

**South African Reserve Bank**  
**Occasional Bulletin of Economic Notes**  
**OBEN/21/01**



SOUTH AFRICAN RESERVE BANK



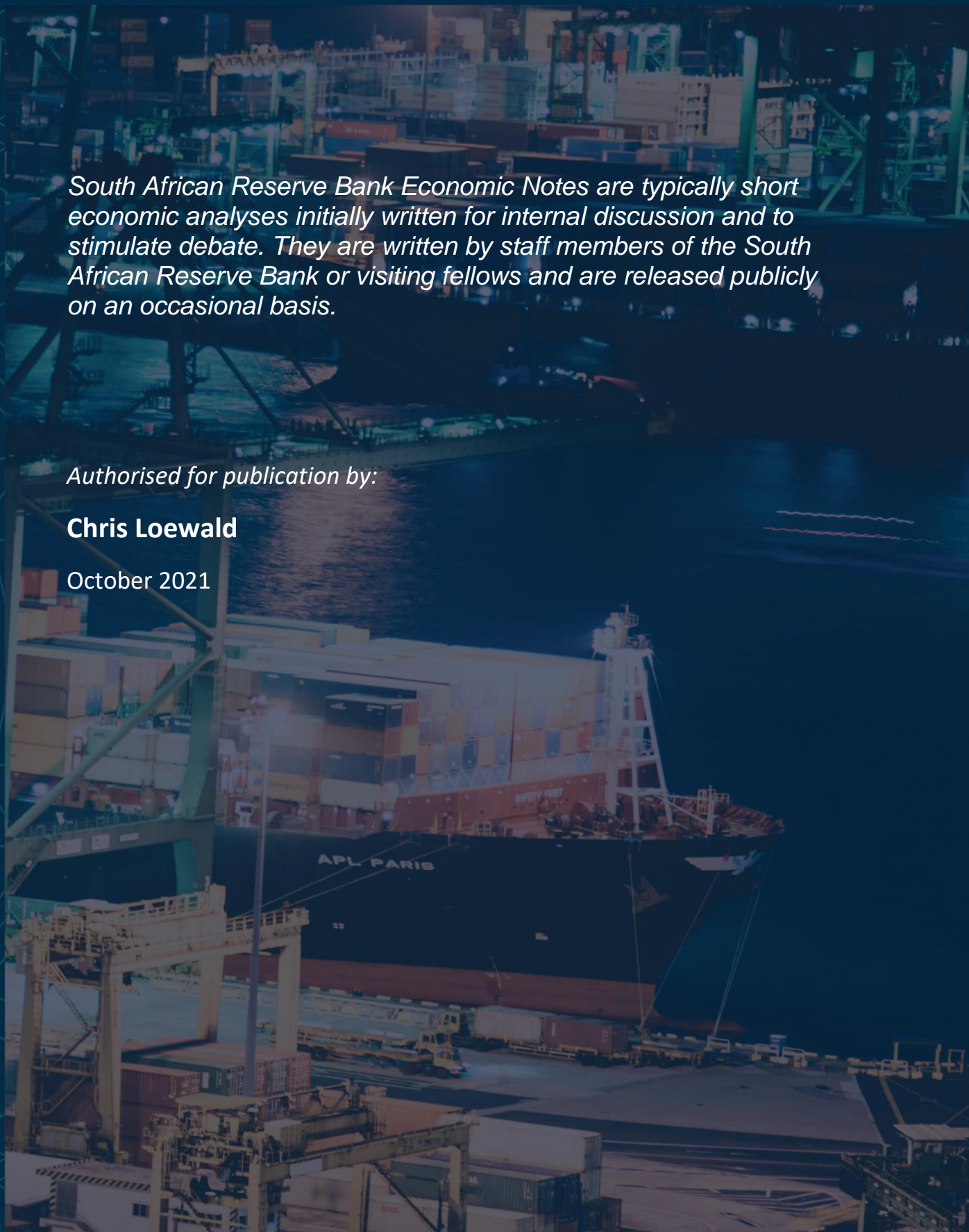
A purposeful journey

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*Authorised for publication by:*

**Chris Loewald**

October 2021



# SARB Occasional Bulletin of Economic Notes

## October 2021

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# OBEN 2101\* – January 2021

## Why the pandemic is lowering medical insurance inflation

*Kathryn Bankart, Elise Green, Dineo Lekgeu, Koketso Mano and Mpho Rapapali*

### Abstract

Medical insurance inflation is one of a few CPI components with inflation rates persistently above the midpoint of the target range. Since 2017, headline inflation has averaged 4.4%, while health insurance inflation has averaged 9.3%. The drivers of high inflation for this category include aging, shrinking membership pools as well as sub-optimal regulations. Health insurance inflation is expected to slow sharply during 2021, however, from 9.5% to around 5%. This is because medical schemes have accumulated large surpluses during 2020, as members responded to the COVID-19 pandemic by avoiding medical facilities wherever possible. It is likely that medical insurance inflation will rebound from 2022, once the excess reserves built in 2020 are used up, given that the structural drivers of high medical insurance have not changed.

