PROPERTY BAROMETER

FNB House Price Index

House price and market volume growth have begun to slow again after an early-2018 "mini-surge"

3 September 2018

August 2018 saw the FNB House Price Index growing by a slower 3.5%, year-on-year, down from the previous month's revised 3.9%. This translates into ongoing decline in prices in "real" terms (adjusted for CPI inflation), a trend that has been ongoing since early-2016.

PROPERTY MARKET ANALYTICS

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1. OVERVIEW

1-1.5% ECONOMIC GROWTH EXPECTED TO SUSTAIN REAL HOUSE PRICE "CORRECTION"

On a year-on-year basis, the FNB House Price Index's growth rate has recently begun to slow once more. From a revised 3.9% rate for July, growth slowed to 3.5% in August 2018. This is the 2nd consecutive month of slowing year-on-year growth with the latest revised figures, off a 2018 high point of 4.1% reached in June.

While price growth is still mildly positive in nominal terms, it remains negative in "real" terms, when adjusting for CPI (Consumer Price Index) inflation. This means that the gradual housing market price "correction" continues in the form of a slow real price decline that has been in play since early-2016. As at July 2018 (August CPI not yet available) real house prices declined year-on-year by -1.2%, with CPI inflation at 5.1% in that month and house price growth at 3.9%.

The most recent slowing in year-on-year house price growth has been expected in recent months due to a prior commencement of slowdown in the month-on-month rate. To better evaluate recent house price growth momentum, we examine month-on-month house price growth on a seasonally-adjusted basis. Month-on-month growth direction leads year-on-year growth direction, and here we have seen 4 consecutive months of month-on-month house price growth slowdown. From a high of 0.67% month-on-month growth in April, this rate has slowed to 0.08% as at August 2018

With 8 months' worth of house price data available for 2018, it appears highly likely that 2018 as a whole will turn out to be a slower average house price growth year than 2017, with 2017 having recorded 4.2% average price growth, and 2018 a year-to-date 3.5% average.

This puts real average house price decline at -1% for the year to date, and suggests that 2018 will be the 3rd consecutive year of real house price decline. This recent period of real price decline is termed our "2nd Post-Bubble House Price Correction Phase", the 1st Correction Phase having been around 2008/9.

The multi-year trend of low-but-positive nominal house price growth, but which remains below CPI (Consumer Price Index) inflation translating into a decline in "real" terms, suggests that the sluggish rates of economic growth of recent years are insufficient to create enough housing demand so as to keep the housing market in balance.

This 2016 to 2018 period has been one with little in the way of interest rate stimulus (2 x 25 basis point cuts only, and some additional help from the "pricing squeeze" on home loans in recent times), and GDP growth not exceeding 1.5% year-on-year at any stage (1.3% average for 2017).

Looking ahead, Firstrand's annual GDP growth forecasts fluctuate not far from 1.5% per annum, for the period up to 2020. In addition, the forecast is for interest rates to begin rising mildly as from 2019, given mildly higher CPI inflation projections.

Based on the performance of house prices in recent years, we believe that, should such a weak growth and rising interest rate environment materialize, this would be insufficient to significantly alter the housing market's performance from the current low positive single digit house price growth environment.

Therefore, we forecast average house price growth to average in a range between 3% and 4% for our forecast period to 2020, which would imply a negative rate in real terms through the forecast period.

The housing market would thus remain somewhat off its equilibrium ("equilibrium" referring to where housing demand and supply are in balance) through the forecast period, which is seen in the projected average time of homes on the market prior to sale moving in a 16-18 week range, whereas we believe around 12 weeks to be more-or-less where market equilibrium is.

To achieve positive house price growth in "real" terms, we believe that economic growth would need to be nearer to 3%, which appears unlikely in the foreseeable future. On the other hand, we believe that a full blown recession (GDP decline) would cause not only "real" house price decline but nominal (actual) house price decline too.

2. FNB HOUSE PRICE PERFORMANCE

HOUSE PRICE DECLINE IN REAL TERMS CONTINUES, AND YEAR-ON-YEAR NOMINAL GROWTH SLOWS

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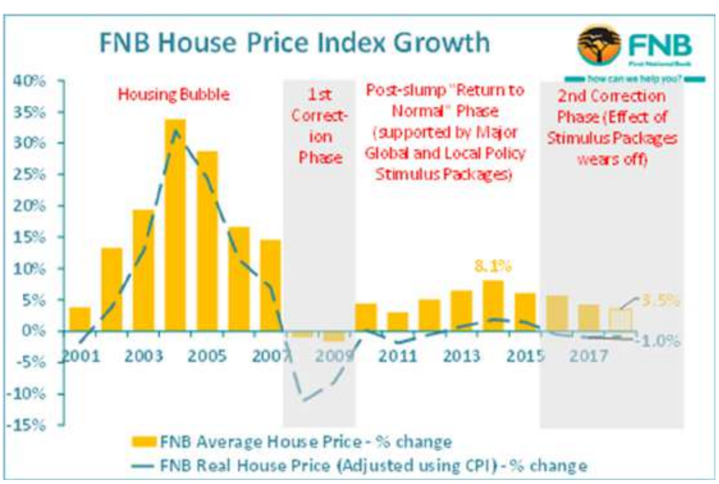
MONTH-ON-MONTH HOUSE PRICE GROWTH CONTINUES TO LOSE STEAM

The most recent slowing in year-on-year house price growth has been expected in recent months due to a prior commencement of slowdown in the month-on-month rate.

To better evaluate recent house price growth momentum, we examine month-on-month house price growth on a seasonally-adjusted basis. Month-on-month growth direction leads year-on-year growth direction, and here we have seen 4 consecutive months of month-on-month house price growth slowdown. From a high of 0.67% month-on-month growth in April, this rate has slowed to 0.08% as at August 2018

2018 LOOKING LIKELY TO BE THE 4TH CONSECUTIVE YEAR OF HOUSE PRICE GROWTH SLOWDOWN



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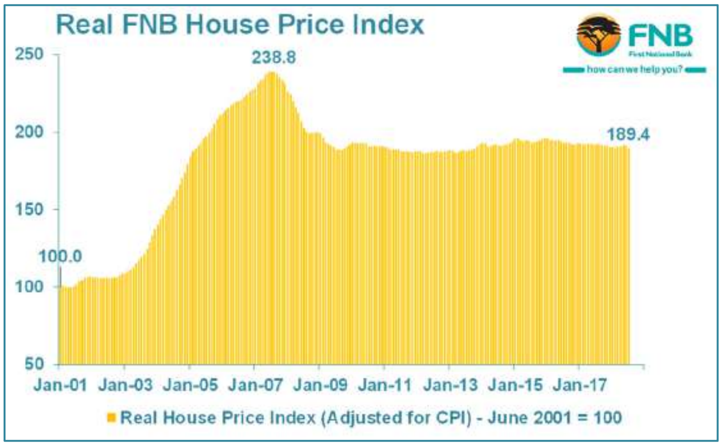
LONGER RUN REAL HOUSE PRICE PERFORMANCE

Examining the longer run performance of the FNB Repeat Sales House Price Index in real terms, we still see it at relatively expensive levels, 89.4% up on the January 2001 "pre-boom" index level. This is despite significant cumulative "post-bubble correction", the "bubble" referring to the pre-2008 housing boom.

As mentioned above, the "post-bubble correction" to date has unfolded in 2 phases. The 1st phase of correction was a sharp decline in real house prices of -21.2% from August 2007's all-time high to September 2009.

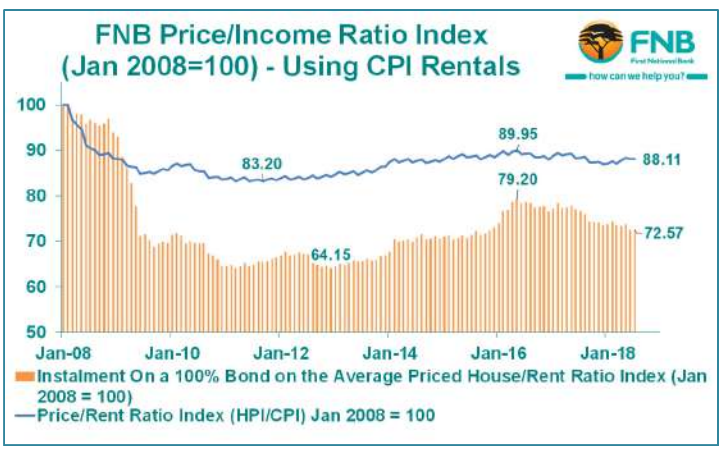


From October 2009 to December 2015, we saw a period of mild cumulative recovery, with cumulative real house price growth of 4.02%. This "mini-recovery" came on the back of massive monetary and fiscal stimulus packages both globally and locally, aimed at ending the 2008/9 recession and Global Financial Crisis. In South Africa, the SARB implemented major interest rate cuts at the time, Prime Rate dropping all the way from 15.5% late in 2008 to 8.5% by mid-2012. The global and local stimulus helped the economy to recover moderately, and a post-recession economic growth peak of 3.3% was reached in 2011.

However, from 2012, the stimulus began to wear off, economic growth began a broad stagnation, and then interest rates started to rise from early-2014 to early-2016.

These events led to the start of the "2nd phase" of the post-bubble correction, with real house prices having to date declined cumulatively by -3.3% since December 2015.

The real house price correction in recent years has been slow going, with CPI inflation also being very low.



The other key "real" house price measure which we watch is our House Price-Residential Rental Ratio Index. This is an important ratio, because if house prices rise too far above rentals, ultimately a relatively cheap rental market would become more attractive relative to home buying, thereby reducing home buyer demand as more households choose the rental option.

Progress in lowering what we believe to still be a relatively high Price-Rent Ratio has also been slow going, with the rental market also mired in mediocrity in a weak economy. Nevertheless, there has been some decline in our Price-Rent Ratio Index, to the tune of -2% since a post-recession high reached in May 2016, and the index is 11.89% down on January 2008.

Low interest rates since 2009 have kept home buying relatively attractive compared to the rental option, however. This is reflected in our Average Instalment Value on a New Loan on the Average Priced House/Average Rental Ratio Index, which is a more significant -27.43 down in January 2008, due to lower interest rates today compared to back then.

ASKING PRICES BECOME LESS REALISTIC DESPITE WEAK HOUSE PRICE GROWTH

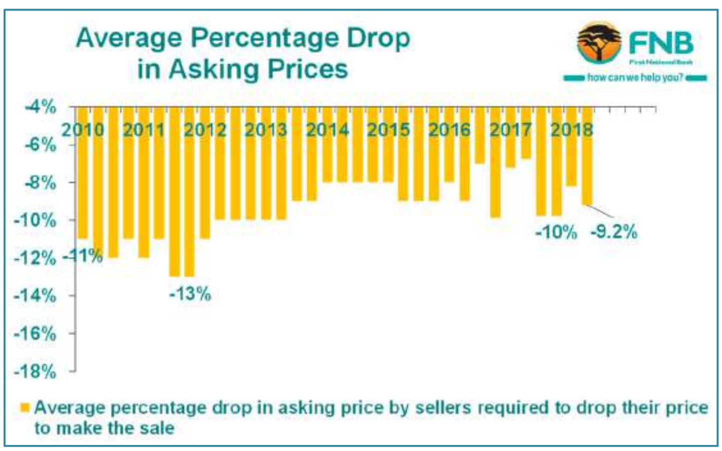
A higher percentage of sellers is required to drop their asking price to make the sale too

A question from the FNB Estate Agent Survey relates to asking price realism. We ask the agents to estimate the percentage of sellers ultimately being required to drop their asking price to make the sale.

While the majority of sellers normally tend to start high and allow themselves to be bargained down as a strategy, there is nevertheless a cyclical element to this behavior.

