

Experimental economics

The Economics Department has always engaged with real world issues. **Clare Lombardelli, James Proudman** and **James Talbot** explain how LSE economics students took part in a Bank of England experiment earlier this year.

2002 is the centenary year of the BSc Economics degree at LSE. The celebration of 100 years of economics at the School will be marked on 29 January 2003 with a special lecture by Charles Bean, chief economist at the Bank of England and an LSE professor.

There will be a reception after the lecture, for which the Department would like to gather some material for a display highlighting the evolution of the degree, its students and alumni over the years. If you have any photographs or other items that may be of interest, please contact Jane Bohannon on +44 (0)20 7955 7542 or email: j.e.bohannon@lse.ac.uk

is strong evidence from across the world to suggest that committees are a preferred arrangement for setting monetary policy by central banks.

One reason could be that committees make better decisions.

This question motivated Alan Blinder, a former vice chairman of the Federal Reserve Board, and his colleague John Morgan at Princeton University to carry out two 'laboratory' experiments using Princeton students to test whether groups do indeed make decisions differently. And they found that groups made substantially better decisions on average than individuals.

To explore the differences between individual and committee decision-making in more detail, a team from the Bank of England conducted a new monetary policy experiment using a sample of just under 200 economics students from LSE.

In the Bank study, participants were asked to act as monetary policy makers, setting the short term interest rate in a simple, computer-based monetary policy game. Each group played the game 16 times: four rounds as individual policy makers, followed by eight rounds in a committee of five players, and finally a further four rounds as individuals.

Each round consisted of ten periods of play, in each of which the individual or committee had to decide what interest rate to set after observing the response of output and inflation in the previous period. In the committee stage, the majority – or more precisely the median – vote was implemented after all com-

mittee members had entered a vote into their respective computers.

The participants did not know the exact structure of the economy they were attempting to analyse. The challenge faced by players – much like real-life monetary policy makers – was to do their best to identify the shocks that hit the economy and to offset their impact by adjusting the short term interest rate in the appropriate manner.

To quantify their performance, players were scored according to their ability to keep inflation close to a pre-specified target and to minimise output fluctuations, and were paid a modest amount for doing so. The chart below shows the pattern of average scores over the different stages of the game.

Three features are striking:

- The significant upward trend in the results over time: players seemed to be learning during the game
- The large upward movement in scores when players moved to committee decision-making in round five
- The large downward move in scores when participants returned to playing as individuals in round 13

So, as in the US study, striking evidence was found that decisions taken by committees are superior. But why is group decision-making superior?

Firstly, the median score of the players in the individual rounds was significantly above the mean. In other words, for the individual games, the average was pulled down by a minority of relatively 'bad' players.

Secondly, there was evidence that committees enable all members to improve their performance by sharing information and learning from each other. So, in terms of group decisions, it appears that the whole is different from – and generally better than – the sum of its parts.

Such a simple and stylised experiment can never hope to fully capture the complex decisions faced by real-world policy makers. But the study has helped to further understanding of the reasons why collective decision-making may be a superior framework for monetary policy. © Bank of England, 2002

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Read more about the study in the Bank's autumn Quarterly Bulletin at: www.bankofengland.co.uk/qb/summary.htm

Also see the Bank of England Working Paper at: www.bankofengland.co.uk/workingpapers/wpabs102.htm#165

Average committee scores over time