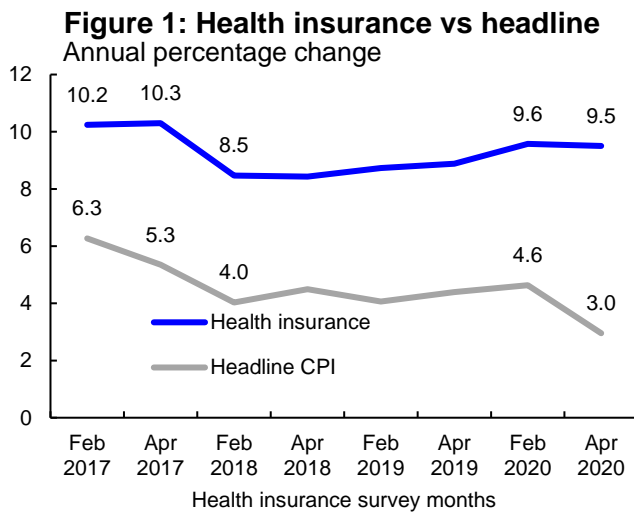
### 1. Introduction<sup>1</sup>

Since 2017, headline inflation has averaged 4.4%, while health insurance inflation has averaged 9.3% (Figure 1). This places health insurance inflation amongst only a few CPI components with inflation rates persistently above the midpoint of the target range - and in the company of public-sector prices, such as water, electricity and municipal assessments. Medical insurance inflation is expected to slow to 5% in 2021, which would be a record low, at 4.5 percentage points below the 2020 outcome. This slowdown is largely due to people having avoided medical facilities wherever possible during the Covid-19 pandemic, which allowed medical schemes to build up large excess reserve funds. Lower 2021 premium increases are expected to deplete these excess reserves, after which medical insurance inflation is likely to rebound to pre-crisis rates.

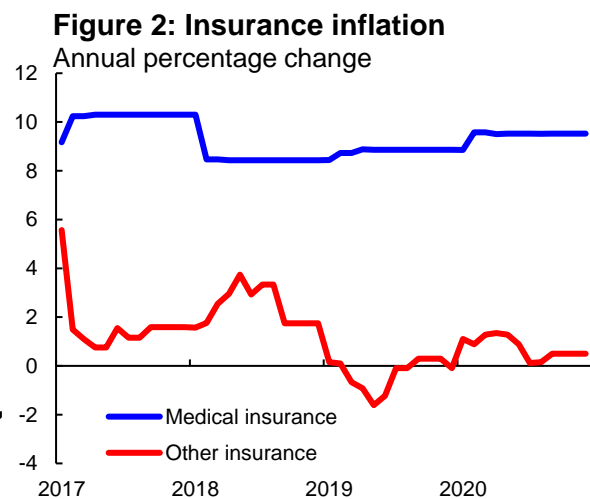
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<sup>1</sup> Special thanks to David Fowkes, Pamela Mjandana and Theo Janse van Rensburg for valuable comments and supervision of this research. Thanks also to Discovery, Fedhealth, Bestmed, Genesis, and Keymed for valuable, industry-specific information.

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Source: Stats SA and SARB



Source: Stats SA and SARB

## 2. Background

Health insurance has a weight of 7.5% in Stats SA's consumer price index (CPI). It is a component of insurance, not medical expenditure, and it has had much higher inflation rates than other insurance categories, such as life and vehicle insurance. Since 2017, health insurance has averaged around 9% versus just over 1% for the remaining insurance products (Figure 2). Only 16% of the population are covered by private medical insurance, but given South Africa's high inequality, and the plutocratic weights<sup>2</sup> used for constructing the CPI, this item nonetheless has a significant weight in the CPI basket. Between 2017 and 2020, it contributed an average of 0.8pp to an average headline inflation outcome of 4.4%.

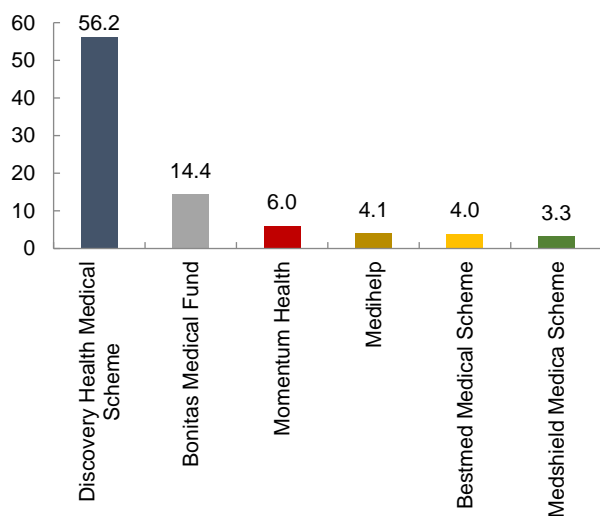
Private medical insurance is provided by two kinds of schemes, open and restricted. Open schemes must by law accept all applicants, whereas restricted schemes limit their membership to specific groups, such as employees of a certain industry or organisation, or members of a professional association or union. The open scheme market is dominated by Discovery, while the biggest restricted scheme is GEMS, which serves government employees (Figures 3 and 4).

Persistently high medical inflation has attracted some scrutiny, with the recent Competition Commission inquiry representing the most thorough investigation to date. The report, published in 2019, concluded that competition in the sector has been distorted by regulatory problems. Specifically, the current regulatory framework is incomplete and allows insurance providers to attract younger, healthier members with lower medical costs, rather than sharing risk across schemes.<sup>3</sup> The Commission also identified problems in market concentration, consumer knowledge, and the prescribed minimum benefit list.

<sup>2</sup> Solomons, J., & Sing, M. (2018). The Plutocratic Gap in South Africa: How representative is target CPI? SARB Economic Note.

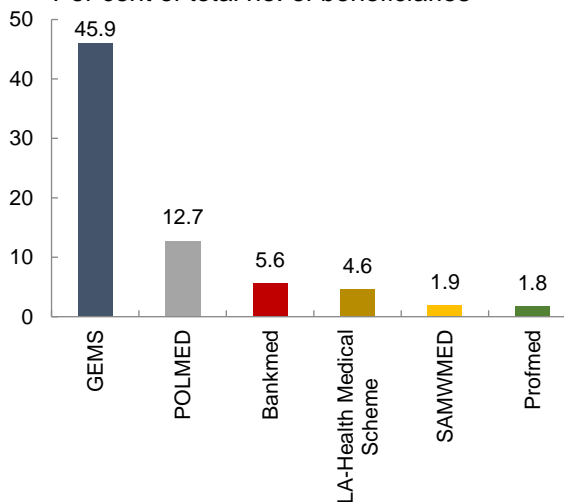
<sup>3</sup> The current regulatory framework does not include a risk adjustment mechanism. This mechanism makes financial adjustments across insurance providers to mitigate the risk-profile related effects on scheme costs, thus removing the incentive for providers to attract younger and healthier members.

