A Bayesian soft target zone analysis

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In the seventies, many countries responded to the pressure on fixed exchange rates by officially floating their currencies, while maintaining them within certain margins. These margins were either very wide or otherwise hardly credible against speculative attack. For some countries – among them the European Monetary System participants – these (narrow) margins were publicly announced and their defence effectively fixed the exchange rate to a benchmark currency. The theoretical distortion this fixing causes to the relationship between fundamental value and observed exchange rate is well known and much publicised. Empirical evidence for the existence of this S-shape has, however, proved elusive. This paper proposes and develops a more robust Bayesian estimation methodology to identify and measure the distortion (or bias) caused by target zones. The methodology used is then extended to the case where the margins are 'soft', or unstated, and therefore require estimation.

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