The 2nd quarter 2018 survey showed a rise in this estimated percentage of sellers having to drop their asking price, from 91% in the previous quarter to 96%.

We caution that from quarter to quarter the data can be volatile. But a 2nd quarter increase in the percentage of sellers dropping asking price is not the first, and seen as part of a multi-year rise from 78%, at a stage of 2014, to 96% by the most recent survey, the evidence suggests that asking prices on average have become less realistic in recent years.

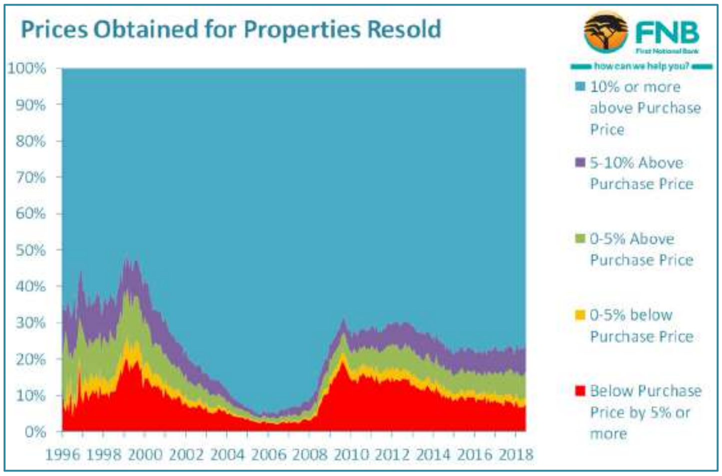


We also see a larger magnitude of estimated average asking price drop recently

In the 2nd quarter survey, the estimated magnitude of decline, for those being required to drop their asking price, became slightly larger. From -8.2% in the 1st quarter of 2018, the estimated percentage drop in asking price to make the sale increased to -9.2% in the 2nd quarter.

Therefore, in the 2nd quarter of 2018, our key survey responses related to "price realism" reflect an apparent quarterly deterioration in the balance between demand and supply of homes.

THE INCIDENCE OF PROPERTY RESALES PRICE DEFLATION NOT NOTICEABLY RISING

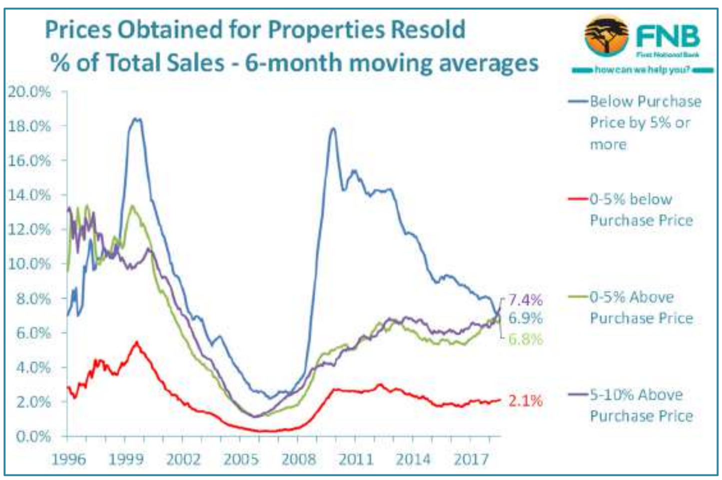


Examining house price performance in a different way, we utilize deeds data for property transactions by individuals ("natural persons"), which we believe to be residential-dominated.

We then look to see what portion of properties are resold at prices below their previous purchase price versus those sold at a capital gain.

As yet, despite very low average house price growth, we have not seen any noticeable increase in the percentage of properties resold at prices lower than previous purchase price.

9.6% of total properties resold in July were estimated to be at lower prices than previous purchase price, and indeed this is higher than the 8.7% of May and 8.9% of June. So it is possible that the incidence of repeat sales deflation is starting to rise, but give the customary data volatility, these 2 months of increase are insufficient to draw conclusions on.



Rather, we prefer to use a 6-month moving average to smooth the data, such is the monthly volatility.

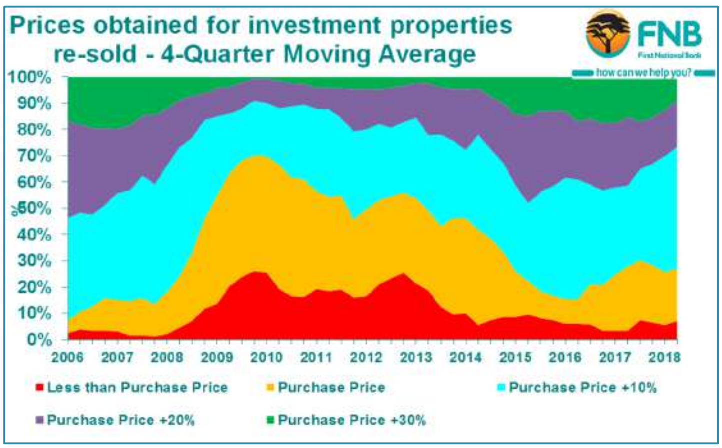
On this basis, we continue to see a declining trend in resales price deflation, from 9.2% of total homes sold for the 6 months to June 2018 to 9.0% for the 6 months to July. This continues a multi-year broad downward trend from a 20.6% high for the 6 months to November 2009, that highly stressed period following the end of the pre-2008 housing bubble.

Of the homes deflating, 2.1% were resold at 0-5% below previous purchase price, while 6.9% were resold at greater than 5% below previous purchase price. The ongoing broad decline in resales price deflation, we believe, is an overhang from pre-2008 days when many were buying homes at the height of the house price bubble, and were always going to battle to achieve a capital gain in the post-bubble era. As that "Bubble Era" batch of homes is gradually sold off, it becomes smaller in size and influences the overall resales price deflation estimate, whereas homes bought in the past 10 years since the bubble ended were generally bought at far more realistic prices, and are thus arguably less likely to deflate.

However, while we are seeing the resales price deflation fade, we are also seeing the high rates of capital gain fade a little.

From 78.2% of total for the 6 months to June 2016, the percentage of resales where over 110% of the original purchase price is achieved has declined mildly to 77% by the 6 months to July 2018.

WHAT THE ESTATE AGENTS SAY ABOUT INVESTMENT PROPERTY RESALES



In the FNB Estate Agent Survey, we ask a question regarding the capital gain on investment homes being put back on the market for sale.

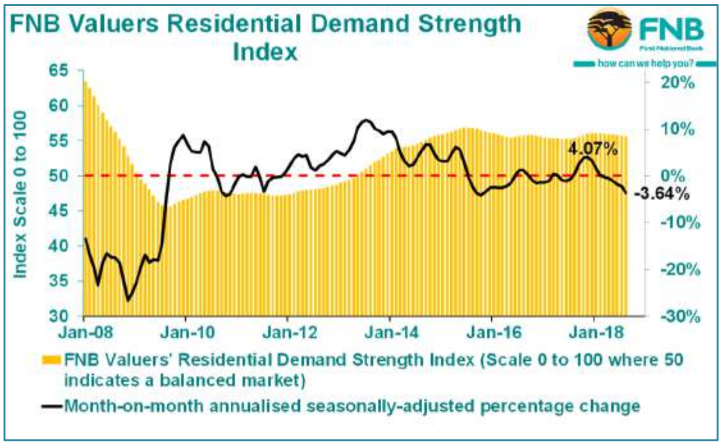
Here, the perception is also that resale price deflation remains limited. Using a 4-quarter average for smoothing, for the 4 quarters up to the 2nd quarter of 2018, the estimated percentage of homes being resold at lower than original purchase price was 7.25% of total resales. This is mildly higher than the 3.25% of a year before. So, unlike our deeds data extract to date mentioned above, agents do perceive some mildly higher resales price deflation of late, albeit still moderate compared to the extreme 25.5% for the 4 quarters of 2012.

They also see capital gains diminishing on the rest of resales. The estimated percentage of resold homes achieving around 30% + capital gain on the original purchase price was 9.25% for the 4 quarters to the 2nd quarter of 2018. This is noticeably down on the 17% for the 4 quarters of 2016. Those achieving around 20%+ capital gains has also declined markedly from 30.25% of total sales for the 2nd quarter of 2015 to 17.5% by the 2nd quarter of 2018.

Therefore, while the incidence of resales price deflation seems moderate, resales price growth achieved appears to be tapering gradually as the market slows.

3. HOUSING DEMAND, SUPPLY AND MARKET BALANCE

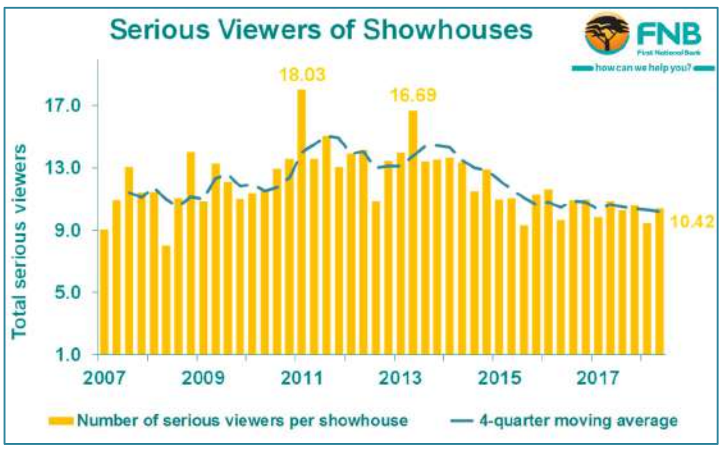
RESIDENTIAL DEMAND RATING IN DECLINE



FNB's valuers, in the FNB Valuer's Residential Demand Strength Index, once again pointed to a decline in demand strength in August 2018.

On a month-on-month seasonally-adjusted annualized basis, the index declined by -3.64%, following on a -2.25% decline in July, the 6th consecutive month of decline after a short positive increase late in the summer of 2017/18.

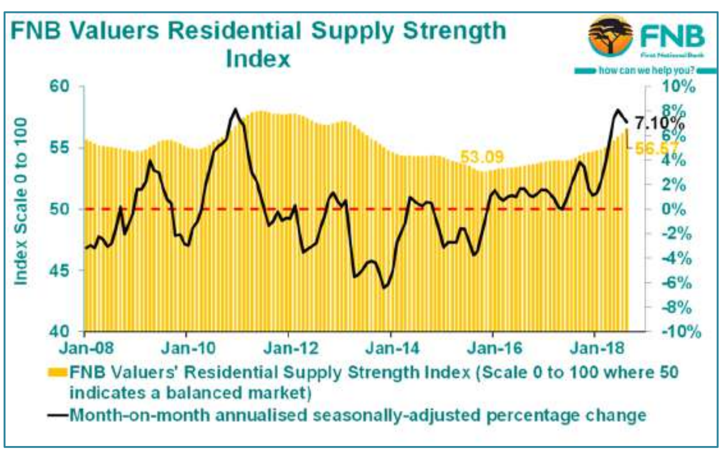
A look at the broader trend shows that the Demand Strength Index reached a multi-year high in July 2015 and has broadly declined since (bar the brief summer 2017/18 increase).



The FNB Estate Agent Survey has an implicit indicator of demand, i.e. the estimated number of serious viewers per showhouse prior to purchase, which broadly fits in with what the FNB valuers perceive, although this estimate did begin to decline a little earlier than the Valuers Demand Strength Index.

From a 16.69 high point reached in the 2nd quarter of 2013, the estimated number of serious viewers per show house declined noticeably from 2014 onward to reach 10.42 viewers by the 2nd quarter of 2018.

