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Sunspot Equilibrium. Karl Shell, Robert Julius Thorne Professor of Economics, *Cornell University, 402 Uris Hall, Ithaca, NY 14853-7601, USA* (also Visiting Professor of Economics, University of California, San Diego).

Traditional general-equilibrium models of the economy have been extended to explain how uncertainty about the physical environment is transmitted through the economy to produce uncertainty about economic outcomes such as prices, interest rates, inflation, and employment. This is not the only type of economic uncertainty. There is also the uncertainty generated by the economy itself, arising because the economy is a social institution dependent upon the decisions of individual consumers and producers. The concept of *sunspot equilibrium* was introduced 15 years ago this month as an explanation of this *excess volatility*, i.e., the randomness in economic outcomes not caused by uncertainty about the economic fundamentals such as technology, preferences, and endowments.

The term 'sunspots' is a spoof on the work of Jevons, a distinguished nineteenth-century economist who attempted to explain the business cycle in terms of the observed cycle in sunspot activity. In the modern theories, 'sunspots' are highly stylized. Unlike actual sunspot activity, stylized sunspot activity is assumed to have no effect on the economic fundamentals. Hence such sunspot uncertainty is purely *extrinsic* to the economy. If these stylized sunspots affect the economic outcomes, they can thus be identified as a source of excess volatility.

The idea of sunspot equilibrium is critically reviewed. How well does it serve as an explanation of excess volatility? How can these equilibria be 'implemented' in economies or more general social systems? Are sunspot equilibria robust in the face of other coordinating arrangements? Are they robust in the face of more general stochastic randomizing devices? Are they robust to the free entry of insurance companies (or casinos)?