

### **Budget 2013 - Insights from Daniel Kahneman**

## **Key Point**

We weigh losses far more heavily than equivalent gains, and we infer the general from the particular, rather than induce the particular from the general. These and many other features of our behaviour are elegantly documented in *Thinking, Fast and Slow*, authored by Nobel Prize winning Daniel Kahneman. In addition to loss aversion, he identifies the halo effect, anchoring, luck, the planning fallacy, optimism bias, the endowment effect and many other features characterising how we behave. They have considerable value as explanations as to how we got into such economic disarray, and provide some pointers as to how to frame the process of making progress. In this commentary, I summarise a few of the key insights, and their relevance to our situation in Ireland.

#### Context

Daniel Kahneman is a psychologist who in 2002 won the Nobel Memorial Prize in **Economic Sciences** for having integrated insights from psychological research into economic science, especially concerning human judgment and decisionmaking under uncertainty. He is regarded as the father of behavioural economics. He has recently written a best-selling book – *Thinking, Fast and Slow* - which operates at two levels; it is a beautiful thank you, tribute and farewell to his late friend and long-time collaborator Amos Tversky, who died in 1996, and a very elegant and accessible pulling together of insights from a lifetime's work, both his own and that of other leading contributors to the field. He points us towards how to avoid the sin of intellectual sloth - drawing the 'obvious' but wrong conclusion based in intuition and whatever information is available. He argues that we draw conclusions about the general from the specific, when we should instead derive conclusions about individual cases from categories and ensembles. Ignorance is bliss; knowing little makes it easier to fit everything you know into a coherent pattern. "The emotional tail wags the rational dog." (quoting Ionathan Iaidt), and makes the point that those who avoid the sin of intellectual sloth could be called 'engaged.' "They are more alert, more intellectually active, less willing to be satisfied with superficially attractive answers, more sceptical about their intuitions. The psychologist Keith Stanovich would call them more rational." (p. 46).

Many governments, including Ireland's, are facing the unwelcome challenge of increasing taxes and reducing expenditure. Kahneman's work addressing how most of us react to challenges and make decisions provides useful pointers that both explain the nature of the challenge, and how to make progress. Below, I summarise some of his key insights, and conclude with some implications. For the points made below, Kahneman provides evidence linked to peer-reviewed literature. The page numbers used for direct quotations refer to the Penguin 2012 edition of his book.



#### **Key Insights and Evidence**

Loss Aversion, Endowment Effect and Anchoring

We put far more weight on the prospect of a loss than an equal probability of a gain. Most of us will not accept a coin toss with an equal chance of winning or losing \$100. We become more open to the offer when heads will give us €200, tails a loss of €100. Golfers – even Tiger Woods –try harder to avoid a bogey (loss aversion) that when putting for a birdie. Related to this is the endowment effect, whereby the reference point is what we now hold. He notes that it is well known in wage negotiations that the current wage is the reference point, from which negotiations are expected to proceed; preventing decline is far more important than achieving a rise. The concession you make to me are my gains, but they are your losses; they cause you more pain than they give me pleasure. Anchoring is a where the number on the table becomes the basis for the negotiation, hence the importance of 'guide prices' in house sales. [He argues that if awards for injury were capped at €1 million, the size of all awards will over time drift up to this reference amount]

We can see all of these phenomena at work in Ireland's fiscal adjustment. One example: Incumbent teachers and other permanent civil servants (who are well represented by unions in negotiations) have lost much less in terms of salary and conditions than new entrants (whose interests are not well represented and who did not have a reference income). Aversion to loss can be mitigated by inflation; the money illusion allows us to be more accepting of *de facto* losses in real (net of inflation) income; this was an important feature of Ireland's last fiscal adjustment in the 1980s. On May 31st 2012, the Irish public voted in a referendum to support ratification of the EU "Fiscal Stability Treaty". In terms of engendering support, the campaign advocating ratification did not get traction until it began to emphasise what would or could be lost if we did not ratify. Pointing out the benefits of ratification generated little engagement; but once the perception of potential losses of not ratifying began to lodge in the public consciousness, the momentum in favour of approval began to grow.

Optimism Bias, the Planning Fallacy and the Sunk Cost Fallacy

He makes the case that most of us think we are smarter and more likely to succeed that we are. Psychologists have confirmed that most people genuinely believe that they are superior to most others on most desirable traits. At a personal level it is a blessing. Optimists are normally cheerful and happy, and therefore popular; they are resilient in adapting to failures and hardships, their chances of clinical depression are reduced, their immune system is stronger, they take better care of their health, they feel healthier that others and are in fact likely to live longer. He notes (pp. 253, 255, 256):

