Book Are economists human?

Early in their engaging book, Nudge, Richard Thaler and Cass Sunstein draw a distinction between homo economicus, a species whose members they refer to as "econs", and real people, whom they refer to as humans. "Homo economicus can think like Albert Einstein, store as much memory as IBM's Big Blue, and exercise the willpower of Mahatma Gandhi. Really." Real humans do indeed have cool, computationally gifted, far-sighted, and ethical minds, but these "econ" brains are constantly at war with their much older lizard brains, the "hot", programmed-to-win, and actionoriented system that controls affect, that wants stuff, and wants it now.

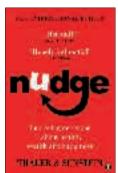
Psychologists have known this for a long time, and economists used to know it too. Adam Smith, he of the invisible hand, and the hero of the econs and of laissez faire, wrote not only The Wealth of Nations, but also, 17 years earlier, The Theory of the Moral Sentiments, in which he analysed the difficulties of self-command over what he referred to as "the passions". John Maynard Keynes built his analysis around simple psychological laws, backed by (mostly introspective) empirical evidence, and thought economic decisions were fundamentally influenced by confidence and emotions, what he referred to as "animal spirits", a term that George Akerlof and Robert Shiller take as the title of their complementary book. Both Nudge and Animal Spirits argue that economists, despite the good examples set by Smith and Keynes, have subsequently paid too little attention to the passions, substituting econ for human behaviour. They argue that this mistake prevents us from understanding key issues in economics such as saving, credit markets, and the current financial crisis. Nudge also suggests a new approach to the regulation of markets; which Thaler and Sunstein call "libertarian paternalism", exemplified by the helpful "nudge". These approaches, and the broader endeavour called behavioural economics promise to bring all of the social sciences closer together, and perhaps even to close the sometimes unbridgeable chasm between economists (who think people know what is good for them) and doctors (who know that they do not).

Current mainstream economics has many defenders and it has many successes despite (or some would argue because of) ignoring the

"But it also bad for the economy if our immediate desires, our animal spirits, cause nations to save too little, or to make collectively poor choices on health care."

passions. Thinking of people as greedy calculators does pretty well in many situations. The idea that I know what is good for me (even if frequently wrong) seems like the right starting place, certainly compared with having other people decide what is good for me. One of the most important arguments in Nudge is that this hands-off position is often untenable. Every government programme has a design-how and where people enrol, what happens if people don't, the list of options, the default-and because people are humans, not econs, which design is used will matter even if the economically optimal outcome is available in all designs. Economists used to argue that such things matter only when the decisions are unimportant, but we now know this is false. Particularly problematic are major life decisions about choosing a pension or a health-insurance plan, where the options are often numerous and complex, and where choice involves uncertain future outcomes, a situation where humans are particularly inept at reaching the rational choice that the econs would both predict and recommend. Paternalism in some form cannot be avoided, at least for some choices. The principle that Thaler and Sunstein offer is the nudge, guided by the principle of the light touch-no one is forced to do anything-and that the "nudgees" finish up being grateful, feeling that they were nudged into something they wanted, at least judged by their better self. The nudge helps the "cool" brain overcome the "hot" brain. There are many examples. The most memorable is the etching of houseflies into the urinals at Schiphol airport, a nudge that reduced spillage by 80%, without compromising the freedom to point as one chooses. The most important is the "Save more tomorrow" scheme, in which employees sign a contract that will automatically increase their saving rate next year, at which time no action needs to be taken. At the very least, this nudge shows how a clever understanding of human psychology can help design lighttouch institutions that help people do what they want to do, with no limit on their freedom to choose. But the nudge idea goes further. It is precisely choices like this, between the present and the (uncertain) future, between spending now and (maybe) spending later, between paying an insurance premium and (maybe) getting health care later, where the immediate desires of the lizard brain wreak havoc with the need to make sensible provision for the future. This is bad for the individual, who risks a reduction in standard of living at retirement, or a health calamity with inadequate insurance. But it is also bad for the economy if our immediate desires, our animal spirits, cause nations to save too little, or to make collectively poor choices on health care.

Many economists—including this one—have spent much effort in trying to understand why some people and



 Nudge Improving Decisions

 About Health, Wealth, and

 Happiness

 Richard H Thaler, Cass R Sunstein.

 Penguin, 2009. Pp 320.