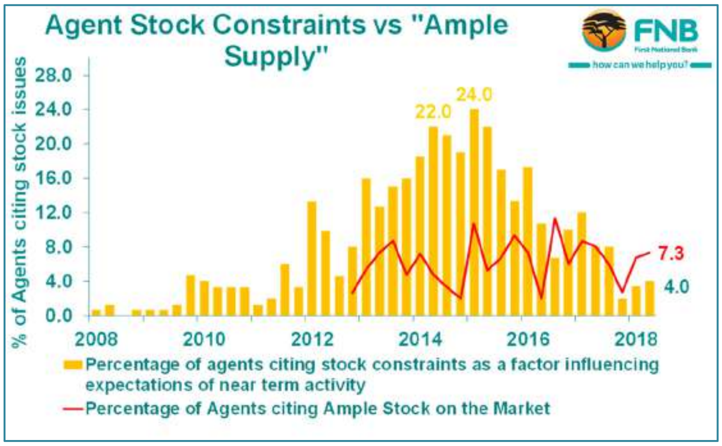
RESIDENTIAL SUPPLY ON THE INCREASE



FNB's valuers, in the FNB Valuer's Residential Supply Strength Index, pointed to ongoing increase in supply of stock on the market.

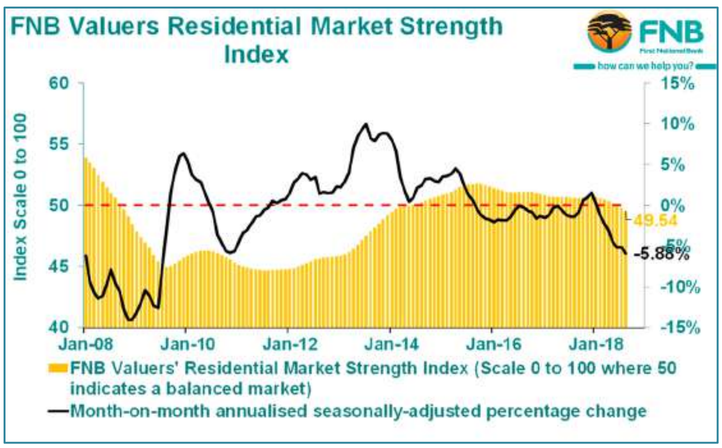
On a month-on-month seasonally-adjusted annualized basis, the Supply Strength Index rose by 7.1%, its 15th consecutive month of increase.

A broad multi-year rising trend in the Supply Rating began in late-2015.



In the FNB Estate Agent Survey, the percentage of agents experiencing stock shortages as a factor in their lives also declined steadily from a multi-year high of 24.9% in the 1st quarter of 2015 to get to low single digit percentages by late-2017, the 2nd quarter 2018 percentage being a lowly 4%.

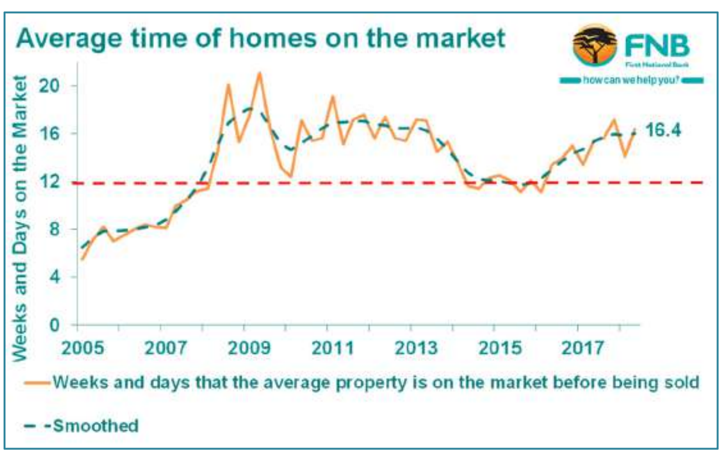
MARKET BALANCE DETERIORATES



The net result of a rising Supply Strength Index and a declining Demand Strength Index is further decline in the FNB Valuers' Market Strength Index in August 2018, to the tune of -5.88% on a month-on-month seasonally-adjusted annualized basis.

This is a downward acceleration on the previous month's -5.16% decline, and the 7th consecutive month of decline after a summer 2017/18 brief period of increase.

Looking at the broader multi-year trend, however, there has been a broad decline in FNB Valuers' Market Strength Index all the way from a decade high point reached in September 2015, as the housing market gradually succumbs to a stagnating economy where GDP (Gross Domestic Product) growth has averageD rates not far above 1% in recent years.

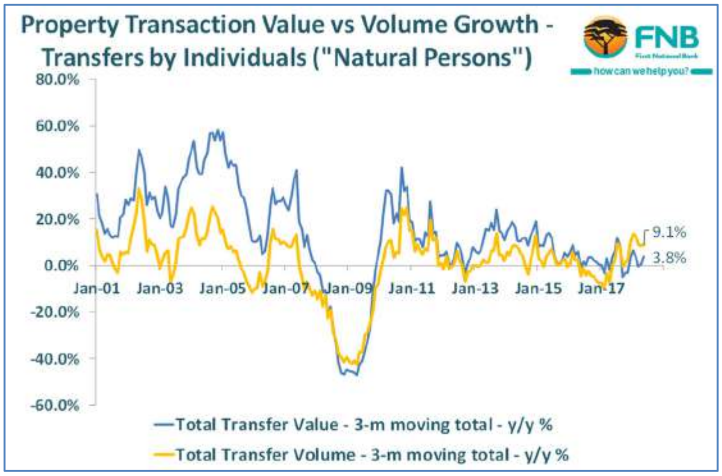


The FNB Valuers' perception of market strength ties in very much with the agents surveyed in the FNB Estate Agent Survey. Here, we survey market strength by surveying the average estimated time of homes on the market prior to sale.

From early-2016 onward, this estimate has climbed noticeably from 11 week and 1 day in the 1st quarter of that year to 16 weeks and 4 days by the 2nd quarter of 2018.

Therefore, both estate agents and the FNB valuer panel has perceived a weakening in market balance through the period 2016 to 2018-to-date.

4. MARKET ACTIVITY

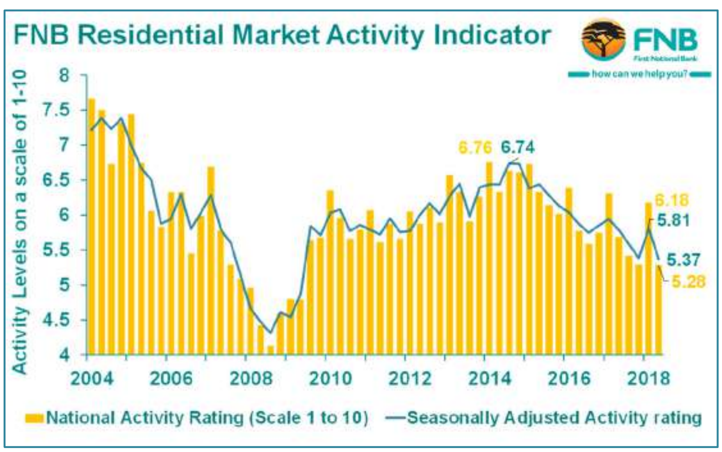


The market experienced some mild positive growth in the 1st half of 2018. As at the 3 months to May 2018, year-on-year growth in property transfers by individuals ("natural persons") measured 9.1%.

This is significantly up on the -10.1% year-on-year decline in transaction volumes as at the 3 months to February 2017, growth having accelerated through last year as economic growth strengthened from quarter to quarter through 2017, the economic growth strengthening assisting with that brief period of summer 2017/18 market strengthening as indicated by the valuers' in the FNB Demand and Market Strength Indices.

However, the high point in transaction volume growth was reached in the 3 months to January 2018, where it recorded 13.5%, so already it appears that transaction volumes growth has slowed since the beginning of the year. This appears to tie in with the Valuers Demand Strength Index, which went back into decline early in 2018 after a prior brief period of growth, while economic growth in the 1st quarter also slowed markedly after having accelerated in each consecutive quarter through 2017.

The value of transactions grew by a lesser 3.8% year-on-year for the 3 months to May, indicating a further shift in the relative strength of the market towards the lower priced end with its lower average bond values.

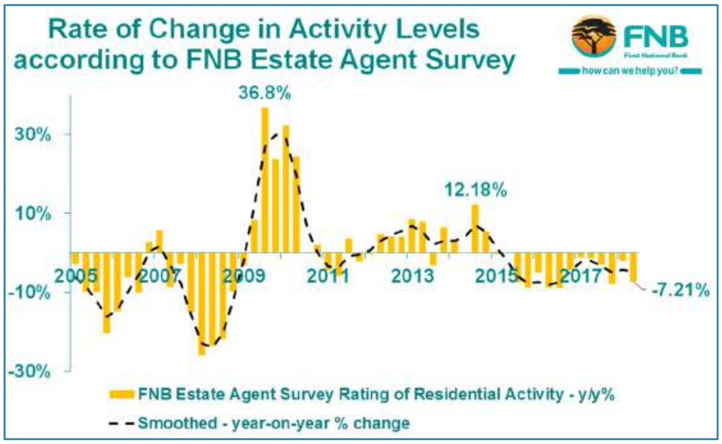


The short "mini-surge" in transaction volumes late in 2017/early-2018 ties in with the direction in the year-on-year percentage change in the FNB Residential Activity Rating.

In the FNB Estate Agent Survey, our sample of agents questioned is asked to rate Activity Levels in their areas on a scale of 1 to 10, with 10 being a very strong level of activity and 1 being very weak.

This Indicator has been in broad decline since around 2015.

However, examining the rate of change in the Activity rating, we saw mild quarterly seasonally-adjusted increases in the summer 2016/18 quarters, which translated into a noticeably diminished year-on-year rate of decline early last year. In other words, activity levels were temporarily improved quarter on quarter (seasaonally adjusted) early last year, according to agents, which translated into a brief improvement in transactions volumes, with a lag, late in 2017 and early this year.



In more recent quarters, however, more significant rates of decline in the Activity rating have pointed to renewed slowdown in volumes, or at least volume growth, coming, and slowing growth in deeds data has already begun to take place

5. MARKET MOOD

Currently, there can be little talk of significant speculative activity, over-exuberant home buying or "1st time buyer panic".

OUR FNB ALTERNATIVE REAL PRIME RATE ESTIMATE REMAINS IN HEALTHY POSITIVE TERRITORY

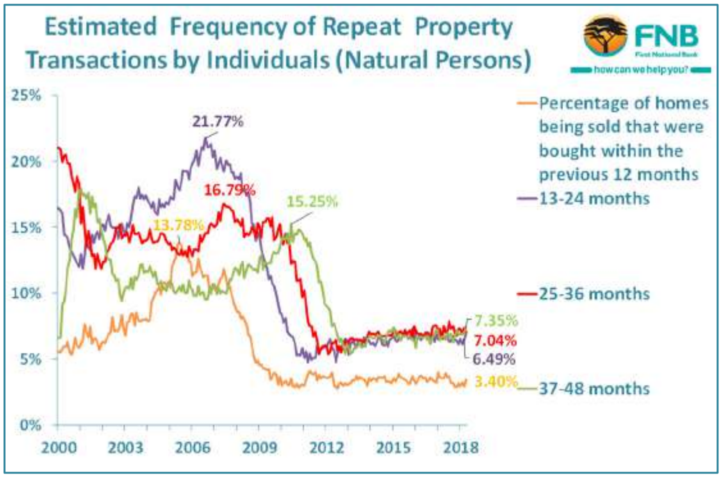
Interest rate policy run currently by the SARB promotes healthy attitudes in the housing market. By "healthy attitudes" we refer to behavior that more-or-less reflects the economic fundamentals, which happen to be weak at present.

To monitor the potential for relative cheap money to be used for quick short term capital gain, we have calculated what we call our Alternative Real Prime Rate, where we use house price growth (instead of the more common CPI inflation approach) to convert Prime Rate to a "Real Prime" Rate.