"The main benefit of optimism is resilience in the face of setbacks....the optimistic style involves taking credit for successes but little blame for failures...... Optimistic individuals play a disproportionate role in shaping our lives. Their decisions make a difference; they are the inventors, the



entrepreneurs, the political and military leaders - not average people.....the optimistic bias plays a role - sometimes the dominant role-whenever individuals or institutions voluntarily take on significant risks; it probably contributes to an explanation of why people litigate, why they start wars, and why they open small businesses" And as such of course they can be very destructive. Politicians and generals promise the troops that they will be "home before Christmas" as they start wars they always imagine will be easily won, and bankers deride the naysayers: "It is time to shout stop. The tide of regulation has gone far enough. We should be proud of our success, not suspicious of it" (Sean Fitzpatrick, CEO, Anglo Irish Bank, 21 June 2007)

Related to this optimism bias is the *planning fallacy* and wishful thinking

The planning fallacy describes plans and forecasts that are unrealistically close to best case scenarios. This happens for many reasons: Statistics from the reference class – the population of similar projects nationally and internationally that could be interrogated to inform estimates – are not systematically collected, insufficient effort goes into detailed estimation of costs and plans, expensive changes are then made mid -stream, costs are deliberately under estimated to secure approval, the role of luck is ignored, there is an illusion of control, and plans of competitors, and what we do not know, are neglected. Kahneman cites the new Parliament building in Edinburgh – where costs went from the estimate in 1997 of £40 million to an out-turn in 2004 of £431 million – as an interesting example of the planning fallacy in action. The sunk cost fallacy is where additional resources are allocated to an existing activity or project, when better choices are available. It is often driven by ego, embarrassment and unwillingness to admit defeat.

Ireland is an interesting case study of the optimism bias in action across all leadership classes. The planning fallacy applied to major one-off projects (e.g. light rail, Dublin Port tunnel) but not where there was a high volume of projects referenced to international norms (national schools, motorways) where there was also 'learning by doing.' There were many examples of the sunk cost fallacy, including electronic voting machines which were not popular, but were persisted with beyond what was rational.

Adjusting for the optimism bias and planning fallacy involves: collecting credible data on the reference class, creating realistic scenarios that include encountering seriously bad luck, and conducting what Kahneman calls a 'premortem' – a thorough review before decisions are made that legitimizes doubts.

The Halo Effect, Luck, Hindsight and Outcome Bias

The halo effect describes the tendency to like or dislike everything about someone, without having evidence to support our judgement. Where our view is positive, we give those in leadership positions - enterprise, politics, religion etc. – the benefit of the doubt for all their decisions, and vice versa. Hindsight bias captures the situation where we "blame decision-makers for good decisions that



worked out badly, and give them too little credit for successful moves that appear obvious only after the fact. Leaders who have been lucky are never punished for having taken too much risk. .. A few lucky gambles can crown a reckless leader with a halo of prescience and boldness (p. 204)... Because luck plays a large role, the quality of leadership and management practises cannot be inferred reliably from observations of success." (p. 207)

He argues that most of us vastly underrate the role of luck in shaping outcomes.

His favourite equations are:

Success = talent + luck
Great Success = a little more talent + a lot of luck

Ireland suffered from the global halo effect, in that all major independent assessors (IMF, OECD, European Central Bank) of our economic management before the crash were effusive in their praise.

## The Importance of Framing

'Framing' is about the context and language used to present choices. Kahneman gives many examples, including: human organ donation – the rate is 100% in Austria and 86% in Sweden, compared with 12% in Germany and 4% in Denmark. The difference derives from how the choices are framed: in Austria and Sweden, you have to opt out of organ donation, while in Germany and Denmark, you have to opt in. Similarly, information saying (about food) '90% fat free' will be perceived differently by most if it says '10% fat', as will information on car performance that says 'kilometres per litre' vs. 'litres per kilometre'. And, the wider the frame, the more informed the choices are likely to be.

# **Implications**

I hope that his book will encourage other eminent economists to emulate Kahneman's idea of pulling together key insights from their field in a manner that is accessible to the public. There was a time when the luminaries of our profession did this, but it has fallen out of fashion.

For governments who have to cut expenditure and raise taxes, a first reaction to the Kahneman opus is that the news is all bad. Our intense aversion to losses and our anchoring (as contrasted with our much less strong feelings about equivalent improvements) to the status quo ordains that such change will be universally unpopular. But nevertheless there are insights that that can help both governments and ourselves make the transition to a better future. It is a sad particularity of politics that incumbent governments tend to increase expenditures and reduce taxes as an election looms; this does give the electorate a good feeling. But if they are re-elected, and have then to increase taxes and/or reduce expenditure, the odium and negativity they will experience will far exceed the feelings of bonhomie they generated before the election. The ideal political and economic strategy would be to generate large surpluses in the good



times, and then use these to maintain expenditure and tax rates in recession. This is the essence of the Keynesian proposition. Unfortunately, the optimism bias ensures that most politicians don't expect recessions, and the immediate pressure to be popular and meet 'needs' - spend it while you have it – makes it difficult to be prudent and avoid the blow back.

