

o6 The Parable of the Ox

John Kay is a British expert on finance and economics. He has been Director of the Institute for Fiscal Studies, one of Britain's most respected think tanks, and professor at the London Business School. He has a weekly column in the Financial Times.

He is also the author of a remarkable book, "Other People's Money: Masters of the Universe or Servants of the People?"

I say 'remarkable' because the book, written by a mainstream economist, lifts the lid on what really goes on in the world of finance.

But he starts the book with a parable that perfectly captures the extraordinary state of our financial markets.

With John Kay's kind permission I am going to read out the parable. It's called "The Parable of the Ox".

"In 1906, the great statistician Francis Galton observed a competition to guess the weight of an ox at a country fair. Eight hundred people entered. Galton, being the kind of man he was, ran statistical tests on the numbers. He discovered that the average guess was extremely close to the actual weight of the ox."

This part of the story actually happened. But then John Kay continues:

"Not many people know the events that followed. A few years later, the scales became less reliable. Repairs were expensive; but the fair organiser had a brilliant idea. Since attendees were so good at guessing the weight of an ox, it was unnecessary to repair the scales. The organiser would simply ask everyone to guess the weight, and take the average of their estimates.

A new problem emerged, however. Once weight-guessing competitions became the rage, some participants tried to cheat. They even sought privileged information from the farmer who had bred the ox. It was feared that if some people had an edge, others would be reluctant to enter the weight-guessing competition. With only a few entrants, you could not rely on the wisdom of the crowd. The process of weight discovery would be damaged.

Strict regulatory rules were introduced. The farmer was asked to prepare three monthly bulletins on the development of his ox. These bulletins were posted on the door of the market for everyone to read. If the farmer gave his friends any other information about the beast, that was also to be posted on the market door. Anyone who entered the competition with knowledge concerning the ox that was not available to the world at large would be expelled from the market. In this way, the integrity of the weight-guessing process would be maintained.

Professional analysts scrutinised the contents of these regulatory announcements and advised their clients on their implications. They wined and dined farmers; but once the farmers were required to be careful about the information they disclosed, these lunches became less useful.

Some smarter analysts realised that understanding the nutrition and health of the ox was not that useful anyway. What mattered were the guesses of the bystanders. Since the beast was no longer being weighed, the key to success lay not in correctly assessing its weight, but rather in correctly assessing what other people would guess. Or what others would guess others would guess. And so on.

Some, such as old Farmer Buffett, claimed that the results of this process were more and more divorced from the realities of ox-rearing. But he was ignored. True, Farmer Buffett's beasts did appear healthy and well fed, and his finances were ever more prosperous: but he was a countryman who did not really understand how markets work.

International bodies were established to define the rules for assessing the weight of the ox. There were two competing standards – generally accepted ox-weighing principles and international ox-weighing standards. However, both agreed on one fundamental principle, which followed from the need to eliminate the role of subjective assessment by any individual. The weight of the ox was officially defined as the average of everyone's guesses.

One difficulty was that sometimes there were few, or even no, guesses of the oxen's weight. But that problem was soon overcome. Mathematicians from the University of Chicago developed models from which it was possible to estimate what, if there had actually been many guesses as to the weight of the animal, the average of these guesses would have been. No knowledge of animal husbandry was required, only a powerful computer.

By this time, there was a large industry of professional weight guessers, organisers of weight-guessing competitions and advisers helping people to refine their guesses. Some people suggested that it might be cheaper to repair the scales, but they were derided: why go back to relying on the judgment of a single auctioneer when you could benefit from the aggregated wisdom of so many clever people?

And then the ox died. Among all this activity, no one had remembered to feed it.”

At the heart of the parable are the ox, the farmer and the weight of the ox, originally assessed by the scales.

Then derived from these real-life things is built a castle in the air, a huge edifice of trading activity that bears little relation to reality, and which results in the death of the ox.

In his book Kay asks what do banks do that relates directly to real life and that contributes to the betterment of human lives and to the efficiency of business.

He points out four ways in which a financial system can contribute meaningfully to a society.

First, banks provide a payments system by which people receive their wages and salaries, and can buy goods and services.

Second, banks match lenders with borrowers, directing savings to their most effective uses.

Third, our financial system allows people to manage their personal finances over their whole lifetime, for example, saving up and providing a pension when older.

And fourth, financial providers help individuals and businesses to manage and insure themselves against the risks that inevitably arise in everyday life and economic activity.

Kay points out, though, that if you were to look at the balance sheet of a bank, these four areas of activity are eclipsed by claims and obligations between financial institutions, i.e. by banks trading securities with each other.

Whilst most people would imagine the principal business of a bank is lending to firms and individuals engaged in the production of goods and services, Kay tells us that typically such lending amounts to only three percent of the total assets and liabilities of a bank.

The balance sheets of banks are dominated by the buying and selling of securities.

So, if a bank makes a loan to a company it establishes a claim against the physical operating assets of the company and against the future profits of the company. Similarly, if a bank makes a loan to an individual to buy a house or flat, then it establishes a claim on that property and on the future income of the individual.

Once these claims are established they can be turned into a tradeable security. So the bank could sell its claim on to a company or on to a person. Or it could buy another bank's claim on a company or individual.

Trade in securities has grown massively in the last thirty years, but this explosion in financial activity is mostly down to trading in what are called 'derivatives'.

A security in the first instance is a claim on an asset. Derivative securities are claims on other securities and their values depend upon the value of these other securities.

