

2011-12

The Governor of the Bank of England (Mervyn King) kindly told the press that the “Product-Mix Auction” that I invented and the Bank now routinely uses “is a marvellous application of theoretical economics to a practical problem of vital importance”, but my biggest ‘splash’ this year was for criticising the details of the government’s hosepipe ban! So I got fewer phone calls from Central Bank Governors about financial liquidity than from secretaries of local allotments associations about more mundane forms of liquidity.

Fortunately we know (even if the Government’s forthcoming Research Assessment doesn’t) that academic significance has little to do with immediate practical application: the article the journalists quoted is more likely than most of my work to influence basic textbooks. It shows that a simple way of re-writing consumer surplus yields new insights. It demonstrates that rationing typically hurts consumers far more by allocating goods to the wrong people, than by the reduction in supply described in the standard textbook calculations which assume efficient rationing. So, as a group, *consumers* (as well as producers) would often gain from *higher* prices that avoid rationing. (In the case of hosepipe bans, the problem is that farmers continue to use water inefficiently, while higher-value consumers – like my lawn! – are starved.)

The new methodology also permits analysis of consumers’ and firms’ socially-wasteful efforts to unfairly obtain rationed goods. For example, a former Nuffield student told me he planned to fill his bath and pump water out of it which is inefficient (since you end up with three inches at the bottom of the bath that you have to throw away) but probably legal. A similar analysis applies to the social costs of lobbying for import quotas, etc.

The right answer for water is, of course, more sophisticated pricing systems as in electricity markets – which I’m also working on with another former Nuffield student.

I continued my usual teaching and administration; gave the British Academy’s Keynes Lecture (its annual lecture on economics) and other invited lectures and seminars; and still advise governments on auctions, banking, climate change, etc.

2010-11

My attempts to provide public service led to some entertaining situations this year. The US Department of Justice spent several months investigating whether it would violate the US Constitution for the US government to take my (pro bono) advice, because UK government departments were simultaneously talking to me. (Luckily, it was determined that since my advice to the UK was also free, I was not construed to be "an agent of a foreign power", so no one would have to go to jail for speaking to me.)

Meanwhile, the Morning Star (organ of the Communist Party of Britain) published an attack on the UK government for having anything to do with me--though the newspaper did profess itself uncertain whether the fact that I am sometimes described as a "game theory expert" meant that I was an Xbox enthusiast, or a World Of Warcraft champion. (Fortunately, my children could explain to me what these things are; the newspaper was also completely wrong about what policies I was advising on.)

Back in the real world, I spent time, and gave talks, at the Central Banks of each of the US, the EU, Canada, and the UK. The new auction I designed for the Bank of England is running regularly, and successfully. I hope further developments of this work (joint with Nuffield doctoral student Elizabeth Baldwin) will be of academic significance, as well as of practical importance in a range of non-financial as well as financial contexts--a short informal article appeared in Oxford Blueprint here <http://www.paulklempere.org/BoE.pdf>.

I continue to lecture to the MPhil in the economics department, and the MFE and MBA at the Business School. Research seminars I gave included an Invited Lecture to the Canadian Economics Association Annual Meetings, and the Plenary Lecture at the Spanish Jornados.

2009-10

I'm most excited about further developments of a new auction design that I first created for the Bank of England from 2007. (I have been helping the Bank *pro bono* since its auctions to supply funds to commercial banks, building societies, etc., failed after the Northern Rock bank run.) The Bank is now using the new design regularly to protect the financial system against crises by injecting liquidity into the banking system rapidly, but in a way that channels resources to those who most need them.

Other potential applications include

- other financial-crisis issues (I also advised the U.S. and other governments),
- selling Electricity generated in different locations,
- trading Emission Reductions for different kinds of Deforestation,
- Biodiversity trading (cf. the new Government's plans to create wildlife corridors etc., by allowing developers to trade off development in one place against greater conservation elsewhere), etc.

Nuffield students Elizabeth Baldwin and Daniel Marszalec both participated in this project. More academic papers will be written when we've finished developing the mathematics. I also worked with Nuffield post-doc Aytak Erdil making core-selecting package auctions (the auctions now often used for spectrum allocation) "fairer", and more robust.

I have been pondering regulatory approaches to prevent future financial crises but, sadly, have not yet solved that problem!

I maintain my interest in the environment and climate change, and continue on the Environmental Economics Academic Panel of (the government departments) DEFRA and DECC. (I also serve on the Management Committee of the Smith School of Enterprise and the Environment.) I remain on the Panel of Economic Advisers of the Competition Commission.

I directed the University's MPhil in Economics (and the taught parts of the DPhil) for the 14th consecutive year, and lectured on these programmes and at the Business School. I gave keynote lectures at several conferences, and am on three editorial boards. I am a Fellow of the British Academy, a Fellow of the Econometric Society, and a Foreign Honorary Member of the American Academy of Arts and Sciences and other similar societies.

2008-09

I spent more of my time than I like responding to various governments' requests for formal or informal advice on:

1. Running auctions getting liquidity to distressed banks, etc. (I advised 3 Central Banks including the Bank of England; see my paper "Central-Bank Liquidity Auctions, "Toxic Asset" Auctions, and Product-Mix Auctions"),
2. Repurchasing toxic assets (I briefly advised the U.S. Treasury on the original \$700 billion TARP which was advisedly cancelled, and more recently advised it and other governments on related matters),
3. How to reorganise the banks (see my short paper "Reorganising the Banks: Focus on the Liabilities, Not the Assets" (with Jeremy Bulow) – although my main advice on this was not (yet!) taken),
4. Climate change (I served on the Environmental Economics Academic Panel of the Department for the Environment, Food & Rural Affairs and Department of Energy and Climate Change; see also my paper "What is the Top Priority on Climate Change?"),
5. Intellectual property policy, and
6. Competition policy (as Member of the Panel of Economic Advisers of the Competition Commission; in my academic existence I gave the *JJ Laffont Lecture* on the subject).

In more academic work, I published an account of my new auction design for differentiated goods, the "Product-Mix Auction". I also worked on improving an existing auction design for complements, the "Core Selecting Package Auction" (with Aytok Erdil). I decided I had finally spent enough time revising my paper about when, for whom, and why auctions are profitable (with Jeremy Bulow), and published it in the *American Economic Review*. I also wrote (with Jeremy Bulow) about the effect of price controls on consumer surplus. Other more or less academic writings emerged from my policy work described above.

I gave various invited lectures, taught the Royal Economic Society Easter School for the second time, and served on three editorial boards.