ABSA

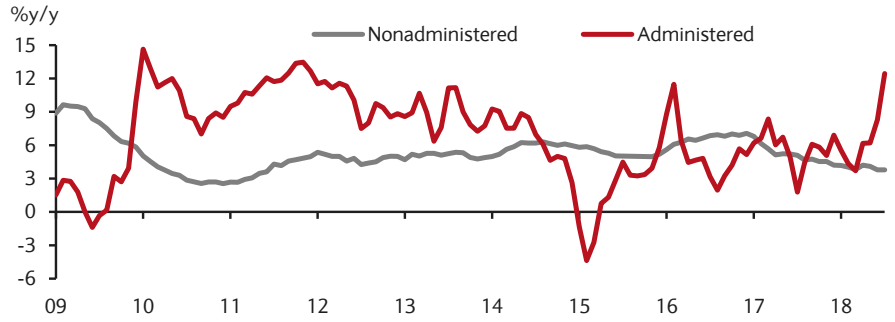
Economic Research
6 September 2018

South Africa inflation

Some sticky and tricky CPI components

- Inflation is rising, driven by various cost-push factors, despite the absence of demand-pull drivers. In particular, goods price inflation, which is generally more volatile than services price inflation, is rising, due to higher petrol prices and the end of food price disinflation. Core goods inflation remains subdued, however. Services inflation, which accounts for more than half the CPI basket, remains elevated, but there are signs that some services prices may be moderating.
- Another analytically useful disaggregation of the CPI is administered prices (12.4% y/y in July) versus the prices set by competitive market forces (3.8% y/y). Administered prices (especially petrol, electricity and water) are likely to be a source of continued upward pressure on overall CPI. Eskom has prepared a draft tariff application for next year, asking for 15%, and some phased application of its ZAR33bn Regulatory Clearing Account awards come on top of this.
- Foodstuffs are a large part of the CPI (17.2%) and are especially subject to swings and roundabouts due to supply shocks, with the resulting price action tending to drive much of the movement in overall CPI. Food prices have been disinflating over the past 18 months, but there are signs of another El Niño event brewing in the Pacific, which generates upside risks for food prices into 2019.
- Owners' equivalent rent is the single biggest component of the CPI (13.3% of the basket). Along with a 3.5% weighting for actual rentals there are signs that the housing contribution to inflation may be slowing in line with decreasing house price inflation. The next quarterly survey of these costs in September will be key.

FIGURE 1
Administered price inflation has risen sharply



Source: StatsSA, Absa Research

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Absa's macroeconomic model for inflation works principally at the level of core CPI; some analysis of the disaggregated CPI components is useful for calibrating the views

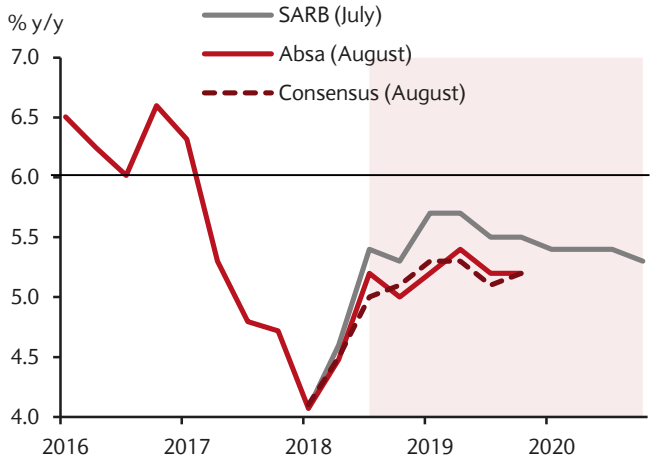
Despite stagnant domestic demand, South African inflationary momentum is exceptionally persistent, with strong cost-push drivers and long run exchange rate depreciation that pushes up the costs of imported goods such as petroleum fuels. Inflation expectations and wage settlements are also proving quite sticky despite the recent slump in demand. Absa's CPI forecasts are based on a demand-side macroeconomic econometric model applied to a fairly limited disaggregation of consumer price data with the bulk of the model working simply on "core" CPI, with separate specifications and/or assumptions for the "noncore" food, petrol and electricity components of the CPI. Hence, the key behavioural equation in Absa's inflation forecasting effort is core CPI, modelled as a function of three underlying drivers: unit labour cost (via the wage bill), imported inflation and the exchange rate (via the import deflator) and the level of capacity utilisation. In this analysis we provide detailed analysis of some of the more disaggregated components of the CPI.

