



26 October 2015

MARKET ANALYTICS AND SCENARIO FORECASTING UNIT

JOHN LOOS: HOUSEHOLD AND PROPERTY SECTOR STRATEGIST 087-328 0151 john.loos@fnb.co.za

> THEO SWANEPOEL: PROPERTY MARKET ANALYST 087-328 0157 tswanepoel@fnb.co.za

The information in this publication is derived from sources which are regarded as accurate and reliable, is of a general nature only, does not constitute advice and may not be applicable to all circumstances. Detailed advice should be obtained in individual cases. No responsibility for any error, omission or loss sustained by any person acting or refraining from acting as a result of this publication is accepted by Firstrand Group Limited and / or the authors of the material.

First National Bank – a division of FirstRand Bank Limited. An Authorised Financial Services provider. Reg No. 1929/001225/06

# PROPERTY BAROMETER Property Weekly

How well do home values really hold up in tough economic times?

There exists a view that property values are capable of by-and-large "holding up" in tougher economic times, some even believing that home values "can only rise". Such views were even arguably behind the massive mortgage lending boom across much of the world last decade.

These claims, or assumptions, around property values are often a little far fetched, and we believe that they stem, in part, from a misinterpretation of the most commonly used measures of home prices, namely house price indices. Home values fluctuate just like any other asset class would in response to changes in economic conditions, but a house price index is something different, not measuring all existing home values but, rather, transaction prices....and there is a big difference

#### A. SUMMARY

There exists a view that property values are capable of by-and-large "holding up" in tougher economic times, some even believing that home values "can only rise". Such views were even arguably behind the massive mortgage lending boom across much of the world last decade.

These claims, or assumptions, are often a little far fetched, and we believe that they stem, in part, from a misinterpretation of the most commonly used measures of home prices, namely house price indices. Home values fluctuate just like any other asset class would in response to changes in economic conditions.

Such claims ignore 3 important points. Firstly, a country such as South Africa, with its general inflation rate, should see average (nominal) house prices rising more than they fall. Indeed, examining the FNB House Price Index, there was only 1 year in its 14 year history in which the average house price for an entire year declines. Looking back further, using the Absa House Price Index with its 49 year history, we can only find 3 years in which the average house price for the entire year fell.

However, in real terms, adjusting for Consumer Price Inflation over time, we find 24 such years of decline, a very different picture. Yes, "downward corrections" are more common than many may believe.

Secondly, the average house price level, as depicted by a house price index, is not necessarily the "market equilibrium" price. When residential demand slumped back in 2008, not all of the weakness was felt in a decline in the average house price. There was some decline in house prices, but there was also a very significant rise in the average time on the market, as many sellers resisted dropping their asking price to where they could make the sale (as many home owners tend to do). The result was an oversupplied market, with the market price remaining well-above the "equilibrium price" which would be required to clear the market. But thirdly, and perhaps most importantly, a house price index is NOT a national home value index. This may sound strange, but there is a big difference. Any of the South African House Price Indices that exist are based on the value of home transactions. If it were possible to value each and every home every month, we could compile an average value of all the homes in South Africa, but this is impractical. So we use transaction value information.

There is a considerable bias in transaction value data towards the higher end of the residential market, because people higher up the income ladder are more mobile, relocate more frequently, and this implies that there is a disproportionately large number of transactions in the higher priced segments relative to the number of residential units that exist. Conversely, towards the low end of the market the frequency that homes get transacted declines. The most affordable segment of the residential market, depending how you segment it, is the group of areas formerly labeled as "Black Townships" back in the Apartheid era. Here, one finds a massive number of residential units, but with relatively few transactions, because the lowest income groups don't have the means to relocate frequently.

So, in toughening economic times, one can see a slump in the volume of residential transactions being more significant in more financially pressured areas, and of course the number of such financially pressured areas can increase in number during recessionary and stagnant economic periods. The influence of such areas or market segments on an overall house price index can then decline, whereas stronger market segments' transaction volumes could conceivably hold up better. Such relative shifts in transaction volumes can see house price indices telling a better story than "on the ground" reality, should the weakest areas' transactions have all but dried up.