When house price growth far exceeds the borrowing rate percentage, a speculators paradise can develop, as was the case around 2004/5, where the Alternative Real Prime Rate was sharply negative. At that stage it made absolute sense for speculators to buy homes using cheap credit, and resell them quickly to achieve huge capital gains.

In August 2018, the Alternative Real Prime Rate was a strongly positive 6.54%, suggesting a speculator-unfriendly environment.

HIGH FREQUENCY BUYING AND RE-SELLING REMAINS LOW



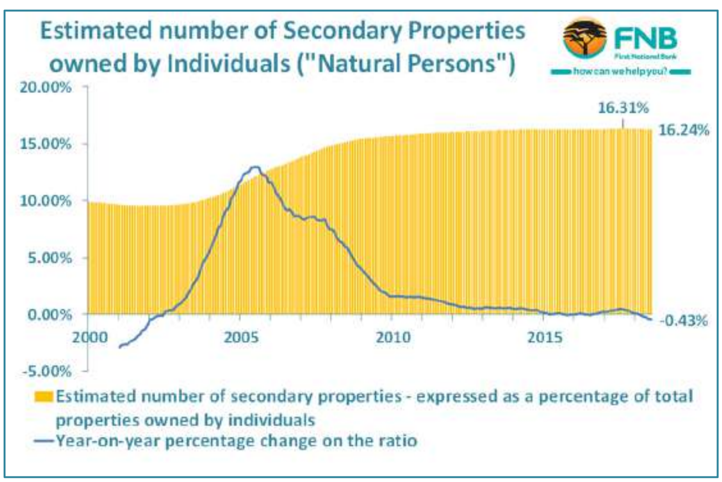
How do we search for signs of speculative or over-exuberant behaviour. Our key indicator in this regard is how quickly properties are being resold after purchase. To this end, we use deeds data to estimate the level of properties (bought and sold by individuals/natural persons) being resold within 12 months of being purchased. We found as at April that only 3.4% of all homes being sold were in the "0 to 12 months since purchase" range. This is very low compared to the 13.78% high reached in June 2005 at around that time where Alternative Real Prime Rate was sharply negative.

Similarly, homes resold within the "13 to 24 months since purchase" range amounted to a lowly 6.49% of total sales, compared to a far higher 21.77% reached in August 2006, also at a time when the housing bubble was still in full swing and Alternative Real Prime Rate was still negative.

In short, homes are on average being resold relatively infrequently of late, which is not only a sign of low levels of speculative activity, but also probably of low levels of exuberance which can lead to frequent selling in order to change of upgrade homes merely for the sake of it.

SECONDARY HOME OWNERSHIP MAY BE WEAKENING

Our next monthly indicator which we monitor for signs of market "exuberance" is our deeds data-driven estimate of secondary home ownership. Buy-to-let and holiday home buying, when at extreme high levels, can be a sign of over-exuberance, given its non-essential nature.



The estimated number of secondary properties, expressed as a percentage of total properties owned by individuals, has declined mildly of late. From a multi-year high of 16.31 in August 2017, this level has declined to 16.24% by July 2017.

In year-on-year growth terms, this has slowed into negative territory from March, and recorded a -0.428% year-on-year decline as at July.

This recent decline in our secondary home ownership estimate appears to tie in with the FNB Estate Agent Survey, which shows a recent noticeable decline in estimated secondary home buying as a percentage of total home buying.

According to the survey, from 14.47% of total home buying as at the 1st quarter of 2017, secondary home buying declined to 9.91% of total home buying by the 2nd quarter of 2018.

ASPIRANT 1ST TIME BUYER PANIC PERCEIVED TO BE DECLINING

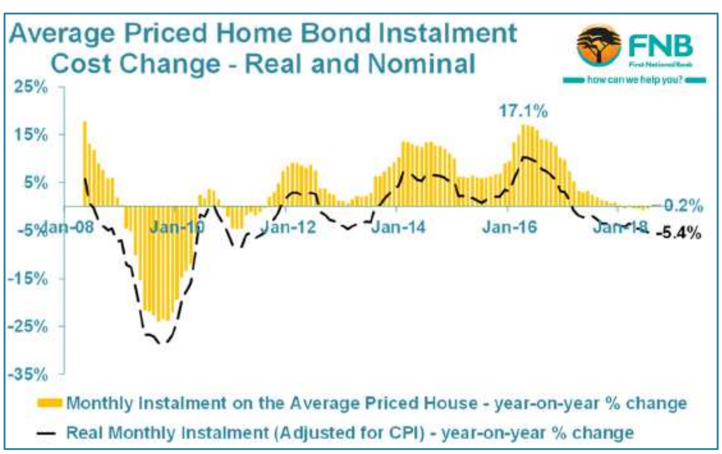
Finally, we attempt to survey the prevalence of aspirant 1st time home buyer panic. There is probably always a certain level of buyer panic, which refers to aspirant buyers fearing that "if I don't buy now prices will become too expensive in future and I'll never be able to afford a home"

While there is probably always a certain level of aspirant buyer panic in the market, our sample of agents surveyed perceives this level of buyer panic amongst 1st time buyers to have diminished from 54% back in mid-2015 to 36.5% by the 2nd quarter of 2018.

Currently, therefore, our set of "market mood"-related indicators suggests that unhealthy speculative activity, over-exuberance and buyer panic are not of major concern at the present time.

6. HOME AFFORDABILITY ON THE MEND

CHANGE IN THE AVERAGE PRICED HOME BOND INSTALMENT



Due to the low rate of house price growth, along with a 25 basis point interest rate cut earlier in 2018, as well as some decline in mortgage lenders' average differential above prime rate on new loans granted, the year-on-year growth rate in the instalment cost of a 100% loan on the average priced house, has risen by a very small 0.2%.

In real terms, adjusting for CPI inflation, this represents a decline in excess of -5%.

In short, in real terms the instalment costs of a new mortgage loan on the average priced house are declining significantly.

The latest house price data thus suggests further improvement in home affordability when the 2nd quarter FNB Home Affordability Ratios are compiled, which would continue a recent improving trend.

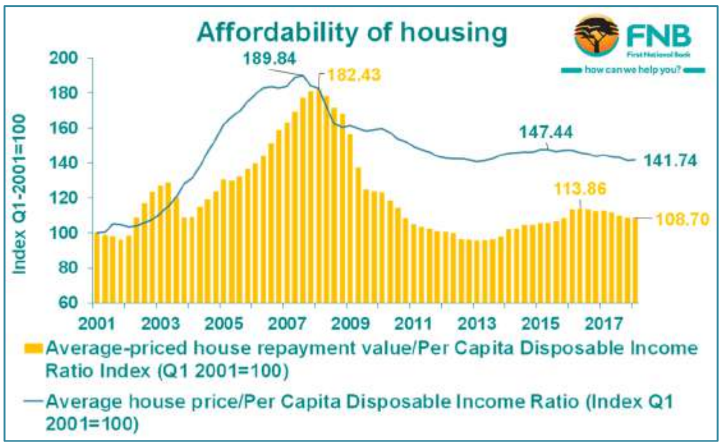
1ST QUARTER FNB HOME AFFORDABILITY RATIOS

The 2 quarterly FNB Housing Affordability Ratios pointed to slight residential affordability deterioration in the 1st quarter of 2018, despite very slow house price growth.

This is reflective of a weak economy translating into weak Per Capita Household Disposable Income growth battling to outpace even modest house price growth.

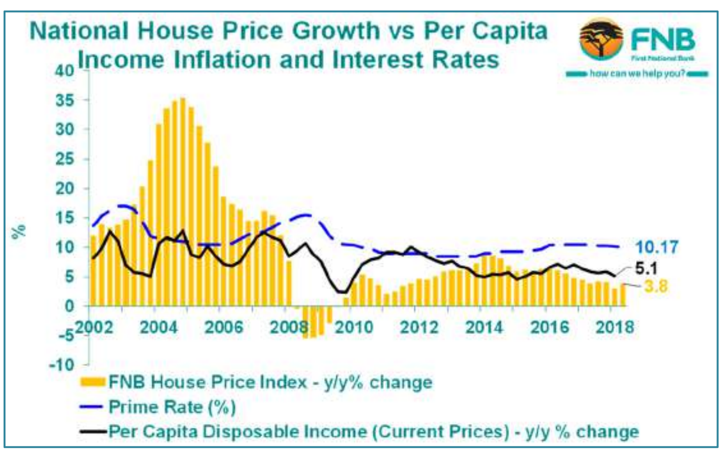
For both credit-dependent as well as cash home buyers, home affordability deteriorated very slightly in the 1st quarter of 2018, "stalling" a recent improving national affordability trend which has been intact through 2016 and 2017, according to the 2 FNB Home Affordability Indices.

The 1st measure, namely the "Average House Price/Per Capita Disposable Income Ratio Index", rose (deteriorated) by +0.2% in the 1st quarter of 2018, following on a -1.2% decline (improvement) in the previous quarter. This stalls the broad declining (improving) trend that started in the 3rd quarter of 2015. Nevertheless, this Affordability Index remains down (improved) by -4.03% since its 7-year high reached in the 2nd quarter of 2015



The 2nd affordability measure, namely the "Installment Value on a new 100% Bond on the Average Priced House/Per Capita Disposable Income Ratio Index", also rose (deteriorated) slightly by +0.2% in the 1st quarter of 2018, after a -1.2% decline in the prior quarter. This 1st quarter 2018 affordability measure did not yet benefit from a 25 basis point interest rate cut in March, as the cut came only right at the end of the quarter in focus.

This index had previously been on a broad improving (declining) trend since a 7-year high reached in the 2nd quarter of 2016 (the quarter in which the last interest rare hiking cycle ended), and is still down (improved) -4.53% cumulatively since then despite the slight 1st quarter deterioration.



The failure to achieve further home affordability improvements in the 1st quarter of 2018 came largely as a result of a quarterly economic contraction in the 1st quarter, which resulted in weak Nominal quarter-on-quarter Per Capita Disposable Income growth.

Whereas quarter-on-quarter house price growth was a meagre +0.4% in the 1st quarter, Nominal Per Capita Disposable Income growth was an even weaker +0.2%.

On a year-on-year basis, Per Capita Disposable Income growth remained above house price growth in the 1st quarter, the former measuring 5.1% and the latter 3.0%. So it is likely that in the near term the home affordability improvements (declines in the indices) may resume, and that the 1st quarter deterioration was a "once-off". However, the fact that year-on-year growth in Nominal Per Capita Disposable Income has slowed from a multi-year high of 7.1% in the 2nd quarter of 2016 to 5.1% by the 1st quarter of 2018 has made it tougher to achieve home affordability improvements of late, and it will require very slow house price growth to achieve further noticeable affordability improvements going forward.

So how affordable is the housing market?

So how “affordable” or “in-affordable” is the housing market? The 2 affordability measures are still significantly improved (down) on their late pre-2008 boom time highs around 2006-2008. The Average House Price/Per Capita Disposable Income Index is -25.3% down on its revised boom time high reached in the 3rd quarter 2007, while the New Bond Installment/Per Capita Income Ratio is -40.4% lower than its 1st Quarter 2008 high point.