Both Absa and SARB forecast CPI inflation will rise but not breach target

CPI inflation is clearly now on a rising trend. Headline CPI inflation printed at 5.1% y/y in July, up from a seven-year low of 3.8% y/y in February. And it is likely to rise further still over the medium term. Both Absa and SARB expect headline CPI inflation to rise. Absa currently forecasts headline CPI will rise to 5.2% by Q4 19, while the SARB forecasts it will rise to 5.5%, according to the July MPC forecast. The latest Reuters consensus for August also anticipates a rise, to 5.2% by end-2019, in line with Absa's forecast (Figure 2). As with all forecasts and consensus readings the projections are subject to revisions and updates. The next SARB forecast update will come with the September MPC on 20 September. Although Absa frequently calibrates its near-term projections if there are surprises in the monthly releases, the next substantive forecast update will come as part of the Quarterly Perspectives Q4 18 model run to be published sometime in early October. The 12% depreciation of the rand against the USD since the July MPC might serve to lift both the Absa and the SARB MPC inflation forecasts somewhat, although at the time of the last MPC we were surprised by the scale of the upward revisions to the SARB's forecasts. For example, the SARB was projecting CPI inflation will average 5.4% in Q3 18, but with a 5.1% print already "booked" for July, it is hard to see how its forecast will materialize. Much of the increase in headline CPI over recent quarters has been driven by so called core goods and services (essentially headline CPI excluding food, petrol and electricity), which account for nearly three quarters (74.4%) of official CPI (Figure 3). Absa's econometric model does not factor in separate dynamics for individual components in this core segment of the CPI, hence the need for some more detailed qualitative consideration here.

FIGURE 2

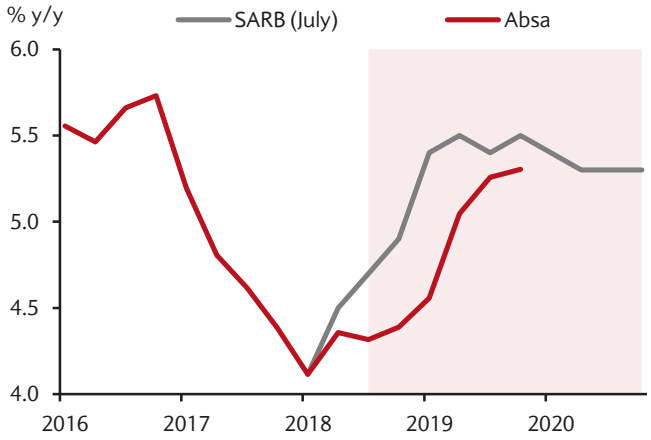
Absa and consensus CPI forecasts sit below July MPC forecast



Source: StatsSA, SARB, Absa Research

FIGURE 3

Core CPI inflation is showing strong upward momentum



Source: StatsSA, SARB, Absa Research

Services account for more than half the CPI basket; goods price inflation is considerably more volatile

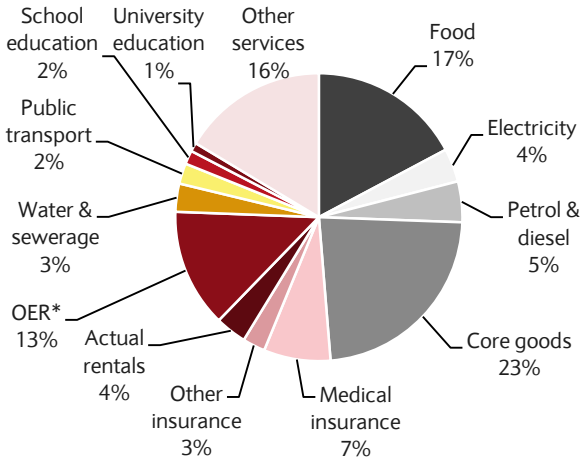
The basket of goods and services that comprises the consumer price inflation index is based on households' expenditure patterns and weights are calculated using data from Statistics South Africa's Living Conditions Survey, 2014/2015 and supplementary sources, and are price updated to December 2016 from Statistics South Africa's 2016 Income and Expenditure Survey. South Africa's 2016 CPI basket contains 412 products and services that are grouped according to the UN standard, the Classification of Individual Consumption by Purpose (COICOP) for goods and services. According to the COICOP classification scheme, a little over the basket – 51.3% to be precise – comprises services, ranging widely from medical insurance to educational fees to domestic workers' wages to the costs of accommodation (Figure 4). One of the most notable features of South Africa's inflation dynamic is the sticky persistence of services price inflation, both market determined and administered, compared with goods price inflation (Figure 5). Since 2009 consumer goods inflation has averaged 5.1% but with a standard deviation of 1.6 percentage points, while consumer services inflation has averaged 5.0% with a standard deviation of 0.8 percentage points. Indeed, services price inflation has tracked at or above the midpoint of the SARB's 3-6% target range since mid-2006.