It can get even worse. When certain areas experience extreme decay, as is arguably more likely during prolonged periods of economic weakness, it can get to a level where they exit the formally traded residential market altogether. Parts of the Joburg CBD and surroundings must have come close to this state at the end of the 1990s. If little or nothing gets traded in such areas, then there are no transaction prices to be included in the national house price index.

However, even if derelict and overrun by vagrants, every property still has a value. That value can be zero, and there were probably even properties in the Joburg CBD at a stage that were negative. Yes, negative, meaning that the owner may have to donate the property to someone or even pay them to take the property and its huge rates bill off his hands. But zero value properties don't often change hands, so they "exit" a house price index in much the same way as a liquidating company will exit the stock exchange's All Share Index.

Such "exits", or "diminished influence" of certain areas on an (transaction-based)) index, can become more frequent in an economic downturn, raising the likelihood that a house price index can over-estimate how well residential values have held up in tougher economic times. This, we suspect, may have been leading to claims by some regarding Zimbabwean property values "holding up" in its economic crisis. The traded market can shrink dramatically in size in such circumstances, and it is those properties still traded whose prices can hold up reasonably, but not necessarily the broader average value of all property stock.

So, in South Africa, with its "not imploding but indeed stagnating" economy, are we at risk of underestimating the extent of property value decline to come? Yes, it is possible, depending on how weak the economy gets before it gets better. A slowing house price index growth rate is unlikely to tell the full story of residential weakness should it occur, because such an index only records what gets transacted, and not what has "exited" the residential market, while the market price can also remain significantly above equilibrium price for lengthy periods of time.

This doesn't render house price indices useless, but, but one has to understand what you are dealing with, and what it can and cannot tell you.

The reality is, though, that home values can and do fluctuate up and down, perhaps more than we think and more than a house price index would tell us. Just ask the property owners in Joburg CBD and immediate surroundings back in the 1990s.

For residential investors, in times of long term economic stagnation, looking out for areas prone to decay becomes far more crucial, because without growth in household sector purchasing power (disposable income), a greater number of "financially-distressed" areas can be at risk of virtually "exiting" the residential market.

# B. HOME VALUES CAN, AND PROBABLY DO, DROP MORE THAN YOU THINK IN WEAK ECONOMIC TIMES - THE BIG MISINTERPRETATION OF HOUSE PRICE INDICES

South Africa's economic growth has been on a broad multi-year slowing trend since 2012, and after a poor 1.5% growth rate in 2014, 2015 looks set to be even slower. The myriad of structural constraints are well-documented, while elevated social tensions in South African society have become more disruptive to the economy and a cause of concern to investors. On top of this, the global economy has gone off the boil, which weakens demand for South African exports.

In a tougher economic environment, can home values hold up? Some would claim that property is a great "store of value" in tough times. However, this we believe to be in part a misinterpretation of some key housing market data. Home values fluctuate just like any other asset class would in response to changes in economic conditions.

# There exists a widespread belief, or hope, that home values will always rise

The credit-dependent nature of the Residential Property Market is arguably a key reason for a widespread desire for property values to rise, or at least not fall, along with, perhaps, a widespread view that property is an investment and not a consumer item. This desire to see prices rise comes from both mortgage lenders, whose lending is "secured" by the value of the property, and from the home owner, who not only sees the property value as a measure of a large portion of his wealth but also as a safeguard should financial pressure require her to "trade out" of her existing home and settle the related debts.

This "need" for property values to maintain their levels, or to rise, thus makes perfect sense, especially in the modern world where 100% loan-to-value home loans are quite common.

# The reality, however, can be somewhat different. Values can, and periodically do, fall

But what we want and what we get are often not the same thing, and the reality is that property values are no different from other assets in that they can go up or down, and indeed they do. Some commentators may attempt to "soften the blow" of this claim by quoting one or more of the national house price indices, which show that average house price inflation has declined at certain times, but that this occurrence is rare.

