of Chile, by Colin Gillion and Alajandro Bonilla (Social Security Department, International Labour Office)

The apparent success of Chile's "privatized" pension scheme has prompted other Latin American countries to consider following suit; the authors believe that this would not be without risk. The article begins by describing the main features of the Chilean scheme and explaining the basic arithmetic of the individual retirement accounts. The second part comments on a number of its advantages and drawbacks, some of which are already evident while others are likely to emerge as the scheme matures. In their conclusions the authors argue that the scheme puts both individual workers and public budgets at some risk, that it embodies insufficient solidarity between generations and different social groups, and that it falls short of the criteria established in relevant international labour standards. *International Labour Review*, 131(2): 171-195. (Reprinted with permission of *International Labour Review*.)

EMPLOYEE BENEFIT AND WAGE COMPENSATION

Pensions and Wages: An Hedonic Price Theory Approach, by E. Montgomery, K. Shaw, and M. E. Benedict

This paper examines whether a trade-off exists between the level of pension benefits and wages. The 1983 Survey of Consumer Finance is used to match detailed information on pension plans to worker characteristics for a random sample of the population. The pension-wage tradeoff is estimated using both a contractual model of the labor market and the spot market model used in previous studies. The results indicate a large negative tradeoff in the contractual model but only a neglible tradeoff in the spot market model. Results from estimating the underlying structural equations for pensions are also presented. *International Economic Review*, February 1992, 33(1): 111-128. (Reprinted with permission of the *Journal of Economic Literature*.)

Profit Sharing and Productivity: Microeconomic Evidence from the United States, by D. L. Kruse

Profit sharing has often been suggested as a potential solution to principal/agent problems in the workplace. The relationship between productivity and profit sharing is examined using a panel dataset drawn from 2,976 publicly-held companies over the 1971-85 period. Alternatively using firm-intercept and first-difference specifications, the regression results indicate that the adoption of profit sharing is associated with a 2.5-4.2 percent increase in productivity. In addition, the size of the effect increases with the proportion of employees participating in profit sharing. These results hold under a variety of specifications and do not appear to be explained by accompanying changes in management or personnel policies. *Economic Journal*, January 1992, 102(410): 24-36. (Reprinted with permission of *Journal of Economic Literature*.)

PENSIONS AND RETIREMENT

Life Cycle Valuation of Social Security and Pension Wealth, by Thad W. Mirer (State University of New York at Albany)

The proper valuation of annuity wealth is important for many empirical studies of economic behavior and the distribution of wealth and well-being. This paper examines Bernheim's argument that the value of Social Security benefit streams should be determined by simple discounting, rather than by actuarial discounting, when consumers behave according to life-cycle principles. In a model having a more realistic mortality structure than his, we document the poor performance of both methods for a broad range of parameter values. *Journal of Public Economics*, August 1992, 48(3): 377-384. (Reprinted with permission of North-Holland Publishing Company.)

PENSION FUNDING

Economic Measures of Unfunded Pension Obligations, by Sara Ann Reiter (State University of New York at Binghamton)

This article investigates whether bond risk premiums reflect implicit or explicit contract measures of pension equilibrium. Pension obligations measured on an explicit contract basis are much smaller than obligations that reflect implicit promises to continue the plan and provide future benefit increases. The association of implicit and explicit benefit pension obligation measures with risk premiums on new issue debt is tested, and implicit contract measures are found to provide incremental explanatory power. This result has implications for economists measuring the pension saving rate, legislators determining public policy issue related to pension plan termination, corporate decision-makers determining pension-funding policy, and financial statement users interpreting financial statement disclosures about pension obligations. *Quarterly Review of Economics and Finance*, Summer 1992, 32(2): 110-128. (Reprinted with permission of the *Quarterly Review of Economics and Finance*.)

Pension Reversions and Worker-Stockholder Wealth Transfers, by Mitchell A. Petersen (National Science Foundation)

This paper examines the relative importance of transfers from workers to shareholders in the firm's decision to terminate their overfunded defined benefit pension plans. In contrast to earlier studies, I find evidence that firms terminate their pension plans to relieve themselves of implicit promises to workers of future compensation. In addition, financing and tax considerations influence the reversion decision. The results suggest that the 1986 excise tax on asset reversions reduced termination for reversion by 36 percent in 1986. *The Quarterly Journal of Economics*, August 1992, 107(3): 1033-1056. (Reprinted with permission of *The Quarterly Journal of Economics*.)

