

Bubbles and myths, crises and explanations II/1: the South Sea bubble

Madarász Aladár

The first part of the study (published here in 2009) was devoted to “tulipmania”. This article continues the account of early bubbles and crises with the 1720 boom and bust of the South Sea Company, which is to this day one of the best known and most cited examples in history. For several decades, bubbles were not seen as an important issue in economic and financial theory, but recent events have focused attention on them again. The author introduces some historical examples of the bubble metaphor in literature, before giving an account of the emergence of British public debt and the fiscal–military state, and summarizing various interpretations of the financial revolution. An account of the South Sea Bubble, a detailed description of the debt-equity swap, and citations from some contemporary investors and observers are followed by an overview of the way the events of 1720 were used subsequently by various economists and historians in their own theorizing and explanations. The interpretations placed on it range from deliberate fraud, through irrational investment mania, to the emergence of a rational bubble.

Crisis and loan derivatives. The pricing and risks of synthetic collateralized debt obligations

Ákos Gyarmati and Péter Medvegyev

The first part of the paper examines briefly the financial crisis of 2007 and its causes, focusing on its driving processes and key motifs. This shows clearly the importance and centrality of credit derivatives in the crisis. The second part presents a mathematical modelling of one of the most popular credit derivative products: synthetic collateralized debt obligations, along with the drawbacks and problems of the modelling process. It is widely claimed that these products caused or at least precipitated the crises. The authors show not only that the modelling tools were inappropriate, but that the principle for pricing did not match adequately the risk-neutral valuation framework.

Parity-dependent complex indicators of fertility in Hungary and decomposition of differences between them

Miklós Faragó

The paper presents the method of a several-state fertility table over time and applies it to Hungarian birth rates, first calculating in retrospect the full age and parity-dependent fertility ratios for the Hungarian population over the last forty years. The calculation provides some details of decisive importance, including the number of children contributed to the

full fertility ratio by individual age groups and parities of the mother. This provides not only the likely number of children, but the likely distribution of the number of children by age and parity in a family, which allows a dynamic examination of the fertility tendency to be made. The same method can be applied to other indicators as well, for instance the average age of mothers at the time of successive births or the likely intervals between births. The second part of the study applies a decomposition process to produce full age and parity-dependent fertility comparisons for the present and for various past moments in time. Regional comparisons within Hungary and international comparisons are also made.