Administered prices in general and regulated prices in particular have spiked and seem set to be an ongoing source of upward pressure in the CPI dynamic

Another analytically useful way to parse the CPI basket for insights is to divide it into administered versus non-administered prices. According to StatsSA, an administered price is defined as "the price of a product which is set consciously by an individual producer or group of producers and/or any price which can be determined or influenced by government, either directly or through a government agency/institution without reference to market forces. Products and services included are assessment rates, water, electricity, paraffin, petrol, diesel, public transport – trains, motor licences and registration, telephone fees, cell calls, television licence, school fees, university/technicons/colleges and university boarding fees" (Figure 6). Some administered prices are actually regulated, in the sense that they are monitored and controlled by government policy. Price-regulated goods and services include water, electricity, paraffin, petrol, diesel, telephone fees and cell calls. Administered prices account for 16.2% of the CPI basket, of which 11.8 percentage points is actually regulated directly by government. Notably, regulated price inflation hit 13.9% y/y in July, after a 4.1% m/m jump, taking the overall rate of inflation for administered prices up to 12.4% y/y (Figure 1, cover page). With no competitive market forces to bear down on administered prices, it is clear these remain a source of upside inflation risk.

FIGURE 4

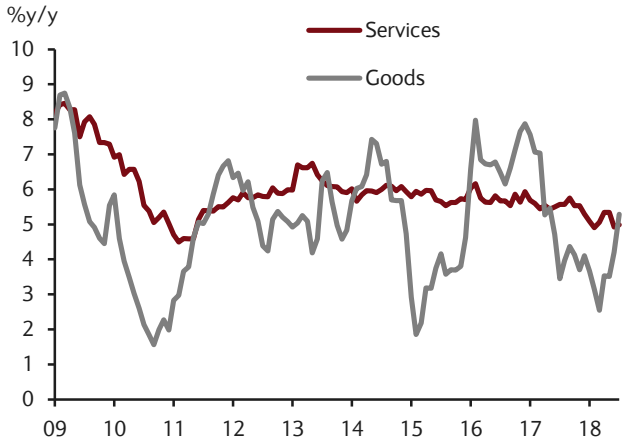
Services account for more than half the CPI basket



* Owners' equivalent rent. Source: StatsSA, Absa Research

FIGURE 5

Goods prices are much more volatile than services prices



Source: StatsSA, Absa Research

FIGURE 6

Some 16.2% of the CPI basket comprises goods and services with administered prices

Group	Products and services	Reasoning for inclusion	Weight (%)
Housing	Total		6.17
	Assessment rates	A tax set by local government	1.30
	Water*	Set by local government within Department of Water & Sanitation	1.08
	Electricity*	Set by local government and regulated by the NERSA	3.75
	Paraffin*	Regulated by Dept of Energy	0.05
Transport	Total		5.06
	Petrol*	Regulated by Dept of Energy	3.30
	Diesel*	Regulated by Dept of Energy	1.28
	Public transport – trains	Set by government agency	0.13
	Motor licenses and registration	Set by provincial government	0.13
	Driving licenses	Set by provincial government	0.13
	Toll fees	SANRAL	0.09
Communication	Total		2.31
	Telephone fees*	Regulated by ICASA**	0.09
	Cell calls*	Regulated ICASA	2.22
Recreation and culture	Total		0.04
	Television license	Set by government agency	0.04
Education	Total		2.53
	School fees	Set by government agencies (schools)	1.54
	Universities/ Technicons/colleges	Set by government agencies (universities, technicons)	0.99

* Regulated ** The Independent Communication Authority of SA (Icasa) Source: StatsSA, Absa Research

Foodstuffs in particular are subject to supply shocks and exchange rate influences

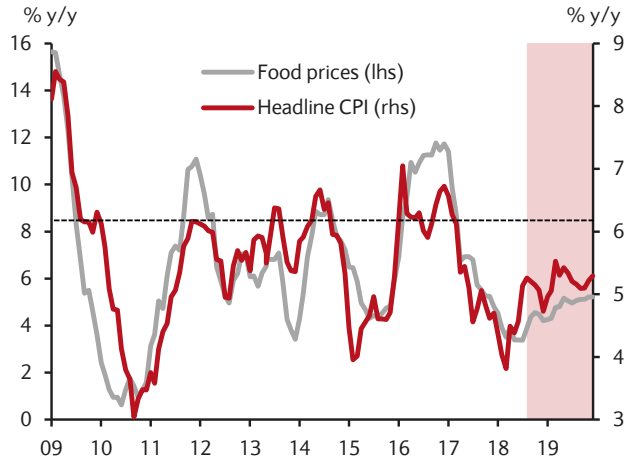
One important reason for greater volatility of goods price inflation in South Africa compared with services price inflation is that supply shocks tend to manifest most strongly amongst handful of goods categories with a particularly large weighting in the CPI, such as foodstuffs, which account for 17.2% of the CPI basket. Indeed, a clear correlation between food price inflation and overall CPI inflation can be observed, which illustrates just how key food prices are to determining the overall pattern of CPI (Figure 6).