But once the first layer of derivative securities is created then further layers of derivative securities can be created whose values are dependent upon the values of other derivative securities and so on, and so on.

The result, Kay says, is that we end up with the value of all derivative contracts being three times the true value of all the actual physical assets in the world.

The urge to make profit out of such trading in securities results in 'high-frequency trading' done by computers which are continuously offering to buy and sell securities, such that the time interval for which securities are held by one owner may literally be seconds or less.

This explains why Spread Networks, a telecoms provider in the USA, recently built a link through the Appalachian mountains to reduce time taken to transmit data between the New York and Chicago trading exchanges by a little less than one millisecond!

Similar things have been happening with world trade.

World trade has been growing rapidly, but trading in foreign exchange, changing one currency for another, has grown at a much faster rate.

The result is that the value of daily foreign exchange transactions is almost one hundred times higher than the value of daily international trade in goods and services.

All of this meant that by the first decade of the twenty-first century banking was dominated by people who are very good at solving difficult mathematical problems related to the pricing of derivative securities or of the intricacies of foreign exchange dealings, and who know little of real life.

Kay concludes that the exercise of these mathematical skills by people with an exaggerated idea of their own competence in managing trading markets, in 2008 plunged the world economy into its worst financial crisis since the great depression of the 1930s.

Let's fill this out with more detail, especially relating to mortgages.

Before the 1980s, to obtain a mortgage on a property required obtaining the trust of a local manager of a bank or a building society, who was skilled in assessing the credit worthiness of the potential borrower as well as the true value of the property.

From the 1980s such subjective assessments were largely swept away in favour of computerised credit scoring models.

Then mortgages were packaged into securitised instruments which were themselves subject to credit evaluation by rating agencies using mathematical models derived from historic databases.

So personal trust and local knowledge was lost in favour of distant mathematically driven models.

Mortgage lending in the United States was probably the most extensive attempt to substitute mechanised assessment processes for face-to-face assessment.

As John Kay comments, the experiment ended badly.

What developed was a systematic chain of misrepresentation between borrower and initial lender, from lender to ratings agency, and from sellers of mortgage backed securities to suppliers of capital.

In this way lending institutions deprived themselves of the trust, knowledge and skills necessary to effectively manage mortgage provision.

At the same time increased reliance was placed on people with increasingly sophisticated mathematical modelling skills using increasingly advanced technology.

But the skills and technology were not related to the process of initiating and concluding a mortgage deal based on real life.

As a result people who traded in mortgage backed securities knew very little about mortgages and much less about houses and home buyers.

Similarly people who traded in shares knew about stock markets but not about companies and their products.

Instead of being interested in knowing what was happening in reality, on the ground so to speak, traders were much more interested in what 'the market thinks', i.e. in what other traders think.

As John Kay comments, it is common to describe 'the mind of the market'. But, as he says, the market does not think, it only knows what individuals who trade in the market know. And they know precious little about real life.

Kay says it's as if we were attempting to fly an aeroplane by consensus of the views of the passengers, instead of placing our trust in a highly trained and skilled, experienced pilot.

Barely controlling his contempt, Kay concludes:

“The aggregation of inconsequential information across large numbers of people amounts not to the ‘wisdom of crowds’ but to not very much at all: the more so since the opinions that are aggregated are not independently formed. The crowds that clamoured for the crucifixion of Jesus, watched the tumbrels roll to the guillotine and stood to attention at Nuremberg rallies were not wise, but baying mobs reinforcing the ignorant opinions of their neighbours. The trader typically knows very little about the underlying characteristics of the securities he or she trades, but a great deal about other traders, and what they currently think. What ‘the market thinks’ may be little more than an accumulation of other traders’ estimates of what other traders think – the process famously satirised in Keynes’s metaphor of the beauty contest, in which judgements are based not on what is beautiful but on what others think others think is beautiful.”

In the pursuit of greed what has been forgotten is the need for individuals in banking with the skills required to judge the quality of the underlying assets of a business as well as the ability of those who manage those assets; to have a good understanding of the residential property market, and the experience to assess the capacity of a potential mortgage holder to meet their repayments; and to possess knowledge of shops and offices and the financial acumen of their tenants.

Compare these ‘old-fashioned’ skills with these two examples of ‘predatory lending’, a common practice in the USA in the run-up to the 2008 financial collapse.

In one case in Bakersfield, California, a strawberry picker with an annual income of \$14,000 was lent \$724,000 to buy a house!

In a second case, a maternity nurse and her sister ended up owning six townhouses in Queens, New York.

When asked how that happened, she said that she and her sister bought their first house, and then, when its value rose, the lenders came and suggested they refinance and borrow \$250,000 to buy another townhouse.

Then the price of that house rose too and they repeated the trick. Eventually they owned an extra five houses, but when the market fell they couldn’t make any of the repayments.

The mirage created by bankers and others in the USA cost millions their homes during and after the crisis.

And one of the main reasons that the bubble's bursting in 2008 led to such an enormous crisis was that no bank could trust another. Nobel prize winner Joseph Stiglitz explains;

“Each bank knew the shenanigans it had been engaged in — the movement of liabilities off its balance sheets, the predatory and reckless lending — and so knew that it could not trust any other bank. Interbank lending froze, and the financial system came to the verge of collapse, saved only by the resolute action of the public, whose trust had been the most abused of all.”

Human greed undoubtedly played a part in the collapse of 2008.