**Figure 3: Open scheme market**  
Per cent of total no. of beneficiaries



Source: Council for Medical Schemes

**Figure 4: Restricted scheme market**  
Per cent of total no. of beneficiaries



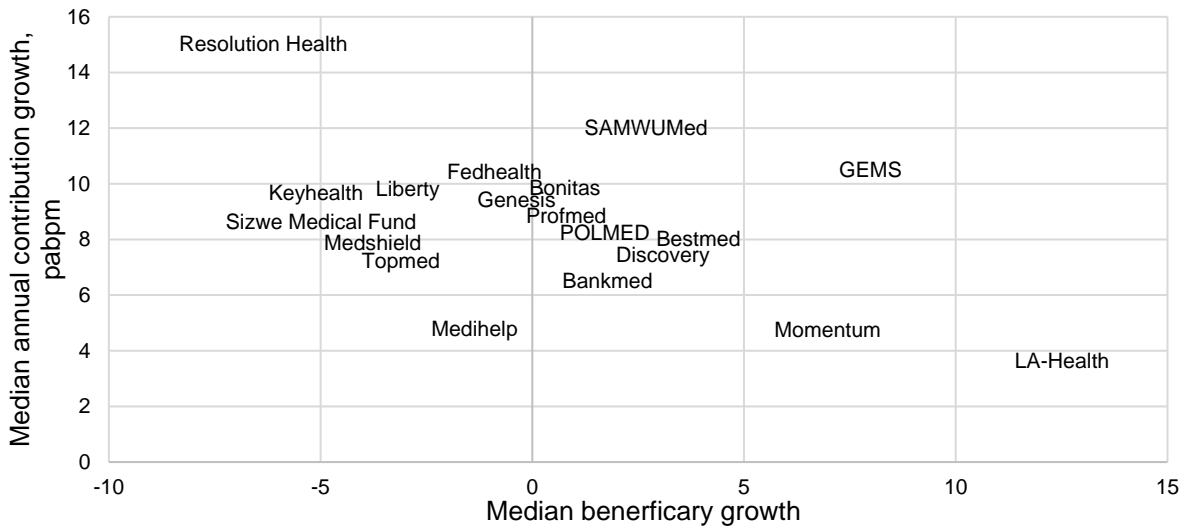
Source: Council for Medical Schemes

Insurers also point to the Prescribed Minimum Benefit list as problematic. This list specifies treatments which all schemes are expected to cover in full. In doing so, it effectively cuts the connection between supply and demand in pricing: since all PMB conditions *must* be covered by insurers, pricing power shifts to healthcare practitioners. Because many PMB conditions are catastrophic illnesses which require hospitalisation, this system has also encouraged the creation of minimal ‘hospital plans’, which (perversely) incentivise hospitalisation for conditions which could have been treated out-of-hospital, in order to secure scheme pay-out. Lastly, the PMB list is supposed to be updated regularly, but in practice there have been persistent delays. This means cheaper or more effective treatments are not replacing older, prescribed treatments, with consequences for both treatment quality and cost.<sup>4</sup>

Regarding consumer knowledge, the sector suffers from opacity in insurance cost and benefits. It also appears consumers treat medical insurance as a grudge purchase, and are therefore less motivated to invest time in understanding the fine print of agreements. This means they are less likely to punish a scheme for overpricing by switching schemes, which may help explain why there is no apparent relationship between price changes and membership changes across schemes (Figure 5).

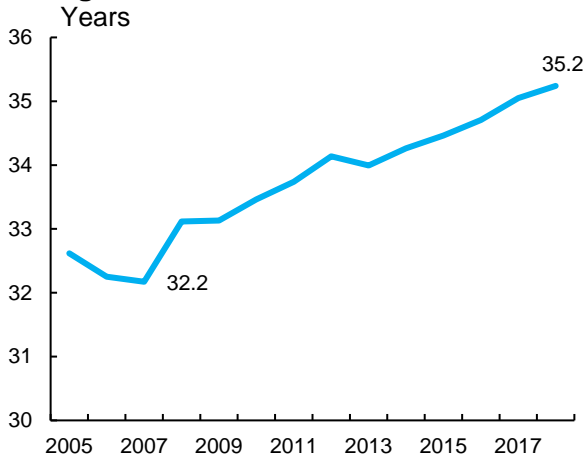
<sup>4</sup> The Competition Commission. Health Market Inquiry Final Findings and Recommendations Report, 2019.