An El Niño event seems to be brewing; although it is still early days, this would seem to raise upside risks for food prices

Unfortunately, food prices, although they have been well behaved recently, would appear subject to some upside risk towards the end of 2018 and into 2019, given signs of a brewing El Niño event, which tends to be associated with drought in South Africa and hence reduced summer crop harvests, and hence higher maize and wheat prices, which are up 14% and 7%, respectively, since the middle of the year (Figure 7). On 31 August the South Africa Weather Service (SAWS) issued a statement saying that "the likelihood of an El Niño event occurring is increasing as we move towards spring" but "at this stage the impact of the expected El Niño is unclear", but early indications are that "below-normal rainfall is expected for most of the summer rainfall areas during late spring", while the climate models suggest below-normal rainfall in the southern coastal areas. We caution that the exact impact of any El Niño event is inevitably quite uncertain, but the risks are clear. However, plentiful local stockpiles should somewhat mitigate the upside pressure on food prices.

FIGURE 7

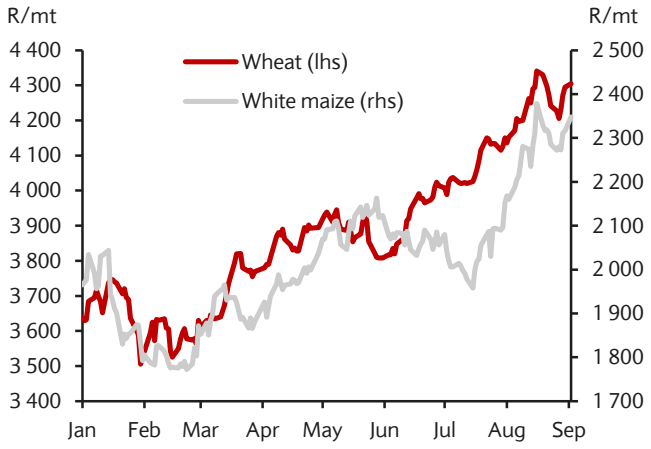
Food price volatility is a key driver over overall CPI patterns



Source: StatsSA, Absa Research

FIGURE 8

Grain prices have already climbed a lot so far this year



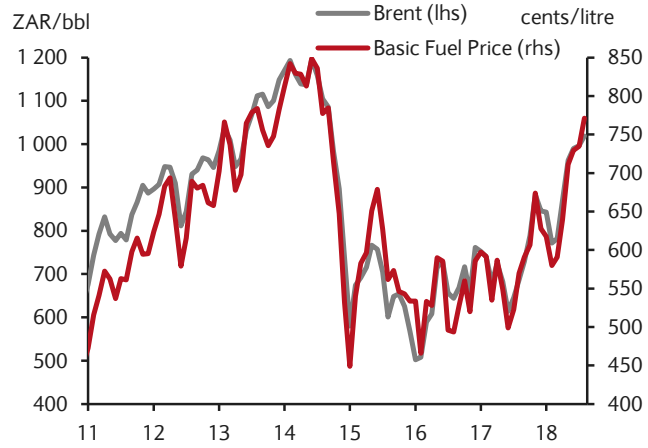
Source: SAFEX, Absa Research

Fuel price inflation depends critically on crude oil prices and the exchange rate – neither of which the government has any control over

Fuel prices (4.6% of the CPI basket) are also subject to big swings and roundabouts, driven by global supply shocks and exchange rate movements. The Department of Energy adjusts fuel prices monthly according to a detailed formula that aims to fully recoup the costs of importing, refining and distributing fuel, with the Basic Fuel Price thus tightly linked to the rand price of crude oil. However, the government has no control over oil prices or the exchange rate. Petrol price inflation in July hit over 25% y/y (the fastest pace of change since 2011) due to a combination of big tax increases in the 2018 Budget, major exchange rate depreciation, and a surge in crude oil prices. According to the adjustment formula another big increase of around 25c/l was due at the beginning of September, but the government intervened to limit the increase to just 5c/l, at a cost to the Central Energy Fund's slate levy account of about ZAR500mn. Unfortunately, since then market prices have moved further away from the government on this issue. Since the government has no fiscal room to cut taxes on fuel (or otherwise subsidise fuel prices) in the long run it will soon have to revert back to full cost recovery. Absa forecasts fuel price inflation will decelerate, but this is based on the assumption that the depreciation of the rand against the dollar slows and that crude oil prices moderate somewhat in line with the consensus forecast.

