# Cambridge Economics

**News from the Cambridge Faculty of Economics** 

Issue 11 Winter 2018

# A Good Knight's Work

Distinguished Alumnus: Professor Sir Angus Deaton\*

Angus Deaton was awarded the 2015
Nobel Prize in Economic Sciences for 'his analysis of consumption, poverty and welfare'. The citation for his UK knighthood, conferred the following year, was for 'services to research in economics and international affairs'. Following James Meade and Richard Stone, both of whom were friends and the latter his closest mentor, and after Amartya Sen and James Mirrlees, who spent much of his career at Cambridge, Angus is the fifth Nobel Laureate from Cambridge economics.

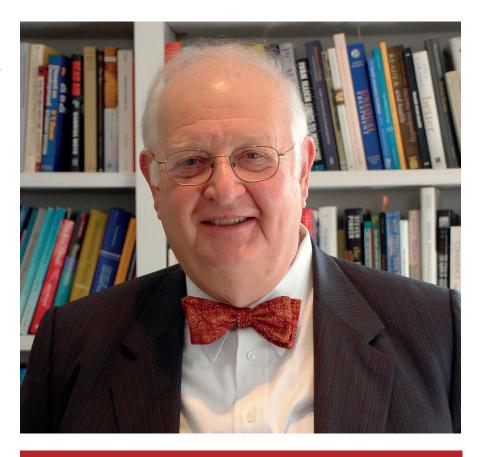
#### **Cambridge life**

No-one, including Angus, could have foreseen this outcome when he first came to Cambridge in 1964, from Fettes College in Edinburgh, to read Mathematics. He says he found the subject, as taught, difficult to engage with: he lost interest; played lots of bridge and went to the cinema; did very little work; discovered Cambridge pubs, and consequently fared badly in examinations.

By the end of his second year he was on the point of giving up and leaving Cambridge. But his tutor at Fitzwilliam College who, like his father, was anxious to keep him in the College, persuaded him otherwise, saying: 'There is only one thing for people like you – Economics!'

Continued overleaf...





#### **INSIDE:**

| From the Editor  | 3   |
|--|-----|
| Professor Sanjeev Goyal                                  | 4   |
| The Education Production Function: A Brain Teaser        | 6   |
| The Narrow Corridor to Liberty                           | 8   |
| Morality and the Market                                  | 1   |
| GDP – Grossly Distorted Picture?                         | 1.  |
| Better Economics Teaching? CORE!                         | 1.  |
| The Digital Revolution and the State: The Great Reversal | 1-1 |
| The Economics of Religion in India                       | 1.  |
| Systemic Risk-shifting in Financial Networks             | 1   |
| Awards / Obituaries                                      | 1   |
| Comings and Goings                                       | 2   |

## **Distinguished Alumnus**

Transferring to Part 2 of the Economics Tripos, Deaton graduated in 1967. He went to work in the (embryonic) research department of the Bank of England. But his mind was elsewhere: he had a girlfriend who was a doctoral candidate in English at Cambridge, and he wanted to come back to get married.

In 1969 he was appointed as a Junior Research Officer in the Department of Applied Economics, working on national wealth accounting data in collaboration with Dr Jack Revell, who was writing his book on 'The Wealth of the Nation' and had been Deaton's Director of Studies at Fitzwilliam. One of Deaton's tasks was manually to derive and prepare data held at the offices of the Registrar of Friendly Societies – a lengthy and tedious assignment. But it involved interacting directly with primary data which, he says, led him to start 'dreaming about numbers' and what they might reveal.

When Revell left Cambridge for a Chair at Bangor, in North Wales, Deaton became involved with the Growth Programme, led by Richard Stone and who was himself to become a Nobel Laureate in 1984. Deaton worked with Alan Roe on 'Finance for Growth', concentrating on 'saving and consumption', which proved to be the start for his lifetime's work on human wellbeing.

Looking back at life in the Economics Faculty, Deaton recalls the Coffee Room (Faculty Lounge) being dominated by Nicholas Kaldor and Joan Robinson, larger-than-life guardians of the Keynesian legacy. It was not easy for newly-recruited junior academic staff to get access to them: they were surrounded by their acolytes and had little time for young researchers from the DAE. Richard Stone and James Meade, by choice, did not engage socially

in the Coffee Room. But there were helpful people: Deaton remembers Ken Wigley, who was to move later to the OECD, and Gwyn Aneuryn-Evans, who was starting to bring econometrics into the Faculty. And, above all, the coffee was good – specially brewed and served by the concierge's wife.

In association with his University post, Deaton became Fellow and Director of Studies in Economics at Fitzwilliam in 1972, where he remained until 1976, when he was appointed to a Chair in Econometrics at Bristol University. He moved to Princeton as Professor of Economics and International Affairs in 1983 until he became Emeritus in 2016. Currently he is Senior Scholar in the Woodrow Wilson School at Princeton.

#### **Knight work**

Deaton's work has focused on the patterns and drivers of consumption in developed and developing countries, the form and analysis of the consumption function (linking income to aggregate demand), and the relationships with income, poverty, health and welfare.

At Cambridge, Deaton, following and working with Richard Stone, inherited Keynes' concept of the aggregate consumption function as a main driver of economic activity. On the pattern of demand, one of Deaton's early contributions (with John Muelbauer, then at Birkbeck) was to demonstrate the usefulness for empirical work of the standard neoclassical theory of consumption. This took as granted the rationality of the consumer in seeking to maximise individual utility, and in Deaton and Muellbauer's work, allowed for limited but interesting heterogeneity across individuals, while producing an empirically tractable model of demand. The

model maintains Slutsky symmetry in price responses, as well as the homogeneity condition that, if prices and income both increase by the same percentage, the consumer's ideal bundle of goods for consumption will remain unchanged.