 US\$15-00 (£7-99).

 ISBN 978-0-1431-1526-7.



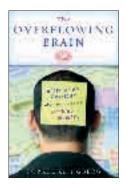
Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism George A Akerlof, Robert J Shiller, Princeton University Press, 2009. Pp 264. US\$24.95 (£16.95). ISBN 978-1-4008-3012-1.

some countries save so much more than others, why the Chinese and Indians save more than a third of their incomes, and why Americans have saved almost nothing in the recent past. The resulting international imbalances in assets and liabilities certainly contributed to our recent difficulties. Yet we have no good theory to make sense of these things, and behavioural economics is a promising avenue that both books illuminate: Nudge is behavioural economics applied to individual behaviour, Animal Spirits is behavioural economics applied to economy-wide phenomena, such as inflation, employment, business cycles, and especially the current financial crisis. This is surely the right way to go, although the macro research programme of Animal Spirits is at a much earlier stage of development than the micro programme in Nudge.

It is not yet clear what mixture of old and new economics will eventually form a revised standard model for understanding economic fluctuations. Indeed, many of the most eqregious features of the financial crisis are easily captured by econ behaviour and were perpetrated by people who knew very well what was good for them, and who used computing power greatly in excess of the capacity of IBM's Big Blue. There is nothing irrational about taking on huge risks when you yourself keep your winnings, and everyone else gets your losses. Yet it is clearly right that social norms-about regulation of behaviour, both public and privateplayed a part, and that feedbacks through animal spirits can destabilise the markets, just as Keynes argued.

Over the past 30 years, economists have mounted an imperialist invasion of the other social sciences, including behavioural medicine. What we are seeing now is the empire striking back, with ideas from other social sciences invading the core of economics, welcomed by some, and fiercely resisted by others. With luck, this mixing will give us a better understanding of the economic behaviour of individuals, and of the behaviour of economies. It might also bring a more humane economics that preserves our hardnosed appreciation of how markets work and what they can do as well as of the benefits of laissez faire when it is indeed safe to laisser faire, but that also incorporates a broader understanding of, and sympathy for human nature. After 250 years, perhaps both of Adam Smith's great books can become part of the canon.

Angus S Deaton deaton@Princeton.EDU



The Overflowing Brain: Information Overload and the Limits of Working Memory Torkel Klingberg. Oxford University Press, 2009. Pp 216. £12-99. ISBN 978 0 19 537288 5.

In brief

Book Perfect recall

People who study memory generally distinguish between long-term memory and short-term or "working" memory—that is, our ability to remember information for a limited period of time. Recalling where we have parked the car outside the supermarket requires long-term memory; searching for an item on the supermarket shelves involves working memory—as does forgetting which item you are looking for.

How to measure, train, and enhance working memory is the subject of *The Overflowing Brain*, an absorbing first book by neuroscientist and physician Torkel Klingberg, who is well known for his studies of young people with attention deficit hyperactivity disorder. Indeed, one of his chapters is provocatively entitled "Does ADHD exist?" Klingberg discusses the unresolved impact of computer games on cognitive ability; these much-maligned activities should not be lumped together and condemned, Klingberg persuasively argues, but instead treated individually.

Drugs such as methylphenidate (Ritalin)-especially popular with US students and now banned in lapan-not to mention caffeine. are, of course, one way to improve working memory. Many more of them are under development. Within 15 years, Klingberg guesses, middle-aged people well aware of the inexorable decline in their working memory-which begins in one's late twenties—"will be regularly imbibing a cocktail of substances designed to counteract the completely natural decline in various neurotransmitters in the brain".

But Klingberg's own preference is to encourage mental gymnastics, rather than pill popping. Why not introduce into the school curriculum the training of attention and working memory, Klingberg recommends, after outlining the results of a range of recent studies that point to the possibility of certain kinds of memory enhancement without drugs.

This attitude underlies his discussion of the so-called Flynn effect: the unexplained increase in IQ during the past century first noted by the sociologist James Flynn in the 1980s. Klingberg believes that the explanation for the rise is likely to lie in a general improvement in working memory—and hence problem-solving ability-during this period, brought about by improved mental training caused by exposure to constantly increasing information. Despite a somewhat unconvincing final section that explores the notion of "flow" in relation to attention, Klingberg's brief book packs a considerable punch.

Andrew Robinson ar471@cam.ac.uk