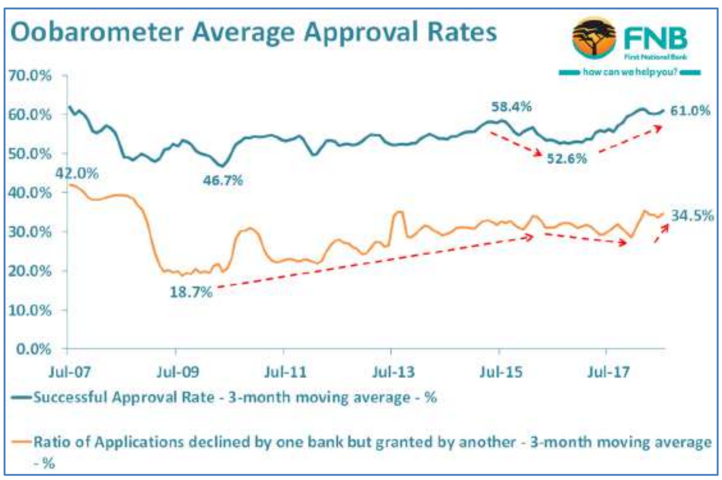
On the other hand, though, the House Price/Per Capita Income Ratio Index is still +41.74% above the 1st quarter 2001 “pre-boom” level, so it is still far from “cheap” by historic standards. But keeping property values still “temporarily” comparative, affordability-wise, to early-2001 has been a period of abnormally low interest rates in recent years, which has meant that the Loan Instalment/Per Capita Disposable Income Index is actually only +8.7% above (less affordable than) the 1st quarter 2001 level.

South Africa’s currently low interest rates thus continue to assist in sustaining the relatively high real house price levels (by SA’s historic standards) that we currently experience.

7. MORTGAGE LENDING ENVIRONMENT

The mediocre “natural” growth in the Residential Market has seemingly encouraged a more competitive mortgage lending environment.

MORTGAGE APPROVAL RATES GRADUALLY RISE



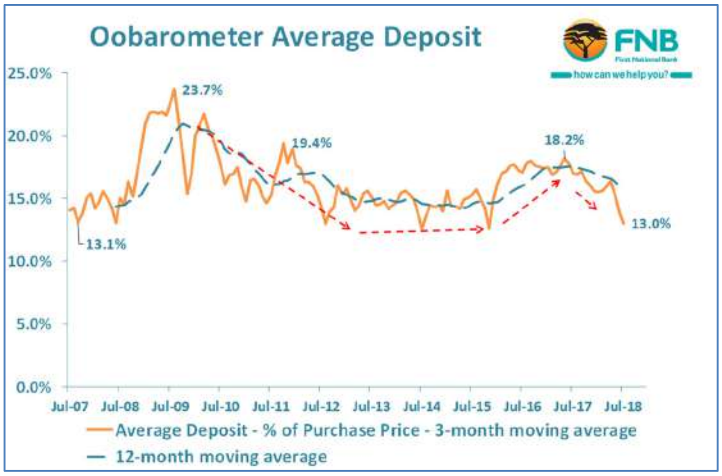
According to the data of mortgage originator Ooba, there has been a noticeable broad increase in the successful approval rate on home loans, from 52.6% of applications through Ooba for the 3 months to August 2016 (we use a 3-month moving average in order to smooth the data mildly) to 61% by July 2018.

More recently, we have also seen a noticeable rise in the percentage of loans “declined by one bank but approved by another”, from 28.6% of total applications for the final 3 months of 2017 to 34.5% for the 3 months up to July 2018.

Putting these the approvals all together into what is termed the “effective approval rate”, we have seen a significant rise from 66.4% of home loan applications for the 3 months to September 2016, to 74.4% for the 3 months to July 2018.

That’s a significant rise of 8 percentage points in the effective approval rate, according to Ooba data.

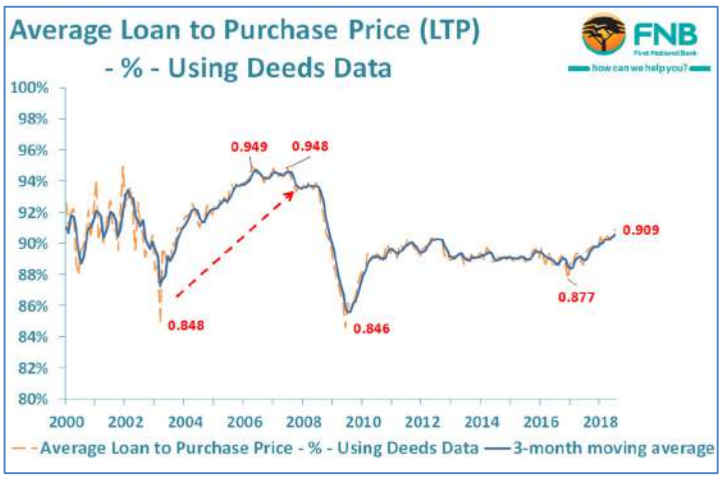
AVERAGE DEPOSIT REQUIREMENTS DECLINE AS LOAN-TO-VALUE RATIO RISES



Also evident in the Ooba data has been a noticeable decline in the average percentage deposit on new home loans granted through this originator.

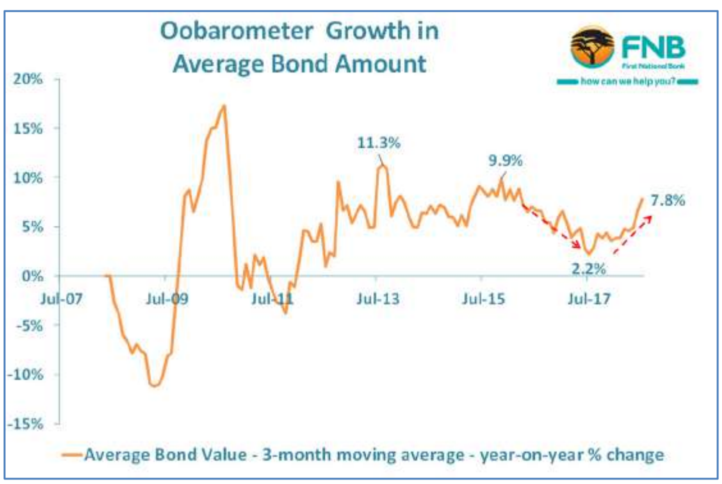
From a high of 18.2% of the value of the home loan as at May 2017, this average percentage has declined to 13% by July 2018.

This points to a higher average Loan-to-Value (LTV) ratio on home loans approved.



The indication of a higher average LTV ratio granted to the market is backed up by our own separate estimate using deeds data for transactions by individuals.

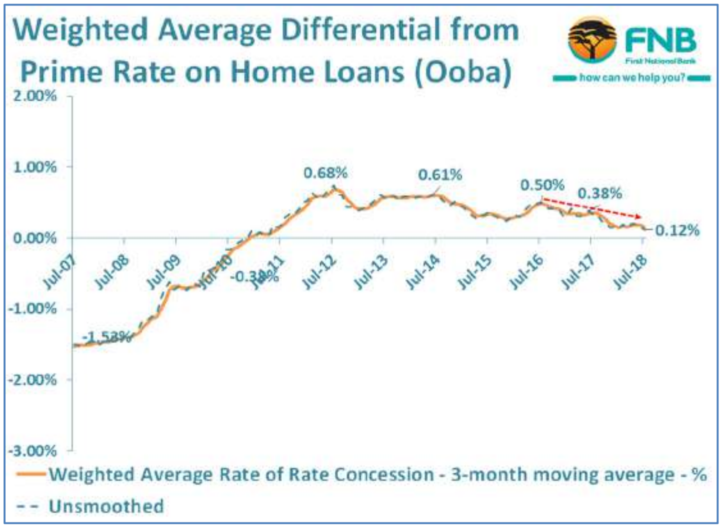
Here we see the estimated Loan-to-Purchase Price (LTP) ratio also having risen somewhat, from a multi-year low of 0.877 as at December 2016, to 0.909 by June 2018, the highest LTP level in about 10 years.



From the 3 months to July 2017, where Ooba's average bond amount saw lowly year-on-year growth of 2.2% in value, this rate has accelerated to 7.8% by the 3 months to July 2018

This acceleration comes while Ooba's average house price growth rate remains at a lowly 2.9% for the 3 months to July 2018, and is in part reflective of a higher average LTV on home loans granted.

HOME LOAN PRICING IS BEING GRADUALLY "SQUEEZED" AS COMPETITION MOUNTS



Finally, we have also seen increasingly competitive pricing of home loans since mid-2016.

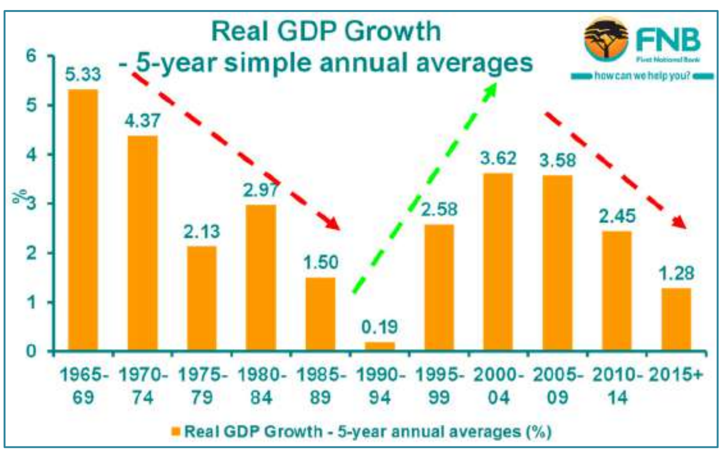
The average weighted differential from Prime Rate, charged by mortgage lenders on new loans approved through Ooba, has declined from +0.5 of a percentage point above Prime Rate as at July 2016 to +0.12 of a percentage point above Prime Rate as at July 2018.

In short, the mortgage lending industry has increased approval rates, increased average LTVs and lowered average pricing, as competition levels heat up in a low growth housing and mortgage market.

8. HOUSING MARKET OUTLOOK AND FORECAST

THE ECONOMIC SUPER-CYCLE STAGNATION PHASE…..

The South African economy is firmly anchored in what we call its "super-cycle stagnation phase". Eliminating volatility by focusing on 5-year annual average GDP (Gross Domestic Product) growth rates, we have seen average growth slide from 3.58% per annum in the 2005-2009 period to 1.3% in the 2015+ period.



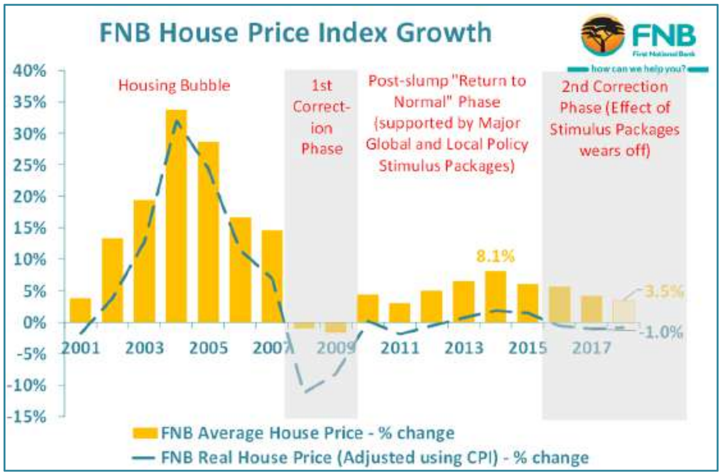
The onset of the economic growth stagnation phase is largely the result of the "3 Great Stimulus Levers" having been pulled, leaving little easy stimulus ammunition left

- **Lever 1:** Early-90s…political settlement meant the end of boycotts and sanctions, with normalisation of trade and business relations with the world boosting economic growth
- **Lever 2**: A huge "once-off downward structural adjustment" in interest rates from late-1998, precipitating a credit-driven consumer and housing boom, taking economic growth still higher. High household debt, and low interest rates, limit further scope for interest rate stimulus currently.
- **Lever 3**: Fiscal stimulus - wider fiscal deficit and rising government debt from 2008. But growing investor concern around future ability to repay the debt, should it continue to rise, limits further scope for this.