ESTATE PLANNING AND DISTRIBUTION

Reassessing the Role for Wealth Transfer Taxes, by J. Aaron (The Brookings Institute) and Alicia H. Munnell (Federal Reserve Bank of Boston)

This article brings together several strands in the literature to provide a framework for assessing the role of wealth transfer taxes. It examines the theoretical rationale for these taxes, discusses data on the distribution and accumulation of wealth, and reviews the experience of the United States and other countries under their existing systems. Although wealth is highly concentrated in industrial countries and the life-cycle framework indicates that wealth transfers should be taxed, this paper finds that countries do little through their tax systems to affect wealth concentration. Because a substantial portion of the existing stock of wealth is inherited, these taxes could have significant equalizing effects. Thus, a serious reassessment of wealth transfer taxes is warranted. *National Tax Journal*, June 1992, 45(2): 119-143. (Reprinted with permission of the *National Tax Journal*.)

HUMAN LIFE VALUE

Paternalistic Altruism and the Value of Statistical Life, by M.W. Jones-Lee

In applying the willingness-to-pay approach to the assessment of public-sector projects that have potential safety effects, it is clearly important to know whether and how values of statistical life and safety should reflect people's altruistic concern for other people's wellbeing. Thus far this question has been answered only for a very limited number of special cases. The purpose of this paper is to extend the analysis to cover a wider spectrum of degrees and types of altruistic concern than has so far been considered in the literature. *Economic Journal*, January 1992, 102(410): 80-90. (Reprinted with permission of the *Journal of Economic Literature*.)

LIFE CYCLE MODELS AND SAVINGS

Saving, Wealth, and the Exchange-Bequest Motive, by William A. Lord (University of Maryland)

A model of exchange-motivated bequests based upon childrens' "attentions" to parents, provided when the children are young adults, is joined to a standard life-cycle specification to examine the consequences for wealth and savings. The results of general equilibrium simulations show contribution to be far below some recent estimates. Exchange-motivated bequests produce offsets to life-cycle savings that limit their ability to increase total savings. *Canadian Journal of Economics*, August 1992, 25(3): 743-753. (Reprinted with permission of the *Canadian Journal of Economics*.)

INSURER MANAGEMENT AND REGULATION

The Dutch Premium Principle, by A. E. van Heerwaarden and R. Kaas (University of Amsterdam, Netherlands)

A premium principle is derived, in which the loading for a risk is the reinsurance loading for an excess-of-loss cover. It is shown that the principle is well-behaved in the sense that it results in larger premiums for risks that are larger in stop-loss order or in stochastic dominance. *Insurance: Mathematics and Economics*, August 1992, 11(2): 129-133. (Reprinted with permission of North-Holland Publishing Company.)

A Stochastic Approach to Insurance Cycles, by M. J. Goovaerts (Katholieke Universiteit Leuven, Louvain, Belgium and Universiteit van Amsterdam, Netherlands), F. De Vylder (Université Catholique de Louvain, Belgium), and R. Kaas (Universiteit van Amsterdam, Netherlands)

In a series of papers Pentikäinen and coworkers have examined insurance cycles and their consequences for the solvency of insurers and equalization reserves. In a recent contribution, Taylor analyzed the underwriting cycles by means of differential equations, describing more or less deterministic behavior of the cycle. The aim of the present contribution is to give a general framework which can be applied to describe these cycles in a stochastic way. The advantage of our approach lies in the fact that we obtain analytical expressions for solvency margins and that we are able to separate the effects of pure solvency and the effect of cyclic behavior. In other words, a clear distinction is made between the classical idea of solvency and the equalization reserves due to cyclic trends. The underlying idea is from the so-called "path integral," originally arising in quantum mechanics. *Insurance: Mathematics and Economics*, August 1992, 11(2): 97-107. (Reprinted with permission of North-Holland Publishing Company.)

International P/L Insurance Output, Input, and Productivity Comparisons, by Mary A. Weiss (Temple University)

This research provides (bilateral) divisia and multilateral divisia indexes of output, input, and productivity for the property-liability (P-L) insurance industry for the following countries: United States, West Germany, Switzerland, France and Japan. The time period studied is 1975 to 1987. The results indicate that considerable diversity exists among different countries, with Japan showing the weakest productivity growth. The United States and West Germany are associated overall with high productivity. *The Geneva Papers on Risk and Insurance Theory*, June 1992, 16(2): 179-200. (Reprinted with permission of Kluwer Academic Publishers.)

Preferred Habitat, Taxable/Tax-Exempt Yield Spreads and Cycles in Property/Liability Insurance, by Karlyn Mitchell and Michael D. McDade (North Carolina State University)

Several theories seek to explain the spread between the yields on taxable and tax-exempt bonds of comparable maturity. This paper reconsiders the market segmentation theory by focusing on property and liability insurance companies (PLICs). PLICs can provide evidence on the market segmentation theory both because they are major participants in the market for longer term tax-exempt bonds and because of their industry's pronounced profit cycle, which causes wide variations in PLICs' need for tax shields. If investors have "preferred habitats" as per the market segmentation theory, their preferences should cause PLICs' purchases and sales of tax-exempts to have different impacts on taxable/tax-exempts yield spreads at different maturities. This paper finds strong evidence of market segmentation during the 1972-84 period, when the industry experienced two extremely pronounced cycles, and weaker evidence of market segmentation during 1959-71 and 1985-89 periods. *Journal of Money, Credit and Banking*, November 1992, 24(4): 528-552. (Reprinted with permission of the *Journal of Money, Credit and Banking*.)

