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Lessons learnt: how the South African Reserve Bank moved inflation to 4.5%, and what it cost

Good day.

My subject today is lower inflation. It is a major global theme – we have experienced the biggest inflation surge in decades, and now policymakers are looking back at the lessons learnt. I want to reflect on those lessons. I also want to discuss the South African experience with lower inflation. For that, I will focus on our move to 4.5% as the midpoint objective of monetary policy − a change we introduced back in 2017. All of this is relevant to our ongoing discussion about the inflation target and the desirability of moving to a lower target, in line with our peers.

The first lesson, from the global inflation surge, is that people *really* hate inflation.

We always knew inflation was bad, and we always knew the public disliked it. Still, many economists have been surprised by the depths of public unhappiness with high inflation. This has been especially clear in advanced economies that had very low inflation over a sustained period, usually 2% or less. At those rates, most people did not have to worry about inflation. But after the COVID-19 pandemic, they suddenly experienced the kind of price increases usually found in poorer countries, and they hated it even more than expected. They objected when prices rose, and they were disappointed when they did not fall again afterwards.[1] They felt their wages had not

[1] As Jared Bernstein put it, "A central banker wants inflation to get back to target. A shopper wants his or her old price back." 'Inflation's (almost) roundtrip: What happened, how people experienced it, and what have we learned?', Remarks by Council of Economic Advisers (CEA) Chair Jared Bernstein at the Economic Policy Institute, 30 July 2024. https://www.whitehouse.gov/cea/written-materials/2024/07/30/inflations-almost-roundtrip-what-happened-how-people-experienced-it-and-what-have-we-learned/

kept up with inflation.[2] They objected that it would have been easier to cope with a recession.[3] It is a strong reminder to central bankers that the public like price stability and dislike inflation.

A second lesson is about the effectiveness of monetary policy – what works, and what doesn't.

Something that didn't work was the 'transitory' argument, the claim made in 2021 that high inflation would be temporary, and there was no need for a monetary policy response.

As Jerome Powell said in his Jackson Hole speech this year, "The good ship Transitory was a crowded one, with most mainstream analysts and advanced-economy central bankers on board."[4] You will notice he exempted emerging market central bankers, who were more used to severe supply-demand imbalances and their inflation consequences. The fact is, the good ship Transitory sank in the inflation storm of 2022 – but fortunately everyone on board escaped to another vessel, joining the emerging market central bankers with aggressive inflation-fighting policies.[5]

Another failed claim was the 2022 argument that inflation would come down only through a severe recession, with a big increase in unemployment. In fact, inflation in major economies, like the United States (US), fell from about 9% to just over 2%, with no recession and steady job growth.[6]

Looking at this record, you could say that central bankers either got it right or they got lucky.[7]

My sense is that they made their own luck.

[2] S Stantcheva, 'Why do we dislike inflation?', *NBER Working Paper 32300*, April 2024. https://www.nber.org/papers/w32300

[3] S Keynes, 'Is a recession worse than inflation?', *Financial Times*, 14 June 2024: https://on.ft.com/3VGP6lQ

[4] J Powell, 'Review and outlook', Speech by Jerome Powell, Chair of the Board of Governors of the Federal Reserve System, at 'Reassessing the Effectiveness and Transmission of Monetary Policy', an economic symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 23 August 2024. https://www.federalreserve.gov/newsevents/speech/powell20240823a.htm

[5] See, for example, Rich Miller, 'Jerome Powell ditches "transitory" tag, paves way for rate hike', 30 November 2021. https://www.bloomberg.com/news/articles/2021-11-30/powell-ditches-transitory-inflation-tag-paves-way-for-rate-hike

[6] 'Has Team Transitory really won America's inflation debate?'. *The Economist,* 10 January 2024. https://www.economist.com/finance-and-economics/2024/01/10/has-team-transitory-really-won-americas-inflation-debate

[7] C Giles, 'Were central bankers lucky or smart in reducing inflation?', *Financial Times,* 2 July 2024. https://www.ft.com/content/bd22ac3c-4cf9-4eed-b8d8-ec20103dfb8f

There is no question that supply-side factors helped. We had lower oil price inflation, lower food price inflation and better supply-chain functioning after the COVID-19 disruptions.