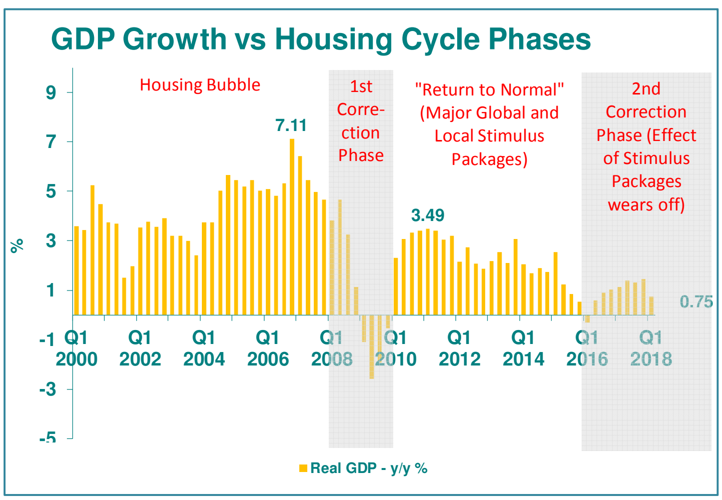
With limited "easy" stimulus ammunition available, South Africa's myriad of economic structure constraints have become a drag on economic growth. These constraints are numerous, and include underperformance of key state owned enterprises, notably the main electricity provider, a highly unequal skills distribution, and the well-documented labour market inflexibility, to name but a few.

These structural constraints are not easily resolved in the near term. Therefore, it would appear that economic growth looks set to be weak through the next few years.

….KEEPS THE HOUSING MARKET IN ITS 2ND POST-BUBBLE "CORRECTION PHASE



We have already noted that house prices, on average, have been in decline in real terms (adjusted for CPI) since early-2016.



This has been a period with little in the way of interest rate stimulus (2 x 25 basis point cuts only), and GDP growth not exceeding 1.5% year-on-year at any stage (1.3% average for 2017).

Firstrand's annual GDP growth forecasts fluctuate not far from 1.5% per annum, for the period up to 2020.

In addition, the forecast is for interest rates to begin rising mildly as from 2019.

Based on the performance of house prices in recent years, we believe that, should such a weak growth and rising interest rate environment materialize, this would be insufficient to significantly alter the housing market's performance from the current low positive single digit house price growth environment.

Therefore, we forecast average house price growth to average in a range between 3% and 4% for our forecast period to 2020, which would imply a negative rate in real terms through the forecast period.

The housing market would thus remain somewhat off its equilibrium ("equilibrium" referring to where housing demand and supply are in balance), which is seen in the projected average time of homes on the market prior to sale moving in a 16-18 week range, whereas we see around 12 weeks as being more-or-less where market equilibrium is.

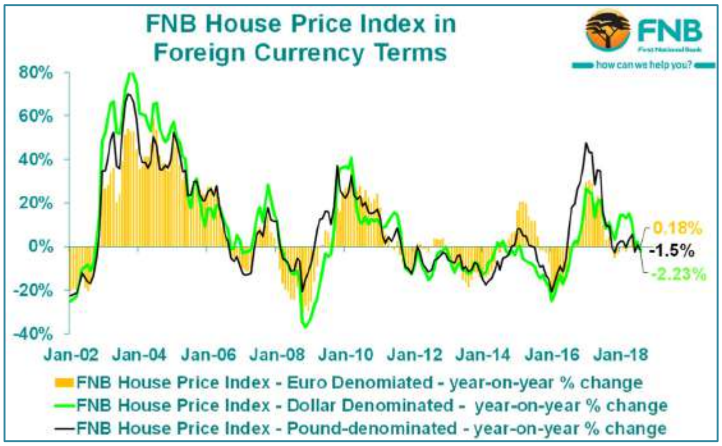
To achieve positive house price growth in "real" terms, we believe that economic growth would need to be nearer to 3%. On the other hand, we believe that a full blown recession (GDP decline) would cause not only "real" house price decline but nominal (actual) house price decline too.

MACROECONOMIC FORECAST SUMMARY	2017	2018	2019	2020
GDP Growth - % Change	1.3	1.3	1.6	1.4
CPI Inflation - % Change	5.3	4.6	5.4	5.2
Prime Rate (Period end) - % Change	10.25	10.00	10.25	10.75
Debt-to-Disposable Income Ratio (4-quarter average)	71.2	71.4	71.6	71.8
Debt-Service Ratio (4-quarter average)	9.1	9.1	9.3	9.7
HOUSING MARKET FORECAST SUMMARY				
Average House Price (12 month average) - % Change	4.2	3.5	3.7	3.4
Real House Price (12 month average) - % Change	-1.1	-1.1	-1.7	-1.8
Housing Demand Strength Index (12 month average) (Scale 0 to 100)	55.5	55.9	55.7	54.9
- % Change	*-0.4*	*0.7*	*-0.4*	*-1.5*
Housing Supply Strength Index (12 month average) (Scale 0 to 100)	54.2	55.7	57.5	59.3
- % Change	*1.3*	*2.7*	*3.4*	*3.1*
Housing Market Strength Index (12 month average) (Scale 0 to 100)	50.7	50.1	49.1	47.8
- % Change	-0.9	-1.1	-2.1	-2.6
Average Time of Homes on the Market (12-month average) - weeks and days	15.4	16.0	17.3	17.5

MISCELLANEOUS HOUSING MARKET INDICATORS

9. THE FOREIGN EFFECT

HOUSE PRICE GROWTH IN FOREIGN CURRENCY TERMS



The FNB House Price Index in certain major foreign currency-denominated terms points to very low price growth and even price deflation in some cases.

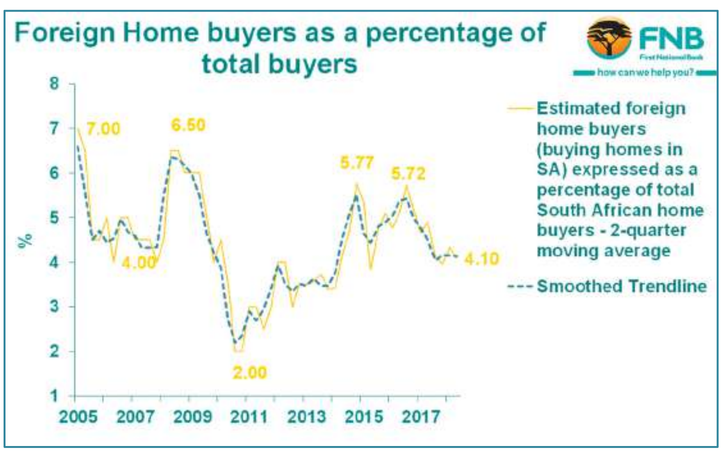
In August 2018, in Euro terms there was some very slight year-on-year house price growth to the tune of +0.18%, but in both Dollar and UK Pound terms the index showed -2.23% and -0.15% year-on-year deflation respectively.

In fact, 2018 has seen noticeably slower average house price growth in foreign currency terms compared to earlier in 2017, and of course the most recent Rand depreciation in August sustains this situation.

However, we would not expect renewed Rand weakness and even possible decline in house prices in foreign currency terms to boost foreigner demand for domestic homes in the near term,, with weak sentiment towards South Africa and its political and economic future weighing on both the Rand and other markets such as the housing market.

In fact, our FNB Estate Agent Survey points to recently declining foreigner and SA expat buying of domestic property.

RECENT ESTIMATES OF DOMESTIC RESIDENTIAL PROPERTY BUYING BY FOREIGNERS

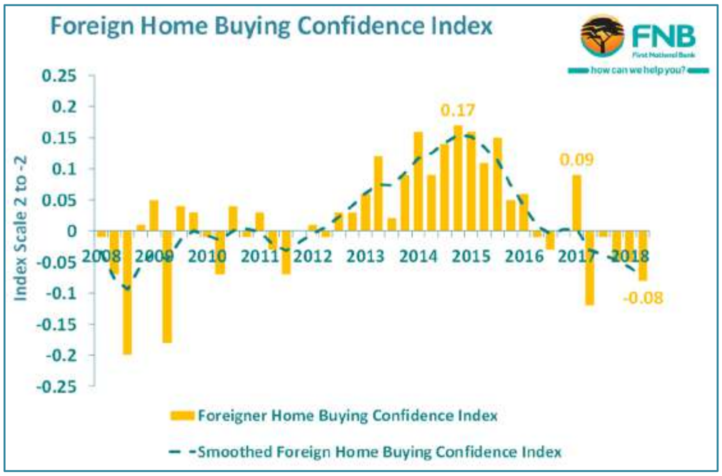


In the FNB Estate Agent survey, we ask the sample of agents surveyed (predominantly in the 6 major metros of the country) to estimate the number of foreign citizens buying homes domestically as a percentage of total home buying. Using a 2-quarter moving average in order to reduce quarterly volatility in the data, the estimate was 4.10% of total home buying for the 2 quarters up to and including the 2nd quarter of 2018.

This is significantly down on the 5.72% high reached in the 3rd quarter of 2016.

We have a follow up question in the survey which also hints at slower foreigner buying of late. In this question, the survey respondents are asked whether they perceive an increase, decrease or unchanged level in foreign buyer numbers compared to 12 months ago.

The aggregated response was biased very slightly in favour of "less foreigner buying" in the 2nd quarter 2018 survey. 87% reported "unchanged levels" ("unchanged" is normally by far the largest response). 2% of agents reported a "lot less" foreign buyers and 8% reported a "little less". That totaled 10% of respondents indicating less foreign buyers from a year ago. By comparison, 2% of respondents reported "a little more" foreign home buyers and 1% "a lot more". This means 3% perceiving more foreign buyers, keeping the bias in favour of "less foreign buyers.



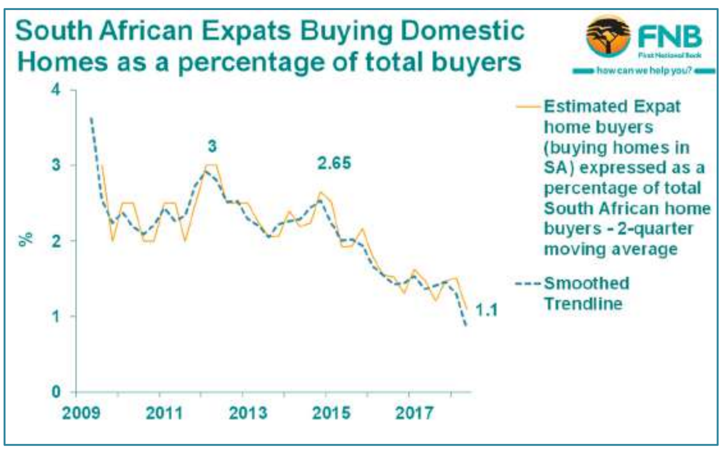
We aggregate the agent answers into what we call our Foreign Home Buying Confidence Index, depicted on a scale of +2 to -2. A level of +2 means that 100% of agents state a "lot more foreigner buying", -2 reflecting 100% stating a "lot less", and with a zero level indicating that on average the agents are saying that levels are unchanged from 12 months ago.

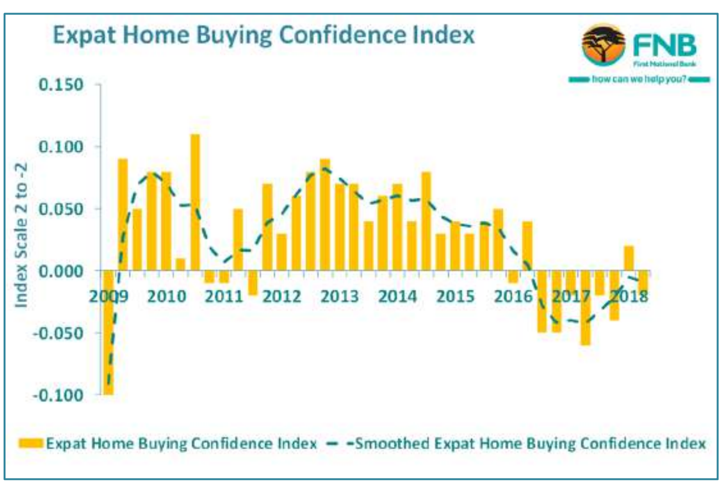
The index was at its strongest positive level of +0.17 as at the final quarter of 2014, having climbed to that level starting around 2012 and reflecting prior years' improvement. However, since 2015 this indicator's level has fallen, and in 7 of the last 9 quarters it has been in negative territory. The 2nd quarter 2018 level was negative, to the tune of -0.08, unchanged from the prior quarter.

