

SOCIAL INSURANCE

Substitution Between Unemployment Insurance and Workers' Compensation: An Analysis Applied to the Risk of Workplace Accidents, by Bernard Fortin (Université Laval, Québec, Canada) and Paul Lanoie (Ecole des Hautes Etudes Commerciales and CRDE, Montréal, Canada)

This paper extends the literature on post-injury duration of absence from work by developing a model that incorporates substitution between unemployment insurance benefits and workers' compensation. A theoretical analysis is presented in which the worker maximizes expected utility over four possible states of nature. The model is tested empirically using pooled cross-section and time-series data at the two-digit industry level. The main findings support the predictions of the model: an increase in workers' compensation benefits increases the average duration of accidents with an elasticity of 0.9-1.4, while an increase in unemployment insurance payments reduces the average duration of accidents with an elasticity of 0.5-0.7. *Journal of Public Economics*, December 1992, 49(3): 287-312. (Reprinted with permission of North-Holland Publishing Company.)

EMPLOYEE BENEFIT ISSUES

Managerial Vote Ownership and Shareholder Wealth: Evidence from Employee Stock Ownership Plans, by Saeyoung Chang (Arizona State University) and David Mayers (Ohio State University)

We examine employee stock ownership plan (ESOP) announcements to study the effects of an increase in managerial voting rights without a proportional increase in the ownership of cash flow claims. Our finding that when managers initially control few votes firm value increases with the fraction of shares contributed to the ESOP supports the view that managerial vote control serves shareholder interests. Conversely, the decrease in firm value with larger contributions to the ESOP when managers initially control many votes reflects a divergence of incentives that increases the agency problems between managers and outside shareholders. *Journal of Financial Economics*, August 1992, 32: 103-131. (Reprinted with permission of North-Holland Publishing Company.)

Finding the Optimal Allocation to a Health-Care Reimbursement Account, by Thomas S. Nunnikhoven (International Paper Company, Memphis, TN)

A health-care reimbursement account offers tax savings to eligible employees who are willing to face a risk of losses due to unused account balances. Finding the optimal allocation to such an account requires decision making in the face of uncertain future medical expense. The allocation which minimizes expected total cost (sum of medical expense, excess taxes and

forfeiture) is found for a known household expense distribution. This distribution would not be known in practice and must be estimated. Using the gamma density function as an approximation the variability in this distribution (specifically, the shape parameter α) is estimated using US Consumer Expenditure Survey (CES) data. Separate estimates are provided for groupings by age and family size. It is assumed that the mean is unique to each household; thus each family in the CES represents a distinct population. A transformation to an F distribution is used to estimate the common value of α for each group. The optimal allocation is a multiple of the estimated mean: the multiplier depends on α , the probability that no expense will be incurred, the household marginal tax rate, and its risk preferences between the two losses. Values of the multiplier are provided for selected cases. It is shown that the results are relatively insensitive to moderate errors in the estimation process. *Insurance: Mathematics and Economics*, October 1992, 11(3): 223-235. (Reprinted with permission of North-Holland Publishing Company.)

PENSION FUNDING

Pension Funding with Time Delays: A Stochastic Approach, by Steven Haberman (City University, London, UK)

A model is set up which facilitates the comparison of different pension funding methods. Real rates of return on the fund are assumed to be represented by independent, identically distributed random variables. The contribution rate is fixed relative to the fund level but with a time delay. Expressions for the expectations and the variability of fund and contribution levels are obtained for finite t and in the limit as $t \rightarrow \infty$. *Insurance: Mathematics and Economics*, October 1992, 11(3): 179-189. (Reprinted with permission of North-Holland Publishing Company.)

INSURER MANAGEMENT AND REGULATION

Optimistic Reporting in the Property-Casualty Insurance Industry, by Kathy Ruby Petroni (Michigan State University)

This paper examines the response of managers of property-casualty insurers to the differential costs and benefits of understating the liability for outstanding claim losses. The primary hypothesis is that the incentive to underestimate the liability is a decreasing function of the insurer's actual financial position. Empirical tests suggest that managers of financially weak insurers bias downward their estimates of claim loss reserves relative to other insurers after controlling for exogenous economic factors. Evidence also reveals that managers of insurers "close" to receiving regulatory attention understate reserve estimates to an even larger degree. *Journal of Accounting and*