FIGURE 9

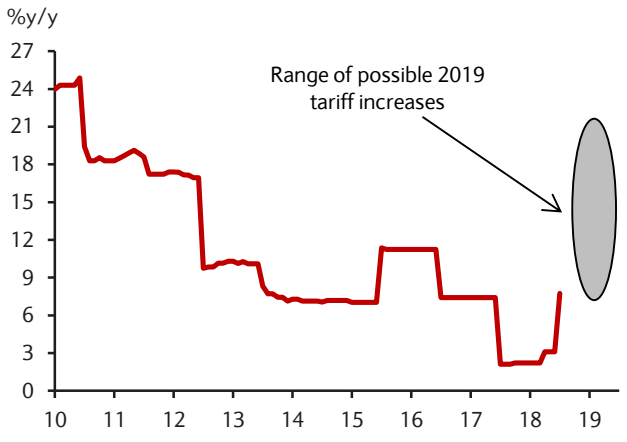
No room for maneuver on the Basic Fuel Price



Source: Central Energy Fund, Absa Research

FIGURE 10

Electricity price hikes next year could be substantial



Source: StatsSA, Absa Research

Eskom is gearing up to apply for a 15% standard tariff hike next year even before the Regulatory Clearing Account award is applied…

Another important nondurable good excluded from core CPI but key for the overall inflation outlook is electricity. And whereas we might expect petrol price inflation to decelerate, albeit from extremely high levels currently, we think the prices for electricity, which account for 3.8% of the CPI basket, look set for a potential sharp acceleration. This year, the National Energy Regulator of South Africa (NERSA) allowed the state-owned power utility a standard tariff increase of only 5.23%, but since municipal distributors tend to add their own small margins, the actual electricity price increase that manifested itself in the consumer price survey in July was 6.7%. For next year, we have assumed in our forecasts a standard tariff uplift of 8% as our base case scenario. (This is also the SARB's assumption, according to the latest MPC forecast in July.) However, last week Moneyweb reported that Eskom has prepared an application to NERSA asking for a 15% per annum increase for each of the next three years. While this application is still in draft form, typically NERSA would announce a final decision on its MYPD review around December.

…raising the risks of double digit electricity price hikes in 2019

Even if NERSA takes a very parsimonious approach to Eskom's application, the risks to next year's tariff award would seem to lie to the upside of our 8% assumption given NERSA's decision in mid June to allow Eskom to adjust tariffs upwards to recoup ZAR32.7bn of the ZAR66.6bn it initially applied for under the Regulatory Clearing Account (RCA) mechanism. The exact phasing of any RCA-related tariff adjustments is unclear, but NERSA is expected to make an announcement on this in September. If phased over three years, these RCA-related tariff adjustments might amount to a roughly 5% per annum increase in allowable revenue. We think in general there is more uncertainty than usual about electricity tariff prices, but that the risks are strongly tilted to the upside from our 8% assumption and could even deliver a double digit increase next year, even if Eskom's standard tariff application is knocked back sharply by NERSA.

As important inputs to production, big price hikes for petrol and electricity are likely to have knock on inflationary effects

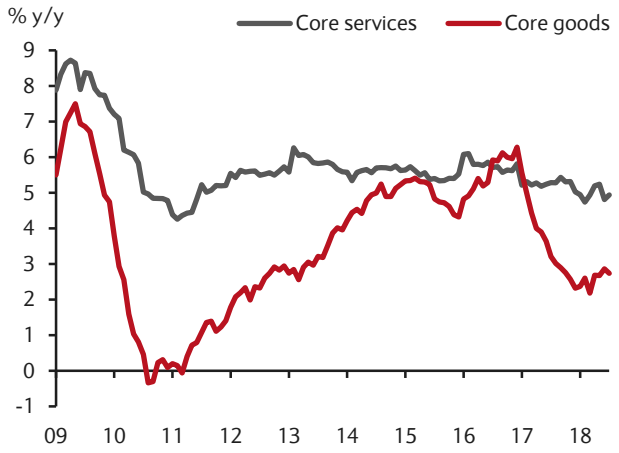
It is important to note as well that both fuel and electricity prices, as key inputs to many production and distribution processes, also have potential knock-on effects on consumer price inflation. However, a price hike for either of these goods has a disinflationary influence as well, since both goods are probably quite price inelastic, given that they are essential, with no close substitutes. Thus, a price hike for either of these two goods is an inflationary cost-push impulse via firms' cost structures but is also negative for consumers' real incomes and hence demand. How these two opposing influences net out at the level of the overall CPI would be very difficult to disentangle, and depends on the strength of producer pricing power from one month to the next.