**Figure 5: Member vs contribution growth (2005-2018)**



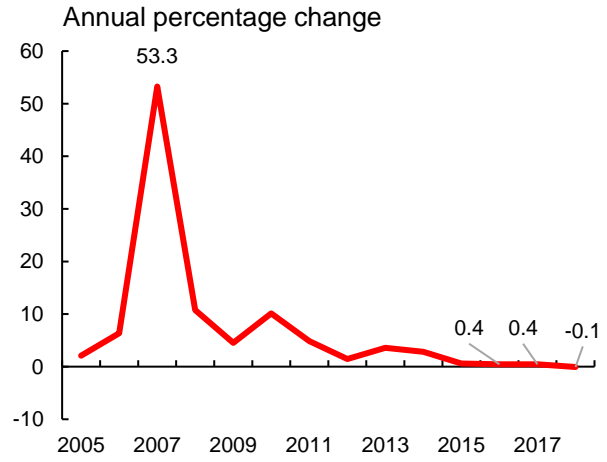
Source: Council for Medical Schemes

**Figure 6: Average beneficiary age across 19 schemes**



Source: Council for Medical Schemes

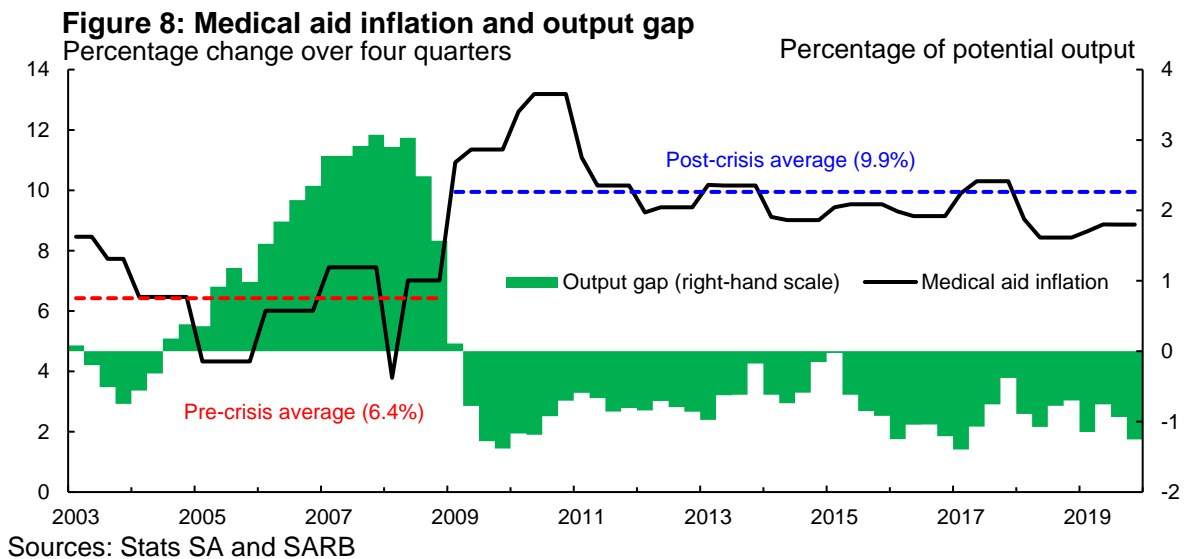
**Figure 7: Average growth in members across 19 schemes**



Source: Council for Medical Schemes

It is also worth considering macroeconomic explanations for high health insurance inflation. Over the past decade, South Africa's macroeconomic performance has been extremely disappointing, with low growth and rising unemployment. Most people access medical insurance through formal sector employment, so where job growth is weak it will be more difficult for new entrants to the labour force to find formal sector employment and thereby qualify for private medical insurance. As a result, the average age of medical scheme beneficiaries has risen over the past decade (Figures 6 and 7).

Given that older people have higher health costs, on average, this has increased medical insurance costs. It has also further disincentivised young people from joining schemes, given that they face levies higher than their expected returns. Indeed, with households pressured to cut costs in an environment of declining per capita growth, healthier, younger people have had better reasons to take on risk by foregoing medical cover, thereby preserving spending power for other priorities. For these reasons, rather than ignoring the economic cycle, medical insurance inflation has behaved counter-cyclically (Figure 8). This also helps explain why it was significantly lower in the 2000s, averaging 6.4% versus 9.9% for the 2010s.



### 3. The Covid-19 impact

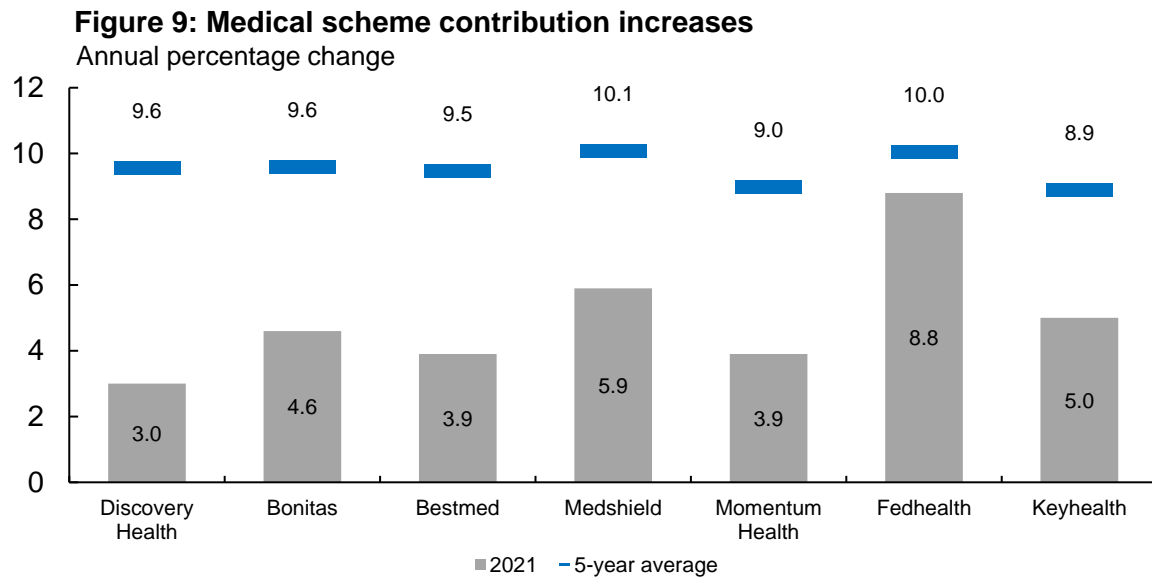
In May 2020, Discovery released a white paper quantifying the likely medical costs of COVID-19. Claims were projected to range between R7.3 – R31.8 billion by June 2021. This would have equated to additional costs of R816 – R3 561 per beneficiary. This provided a formal statement of a common intuition that Covid-19 would drive up medical costs and feed into higher medical insurance inflation.