Indeed, they would be factually correct on that point. Examining the FNB House Price Index, we can find only 1 year in its 14 year history in which the average house price for an entire year actually declined. Taking the house price index with the longest history, namely the Absa House Price Index, there were only 3 years since 1967 in which the average house price level declined for the year as a whole.

*However, such claims would ignore 3 important points.* Firstly, house prices fall far more often in REAL terms, when adjusted for general inflation (using CPI). Secondly, market equilibrium prices can fall far more significantly than actual market prices where the market can be in disequilibrium for lengthy periods of time. Thirdly, house price indices are not "Home Value Indices", and the latter can sometimes fall far more significantly.

#### We will discuss these three important points below:

#### 1. In Real terms, house price "corrections" are quite common

Firstly, it should go without saying that, in an economy where there is almost always general price inflation (including in consumer prices and wages), over time one should see house prices rising more than they fall on average. If one converts a house price index into REAL terms however, adjusting it for consumer price inflation, one gets a very different story. Since 1967, there has been an average annual decline in real house prices in 24 of those 49 years, according to the Absa House Price Index, i.e. almost half of the total years for which we have a recorded history.

However, mortgage lenders and mortgage borrowers would be less concerned perhaps with real house price decline, as long as there is ongoing nominal appreciation, because nominal appreciation alone can be sufficient to keep you owing less than your property is worth, the financial safeguard that both borrower and lender would be looking for.

# 2. The average house price level, as depicted by a house price index, is not necessarily the "market equilibrium" price

Secondly, a house price index attempts to provide an average estimate of house prices transacted, from which it is very useful to calculate house price inflation, but that average price is NOT necessarily a "Market Equilibrium" price.

In the residential market, there are various reasons for very strong resistance towards dropping prices to make a sale. Home sellers, for various reasons, are reluctant to sell for a lower price than what they purchased the house, and often resist selling for a lower price than their often "inflated" idea of what the property is worth. This is due sometimes to the mortgage debt which they have to settle, sometimes to their belief that house prices never go down, or because they see the home as an investment and measure of wealth, and its value thus far more important than that of their consumer items. This "downward resistance" also perhaps stems in part from the competition amongst estate agents to obtain the selling mandate, with the agent quoting the highest selling price more likely to get that all-important sales mandate.

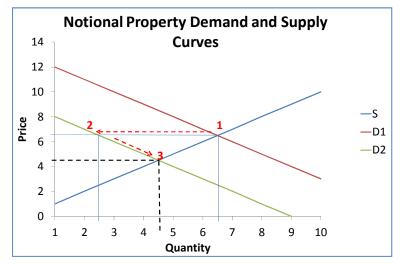
But perhaps a further key cause of this resistance is a miscalculation of the "holding costs" of a for sale home, should it remain on the market for a long time, as well as an "inflation illusion", which means that if a seller has to wait a year to sell his house, due to an initially unrealistic asking price, it means that he has effectively dropped the asking price in real terms over that 12 month period, often without even realizing it.

Whatever the myriad of reasons, this resistance towards dropping prices means that, when one gets a drop in residential demand, such as back around 2008/9, house prices don't necessarily fall sufficiently to keep the market in demand-supply equilibrium. Rather, there may be some price decline, but simultaneously a significant rise in supply, and an increase in the average time of homes on the market.

In such a case, the transaction prices being fetched in a relatively thin volume market may be above demandsupply equilibrium prices, with the market remaining oversupplied for a long period of time and home holding costs substantially elevated in many cases.

