071045 (E10, E12)

An empirical test of ordinal independence.

Wu G., Harvard Business School, Boston, Journal of Risk and Uncertainty, Vol. 9, Nr. 1, 1994, pp. 39-60.

In this article, the author tests Green and Jullien's (1988) Ordinal Independence (OI) Axiom, an axiom necessary for any rank-dependent expected utility (RDEU) model, including Cumulative Prospect Theory (Tversky and Kahneman, 1992). The authors observe systematic violations of OI (some within-subject violation rates of over 50%). These patterns of choice cannot be explained by any RDEU theory alone. The authors suggest that subjects are employing an editing operation prior to evaluation: if an outcome-probability pair is common to both gambles, it is canceled when the commonality is transparent; otherwise, it is not canceled. The authors interpret the results with respect to both original and cumulative prospect theory and the known empirical properties of the weighting function(Author) Keywords: Ordinal Independence, Rank-dependent Expected Utility, Prospect Theory, Editing.

071046 (E10, B10)

The dynamical, international life insurance market of the Netherlands (1947-1992).

Nijenhuis O.G.M., Potjes J.C.A., Schilder G., Heterogeniteit in Verzekering - Liber Amicorum G.W. de Wit. 1994.

The dynamics of the Dutch life insurance market are studied by statistical analysis of the level of concentration and the level of competition for the period 1947-1992. The growth of the life market and the tendency towards single premium policies increased the level of competition for market share. Concentration could only be sustained through mergers and acquisitions. The Dutch market has always been open to foreign participants, while Dutch insurance corporations have expanded to all parts of the world. (Authors) Keywords: Life Insurance Market.

071047 (E10)

Prediction.

De Wit G.W., Rotterdam, Heterogeniteit in Verzekering - Liber Amicorum G.W. de Wit, 1994.

A new definition of prediction is given.

Starting with a historical consideration of prediction: combination astronomy - astrology, special attention was

given to the far reaching impact of mathematical thinking since Newton in western society.

Presently one is obsessed with mathematical thinking (belief in mathematical models, computers, etc.). In principle one does not accept stochastics (there is an observation far from the trend). The simple linear regression line in a stochastic world is a return to well known determinism.

It is argued that mathematical models should be mixed with feeling/intuition. The closer prediction comes to man, the larger the influence of feeling/intuition.

Science has to carry out more research into events that will lead to breaking points in economy and society in the future. The effect of the above on insurance was discussed.

(Author)

Keywords: Prediction.

E12: UTILITY THEORY

071048 (E12, E32, E50, B70)

Insurance and precautionary capital accumulation in a continuous-time model.

Gollier C., University de Toulouse in Paris, *The Journal of Risk and Insurance*, Vol. 61, nr. 1, 1994, pp. 78-95.

This article analyzes the optimal dynamic strategy of a risk-averse agent bearing an insurable risk to determine whether precautionary saving is superior to insurance in the long run. The risk of loss is described by a Poisson process. Policyholders can purchase insurance and/or accumulate precautionary savings in order to forearm themselves in the face of uncertainty. It is shown that the demand for insurance vanishes in the long run if the loading factor exceeds a critical value which is strictly positive. However, insurance may be a transitory strategy to protect capital accumulation. The optimal strategy for capital accumulation and insurance demand is derived in the constant relative risk aversion case. It is also shown that compulsory full insurance reduces the rate of consumption if and only if risk aversion exceeds one. (Author)

Keywords: Risk Aversion, Precautionary Saving, Insurance.

071049 (E12)

Unbounded behaviorally consistent stopping rules.