Contrary to these expectations, COVID-19 and related lockdown restrictions has so far resulted in less insurance utilisation. People cut back on visits to medical facilities as much as possible, to avoid exposure to the virus. Lockdowns also limited mobility and access to alcohol, which are common causes of harm. For example, non-trauma surgery admissions declined nearly 50% from 7.96 to 4.49 per day.<sup>5</sup> In itself, Covid-19 obviously created new medical costs, but its net effect on the medical industry was actually to lower expenditure.

In this context, medical schemes began accumulating additional surpluses. For example, Discovery's net surplus (as a percentage of contributions) rose from 2.7% in 2019 to about 6.5% in 2020. These surpluses will feed into reserve holdings, but are not expected to

<sup>5</sup> Moustakis, J., Piperidis, A. A., & Ogunrombi, A. B. (2020). The effect of COVID-19 on essential surgical admissions in South Africa: A retrospective observational analysis of admissions before and during lockdown at a tertiary healthcare complex. *South African Medical Journal*, 110(9), 910-915.

remain elevated indefinitely, as beneficiaries undertake postponed procedures and as overall conditions normalise. However, it is not necessary for schemes to hold such large reserves, so most schemes are returning them to beneficiaries by implementing lower 2021 increases (Figure 9). Based on SARB data collection, medical insurance inflation is therefore likely to average 5% in 2021. This will lower headline inflation by 0.3 percentage points, and services inflation by 0.7 percentage points.

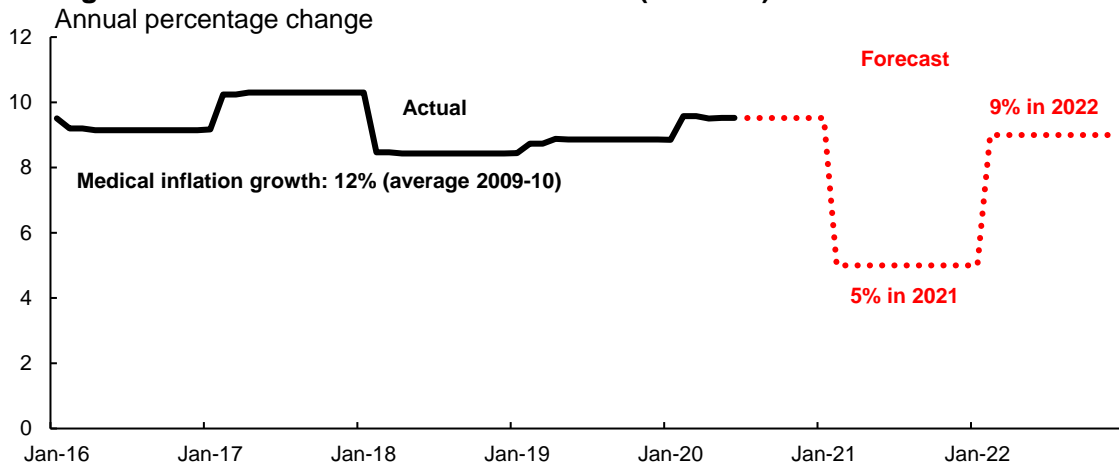


Beyond 2021, there are both upside and downside risks to the forecast. On the upside, it is possible demand will surge in 2021 given both regular demand plus catch-up from 2020. Practitioners may also work longer hours and raise prices to accommodate this demand. Covid-related costs, including vaccines and chronic symptoms of the virus, will raise expenditure. There could also be higher health care costs linked to other conditions not being diagnosed or treated timeously. On the downside, the supply of medical services is quite inelastic, which probably caps the scope for catch-up consumption of medical services. Additional Covid-19 waves and lockdown measures could limit medical spending further, as they did in 2020. Finally, the 2020 experience has revealed areas of inefficiency and overutilization - information which may help lower cost pressures in future.

As of January 2021, the SARB disaggregated inflation model forecast has medical insurance inflation at 9% for 2022 (Figure 10), implying the 2021 moderation is purely temporary.