#### - The theoretical representation

A very simple representation of the theory on a demand-supply graph below appears as follows. Lets assume a sudden sharp interest rate hike. As this is not a house price-related residential demand-driver, the Housing Demand Curve would shift to the left from D1 to D2. The average price may not immediately decline, however. Therefore, the market initially shifts from point 1 to point 2 on the graph, the average price initially remaining unchanged but quantity demanded and transacted declining from a 6.5 to 2.5. Initially, however, the supply of homes remains at 6.5, and the market is oversupplied. This move to an oversupplied situation would be witnessed



in an increase in the average time of homes on the market. The prices now getting transacted in the market at position 2 are above the market equilibrium prices. Only over a significantly longer period, would the market then gradually make its way to position 3 on the graph, with supply shrinking somewhat due to lower prices, and price levels declining gradually (often only in real terms over time as inflation takes its toll), with the market eventually finding a new demand-supply equilibrium at a lower transaction volume level than prior to the demand shift, i.e. 4.5, but higher than straight after the initial demand drop.

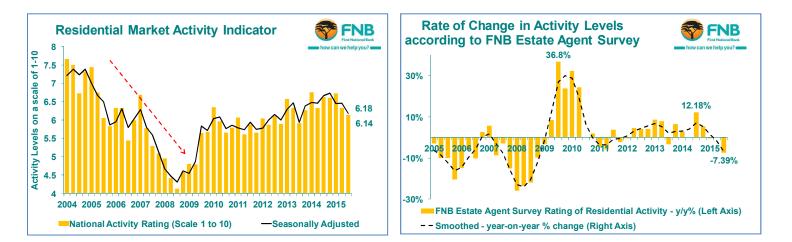
- A real life example of market correction – the 2008/9 Recession impact

A real life example of such an adjustment to a fall in demand took place around 2008/9, as last decade's residential property boom came to an end.

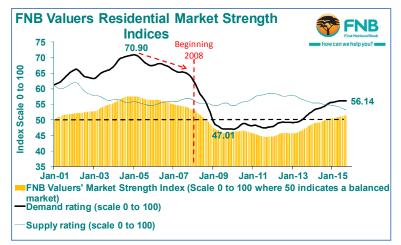
It became possible to portray these dynamics better since the introduction of the FNB Estate Agent Survey.

*Examining the FNB Estate Agent Activity Rating, we started to see a broad slide in the Estate Agent Residential Activity Rating from 2005 onward, ignoring a very brief respite in 2007.* 

This, we believe to be in part driven by slowing residential demand, or at least growth in demand, in turn the result of massive house price inflation causing a sharp deterioration in home affordability. Later, from mid-2006 onward, rising interest rates would add to this affordability deterioration.



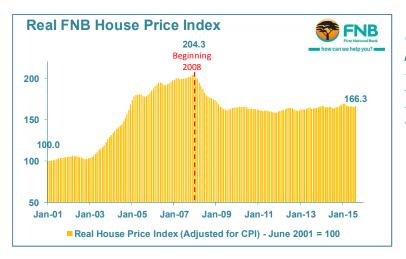
Indeed, FNB;s valuers began to perceive residential demand to be weakening. The FNB Valuers' Residential Demand Strength Rating began its slide from early in 2005, and declined all the way from 70.9 as at January 2005 to 47.01 by mid-2009.



This saw the FNB Valuers' Market Strength Index, the balance between their Demand and Supply Ratings, peaking in early 2005 and also gradually starting to weaken thereafter.

In short, therefore, our agent and valuergenerated indicators pointed to the weakening residential demand from around 2005. At that stage, the strongest part of SA's Residential Property Bubble was past.

Perceptions of slowing residential demand, however, were not seen in the transactions volume numbers until 2007, but further growth in transactions volumes did slow to a snails' pace after 2004. In the mean time, a massive building boom was gathering speed, and residential supply was beginning to improve.



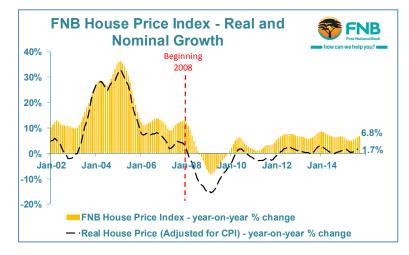


How did the market move towards its new equilibrium level? The peak in real house prices, according to the FNB House Price Index, only came in December 2007. Admittedly, though, we did see slowing real house price growth from early 2007, but no all out decline.