The optionality of many big ticket durable consumer good purchases means that the inflation rate for durable goods is very responsive to the consumer demand fundamentals

Even if the noncore goods (foodstuffs, fuel and electricity) are stripped out of the goods basket, goods prices are still more volatile than services prices. This likely reflects to some extent the reality that goods are more actively traded across borders than services and so the swings and roundabouts of South Africa's exchange rate act more strongly on goods prices than on services prices, although admittedly there are services (such as transportation) that depend heavily on imported input costs (such as petrol) so the prices of services are not completely immune to the exchange rate. StatsSA does not publish a core goods series but it is easy enough to calculate one. We estimate core goods inflation in July at 2.7% y/y, versus 5.0% for services. It also reflects the fact that many of the goods left in the CPI are durables, defined by COICOP to be:

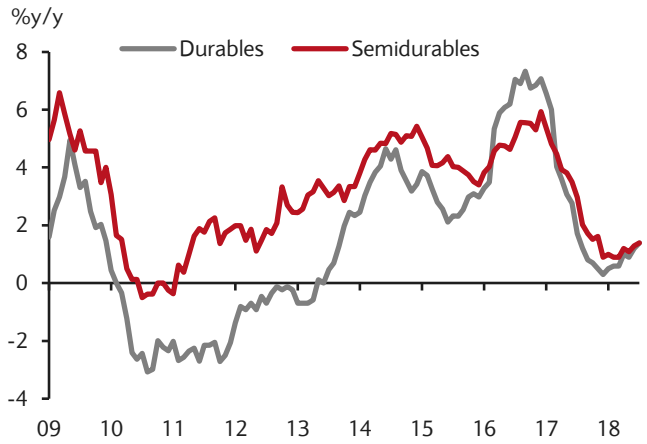
- furniture and furnishings;
- major household appliances whether or not electrical;
- major tools and equipment;
- vehicles;
- telephone and fax equipment;

FIGURE 11
"Core" goods remain more volatile than services



Source: StatsSA, Absa Research

FIGURE 12
Weak demand keeps lid on durables inflation



Source: StatsSA, Absa Research

- information processing equipment;
- musical instruments;
- equipment for the reception, recording and reproduction of sound and pictures; and
- jewellery.

The key thing about durables is that to a very significant degree they are big ticket items for which purchases by consumers are often optional, contingent on households' disposable income and consumer confidence. Thus, demand conditions matter a lot for the pricing power of producers and distributors of durables and semidurables. Despite a sharply weaker exchange rate, for example, the July inflation rate for durables and semidurables was a mere 1.4% y/y (Figure 12).

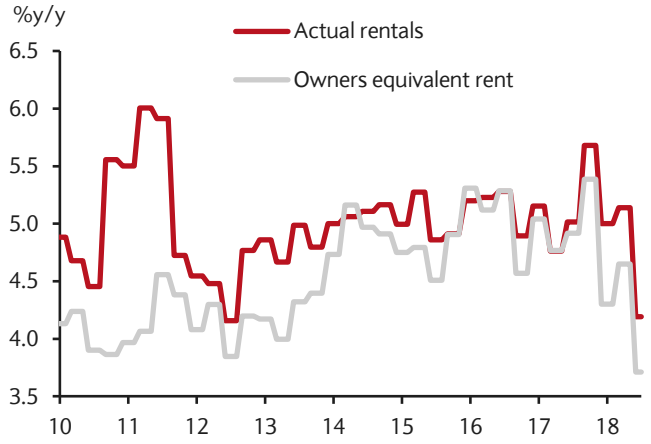
Owner-occupied housing costs represent 13.3% of the CPI basket; these are priced by rental equivalence

As previously mentioned, services prices have demonstrated a persistently elevated inflation rate. Two of the most weighty services in the CPI basket have to do with housing costs, which in aggregate account for nearly a quarter (24.6%) of the CPI basket. In particular, owner-occupier housing costs represent the largest single component of the CPI, at 13.3% of the basket, while actual rentals amount to 3.5% of the basket. Owner-occupied housing costs are derived as an imputed rental equivalent for consumers who actually own their own homes, termed Owners' Equivalent Rent or OER.