**Figure 10: Medical aid insurance inflation (forecast)**

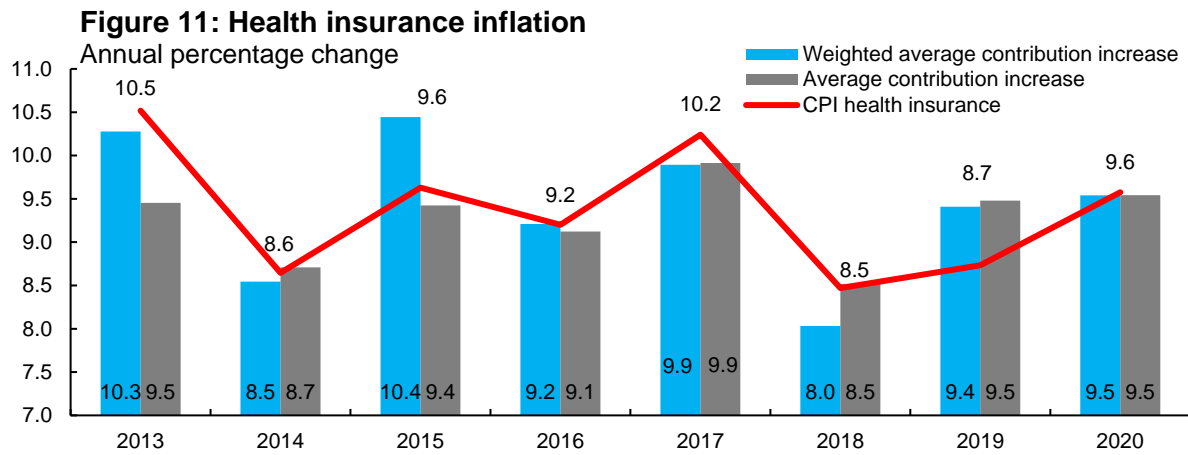


Source: SARB

#### 4. Survey method and insurer dynamics

In surveying medical insurance, Stats SA uses a simple, unweighted average of medical scheme increases. Unweighted indices are standard practice for the CPI, where prices are recorded based on availability of a good or service and not market share: for example, if Coca Cola is most of the soft drink market, but a shop also stocks Pepsi, the CPI data collection team will record the price of each and both will have an equal impact on the price index.

In general, for medical insurance, this methodological choice does not appear to have had meaningful consequences. Based on SARB data collected for historical forecasts, dating back to 2013 and covering 90% of the open-scheme market, weighted and unweighted inflation rates have been comparable over time (Figure 11). It will be a factor in 2021, however, as most schemes are implementing lower increases for the year as a whole, Discovery will leave prices unchanged for the first half of the year and then implement its increase later. This would have created more CPI volatility were the schemes weighted by market share, and it appears to be the reason some analysts have projected much lower medical insurance for the first half of 2021, but Discovery's influence on the CPI will not be magnified by its market share.



Source: Stats SA and SARB

Normally, Stats SA captures medical insurance in two surveys, one in February and one in April. The February survey covers most schemes and the April one applies to government employee schemes, so the medical insurance inflation index moves most markedly in the first quarter and then a further, smaller adjustment follows in the second quarter. The index is then typically flat for the remainder of the year. For 2021, however, Stats SA is aware that at least one increase (Discovery's) will take place later in the year, and will therefore expand its surveys to capture additional increases. This will affect normal seasonal patterns in CPI.

## 5. Conclusion

Health insurance inflation has long been high relative to headline CPI. This trend has been disrupted by COVID-19, which has led – unexpectedly – to reduced utilisation of benefits and therefore lower increases in 2021 medical scheme contributions. This, however, does not correct the structural issues in the medical industry, so medical insurance inflation is likely to return to pre-crisis levels from 2022. Accordingly, we expect 5% health insurance inflation in 2021, down 4.5 percentage points from 2020, with a rebound to 9% inflation in 2022.

## Appendix A: Public health insurance

It is unclear what the impact of introducing public health insurance on inflation will be. Reducing health insurance inflation could be assisted by improved economic performance and better regulation. However, what emerging market experiences have taught us is that poor quality of public healthcare complicates attempts at unifying the medical industry, and many still rely on the private sector – at an additional cost.

Together with SA, India has one of the most privatized healthcare systems in the world, as 65% of total health expenditures are on out-of-pocket payments for higher-priced private care. Public health insurance is of low quality, short on resources, and mostly ineffective.<sup>6</sup> While average inflation is to average 6.7% from 2006-2021,<sup>7</sup> Oxford Economics forecasts revenue from health insurance premiums to reach US\$3.5 billion by 2021 - more than 12% average growth from 2006-2021.

Other emerging market economies have made significant progress in building a public health insurance system, as they strive to reach universal health coverage. Brazil's national health system, *Sistema Único de Saúde* (SUS, established in 1988), has proved largely successful and high-quality, free healthcare is used by about 75% of Brazil's population. China also achieved universal health coverage in 2011, with 95% of the population covered by public health insurance,<sup>8</sup> and rapid economic growth has enabled greater public financing for the health sector.<sup>9</sup> However, the system has become overwhelmed and more use of private health care has resumed.<sup>10</sup>

Ultimately, private financing of healthcare – through out-of-pocket payments and supplemental private insurance – in Brazil, China, India, Russia and South Africa still contributed to 54%, 44%, 69%, 40% and 52% of total health spending in 2014, respectively. This makes the immediate effect of public health schemes on inflation in emerging countries generally difficult to distinguish - the continued demand for private health services suggests introduction of public programs had a negligible impact on market power.<sup>11</sup>

SA is still in the process of introducing its public health insurance scheme, the NHI. The aim is to design a health financing system to pool funds for the provision of personal health services to all South Africans, irrespective of socio-economic status. Supposedly, transforming the current two-tiered health system into a unified health system will lower the cost of private healthcare. However, as we have learned from international experience, the introduction of public health insurance does not necessarily lower individual healthcare

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<sup>6</sup> Gupta, I. 2020, "India," International Health Care System Profiles, The Commonwealth Fund, 2020. (Link)

<sup>7</sup> IMF Data Mapper 2020 (own calculation).

<sup>8</sup> Yu 2015, "Universal health insurance coverage for 1.3 billion people: What accounts for China's success? Health Policy 119 (2015) 1145–1152. (Link)

<sup>9</sup> Xu et al. 2019, "Global Spending on Health: A World in Transition," WHO, p.30

<sup>10</sup> Romaniuk, P., Poznańska, A., Brukało, K., & Holecki, T. (2020). Health System Outcomes in BRICS Countries and Their Association with the Economic Context. *Frontiers in public health*, 8, 80. (Link)