But it is equally clear that the monetary policy response is part of the story.

Forceful policy responses put the brakes on inflation. They also helped convince the public that central banks were committed to low inflation, and that high inflation was an aberration, not the new normal. In the language of the Bank for International Settlements, central banks managed to get back to a zone of stability, averting a switch to a high inflation regime.[8]

The lessons are, it was wrong to say we could have low inflation for free, that we could just look through shocks, keep rates low, and all would be fine. But it was also wrong to say that lowering inflation would require a recession and large-scale job losses: a soft landing was an attainable goal.[9] What we have seen is a reminder that good monetary policy can deliver low inflation at a modest cost. It does that by safeguarding the low inflation regime, which has its own self-stabilising properties.[10] Given how strongly people dislike inflation, this is clearly the space we want to occupy.

Let me now turn to our own inflation experience.

South Africa implemented inflation targeting nearly a quarter of a century ago, in 2000. Looking back, the framework has been generally successful.[11] Both inflation and interest rates have been lower than they were before inflation targeting. Inflation has also been within the 3−6% target range, on average. However, this average has been on the high side of the target range. Since 2000, using the 'targeted inflation' measure, it has averaged 5.85%.[12] We have also missed the target quite often, almost exclusively to the upside: we have been above the 6% upper bound of the target nearly 40% of the time, compared with only 1% of outcomes below the 3% lower bound.[13]

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[8] See Bank for International Settlements, *Annual Economic Report,* Chapter 2, 30 June 2024. https://www.bis.org/publ/arpdf/ar2024e.htm

[9] For a discussion of soft and hard landings, see Sam Boocker and David Wessel, 'What is a soft landing?', 14 September 2023. https://www.brookings.edu/articles/what-is-a-soft-landing/

[10] C Borio et al., 'The two-regime view of inflation', *BIS Papers No. 133*, March 2023. https://www.bis.org/publ/bppdf/bispap133.pdf

[11] See National Treasury, *Macroeconomic policy: a review of trends and choices,* 2024 (especially pp. 30-32. https://www.treasury.gov.za/documents/national%20budget/2024/Macroeconomic%20Policy%20Review.pdf

[12] The targeted measure of inflation was the consumer price index excluding mortgage costs (CPIX), which then shifted to the consumer price index (CPI). Over the past 10 years (120 months since July 2014) it has averaged 5.12%.

[13] Out of 294 months, 113 have had inflation above 6%, while 3 have been below 3%; 38.4% of the months have been above 6% compared with 1% below 3% (all during COVID-19). This reflects targeted inflation; CPI was below 3% for a period in the 2000s, but as this was not the targeted measure of inflation, it did not constitute target breaches.

When we reflected on our record, soon after I was appointed as Governor, we identified three shortcomings.

First, we were missing our target too frequently – even though 3−6% is one of the wider targets around, and therefore should have been relatively easy to hit most of the time.[14]

Second, our average inflation rate was high. Inflation was mostly near 6%. This did not amount to a crisis, and it was much better than the double-digit rates seen in the 1980s and 1990s. But it was not good. At 6% inflation, prices double in just over a decade and triple in two decades.[15] No one could confuse that with price stability.

Third, we realised that the economy had a structural growth problem. After the global financial crisis, South Africa's growth slowdown was diagnosed as a weak demand problem. To deal with it, we tolerated higher inflation so that we could avoid rate increases and restore growth. It didn't work. Growth never came back; we just ended up with high inflation.[16] Accommodative monetary policy was the wrong medicine for the patient.

These hard truths prompted us to try a new strategy.

From 2017, we began emphasising that we wanted inflation in the middle of our target range, at 4.5%. We would not treat 3−6% as a 'zone of indifference', which in practice meant aiming for the top of the range and ignoring the bottom half. Rather, we were explicit that we wanted to be at the midpoint, over time. The range would be there to handle volatility, which is inevitable with inflation. But over time, the SARB would always be working to bring inflation back to 4.5%.

To make this point clear, we put it in the Monetary Policy Committee statement and our *Monetary Policy Review*. We discussed it in speeches.[17] We also adopted a new

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[14] The standard deviation of CPI inflation, since 2000, has been 1.95 percentage points, implying that around 90% of observations should have been within a 3-percentage point range, with a normal distribution and a mean of 4.5%. As noted above, only around 60% of outcomes were within the target range.