EXPAT BUYING OF LOCAL PROPERTY

A second set of foreign-related buying questions that we pose to the sample of agents relates to the levels of buying of domestic residential property by South African expats living abroad.

Here, we saw a decline in the 2nd quarter 2018 estimate, with the estimated level remaining low after a decline through 2015 to 2017.





In the final quarter of 2014, the estimated level of Expat buying was 2.65% of total home buying using a 2-quarter moving average.

This percentage had slowed to a multi-year low of 1.1% by the 2nd quarter of 2018

We have a follow up question in the survey, similar to the follow up question in the case of foreign buyers. In this question, the survey respondents are asked whether they perceive an increase, decrease or unchanged level in foreign buyer numbers compared to 12 months ago.

The responses have been biased in favour of "less expat buying" in 8 out of the last 10 quarters.

The 2nd quarter 2018 survey response continued the declining bias, albeit very slight. In the survey, 97% reported "unchanged levels" ("unchanged" is normally by far the largest response). 1% of agents reported a "lot less" expat buyers and 1% reported a "little less". That totaled 2% of respondents indicating less expat buyers from a year ago. By comparison, 1% of respondents reported "a little more" expat home buyers and 0% "a lot more". This means 1% perceiving more expat buyers vs 2% saying "less".

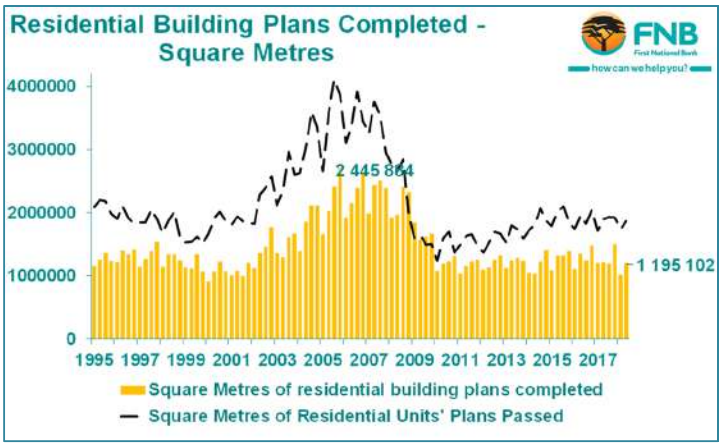
The bias is thus still very slightly in favour of “less expat buyers”.

We aggregate the agent answers into what we call our Expat Home Buying Confidence Index, depicted on a scale of +2 to -2. A level of +2 means that 100% of agents state a “lot more expat buying”, -2 reflecting 100% stating a “lot less”, and with a zero level indicating that on average the agents are saying that levels are unchanged from 12 months ago.

The Index level for the 2nd quarter of 2018 remained a slightly negative -0.02.

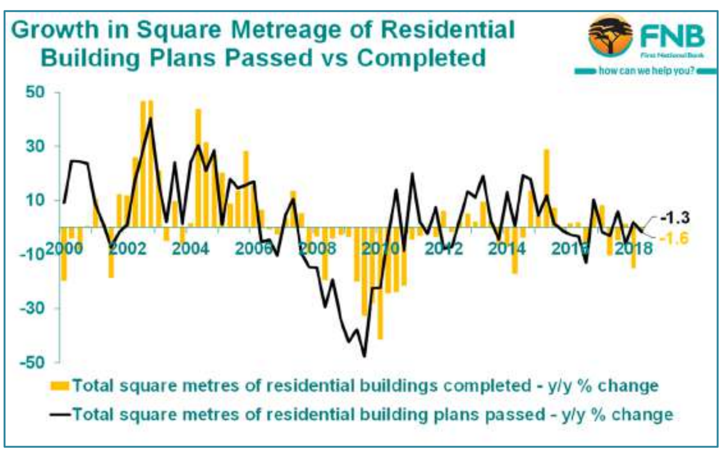
10. NEW RESIDENTIAL BUILDING ACTIVITY

August saw the release of June Residential Building Statistics from StatsSA, which completes the 2nd quarter residential building picture.



Comparing the square meterage of residential buildings completed in the 2nd quarter of 2018 with last decade’s boom time multi-decade 2nd quarter peak, reached in the 2nd quarter of 2007 (2,445,884 square metres), we see that the 2018 2nd quarter remained relatively low, at 48.9% of the 2nd quarter 2007 level (1,195,102 square metres).

The “stubbornly” lower level ever since the end of the pre-2008 housing building boom is easily explained by weak demand in the existing home market, diminishing in stock constraints in the market, and resultant low single-digit average house price growth. This has translated into a battle by the Residential Development Sector to bring competitively priced new housing stock to the market (“competitively” referring to homes whose prices can compete with existing home price levels.



These conditions have exerted recent downward pressure on residential building activity. In the 2nd quarter, the square metres of residential building space completed declined mildly by -1.6% year-on-year, after a -15% decline in the 1st quarter.

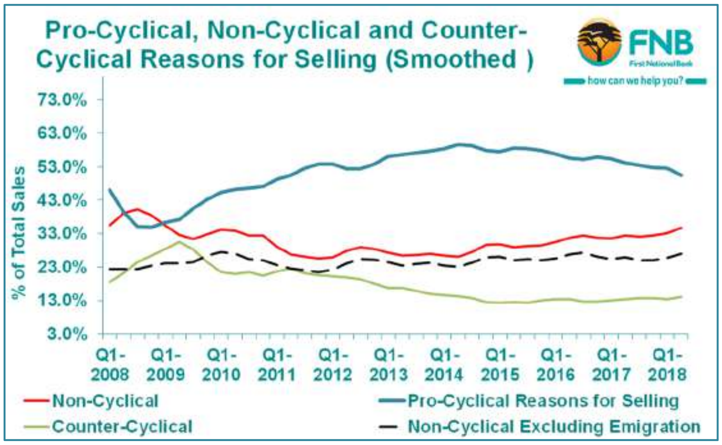
Square metres of plans passed also declined in the 2nd quarter to the tune of -1.3%.

Completions (sq. metres) have shown year-on-year decline in 4 of the past 5 quarters, while plans passed (sq. metres) have shown decline in 3 of the past 5 quarters.

While this is bad news from a Building Sector point of view, from a point of view of the assisting the balance between supply and demand in the existing home market, low levels of building activity in such times of weak housing demand can help.

11. REASONS FOR SELLING SHOW PRO-CYCLICAL REASONS TO BE IN DECLINE

In the FNB Estate Agent Survey, we have a question relating to the reasons that sellers are selling their primary residences. There are 8 main motives, and we ask agents to estimate the percentage of sellers that fall into each category.

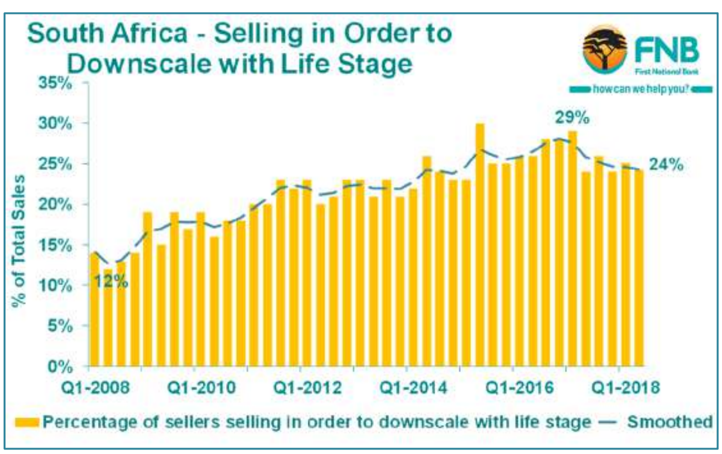


Of the 8 categories, we identify 4 as "pro-cyclical" motives for selling, in other words categories that will increase in significance as the property market strengthens and decline in significance as it weakens. These 4 categories are "selling in order to upgrade", "selling in order to downscale with life stage", "selling in order to relocate to a different region within South Africa", and "selling in order to move nearer to work or amenities".

As a group, these 4 motives have declined in significance from a high of 61% of total selling as at the 2nd quarter of 2014, to 49.34% by the 2nd quarter of 2018.

PRO-CYCLICAL REASONS FOR SELLING HOMES

More owners stay put as economic and financial times become increasingly constrained. Therefore, we see "selling in order to upgrade to a better home" having declined from 20% of total selling at the end of 2013 to 11% by the 2nd quarter of 2018.



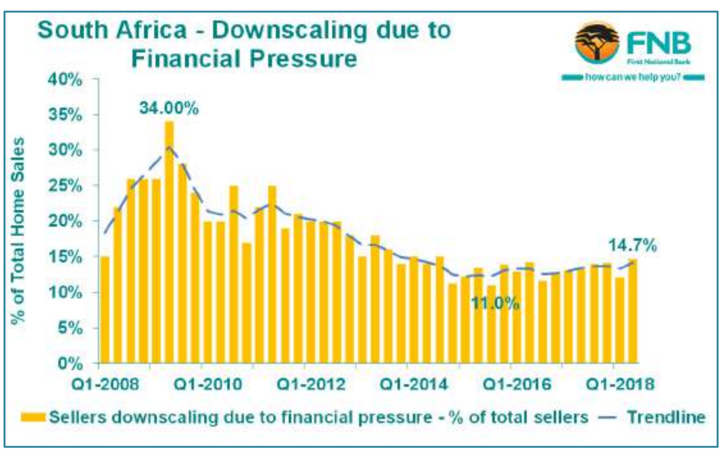
Selling in order to downscale with life stage, the ageing portion of the homeowner population, has more recently declined from 29% of total selling in the 1st quarter of 2017 to 24% in the 2nd quarter of 2018.

While relocating to be nearer to work or amenities is nice, it can be postponed in many instances when financial times are tougher. Not surprisingly, therefore, from a peak of 10% of total selling in the 1st quarter of 2014, the estimate for those selling for this motive declined to 6% of total selling by the 2nd quarter of 2018

More recently, the survey has pointed to a marked drop in "selling in order to relocate within South Africa", from a high of 10% in the 1st quarter of 2018 to 6% in the 2nd quarter.

However, a 1 quarter drop is not a conclusive declining trend yet, but with diminishing job opportunities in a stagnating economy, one would expect this need to relocate to diminish.

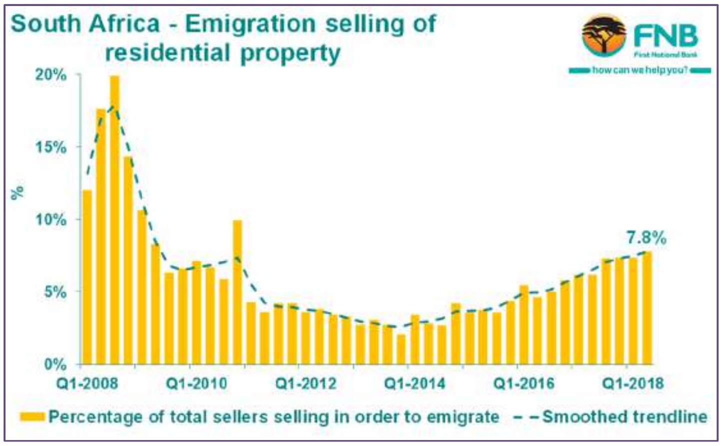
COUNTER-CYCLICAL REASONS FOR SELLING – FINANCIAL PRESSURE-RELATED SELLING



In the Counter-Cyclical Reasons for Selling category, there is only one key motive, and that is "selling in order to downscale due to financial pressure". Understandably, this motive should increase in significance in a "downturn" and vice versa in better economic and property times.