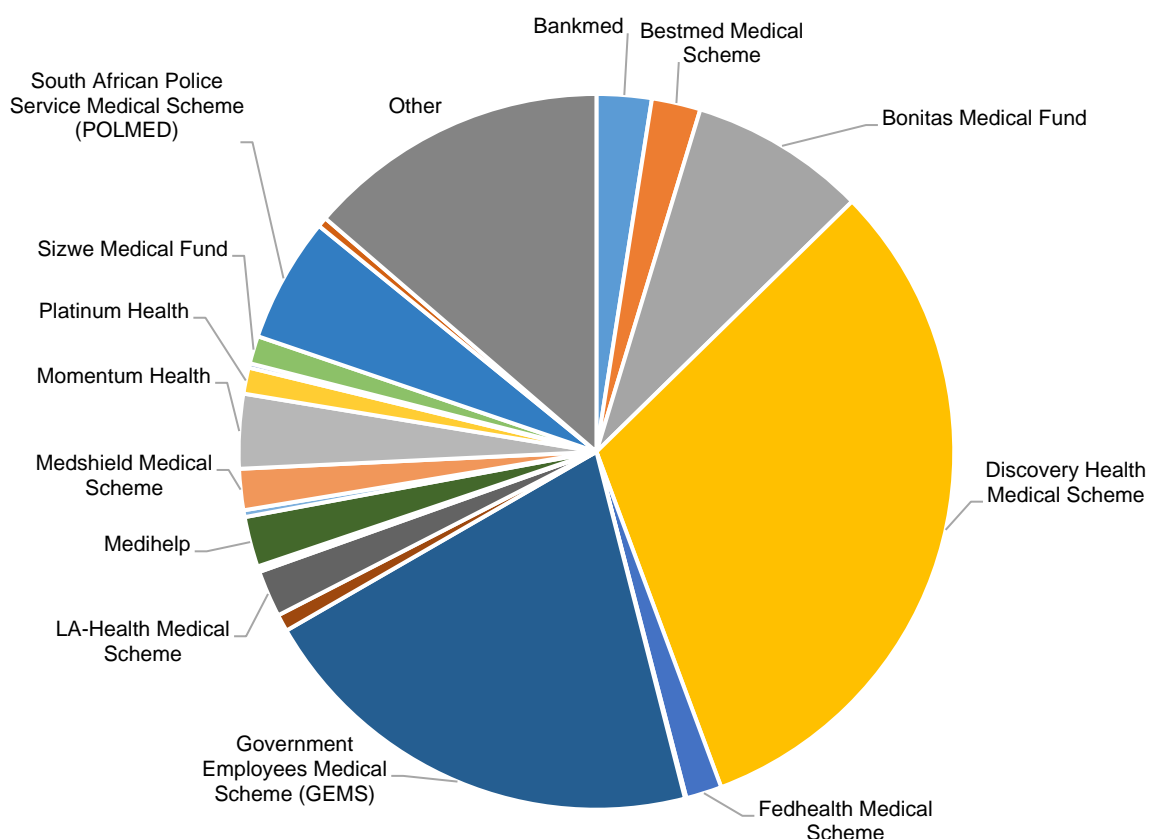
<sup>11</sup> In the US, the introduction of Medicare/Medicaid (public health insurance) in 1965 led to an increase in relative health care prices in the short term, but prices moderated in the long term due to capacity adjustments, consistent with an 8.1% increase in total US health spending from 1965-72.<sup>11</sup> Obamacare, enacted in 2010, may have managed to imprint permanently lower inflation.

costs, especially when resources are still constrained and private services remain superior. From a CPI perspective, this would just shift weight from insurance to medical service costs (out-of-pocket spending).

Under the NHI, the current role of insurers will be restricted to only providing cover for health services not covered by the fund (i.e. complementary services, cosmetic, and other non-essential surgeries). The NHI would largely be funded by general taxes. Additional sources of funds would come from contributions made by individuals earning above a given amount and their employers. The NHI Bill of 2018 sets out three phases for implementation, with the final phase being complete by 2026. However, this will likely be delayed. Arguably, COVID-19 highlighted the need for a unified healthcare system,<sup>12</sup> but growth constraints leave no scope for increased spending. In fact, currently budgeted spending will need to be sharply reduced.

Given SA's high youth unemployment, the NHI could improve access by making private healthcare accessible to more of the population. This is important but needs to be assessed against funding and quality issues. Also, if the employed (healthy) youth can afford to give up health cover for other priorities, this may not be addressing the plight of the unemployed youth.

**Figure 12: Medical aid scheme market share, 2018**

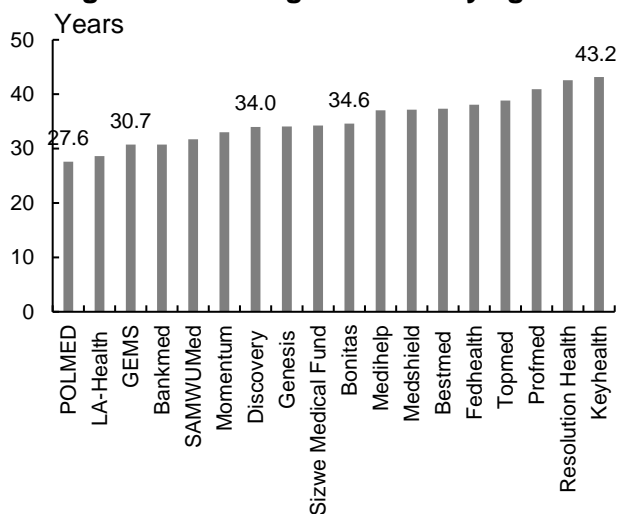


Source: Council for medical schemes

<sup>12</sup> Given how beds had to be pooled across private and public hospitals to meet demand.