Deceleration in house price gains nationally should lead to further moderation of housing price costs

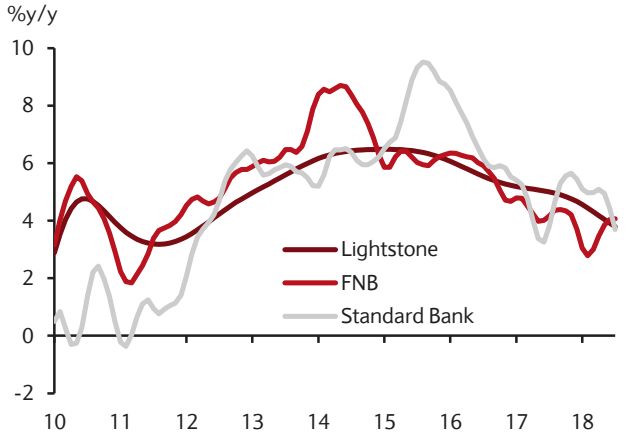
Notably, housing costs, both actual rentals and OER, are surveyed only quarterly, in March, June, September and December. In the last survey for June both components recorded a sharp deceleration, with actual rental inflation dropping from 5.1% y/y to 4.2% y/y, while the OER dropped from 4.6% y/y to 3.7% y/y. The relationship between residential rentals and actual house prices is complex, but over the long run changes in house prices should probably exhibit a positive correlation with changes in rental prices since housing rental and housing ownership are to some extent substitutable for each other. Absa is currently reworking its methodology for calculating a house price index, but all the other available data on house prices in South Africa currently show a deceleration in house price gains, at least in terms of a national average. One can plausibly expect the slowdown in the residential housing market to further contribute to moderation of the rental and OER inflation when the next set of survey data are published in October (for the month of September).

FIGURE 13
Housing costs in the CPI have slowed…



Source: StatsSA, Absa Research

FIGURE 14
…as have house price increases



Source: Lightstone, FNB, Standard Bank, Absa Research

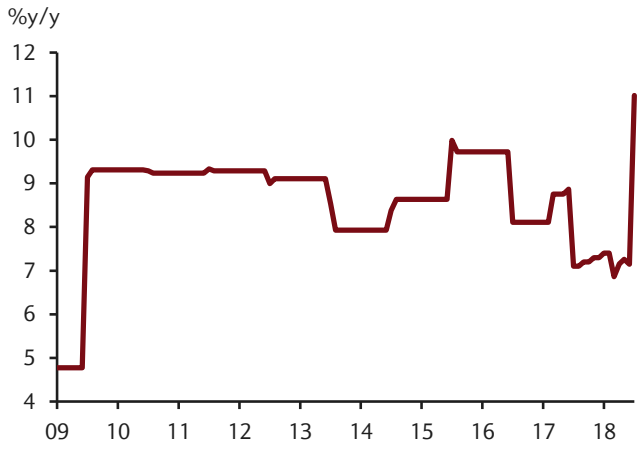
Water and associated municipal services associated with housing have jumped, especially with the introduction of graduated tariffs for water usage in drought stricken areas.

Unfortunately, even if the direct costs of housing are slowing, two important ancillary housing-related costs, both of which are administered rather than market determined, are potentially ripe for sharp upward inflation over the coming year. We have already discussed electricity prices, which look at the risk of a double digit increase in 2019. Another set of administered prices that are grouped with housing costs are water, sewerage, refuse removal, and municipal rates, which collectively account for 3.2% of the CPI basket (with water supply about a third of this). Like electricity, these administered goods are surveyed biannually in July and August, but unlikely electricity are classified under the COICOP scheme as services. Water and services prices jumped sharply in the July survey, posting an inflation rate of 11.7% y/y (Figure 13) as many municipalities, especially in drought stricken areas such as Cape Town, began charging higher prices for above-target usage (i.e graduated tariffs) over the past year. For municipally provided goods and services that have usage-graduated tariff structures, StatsSA's price survey attempts to measure the change in the average price charged. Given the need to fund the rehabilitation of municipal water reticulation networks and sewerage treatment, as well as the likely increasing need to use prices to ration South Africa's scarce water supplies, it seems likely that this component of the CPI will remain under upward pressure going forward.