For governments, setting the right frame, and focussing on losses reduced, rather than benefits accruing, will help mitigate the negativity. Thus, in the Irish context, when property taxes are being introduced, the focus should be on the losses *that will be incurred* if this is not done; these losses include take-home income (if increase in income tax is the alternative) and follow on losses in jobs as labour becomes more expensive; or (if increase in VAT is the alternative) increases in prices and losses in competitiveness and jobs. In the case of domestic water charges, similar to the above, but also note the loss in reliability of water supply and its quality if a sustainable funding system is not in place that encourages conservation. It is important to be as focussed and precise as possible, and not exaggerate the losses – just present the facts as best they can be discerned and the evidence that underpins them.

When we want people to act in ways that are in their own and (especially) in the public interest, we should frame the choices they face such that it is as easy and painless as possible to act appropriately (the organ donor case)

It is important that the new Irish Government Economic and Evaluation Service and those in the public service generally with responsibility for the design of policy absorb and apply the insights from behavioural economics.

To counter the planning fallacy and optimism bias, a key is to improve prediction, recognising that intuitive predictions tend to be overconfident and overly extreme.

#### Kahneman recommends the following:

- Identify the reference class e.g. emergency health services, and then obtain statistics on reference class (e.g. costs per patient)
- Develop a large data base that provides information on plans and outcomes for hundreds of projects all over the world
- Generate baseline prediction
- Use specific information about the case to adjust the baseline prediction
- In the default case of no useful evidence, you stay with the baseline

For we the public, it is important that we resist the halo fallacy, recognising that "because luck plays a large role, the quality of leadership and management practises cannot be inferred reliably from observations of success (or failure)" (p. 207). Kahneman proposes that we should reward decision-makers on how the decision was made, not by how it turned out. Unfortunately, in Ireland, it is very difficult to act on this admonition. The most we get about decisions in the nature of how they were arrived at, predictions, processes, values, analyses, priorities and rationales are to be found in press releases, which vary in content



and analytical quality. You cannot reward what you do not know. This omission is a discourtesy to the taxpayer who pays the bills, and a loss to us all. The new Irish Government Economic and Evaluation Service may begin to fill this gap, but it should be the task of all departments to do their bit.

## And, as the autumnal gloom descends, do read Thinking, Fast and Slow.

#### **Notes**

Daniel Kahneman, *Thinking, Fast and Slow*, Penguin Books, London, 2012. All the pages numbers cited refer to this edition

Kahneman shared the prize in 2002 with Vernon L. Smith, who pioneered the use of laboratory experiments as a tool in empirical economic analysis, especially in the study of alternative market mechanisms.

Apropos the fact that we (unconsciously) strive harder to avoid loss than to achieve gain, Kahneman observes that "If in his best years, Tiger Woods had managed to putt as well for birdies as he did for par, his average tournament score would have improved by one stroke, and his earnings by almost \$1 million per season." (p304)

The key evidence on the power of having to opt out in the case of organ donation comes from: J. Johnson and Daniel Goldstein, 2003. "Do defaults save lives?" *Science*, 302, pp. 1338-39

The Sean Fitzpatrick quote is from: <a href="http://quotesfromthebubble.blogspot.ie/2010/03/seanie-fitzpatrick-former-chairman-of.html">http://quotesfromthebubble.blogspot.ie/2010/03/seanie-fitzpatrick-former-chairman-of.html</a>

For the announcement of the Irish Economic Research Services March 6, 2012 by Brendan Howlin, TD, Minister for Public Expenditure and Reform; see <a href="http://per.gov.ie/2012/03/06/minister-howlin-announces-establishment-of-new-government-economic-and-evaluation-service/">http://per.gov.ie/2012/03/06/minister-howlin-announces-establishment-of-new-government-economic-and-evaluation-service/</a>

The evidence that we suffered from a global halo effect before the crash is the following:

On September 2007 (by which stage Irish bank shares had lost one-third of their peak value) the IMF commended Ireland's "prudent fiscal policy", mentioning "Ireland's continued impressive economic performance": [See Section IV of IMF Article IV Consultation on Ireland (IMF Country Report No. 07/325).]

On 20 November 2007 Lorenzo Bini Smaghi, one of the more vocal members of the Executive Board of the ECB, stated that

"The Irish example shows that it is possible to prosper in the monetary union while having a higher potential growth rate than the rest of the union. This does not need to be 'paid' in terms of divergent or explosive inflationary outcomes and / or in unsustainable competitiveness for the country."

[ 'The value of central bank communication', Speech by Lorenzo Bini Smaghi, Member of the Executive Board of the ECB, Financial market speech series, Landesbank



Hessen-Thüringen permanent representation of Hessen in Brussels, Brussels, 20 November 2007]

In April 2008 the OECD noted that "Financial Sector Risks have been Contained" and that "The Irish banks are well-capitalized and profitable, which provides a cushion to weather the more difficult times ahead." [OECD Economic Survey of Ireland, April 2008, Chapter 3: Financial Stability: Banking on Prudence]

From October 2001 to March 2009 Ireland enjoyed AAA credit rating from S&P.

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