[15] Starting at a price level of 100, at 6% inflation prices pass 200 in year 12 and 300 in year 19. Given compound interest, by year 31 the price level passes 600.

[16] For a fuller discussion, see L Kganyago, 'South Africa's growth performance and monetary policy', an address by Lesetja Kganyago, Governor of the South African Reserve Bank, at the Bureau for Economic Research, Cape Town, 22 October 2015. https://www.resbank.co.za/en/home/publications/publication-detail-pages/speeches/speeches-by-governors/2015/456

[17] See, for example, L Kganyago, 'South Africa's macroeconomic adjustment and monetary policy', an address by Lesetja Kganyago, Governor of the South African Reserve Bank, at the 5th SA Tomorrow Investor Conference, New York, 9 November 2017. See especially p. 5: "Bringing inflation to the midpoint and ultimately anchoring expectations there, instead of at 6%, is one of the SARB's most important medium-term strategic goals."

flagship forecasting model, the Quarterly Projection Model, which included an explicit 4.5% objective and projected a path for the policy rate that would deliver on that goal.

The new strategy worked. Over the next few years, we achieved lower inflation, and we also secured broad stakeholder understanding of our revised objective.

Between 2017 and 2019, we recorded many more mentions of our 4.5% objective, for instance from experts and journalists, in analyst reports and news articles.[18] No longer did anyone have to write scholarly papers to estimate our implicit target[19]; we communicated exactly what it was.

And inflation slowed. In 2016, annual inflation was 6.3%. That fell to 5.3% in 2017, 4.6% in 2018 and 4.1% in 2019. By the time COVID-19 hit, the latest monthly inflation print we had in hand was 4.5%, exactly.[20]

Inflation expectations also declined significantly, from near the top of the target range to around the middle. For instance, at the start of 2017, two-year ahead survey expectations were at 6%.[21] At the beginning of 2020, that measure was down to 4.8%, and by the end of the year it was 4.5%.

We were clear that we wanted inflation at 4.5% − and we delivered.

This experience demonstrated some lessons that remain important today. These are lessons about the costs of lower inflation, about structural factors like high administered prices, and about the role of monetary policy in shaping trend inflation.

I'll start with the influence of monetary policy over inflation.

If you go and ask people what causes inflation, you often get answers about food or oil prices, and other such supply-side factors. Yet all countries face these shocks. Nonetheless, different countries have different inflation rates over time, sometimes very different rates.

It is easy to understand moves in inflation caused by something like the petrol price. But over longer periods, such as 10 years, these factors mainly create volatility,

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https://www.resbank.co.za/en/home/publications/publication-detail-pages/speeches/speeches-by-governors/2017/516."

[18] South African Reserve Bank, *Monetary Policy Review,* October 2019. See Box 2, pp. 8-9. https://www.resbank.co.za/en/home/publications/publication-detail-pages/reviews/monetary-policy-review/2019/9526

[19] See, for example, N Klein. 'Estimating the implicit inflation target of the South African Reserve Bank', *IMF Working Paper No. 2012/177,* 1 July 2012. https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Estimating-the-Implicit-Inflation-Target-of-the-South-African-Reserve-Bank-26045

[20] This reflects the January 2020 print.

[21] This refers to the survey of inflation expectations conducted by the Bureau for Economic Research

nothing more. For the long-run price level, it is the central bank that must take most of the responsibility. Yet, because the inflation process is not always well understood, monetary policy is not held adequately accountable, and our stakeholders are not fully aware of what they can ask us.

Let me give a simple example.

In 2000, both Chile and South Africa adopted inflation targets. Chile went for 3% and we went for a range of 3−6%. Since then, our inflation has been higher than Chile's by 1.8 percentage points, on average.[22] Chilean inflation has been a bit under 4%, whereas ours, as mentioned earlier, has been close to 6%. This may not sound like much of a difference, but if you look at price levels, Chile's prices are now 2.8 times what they were in 2000, while ours are 4.5 times higher. Both have increased a lot – but ours has increased much more. It was not that we faced a higher world oil price or a higher wheat price. And both countries had professional, independent central banks. The difference was that we had a higher inflation target.