Education and public transport fees may show upward momentum; as a big component of CPI medical aid premia, which have shown inflation consistently above target, also bear watching

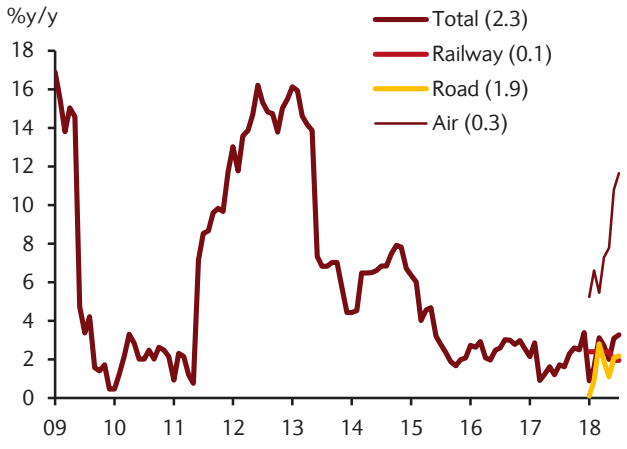
Three other important services, the price of which bear close watching in the CPI dynamics going forward, are public transport, educational costs, and medical aid fees. Public transport is 2.3% of the CPI basket in total, the bulk of which is road transport (1.9%). Road transport and train transport are only surveyed quarterly, in March, June, September and December. So far the data show only a modest total increase in public transport inflation of 3.3% y/y as of July, but the costs of road-based public transport such as taxis are likely to rise in positive correlation with the price of petrol. As for education, there appears to be some confusion about the impact of the decision to make university free for students from less well off households. But as with fee-free students from needy families at primary and secondary schools, this would not affect the price of university education. In fact, it could even indirectly motivate universities to increase their fees in an effort to recoup costs from wealthier students, although the political and social opprobrium from doing so would likely be high.

FIGURE 15
Water and municipal services inflation has spiked



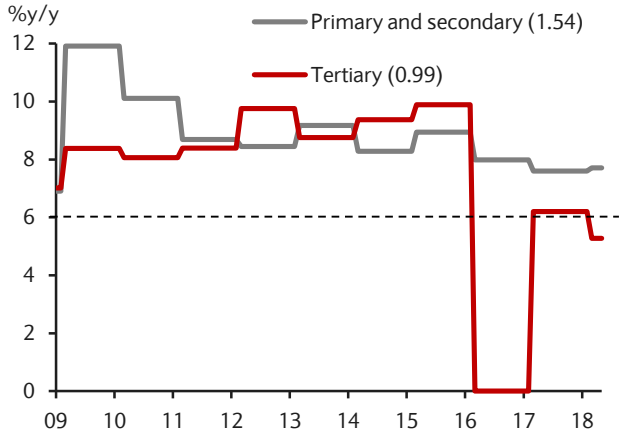
Source: StatsSA, Absa Research

FIGURE 16
Public transport inflation will likely rise with petrol prices



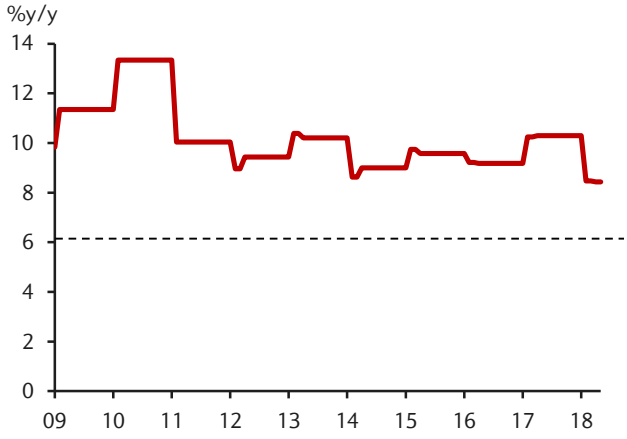
Source: StatsSA, Absa Research

FIGURE 17
Education: pressure on university fees



Source: StatsSA, Absa Research

FIGURE 18
Medical aid premia inflation: persistently above 6%



Source: StatsSA, Absa Research

All in all, as the rand weakens, CPI mounts and fears of SARB rate hikes grow, it will be important to have a detailed handle on the dynamics driving individual components of the CPI. Unfortunately, while core goods inflation remains weak and housing costs are also set for deceleration, various other parts of the CPI look pregnant with upside risks. That said, we remind readers that the SARB MPC has frequently stated it will not react to the first round impact of any supply shock but instead remains principally concerned with ensuring these do not spark a broader second round of inflation momentum. We remain of the view that the SARB is unlikely to hike rates any time soon, given the manifest weakness of domestic demand – as evidenced by the extremely weak inflation rate for goods and services whose price is market-determined rather than administered, and the Q2 18 contraction in household consumption expenditure.

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We, Miyelani Maluleke and Peter Worthington, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

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