This model, the origins of which can be traced back as far as the 19th century, had been the object of criticism, mainly on account of its restrictive assumptions. By building large and detailed databases – a very big manual task in those days - Deaton was able to disaggregate the consumption function so as to model heterogeneous consumer behaviour, in the context of relative price movements among commodities with different income and substitution effects. The outcome – the 'Almost Ideal Demand System' - gave a rich insight into consumer behaviour, and made possible the rebuilding of aggregate demand functions to demonstrate that, rather than being wrong, the standard theory had been misspecified in practice.

Deaton's attention then turned to the study of consumption over time, and the part played by income and wealth. The permanent income/ life-cycle theory argued that temporary variations in income will lead to individuals adjusting their short-term savings behaviour so as to smooth their long-term pattern of consumption to match their expected long-term income. Moreover, if individuals are rational and have good information, permanent consumption will move towards equality with permanent income. Real-world aggregate data appeared to confirm these relationships.

But Deaton showed that this is misleading if, as in the textbooks, it

is interpreted as the behaviour of a representative agent. If a single agent were to receive average income, and behave rationally, consumption should be *less* smooth than income, what became known as the `Deaton Paradox.' The moral is that we have to work with individual agents, not mythical representative agents, and that we must model realistically what they know and when they know it. The enduring significance of this is to demonstrate the importance of evidence-based, finely-grained and comprehensive empirical data at the level of households to make possible the *re-aggregation* of the consumption function - something which the digital revolution and recent work in macroeconomics is helping to carry forward.

#### **Economic growth and the** pursuit of happiness

This work led on naturally to considering the links between income and poverty. Here, in addition to developing frameworks for the identification and measurement of poverty, Deaton fully accepts the role of economic growth in alleviating poverty in poor countries. But the respective roles of growth and redistribution are hopelessly muddled in the data by the fact that household surveys, which are used to calculate distribution, are often wildly inconsistent with the national accounts statistics, which measure growth. Debates about growth versus redistribution can never be settled because debaters can essentially choose their own data to buttress their cases.

Deaton recognises and celebrates the importance and long-term benefits of economic growth, which through international trade and integration is associated with innovation, improved health and welfare, and with lifting

people out of poverty. A degree of income inequality is necessary to reward effort and innovation. He has brought all this together in his book 'The Great Escape' (2013)\*\*.

Recently, in association with Princeton economist (and Angus's wife), Anne Case, he has studied the causes of the trend to increasing mortality and morbidity among midlife white non-Hispanic Americans with low levels of education (that is, High School or less). It is associated with increases in drug overdoses, suicides and alcohol-related liver disease. While stagnant real wages and the loss of job opportunities are clearly relevant, the underlying causes go much deeper: households in this segment of the community suffer cumulative intergenerational disadvantages in labour market opportunities, in marriage and child outcomes, and in health. The challenge demands effective policy interventions: reducing excessive prescription of opioids is one; supporting increases in median real wages is another.

Reflecting on current economic and social trends, Deaton notes emerging evidence among the millennial generation of discontent towards large multinational corporations, carrying implications and challenges for their business strategies. This forms part, perhaps, of a broader platform of doubt about the values of both capitalism and democracy. If this is so, he sees it as vital for democratic systems to deliver for the *majority* of people, rather than dedicated and active minorities, if economic and social welfare ('happiness') is to be improved.

#### **Tony Cockerill**

\* Interview took place on 4 July 2018. \*\* Angus Deaton (2013). 'The Great Escape: health, wealth and the origins of inequality'. Princeton University Press.

## **From the Editor**



It is an exciting, if controversial, time to be an economist. There are two major issues: the state of Economics and economic research; and the state of economics education.

For the first of these, the charges against conventional microeconomics are that it is dominated unduly by mathematical models; it lacks empirical relevance, and it fails to take account of developments in cognate subject areas - psychology, sociology, biology and history in particular. At the same time, macroeconomics is seen as needing to rebuild its intellectual architecture after having been unsettled by the financial shock of a decade ago. For the second issue, there are lively debates about the scope of the Economics curriculum and its relevance for today's students, and about pedagogic philosophy and method.

Economics in Cambridge is closely involved in all of this. Some aspects of what is going on is reflected in this year's issue of Cambridge Economics. Sanjeev Goyal's valedictory at the end of his four years as Chair of the Faculty shows the outstanding contribution he has made to the development of research and teaching in Economics in Cambridge. Matthew Elliott's review of his own work on riskshifting in financial institutions is a fine example of contemporary empirical research, just ten years since the collapse of Lehman Brothers. Diane Coyle, who contributes much to the debate on the reform of Economics education, shows how insight, analytical precision and the Big Data revolution can alter our understanding and interpretation of fundamental economic indicators. Above all, perhaps, Nobel Laureate Angus Deaton's life-time work and achievements demonstrate the symbiosis between economics research and teaching.

This issue, in addition, marks significant publications by colleagues and summarises the key public lectures that have been given in 2017-18. The circulation of Cambridge Economics is amongst the largest of all alumni newsletters in the University. We value the interest and support that comes from across the whole range of alumni/ae. We are always happy to hear from you at www.econalum@ hermes.cam.ac.uk.

#### **Prof Tony Cockerill**

27 September 2018