## Roman Frydman and Michael D. Goldberg, Beyond Mechanical Markets: Asset Price Swings, Risk, and the Role of the State, Princeton University Press, February 2011, 304 pages

The argument of this original and important book is that the fully predetermined economic models still used by central banks and others are seriously misleading and basically useless in dealing with a real world in which individuals are making imperfect and unpredictable interpretations of economic events. These models, even the latest ones which incorporate the findings of behavioural economics, assume that individuals follow mechanical rules and thus behave in predictable ways. Recent reforms in banking regulation aimed at strengthening the resilience of banking and credit systems, though helpful, do not deal with one of the main causes of financial crises: violent upswings in asset prices. Increasing capital requirements for banks and varying them cyclically, improving transparency and stopping banks speculating on their own account are not, in themselves, likely to prevent the asset price swings that are almost always associated with crash and boom. The authors, two professors of economics at American universities, conclude that it is necessary for governments to act to dampen asset price movements directly.

The authors do not take the view, either that asset price swings ('bubbles') reflect only psychological factors (crowd mentality) and that markets are irrational casinos, or that these markets are populated by people with perfect knowledge and the ability to anticipate all but purely random factors – the assumptions underlying the models. Frydman and Goldberg recognise that asset price swings are part of the process by which financial markets allocate capital. Thus the dotcom boom around the Millenium did result in a large shift in investment resources towards information technology and its applications, which really are beginning to transform how business is done. The trouble was that the dotcom boom went too far. The authors conclude from this that asset price booms should not be 'pricked' as some suggest, but should be made less extreme by state action.

This view is actually in accord, at least in part, with that of central bankers who have, in the past, been reluctant to intervene in asset markets with monetary policy. There have been good reasons for this reluctance and it has seemed best for central banks to concentrate upon general price stability and, where appropriate, employment. The authors quote Ben Bernanke of the Federal Reserve as saying in 2002: "The problem of a bubble-popping Fed is much tougher than just deciding whether or not a bubble exists... In my view, somehow preventing the boom in stock prices between 1995 and 2000, if it could have been done, would have throttled a great deal of technical progress and sustainable growth in productivity and output."

Unfortunately and especially for the non-academic reader, the authors do not get round to solutions to this dilemma until half-way through the book. Up until then the text is largely devoted to demolishing the already much-battered Rational Expectations and Efficient Market Hypotheses, which still underpin most contemporary economic theorising. These models do not allow for non-routine change and both assume a degree of perfect

knowledge on the part of market participants. By contrast, the authors point to the insights of Maynard Keynes, Friedrich von Hayek and Frank Knight, who placed overriding importance on uncertainty, which has been ignored in much of contemporary economic theory.

There is a welcome amount of empirical material in the book. For example, the authors show that models of exchange rates relating them to fundamentals, such as interest rates and inflation, have no predictive value in the long term. Nonetheless, fundamentals remain important and do ultimately determine market movements. They do find relationships between Bloomberg Wrap Reports, (which 'wrap up' the causes of market movements each day), and fundamentals such as company earnings and use these to show that psychology has little to do with market movements.

The authors' practical recommendations for policy are interesting and they can hardly be accused of a lack of boldness. They want to see a new Bretton Woods-type of international agreement to intervene and dampen over- and under-valued currencies. This is the least convincing of their recommendations and in effect in the past has been tried and failed in European currency arrangements. They themselves reject, or at least defer for further research, the idea that regulatory authorities should intervene directly by buying and selling in equity and housing markets – this too has been tried, at least in currency markets, but the results have hardly been encouraging. More promising is their suggestion that rating agencies should be required to report at least two ratings for each security, one a central position and another, pessimistic, one assuming that there will be 'reversals in the trends of major variables and the prices of the underlying assets'. What this amounts to is a proposal that the agencies should reveal more detail on the stress tests they are supposed to carry out.

Frydman and Goldberg's solution to the policy dilemma, as already indicated, is not to attempt to prick 'bubbles' but to act to dampen down swings in asset prices. To do this the authorities should set 'guidance ranges' within which asset price swings should be confined so as to reduce the risks faced by participants. This looks feasible; a chart of long-term movements in price-earnings ratios or house prices does provide a basis for setting ranges, though these ranges would need to be wide if the capital-allocating functions of markets were not to be impaired too much. Whether it would work or not remains to be seen. Alan Greenspan's warning in December 1996 of 'irrational exuberance' in US equity markets did not arrest the upward climb in stock prices, except temporarily. The authors, however, express confidence that 'a guidance range would work, not only by coordinating market players' views about longer-term prospects, but also by encouraging participants with short-term horizons to place greater weight on benchmark levels in assessing the riskiness of holding speculative positions. They also propose that the indicative ranges should be reinforced by adjusting margin and collateral requirements differently for bulls and bears. In this way, dealing costs would be increased for those bidding prices away from the guidance levels. Some will be shocked by the proposal that central bankers should adopt and act upon a modified form of chartism or technical analysis, but it seems worth a try. After all, what harm could it do? Graham Bannock