Central banking, fast and slow[1]

Address by Ms Fundi Tshazibana, Deputy Governor for the South African Reserve Bank, at the Nelson Mandela Bay 2021 Leadership Summit, 28 July 2021.

'Leadership skills to inform the great reset of society: from global grief to hope'

Good afternoon and thank you for the invitation to speak at your Leadership Summit.

As a relatively new central banker, I have been fascinated by how central banks function – the magnitude of the decisions they make and the most important elements of their work often go unnoticed by many of us, because these things are simply what ought to be. We don't think when we go to the ATM to draw cash − the banknotes are there. When we take out our cards to make payments and when we make EFT payments, we don't stop to think about the payments process, unless of course, there are system glitches. We don't think about how government is able to borrow money in financial markets every week – it just does. In the middle of various economic crises, we haven't lost sleep over many of these things that seem to just happen.

At the same time, there are many other things we are losing sleep over as South Africans. For instance, we have had over 200 000[2] excess deaths over the past year

[1] The title borrows from Daniel Kahneman's well-known book, *Thinking, fast and slow.* On 6 July 2020, Project Syndicate published an op-ed by Mohammed El-Erian also titled 'Central banking, fast and slow'. The title of this speech was finalised in June and published in the Nelson Mandela Bay Leadership Summit programme before this article appeared. This speech deals with a different subject matter to the op-ed and the shared title is purely coincidental.

[2] The South African Medical Research Council estimates around 203 000 excess deaths recorded since 3 May 2020. https://www.samrc.ac.za/reports/report-weekly-deaths-south-africa

and a half, mostly due to COVID-19. We have a youth unemployment rate of 46.3%,[3] the largest public sector debt burden in our history; uncertainty about the reopening of many businesses in the hospitality, travel and tourism sectors; and the high likelihood that many people and many small firms will be left behind as we move into the digital age. These are areas where there are huge gaps between what is happening, and what ought to be.

As leaders, our task is to help close these gaps. Yes, the starting point we have in our country is very difficult. Still, the South African problem is not only that we have a difficult history. It is that we keep on producing more of it. Our challenge as leaders is to change this pattern, not only by developing plans, but by implementing them and taking decisions to correct our course along the way.

I hope my address will give you some ideas for making better decisions, based on my experience at the South African Reserve Bank (SARB) and the broad economics literature.

Leading people, and why it's harder than rocket science

Economics is sometimes portrayed as a profession obsessed with money, but that description is perhaps better reserved for accounting. In truth, economics is a subject fascinated by decision-making. This is because the subject matter of economics is human beings and their choices, which makes it difficult because human choices defy simple rules.

Ben Bernanke, a former Governor of the United States Federal Reserve, once made this point using the example of rocket science. In the 1960s, he tells us, there were many economists who tried to adapt the complicated mathematics of rocket science to economics. They ultimately hoped to steer economies just as rocket scientists could steer spaceships and missiles. But it didn't work. As Bernanke explains:

[3] As of the first quarter of 2021, according to Statistics South Africa's *Quarterly Labour Force Survey*. http://www.statssa.gov.za/publications/P0211/Media%20release%20QLFS%20Q1%202021.pdf

Unfortunately, macroeconomic policy turned out not to be rocket science! The problem lay in a crucial difference between a missile and an economy – which is that, unlike the people who make up an economy, the components of a missile do not try to understand and anticipate the forces being applied to them.[4]

For central banking in particular, this insight helped lay the ground for inflation targeting. It showed policymakers that there wouldn't be stable relationships between things like unemployment and inflation. If central banks thought they could get more jobs by tolerating more inflation, people would learn to expect higher inflation.

Then inflation would rise, without unemployment falling. This is how the world got to the stagflation of the 1970s, where the 1960s trade-off between inflation and unemployment broke down, and both were high simultaneously.

This experience showed that central banks needed a different theory. The new paradigm, inflation targeting, focused instead on communication and credibility. Central banks started communicating clear targets, and doing what it took to achieve them. As people came to understand and trust in these targets, their expectations shifted, which changed outcomes.