Indeed, from a multi-year low of 11% of total selling in the 3rd quarter of 2014, mildly higher interest rates and a stagnating economy have pushed this selling motive mildly higher to 14.7% by the 2nd quarter of 2018.

NON-CYCLICAL REASONS FOR SELLING HOMES



The 3 non-cyclical motives include "selling due to change in family structure", "moving for safety and security reasons" and "selling in order to emigrate". The former 2 have moved more or less sideways in recent years, but emigration-related selling has risen noticeably since 2013 on the back of weakening sentiment in South Africa often related to concerns over its long term policy and political direction.

From a low of 2% of total selling, the emigration motive has risen to 7.8% of total selling by the 2nd quarter of 2018.

TABLE

Reasons for selling (As % of Total Sales)	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018
Downscaling due to financial pressure	**13.0%**	**14.24%**	**11.6%**	**12.9%**	**13.1%**	**13.2%**	**14.0%**	**14.20%**	**12.1%**	**14.7%**
Downscaling with life stage	26%	26%	28%	28%	29%	24%	26%	24%	25%	24%
Emigrating	**5.5%**	**4.6%**	**5.0%**	**5.8%**	**6.2%**	**6.2%**	**7.3%**	**7.4%**	**7.4%**	**7.8%**
Relocating within SA	10%	9%	7%	10%	9%	9%	10%	10%	10%	8%
Upgrading	**14%**	**12%**	**11%**	**13%**	**12%**	**13%**	**11%**	**11%**	**13%**	**11%**
Moving for safety and security reasons	10%	12%	12%	10%	11%	13%	10%	10%	11%	11%
Change in family structure	15%	15%	17%	15%	13%	15%	14%	15%	15%	16%
Moving to be closer to work or amenities	7%	8%	8%	6%	6%	7%	7%	6%	7%	6%

Monthly FNB House Price Index (Jan 2001 = 100)

Date	Index	y/y % change	Date	Index	y/y % change	Date	Index	y/y % change	Date	Index	y/y % change
Jan-01	100.0		Jul-05	244.0	28.8%	Jan-10	325.7	3.0%	Jul-14	412.07	8.2%
Feb-01	100.8	-1.7%	Aug-05	247.9	27.9%	Feb-10	327.9	3.9%	Aug-14	413.42	8.0%
Mar-01	101.0	-0.7%	Sep-05	252.0	26.9%	Mar-10	329.4	4.6%	Sep-14	414.81	7.7%
Apr-01	101.1	-0.4%	Oct-05	256.2	25.7%	Apr-10	330.2	5.2%	Oct-14	416.11	7.3%
May-01	101.7	-0.5%	Nov-05	259.9	23.9%	May-10	330.7	5.5%	Nov-14	417.84	6.8%
Jun-01	102.7	0.7%	Dec-05	263.0	21.7%	Jun-10	330.5	5.4%	Dec-14	420.00	6.2%
Jul-01	104.0	3.0%	Jan-06	265.9	19.9%	Jul-10	329.8	5.0%	Jan-15	422.83	5.8%
Aug-01	105.5	5.9%	Feb-06	268.8	18.5%	Aug-10	329.8	4.7%	Feb-15	426.21	5.8%
Sep-01	106.8	8.6%	Mar-06	271.9	17.6%	Sep-10	330.5	4.5%	Mar-15	429.69	6.2%
Oct-01	108.1	10.6%	Apr-06	275.2	17.3%	Oct-10	331.1	4.1%	Apr-15	432.52	6.4%
Nov-01	109.2	11.6%	May-06	278.5	17.3%	Nov-10	331.5	3.5%	May-15	434.50	6.4%
Dec-01	110.4	11.8%	Jun-06	282.0	17.3%	Dec-10	332.0	2.9%	Jun-15	435.90	6.2%
Jan-02	111.5	11.5%	Jul-06	285.5	17.0%	Jan-11	332.7	2.2%	Jul-15	436.83	6.0%
Feb-02	112.8	11.9%	Aug-06	288.9	16.5%	Feb-11	333.9	1.8%	Aug-15	437.90	5.9%
Mar-02	113.9	12.8%	Sep-06	292.0	15.9%	Mar-11	335.3	1.8%	Sep-15	439.30	5.9%
Apr-02	115.0	13.7%	Oct-06	294.9	15.1%	Apr-11	337.2	2.1%	Oct-15	441.55	6.1%
May-02	116.0	14.1%	Nov-06	297.4	14.4%	May-11	338.8	2.4%	Nov-15	444.15	6.3%
Jun-02	117.0	14.0%	Dec-06	299.9	14.0%	Jun-11	340.0	2.9%	Dec-15	446.82	6.4%
Jul-02	118.0	13.5%	Jan-07	303.3	14.1%	Jul-11	341.0	3.4%	Jan-16	450.05	6.4%
Aug-02	119.3	13.1%	Feb-07	307.4	14.4%	Aug-11	341.9	3.7%	Feb-16	453.57	6.4%
Sep-02	121.0	13.2%	Mar-07	312.7	15.0%	Sep-11	343.0	3.8%	Mar-16	456.99	6.4%
Oct-02	122.7	13.5%	Apr-07	318.6	15.8%	Oct-11	344.2	3.9%	Apr-16	459.73	6.3%
Nov-02	124.4	13.9%	May-07	324.1	16.4%	Nov-11	345.3	4.2%	May-16	461.68	6.3%
Dec-02	125.8	14.0%	Jun-07	328.9	16.6%	Dec-11	346.7	4.4%	Jun-16	462.52	6.1%
Jan-03	127.3	14.1%	Jul-07	332.1	16.4%	Jan-12	348.5	4.7%	Jul-16	463.10	6.0%
Feb-03	129.2	14.6%	Aug-07	333.8	15.5%	Feb-12	350.2	4.9%	Aug-16	463.20	5.8%
Mar-03	131.5	15.4%	Sep-07	334.3	14.5%	Mar-12	351.8	4.9%	Sep-16	463.46	5.5%
Apr-03	133.7	16.3%	Oct-07	333.9	13.2%	Apr-12	353.2	4.7%	Oct-16	463.74	5.0%
May-03	136.0	17.2%	Nov-07	333.1	12.0%	May-12	354.4	4.6%	Nov-16	464.78	4.6%
Jun-03	138.5	18.3%	Dec-07	332.9	11.0%	Jun-12	355.9	4.7%	Dec-16	467.30	4.6%
Jul-03	140.8	19.3%	Jan-08	332.6	9.7%	Jul-12	357.5	4.8%	Jan-17	471.23	4.7%
Aug-03	143.5	20.3%	Feb-08	332.0	8.0%	Aug-12	359.6	5.2%	Feb-17	474.97	4.7%
Sep-03	146.8	21.4%	Mar-08	329.7	5.4%	Sep-12	362.0	5.5%	Mar-17	477.44	4.5%
Oct-03	150.7	22.8%	Apr-08	326.3	2.4%	Oct-12	363.7	5.7%	Apr-17	479.11	4.2%
Nov-03	155.0	24.6%	May-08	322.6	-0.5%	Nov-12	365.1	5.7%	May-17	479.85	3.9%
Dec-03	159.6	26.8%	Jun-08	319.3	-2.9%	Dec-12	366.5	5.7%	Jun-17	480.67	3.9%
Jan-04	164.5	29.2%	Jul-08	316.4	-4.7%	Jan-13	368.8	5.8%	Jul-17	481.78	4.0%
Feb-04	169.5	31.2%	Aug-08	314.9	-5.7%	Feb-13	371.2	6.0%	Aug-17	482.78	4.2%
Mar-04	174.0	32.3%	Sep-08	314.8	-5.9%	Mar-13	373.4	6.1%	Sep-17	483.22	4.3%
Apr-04	178.1	33.2%	Oct-08	315.3	-5.6%	Apr-13	374.9	6.1%	Oct-17	483.54	4.3%
May-04	181.7	33.7%	Nov-08	316.5	-5.0%	May-13	376.3	6.2%	Nov-17	484.16	4.2%
Jun-04	185.4	33.9%	Dec-08	316.6	-4.9%	Jun-13	378.3	6.3%	Dec-17	484.57	3.7%
Jul-04	189.4	34.5%	Jan-09	316.4	-4.9%	Jul-13	380.7	6.5%	Jan-18	485.72	3.1%
Aug-04	193.9	35.1%	Feb-09	315.7	-4.9%	Aug-13	382.9	6.5%	Feb-18	488.49	2.8%
Sep-04	198.6	35.3%	Mar-09	314.9	-4.5%	Sep-13	385.1	6.4%	Mar-18	492.24	3.1%
Oct-04	203.8	35.2%	Apr-09	314.0	-3.8%	Oct-13	387.7	6.6%	Apr-18	496.44	3.6%
Nov-04	209.8	35.3%	May-09	313.4	-2.8%	Nov-13	391.2	7.1%	May-18	499.03	4.0%
Dec-04	216.1	35.4%	Jun-09	313.6	-1.8%	Dec-13	395.5	7.9%	Jun-18	500.36	4.1%
Jan-05	221.8	34.9%	Jul-09	314.2	-0.7%	Jan-14	399.7	8.4%	Jul-18	500.44	3.9%
Feb-05	226.9	33.9%	Aug-09	315.0	0.0%	Feb-14	402.9	8.5%	Aug-18	499.47	3.5%
Mar-05	231.2	32.9%	Sep-09	316.3	0.5%	Mar-14	404.7	8.4%			
Apr-05	234.6	31.8%	Oct-09	318.1	0.9%	Apr-14	406.5	8.4%			
May-05	237.5	30.7%	Nov-09	320.1	1.2%	May-14	408.3	8.5%			
Jun-05	240.5	29.7%	Dec-09	322.7	1.9%	Jun-14	410.3	8.5%			

ADDENDUM - NOTES:

Note on The FNB House Price Index:

The FNB Repeat Sales House Price Index has been one of our repertoire of national house price indices for some years, and is based on the well-known Case-Shiller methodology which is used to compile the Standard & Poor's Case-Shiller Home Price Indices in the United States.

This "repeat sales approach" is based on measuring the rate of change in the prices of individual houses between 2 points in time, based on when the individual homes are transacted. This means that each house price in any month's sample is compared with its own previous transaction value. The various price inflation rates of individual homes are then utilized to compile the average price inflation rate of the index over time.

The index is compiled from FNB's own valuations database, thus based on the residential properties financed by FNB over the past 18 years.

We apply certain "filters" and cut-offs to eliminate "outliers" in the data. They main ones are as follows:

- The maximum price cut-off is R15m, and the lower price cut-off is R20,000.
- The top 5% of repeat sales price growth rates, and the bottom 5% of growth rates are excluded from the data set.
- Repeat transactions that took place longer than 10 years after the previous transaction on the same home are excluded, as are repeat transactions that took place less than 6 months after the previous transaction on the same home.
- The index is very lightly smoothed using a Hodrick-Prescott smoothing function with a Lambda of 5.

Note on the FNB Valuers' Market Strength Index: *When an FNB valuer values a property, he/she is required to provide a rating of demand as well as supply for property in the specific area. The demand and supply rating categories are a simple "good (100)", "average (50)", and "weak (0)". From all of these ratings we compile an aggregate demand and an aggregate supply rating, which are expressed on a scale of 0 to 100. After aggregating the individual demand and supply ratings, we subtract the aggregate supply rating from the demand rating, add 100 to the difference, and divide by 2, so that the FNB Valuers' Residential Market Strength Index is also depicted on a scale of 0 to 100 with 50 being the point where supply and demand are equal.