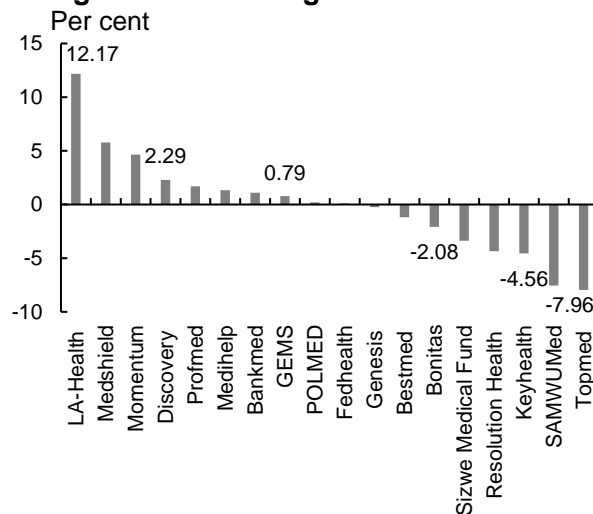
## Appendix B: Descriptive charts and tables

**Figure 13: Average beneficiary age**



Source: Council for Medical Schemes

**Figure 14: Annual growth in members**



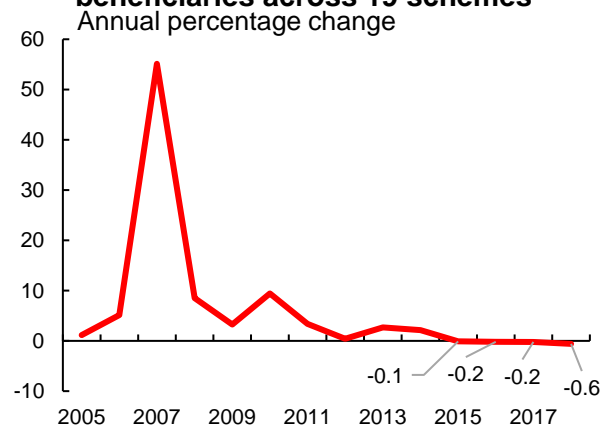
Source: Council for Medical Schemes

**Table 1: Medical cost inflation (2020 projections)<sup>13</sup>**

	North America	Asia-Pacific (APAC)	Europe	Latin America and Caribbean excl. Venezuela	Middle East and Africa	South Africa
Regional Average Gross Medical Trend Rate (nominal)	6.4%	8.7%	5.7%	13.1%	12.2%	10%
Annual general inflation rate (YTD Haver estimates in brackets)	2.6% (1.0%)	2.8% (3.4%)	2.1% (0.9%)	5.6% (3.2%)	5.6% (7.6%)	5.4% (3.4%)

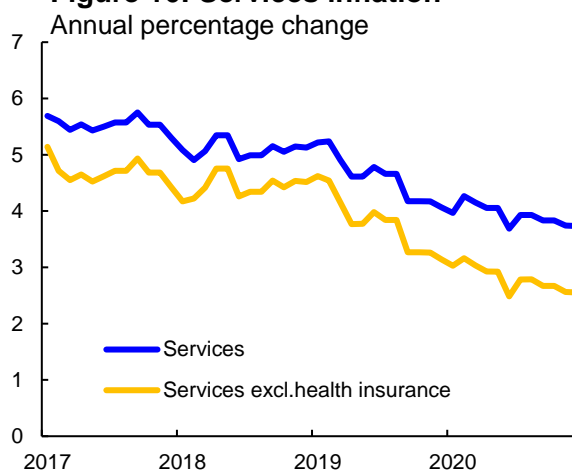
Source: AON 2020 and Haver Analytics

**Figure 15: Average growth in beneficiaries across 19 schemes**



Source: Council for Medical Schemes

**Figure 16: Services inflation**

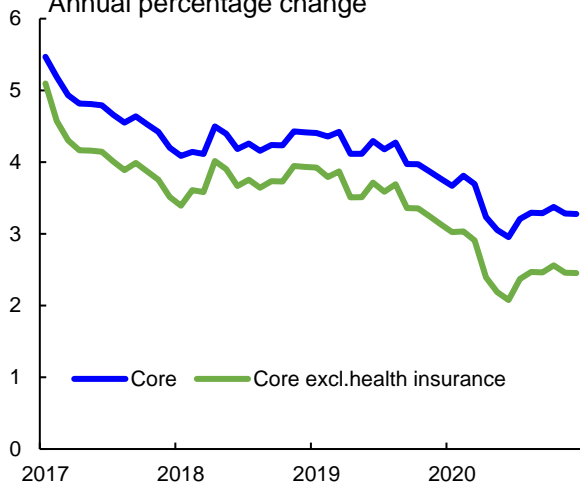


Source: Stats SA and SARB

<sup>13</sup> The medical trend rate is the expected nominal percentage change in the cost of health care prior to any cost-containment measure undertaken by plan sponsors. Inflation rates are as per the IMF WEO April 2019 estimates.

**Figure 17: Core inflation**

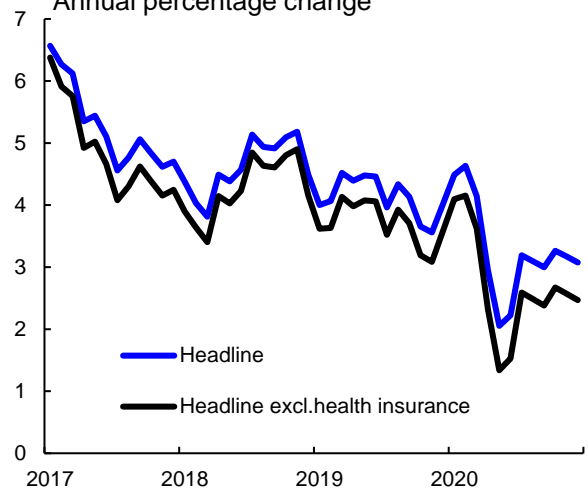
Annual percentage change



Source: Stats SA and SARB

**Figure 18: Headline inflation**

Annual percentage change



Source: Stats SA and SARB