Clear and credible communication turned out to be a secret weapon.

Decision-making theory in behavioural economics

These kinds of insights led to an approach called 'rational choice' becoming prominent in economics, with decisions being explained as products of rational, forward-looking agents pursuing self-interest. This was a useful simplification, especially for all the researchers whose models worked better with these shortcuts. But of course, as you and I know from personal experience, human beings are not rational actors.

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[4] Ben S Bernanke, 'A perspective on inflation targeting', 25 March 2003. https://www.bis.org/review/r030325d.pdf

It took a psychologist, Daniel Kahneman, to move the field forward. Kahneman – who won the Nobel Memorial Prize for Economics in 2002 – pioneered a field called 'behavioural economics', which aimed to marry the rigour of the rational choice model with greater realism. My title for this speech, 'Central banking, fast and slow', is drawn from his famous book, *Thinking, fast and slow.*

To give context to the title, the book talks about two modes of thought: System 1 thinking, which is fast, instinctive, and emotional; and System 2 thinking, which is slower, more deliberate, and logical. This book, and the larger field of behavioural economics, is fundamentally about human decision-making and where it goes wrong.

I'll sketch out some of the key ideas from this literature, and then discuss how they manifest in my area of work.

For Kahneman, humans make two kinds of judgement errors: bias and noise. People use decision-making shortcuts, often unconsciously, which cause them to make mistakes in specific directions. This is bias. And then their judgements are surprisingly erratic, which is noise.

A good example of bias is the fear of flying. Plane crashes are rare but when they happen, they are newsworthy. On the other hand, car crashes are very common, but they get much less attention. Unfortunately, we are biased towards treating visible and dramatic information as being more important. As for noise, even where there is no bias, there is still a surprising amount of randomness in human decisions.

In their latest book,[5] Kahnemann and his co-authors discuss large disparities in criminal sentences for basically similar cases, with some defendants getting one-year sentences and others 15 years for the same offence. They also document similar noisiness in the medical profession. Radiographers, for example, will come up with different diagnoses even when looking at the same X-rays.

[5] Daniel Kahneman, Olivier Sibony and Cass Sunstein, *Noise,* New York: Little, Brown Spark, 2021.

The point is not that judges and medical professionals are especially untrustworthy. Rather, it is that human decisions are surprisingly random, even for experts and even for something quite objective such as an X-ray.

Before I joined the central bank, I used to make jokes about central banks and their committees. I now have an appreciation of why they matter as decision-making structures. Most real-world decision-making features high levels of uncertainty and significant risk of error. This means that we must have mechanisms to bring together different perspectives and that we must rigorously interrogate evidence to minimise our personal bias and noise so that decisions can be justified. This is relevant for both public policymakers and private sector leaders.

Central banking – slow thinking, not short-term thinking

When I first started exploring the work on fast and slow thinking, I of course started with its relevance for public policy. Central banking should be a classic case of slow, deliberative thinking, with a medium-term view and logical, evidence-based analysis. When we change interest rates today, it has effects about 12 to 24 months ahead. But very often the debate about monetary policy is absorbed by short-term thinking, focused on last month's data.

For instance, in May this year we received an inflation print of 5.2%, which is above the 4.5% midpoint of our inflation target. The SARB had been projecting a spike in inflation for over a year, and had published its forecast for inflation and implications for the interest rate path, so the May inflation print was basically no surprise to us at the SARB.

Nonetheless, this concrete and visible data point seemed to make people think that the SARB would now be more likely to hike interest rates. Similarly, in June, when inflation slowed to 4.9%, this was welcomed as good news for interest rates. But again, we had expected this. At most, it confirmed our forecast.

These were classic examples of the so-called 'availability heuristic', where something easy to see obscures the facts which actually matter for a decision.