This comparison takes me to the subject of administered prices. In South Africa, we have a range of prices set by government, for services such as water and electricity. These items tend to have high inflation, well above our target. If you start talking about lowering the target, a standard objection is, 'What about administered price inflation? You cannot control administered prices; if you aim for lower inflation, you will hurt the rest of the economy'. We heard this a lot back when we started aiming for 4.5%, and we also hear it now, in the ongoing discussion about moving to a lower target.

Unpacking this issue, it is important to realise that high administered price inflation negatively impacts everyone, whether the target is 6% or 4.5% or 3%, or whatever it may be. What we are seeing with administered prices is known as a 'relative price adjustment'. Essentially, these goods and services are becoming more expensive relative to others. When this increase stems from inefficiencies and the pricing power of monopolies, it is detrimental both to the economy and to consumers. This is an important part of the reason we have long called for lower administered price inflation.

However, it does not mean that the administered price inflation problem is *worse* at a target of 4.5% than 6%. Similarly, raising the inflation target would not necessarily improve the situation.

If you have a higher target, you would expect all prices to rise faster, across the economy. You would expect your currency to lose its buying power for global commodities, such as energy and food, faster. You would expect more currency

[22] This comparison uses International Monetary Fund data. The measure for South Africa is the CPI, not targeted inflation, so average inflation for 2020-23 was 5.54%; it would be higher using targeted inflation (5.85%). Average inflation for Chile was 3.78% for this period.

depreciation, meaning your currency would become less valuable compared to others that hold their value better.

In these circumstances, administered price inflation would likely increase. Price setters, still intent on making relative price adjustments, would still have the power to do so, and would simply implement even larger price increases.

If this situation is turned around, it becomes clear how it is possible to achieve lower headline inflation even with high administered price inflation. The overall price level rises more slowly, the currency depreciates at a slower pace, and the rate of administered price inflation slows, even as the 'wedge' to other prices remains.

This is what we observed after 2017. Headline inflation slowed, and so did inflation for administered prices. The gap between the two was largely unchanged. From 2010 to 2016 it was 2.4%; since 2017 it has been 2.3%.[23] Of course, the administered price series is heavily influenced by global oil prices, which are not administered, or at least, not by South African authorities. Even excluding the fuel price component, administered price inflation was lower after 2017, whether looking at water, electricity, school fees or vehicle licences. On average, the difference closely matched the amount of total disinflation we achieved – 1.5 percentage points – with headline inflation slowing from around 6% to 4.5%.

Does disinflation negatively impact the rest of the economy if administered price inflation is high? It is important to remember that administered prices make up about 16% of the consumer price index (CPI) basket.[24] It is an important category but hardly a dominant one. If we want 4.5% inflation, and administered prices are stuck at 2.4 percentage points above headline inflation, as they have been, that means other prices can only rise by about 4%. For 3% inflation, the same calculation gives an inflation rate for other prices of about 2.5%. In other words, you do not have to push the rest of the economy into deflation, even if you have high administered prices. You just need everyone else to implement smaller increases.

Of course, it is highly desirable to have lower administered prices. And it is easier to have lower inflation, and lower rates, where these categories are helping, and not hurting, the disinflation effort. But let us not pretend we must live with a relatively high inflation target just because of our administered price problem. It did not stop us from getting from 6% inflation to 4.5%.

This brings me to another concern about lower inflation, that the short-term costs are high. The expectation is that with a lower target, the central bank will raise rates,

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[23] Arguably, the disinflation was achieved after 2017 but before 2020. The gap is 2.6% for 2018 to date and 2.4% for 2019 to date.
[24] CPI excluding administered prices is 83.78% of the total basket. CPI for administered prices but excluding fuel and paraffin is 88.5% of the total basket.

squeezing the economy. Unemployment will then rise, firms will be unable to raise prices because of weak demand, and so inflation slows. This trade-off between growth and inflation strikes some people as unacceptable, even when they understand that lower long-term inflation would be desirable. It is therefore interesting to consider what it cost us to get to 4.5% inflation.

In the real world, it is difficult to test counterfactuals. We cannot go back in time and conduct an experiment where we kept on aiming for the top of our target range rather than the middle. We do, however, have a study where two economists constructed a counterfactual model.[25] Their work compares actual outcomes with how the economy was likely to proceed without the 4.5% change. The results make for interesting reading.