What we did see a lot sooner, however, was the start of a rising trend in the average time of homes on the market prior to sale. From near 5 weeks average in early-2005, the average time on the market rose steadily to ultimately peak at 21 weeks and 1 day in the  $2^{nd}$  quarter of 2009.

Therefore, not all of the market weakening was immediately reflected in a decline in nominal or real house price levels. In 2005, we did start to see slowing real house price growth, but not yet an all out decline, and a simultaneous rise in the average time in the market. This rise in average time on the market reflects a deterioration in the balance between demand and supply with prices

correcting far too slowly. If one assumes that an "equilibrium time on the market" is around 3 months (12 weeks, an admittedly subjective assumption), a longer average time suggests disequilibrium, where supply exceeded demand, and this lengthy average time on the market continued for some years.



By 2008, we would suggest that the equilibrium average house value was below that of the actual average house price reflected in the FNB House Price Index.

By February 2008, this disequilibrium started to be reflected in the start of a bout of year-onyear decline in real house price levels, and in August 2008 a period of nominal year-on-year house price decline set in, which lasted all the way to late 2009.

So part of the market weakness was indeed witnessed in a real and nominal average house price decline. However, this period of real and nominal house price decline appeared too slow

to bring the market beck to equilibrium until only some years later, where the average time on the market began to move steadily lower towards that 3 month mark from around 2013/14, while the FNB Valuers Market Strength Index, too, only recovered to once again reach the 50 "equilibrium level as recently as 2014.

Therefore, the move towards the new equilibrium was a very slow "multi-year" one.

Why would it matter if the residential market was in disequilibrium around 2008/9, and perhaps for a considerable time thereafter until a gradual demand recovery had mopped up the oversupply? A long average time on the market for a home owner not in a hurry to sell would probably not be an issue. However, it becomes an issue for a financially distressed home seller who has to "offload" the property quickly. And it becomes an issue for a lending institution keen not to incur the holding costs that go with a property. These two groups are often forced into going below the market prices at the time to find the equilibrium price in order to make the sale at a faster rate than the market's slow pace at the time.

## 3. A House Price Index is not a "Home Value Index"

The  $3^{rd}$  important point that is often missed, though, is that a house price index is NOT a home value index. This may sound strange, but there is a big difference. Any of the House Price Indices that exist in SA are based on the value of home transactions. If it were possible to value each and every home every month, we could compile an average value of all the homes in South Africa, but this is impractical. So we use transaction value information.

There is a considerable bias in transaction value data towards the higher end of the residential market, because people higher up the income ladder are more mobile, relocate more frequently, and this implies that there is a disproportionately large number of transactions in the higher priced segments relative to the number of residential units that exist. Conversely, towards the low end of the market the frequency at which homes get transacted declines. The most affordable segment of the residential market, depending how you segment it, is the group of areas formerly labeled as "Black Townships" back in the Apartheid era. Here, one finds a massive number of residential units, but with relatively few transactions, because the lowest income groups don't have the means to relocate frequently.

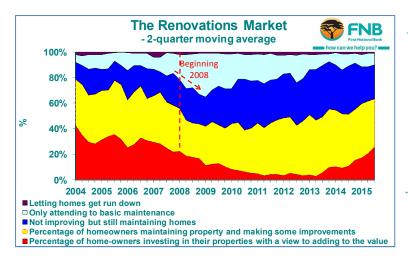
So, in toughening economic times, one can see a slump in the volume of residential transactions being more significant in more financially pressured areas, and of course the number of such financially pressured areas can increase in number during recessionary and stagnant economic periods. The influence of such areas of market segments on an overall house price index can then decline, whereas stronger market segments' transaction volumes could conceivably hold up better. Such relative shifts in transaction volumes can see house price indices telling a better story than the "on the ground" reality, should the weakest areas' transactions have all but dried up.