This past year, the focus on short-term issues contributed to criticism of the SARB as not doing the right thing. Yet, when we look at historical performance, the SARB, imperfect as it might be, has kept to its price stability mandate and brought down inflation rates to well within the target range. The cost of borrowing is therefore *lower* because lenders don't have to demand so much inflation compensation. SARB decisions have also become more transparent – at every meeting of the MPC we publish our forecasts and give reasons for our decisions.

Fairly low and stable inflation is now something we can take for granted as South Africans, and high inflation is perceived as something that happens to other people far away. But if the SARB hadn't patiently worked on stabilising inflation and building credibility, we could easily have been one of those high inflation countries. Then high inflation would have been high up the list of problems I mentioned earlier, worrying us all and keeping us awake. And the SARB certainly wouldn't have been able to move fast when the COVID-19 crisis hit, and cut interest rates to record lows.

The SARB has demonstrated with its policy response to the COVID-19 crisis that 'slow thinking' does not mean slow responses, and it certainly does not mean not taking decisions. Actually, slow, more deliberate, logical and long-term thinking is essential for building buffers that support rapid responses during a crisis. And for public institutions to adapt to the evolving needs of the economy.

To minimise our individual biases and noise, at the SARB we have committee-based decision meetings. This is where we sit down, study the data and consult models that give us policy advice. Then we argue with each other, often quite energetically. Maybe you think real experts don't disagree and don't need computer models to help make decisions, but given the high levels of uncertainty and significant risks of error in decision-making, it is crucial to have the confidence to test your decisions properly.

You are a better leader if you accept that decision-making is hard and that gut instinct is unreliable.

Conclusion

In offering this brief sketch of decision-making, and how economists have studied it over the years, let me conclude with a couple of takeaways that I hope will stay with you and inform your own thinking and leadership.

The first lesson is that leadership is about people. People learn; they adapt their behaviour to incentives and their expectations of the future. Central bankers and many other economists have spent too much time trying to fit people into physics-like models with unchanging laws and behaviours. We have done much better since we came to rely instead on communication and credibility as key mechanisms for achieving our goals.

A second lesson is that once longer-term objectives have been set, we should have the discipline to stick to them. This does not mean that we ignore where we are – starting points do matter. But there is a big difference between course correction and changing strategy.

As a country, we need to make decisions and take deliberate actions that will move us steadily in the direction that we set out in our long-term strategy, the National Development Plan (NDP). The NDP vision for the country includes, among other things, an inclusive economy with high employment, a low cost of living, a lower cost of doing business and better education outcomes. There are no shortcuts here. As the saying goes, 'The best time to plant a tree was 20 years ago. The second best time is now.' We all wish better decisions had been made historically, but the question for leaders is, what good decisions are you making now?

The third lesson is that the lived experience of being a leader is confusing, loud and uncertain. We all cope as best we can, but some coping strategies make things worse. As leaders, we therefore need to work hard to manage our biases and our knee-jerk reactions. Thus, it is vital to *have* sound mechanisms that bring together different perspectives, that minimise bias and noise in decision-making, and which end with a clear decision.

As leaders we must have humility and accept that finding answers is not easy. We must design the best process we can to get to good decisions, and then have the courage to commit and deliver.

The fourth lesson is that, as we contemplate the scale of our challenges as institutions, as businesses, as a country, we must remember that we can't do it all and we will fail if we try. One of the things the behaviouralists got right was to recognise that complexity can be overwhelming, and that real-world decision-making requires coping mechanisms. From the perspective of a country, one of the ways you do this is by having institutions that accumulate expertise and specialise in making specific decisions. Then you let them do their jobs.

At the SARB, we have been given mandates to protect price and financial stability. Those are clear missions, assigned to us by a democratic, constitutional order, and we have focused on them. We have avoided interfering in other areas where we don't have expertise and where we could put our main goals at risk. This focus has helped us deliver substantial benefits for South Africa.

The broader lesson is that we can't fix everything; it's just too much. We have to divide up the work, and then we have to each focus on the things we can do best. It may be unsatisfying to see problems you aren't tackling, but there is plenty of important work to go around.

I hope these ideas will be useful to you.

Thank you.