Perhaps the most striking is, they find *no reduction in aggregate demand* during the move to 4.5%. Growth in gross domestic product (GDP) is in line with the counterfactual. Unemployment is generally unaffected. Credit extension is higher.

Their conclusion is that there was little or no cost to getting inflation to 4.5%. And the explanation they provide is that the SARB's commitment to 4.5% was heard and understood. Inflation was not forced down by a recession; it was managed lower by clear and credible communication.

This conclusion lines up with another study, by SARB economists, of sacrifice ratios in South Africa.[26] A sacrifice ratio is the cost of reducing inflation, measured as the amount of GDP growth lost for each percentage point of lower inflation. For the period where we moved inflation to 4.5%, this study finds a negative sacrifice ratio, which means there was no cost. The authors also find that disinflation costs have generally been low in South Africa.

This is, once again, contrary to the popular intuition that lower inflation is achieved by slower growth and higher unemployment. And once again, the key seems to be the SARB's credibility and communication. If the public understands and believes the central bank's objectives, disinflation can be achieved with little or no pain.

Ladies and gentlemen, let me conclude with a summary of the lessons learnt, which should be informing our current conversations.

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[25] E Pirozhkova and N Viegi, 'Change of the SARB's preferred inflation target in 2017: the conditional forecast story', *SARB Occasional Bulletin of Economic Notes No. 2401*, April 2024. https://www.resbank.co.za/content/dam/sarb/publications/occasional-bulletin-of-economic-notes/2024/change-of-the-sarbs-preferred-inflation-target-in-2017-the-conditional-forecast-story-april-2024-01.pdf

[26] C Loewald, K Makrelov and E Pirozhkova, 'The short-term costs of reducing trend inflation in South Africa', *South African Reserve Bank Working Paper Series WP/22/08*, 2 August 2022. https://www.resbank.co.za/content/dam/sarb/publications/working-papers/2022/WP%202208.pdf

First, we have a relatively high inflation rate. We often speak as if this is a structural, inevitable thing, and not a policy choice. But the fact is, we could have a lower inflation target, like almost all our peers, and with it, lower inflation. If we achieved this, I think South Africans would enjoy the lower inflation experience, and will look back at the era of inflation generally over 5% as a period of great inconvenience and difficulty. People prefer price stability. We cannot honestly claim that we are delivering that.[27] We can do better.

Second, in discussing inflation in South Africa, analysts too often misrepresent the administered price problem. Yes, administered price inflation is too high, and damaging for the economy. Yes, if it were lower, that would help deliver lower inflation and lower interest rates. But administered prices are also responsive to economy-wide inflation, and they are not such a large part of the basket that disinflation can only be achieved by forcing everyone else into deflation. The conversation about lower inflation should not be held hostage by administered prices.

Third, it is still often assumed that lower inflation means lower growth, despite rigorous studies showing that sacrifice ratios can be low. It is depressing enough that short-term pain is considered such a decisive argument against long-term gain. But it is even worse that it is considered a winning argument, when it is not even clear there is short-term pain. The studies of the move to 4.5% inflation certainly do not show high costs. They show a path to lower inflation that relies mainly on communication and credibility, rather than high rates.

Overall, I think these three misconceptions leave us with a macroeconomic discussion that is too pessimistic and insufficiently ambitious. We have an opportunity to achieve permanently lower inflation and therefore permanently lower interest rates. Executed effectively, a lower target could be achieved at little cost – just as we moved to 4.5% at little cost.

Ladies and gentlemen, this is a season of reform in South Africa. For any successful reform, you need to start with ambition and conviction, and then you need to follow that with great care and responsibility, to get the execution right. I hope with this lecture I have helped us find our ambition and conviction, so we can move on to excellence in delivery.

Thank you.

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[27] As Patrick Honohan and Athanasios Orphanides noted in their review of South African monetary policy, “Inflation at 4.5% is arguably still too high to be really thought of as price stability.” South Africa – Towards Inclusive Economic Development (SA-TIED), ‘Monetary policy in South Africa, 2007-21’, *SA-TIED Working Paper No.208*, March 2022. https://sa-tied.wider.unu.edu/sites/default/files/SA-TIED-WP208.pdf