It can get even worse. When certain areas experience extreme decay, as is arguably more likely during prolonged periods of economic weakness, in the "worst case" it can get to a level where they exit the formally traded residential market altogether. Parts of the Joburg CBD and surroundings must have come close to this state at the end of the 1990s. If little or nothing gets traded in such areas, then there are no transaction prices to be included in the national house price index.

However, even if derelict and overrun by vagrants, every property still has a value. That value can be zero, and there were probably even properties in the Joburg CBD at a stage that were negative. Yes, negative, meaning that the owner may have to donate the property to someone or even pay them to take the property and its huge rates bill off his hands. But zero value properties don't often change hands, so they "exit" a property price index in much the same way as a liquidating company will exit the stock exchange's All Share Index.

It is perhaps no co-incidence that Joburg CBD and the likes of Hillbrow's deterioration started back around the 1980s, a time when the country's economy was stagnating. Economic stagnation means that, as new areas open up, oversupplies in "older" areas can develop rapidly, because purchasing power (be it for residential or commercial property) shifts to the more "attractive" option and there is little new purchasing power to replace it in that older area. This is a very different proposition to a rapidly growing economy, where there could be sufficient growth in property purchasing power to sustain newer as well as older areas.

Examining the FNB Estate Agent Survey's Maintenance and Renovations market survey questions, we saw a noticeable deterioration in levels of residential maintenance and upgrades around 2007/8. An increasingly financially pressured household sector saw cut backs in the levels of home maintenance, with that "lower" level, namely "percentage of owners only attending to basic maintenance" increasing in significance, while at the top



end of the scale, those "investing in their properties with a view to adding value (upgrades)" declined sharply, according to the agents surveyed.

Less investment and upkeep regarding residential property means greater levels of "decay". This is fine within limits, but too much in the way of cut-backs can lead certain areas to a "tipping point" where their deterioration cannot easily be revesed, resulting in "investor flight" from the area and in the worst case an ultimate "exit" from the formally traded market. Such cases are extreme, but the risk of this becomes higher in a stagnating economic environment.

#### - Perhaps this explains certain claims about the Zimbabwean property market a few years ago

This is how I would attempt to explain certain claims around an imploding Zimbabwean economy a few years ago, where some maintained that property values had managed to hold up despite an economy in freefall.

Such claims seem highly implausible. What is more likely is that a sizeable portion of that country's property market, both residential and commercial, had exited the formally traded property market, the formally traded market had declined in size quite significantly, and what was left over was traded at "reasonable values". I can only guess, but that is the likely explanation. Supply of formally traded residential and commercial stock can shrink dramatically if an area's or region's economy "tanks". Extreme examples of this in South Africa may possibly be found in certain country towns that were formerly important railway junctions, where mines close down, or where there is extreme urban decay in parts of major cities. After the town and its property market have slumped dramatically, a house price index only picks up what remains traded.

# C. CONCLUSION

So, in South Africa, with its "not imploding but indeed stagnating" economy, are we at risk of underestimating the extent of property value decline to come? Yes, it is possible, depending on how weak the economy gets before it gets better. A slowing house price index growth rate is unlikely to tell the full story of residential weakness should it occur, because such an index only records what gets transacted, and not what has "exited" the residential market, while the market price can also remain significantly above equilibrium price for lengthy periods of time.

This doesn't render house price indices useless. But one has to understand what you are dealing with, and what it can and cannot tell you.

The reality is, though, that home values can and do fluctuate up and down, perhaps more than we think and more than a house price index is able to tell us. Just ask the property owners in Joburg CBD and immediate surroundings back in the 1990s.

For residential investors, in times of long term economic stagnation, looking out for areas prone to decay becomes far more crucial, because without growth in household sector purchasing power (disposable income), a greater number of "financially-distressed" areas can be at risk of virtually "exiting" the residential market.