RISK PRICING

Price Adjustment in an Automobile Insurance Market: A Test of the Sheshinski-Weiss Model, by Bev Dahlby (University of Alberta)

Nominal price rigidity is explained in the Sheshinski-Weiss (sw) model by costly price adjustment. The predictions of the sw model, which describe a firm's optimal forward-looking price adjustment strategy, were derived and tested using microdata on the timing and the magnitude of premium changes by sixty-nine firms in the Alberta automobile insurance market over the period 1974-82. The model was tested by estimating the structural equations of the model, probit equations for premium changes, and reduced-form equations for the firm's new premium and its old premium. The overall conclusion is that the sw model does not explain the price adjustments observed in the Alberta automobile insurance market. *Canadian Journal of Economics*, August 1992, 25(3): 564-583. (Reprinted with permission of the *Canadian Journal of Economics*.)

Why Is Automobile Insurance in Philadelphia So Damn Expensive? by Eric Smith (University of Essex, Colchester, U.K.) and Randall Wright (University of Pennsylvania)

We document and attempt to explain the observation that automobile insurance premiums vary dramatically across cities. We argue that high premiums can be attributed, at least in part, to large numbers of uninsured motorists in some markets, while uninsured motorists can be attributed to high premiums. We construct a simple noncooperative equilibrium model that can generate inefficient equilibria with uninsured drivers and high, yet actuarially fair, premiums. For certain parameterizations, and efficient full-insurance equilibrium and inefficient high-price equilibria with uninsured drivers exist simultaneously, helping to explain price variability across otherwise similar cities. Policy implications are discussed. *The American*

Economic Review, September 1992, 82(4): 756-772. (Reprinted with permission of *The American Economic Review*.)

Risk Insurance and Warranties: Ambiguity and Correlated Risks, by Robin M. Hogarth (University of Chicago) and Howard Kunreuther (University of Pennsylvania)

This paper reports on the results of a questionnaire study of pricing decisions made by professional actuaries when the probabilities of a loss are either ambiguous or nonambiguous. Theoretical hypotheses derived from the expected utility model were compared with the implications of procedures described by practicing actuaries. Actuaries were asked to act as consultants to a computer manufacturer concerning the price of a warranty. The suggested prices were considerably higher when probabilities were ambiguous than when they were well-satisfied. These pricing decisions were consistent with the procedures described by actuaries but inconsistent with predictions from expected utility theory when the risks are perfectly correlated. Further insight into the actual decision process is provided by interviews with actuaries and an analysis of comments written on the questionnaire forms. *The Geneva Papers on Risk and Insurance Theory*, June 1992, 17(1): 35-60. (Reprinted with permission of Kluwer Academic Publishers.)

LIABILITY RULES

Negligence Versus Strict Liability in a Principal-Agent Model, by Harry A. Newman and David W. Wright (The University of Michigan)

This study examines the impact of moral hazard on issues concerning a negligence rule versus strict liability. The study finds that when the owner of a firm hires an employee to preside over potentially hazardous activities, different liability rules motivate the owner to induce the employee to exert different levels of care. The results demonstrate that whether greater care in the prevention of industrial accidents is induced by a strict or negligence liability rule depends upon the utility function of the agent and the degree of moral hazard present in the employment relationship. To implement the analysis, the article discusses a mechanism that allows a negligence liability system to be implemented when effort is not observable. Finally, under a negligence rule, both the level of the optimal due care standard and the agent's level of accident prevention effort will generally depend on whether moral hazard is present within the firm. These results imply that courts should consider the level of moral hazard within the firm prior to establishing the rule of law that will be employed when assessing liability in the event of an industrial accident. *Journal of Economics and Business*, November 1992, 44(4): 265-281. (Reprinted with permission of North-Holland Publishing Company.)

SAFETY AND LOSS CONTROL

Economic Behaviour of the Firm and Prevention of Occupational Injuries, by Thierry Schneider (Centre d'étude sur l'Evaluation de la Protection dans le domaine Nucléaire, Fontenay-aux-Roses, France)

In this paper an economic model of the firm's behaviour is presented, examining the interrelationship between prevention activities and employment level. A competitive firm with a fixed capital stock is considered. Two decisions must be made: the level of employment of homogeneous workers (L) and the level of prevention activities (I). Although many simplifying assumptions are adopted, the impact of wage rate and compensation level on both decision variables is sign àmbiguous. Moreover the case where injured workers are irreplaceable is more difficult than its counterpart with perfect substitutability. *The Geneva Papers on Risk and Insurance Theory*, June 1992, 17(1): 77-85. (Reprinted with permission of Kluwer Academic Publishers.)