

Opinion **Undercover Economist****Undercover Economist: Stakes in kidneys**

Tim Harford JULY 13 2007



Economics is all about realising gains from trade, but sometimes our qualms get in the way. For example, most of us have a spare kidney that – since kidneys tend to fail in pairs – is not terribly useful to us. A few – over 6,300 on the UK waiting list – could have their lives transformed if they could get hold of a compatible kidney. The few have so much to gain; the rest of us, not that much to lose. Donating a kidney is not risk-free: it kills three out of 10,000 donors, which is three times the death rate from pregnancy. The logic of economics is that there is a cash price at which both donor and recipient would walk away smiling.

Of course, it isn't legal to complete this transaction – unless you happen to live in Iran, where recipients are allowed to provide cash compensation to donors. From a utilitarian cost-benefit viewpoint, the prohibition doesn't make much sense. But then, neither did the outrage over the Dutch *Big Donor Show*, in which three desperately ill patients competed for the kidney of a terminally ill donor. In the end, of course, the show turned out to be a hoax; the patients were in on the stunt and the donor was an actress. At the awful news that none of these sick people would receive a cure, the world breathed a puzzling sigh of relief.

Since kidney trades are illegal, it's hardly surprising that there is a severe shortage of kidneys. Four hundred Britons die each year while on the waiting list for an organ transplant. The shortage is getting worse as diabetes and hypertension damage more kidneys.

All is not lost. While most people feel queasy at the idea of exchanging a kidney for, say, £20,000, they are happy with the idea of exchanging a kidney for another kidney.

In such a kidney exchange, two pairs of friends agree a swap in search of more compatible kidneys: I donate a kidney to your friend if you donate a kidney to my friend.

Most people seem to think this is morally acceptable. Quite what the difference is between being paid in cash and being paid in kidney is a question I will leave to the philosophers. (It has only recently become legal in the US and the UK. It was not until March this year that the US Department of Justice clarified its opinion that while cash was “valuable consideration” and thus contravened the law, a kidney was not.)

However, those who have a pragmatic bent have turned their attention to making these kidney exchanges work better. The economists Al Roth, Tayfun Sonmez and Utku Unver have been working with transplant surgeons in New England to design a kidney exchange programme. Twenty-two transplants have taken place so far. The UK has a legislative framework in place to support something similar, and the first paired transplant is likely to take place over the next few months.

It is technically demanding to set up a kidney exchange, but getting it right should pay off. Think about an altruistic or “undirected” donor who offers to donate a kidney wherever it might be useful. Before the kidney exchange, that person's kidney would help only one person. The carefully designed market now allows such a donation to set off a small avalanche of swaps.

Roth has turned his attention to three-way or even four-way swaps. His calculations have demonstrated that the four-way swap is unnecessary: three-way swaps solve almost all compatibility problems. Since a four-way swap means eight simultaneous operations, that is a relief.

Keynes once expressed a wish that economists could be as useful as dentists. Professor Roth and his colleagues have gone one better.

Tim Harford's book, 'The Undercover Economist', is now out in paperback

[Copyright](#) The Financial Times Limited 2023. All rights reserved.
