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## RESIDENTIAL PROPERTY MONTHLY

### HIGHLIGHTS

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- *In the 2<sup>nd</sup> largest economy within the Common (Rand) Monetary Area, i.e. Namibia, our FNB Namibia Average House Price continues to show very strong growth to the tune of 21.4% year-on-year for the 2<sup>nd</sup> quarter of 2013.*

- *There are signals from the residential rental industry that the rental market fundamentals are strong. While the CPI inflation rate for rentals increased only marginally in June, supply constraints in the rental market could see us set for stronger rental inflation. This could see yields resume their rising trend of recent years, but the risk is upward pressure on CPI inflation and possibly interest rates.*

- *The FNB House Price Index continued to accelerate mildly in July, from a revised year-on-year growth rate of 6.7% in June, the July growth rates reached 6.9%. In real terms (adjusting house prices for general inflation in the economy using the CPI), as at June we were still seeing mildly positive year-on-year inflation to the tune of +1.12%.*

- *In foreign currency-denominated terms, the FNB House Price Index continues to show sharp year-on-year decline. This has possibly contributed to some increase in foreigner “bargain hunting” over the past 2 years.*

- *Examining the FNB Valuers’ Market Strength Index, FNB’s Valuers have indicated that recent relative market strength has been the result of the combination of positive residential demand growth as well as a more constrained supply of residential stock on the market.*

- *Interest rates remained unchanged in July, with prime rate at 8.5%. House price growth thus remains lower than prime rate, not making it wildly attractive for speculators wanting to use cheap credit to profit quickly from house price growth. This may also be curbing less seasoned buy-to-let investors, many of whom (perhaps erroneously) base their investment decisions on recent price growth trends as opposed to looking at yields.*

- *Certain high frequency indicators also confirm the recent period of relative residential market strength. After slowing somewhat in the Summer months, year-on-year growth in Transfer Duty Revenues came back strongly in the 2<sup>nd</sup> quarter of 2013, growing by 27.5% year-on-year in June.*

- *Employment estimates and the FNBBER Consumer Confidence Index both pointed to some mild improvement. The Consumer Confidence Index returned to very low positive territory (+1) after 4 consecutive quarters of decline. Such a return to low positive territory, however, points to little more than confidence stabilizing at a very weak level after a major deterioration*

- *Any improvement in employment growth and consumer confidence is encouraging. But with still-very weak consumer confidence, significantly slower economic and disposable income growth in recent times, and no expectation of further interest rate cutting in the near term, we remain of the belief that house price growth will slow to late in 2013 and into 2014.*

## **EXECUTIVE SUMMARY – RESIDENTIAL SUPPLY CONSTRAINTS HAVE BECOME A KEY THEME**

*In recent times, the gradual residential rental and home buying demand growth of recent years has started to catch up with slower supply growth of residential stock. The economy had a good period up until mid-2012, but since then has not been setting the world alight. But investment in new residential stock since 2008 has also been slow, thus constraining supply growth and allowing demand growth to catch up somewhat. Therefore, varying degrees of stock constraints in home buying and rental markets have become a key theme.*

*Stock constraints appear most acute in Namibia, the Common (Rand) Monetary Area's 2<sup>nd</sup> largest economy. Our FNB Namibia Average House Price continues to show very strong growth to the tune of 21.4% year-on-year for the 2<sup>nd</sup> quarter of 2013. That country has had a faster economic growth rate in recent years than SA, but it is also said that supply constraints around the capital Windhoek are particularly acute due to limited land availability. Over the long term, the apparent result of such land constraints has been that our FNB Namibia House Price Index has risen cumulatively by 515% from the 3<sup>rd</sup> quarter of 2000 to the 2<sup>nd</sup> quarter of 2013, while the South African FNB House Price Index rose over the same period by a lesser 239%.*

*Back in South Africa, the supply constraints don't yet appear nearly as severe, but they have been mounting, and slow supply growth is not only an issue in the home buying market. There are clear signals from the residential rental industry that the rental market fundamentals are strengthening. While the CPI inflation rate for rentals increased only marginally in June, low levels of buy-to-let buying since 2008 have gradually led to mounting supply constraints in the rental market. The major portion of letting agents are now reporting shortages of rental stock. Get set for stronger rental inflation, which could see yields resume their rising trend of recent years, but the downside risk is possible upward pressure on CPI inflation and possibly interest rates.*

*On the home buying side, our 2<sup>nd</sup> quarter Estate Agent Survey showed 13% of respondents citing stock constraints, not yet severe but higher than a year or 2 ago. And so FNB House Price Index growth continued to accelerate mildly in July, From a revised year-on-year growth rate of 6.7% in June, the July growth rates reached 6.9%. In real terms (adjusting house prices for general inflation in the economy using the CPI), as at June we were still seeing mildly positive year-on-year house price inflation to the tune of +1.12%.*

*The market does remain cheap for foreigners, however. In dollar terms, the July FNB House Price Index declined year-on-year by -11%, in Euro terms by -16.4%, and by -10.2% in UK Pound terms, all of this due to recent deterioration in sentiment towards SA and resultant Rand weakness. This weakness has possibly been responsible for some increase in foreigner "bargain hunting" over the past 2 years, but foreign buying performance doesn't appear to be back up to pre-2008 recession levels.*

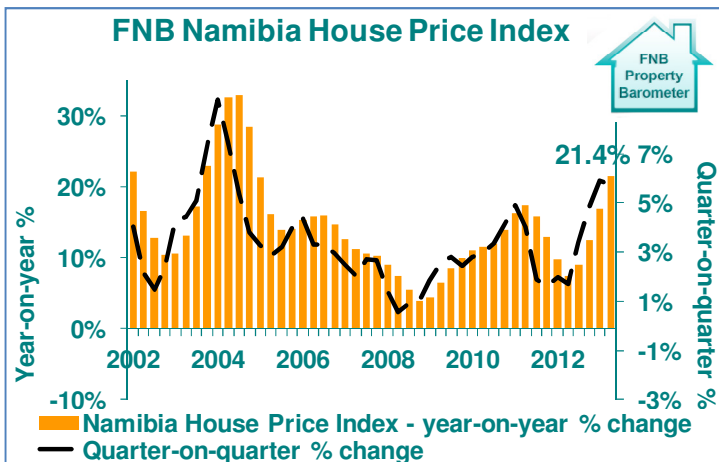
*Back to the market in Rand terms and the FNB Valuers' Market Strength Index for confirmation of recent trends, and FNB's Valuers have also indicated that recent relative market strength has been the result of the combination of positive residential demand growth as well as a more constrained supply of residential stock on the market.*

*Certain high frequency indicators also confirm the recent period of relative residential market strength. After slowing somewhat in the Summer months, year-on-year growth in Transfer Duty Revenues came back strongly in the 2<sup>nd</sup> quarter of 2013, and as at June were growing by 27.5% year-on-year in value.*

*The Reserve Bank (SARB) left interest rates unchanged in July, with prime rate at 8.5%. So, despite some recent mild acceleration, house price growth (Namibia excluded) remains lower than prime rate, not making it wildly attractive for speculators wanting to use cheap credit to profit rapidly from strong house price growth – a healthy situation. This may also be curbing the less seasoned buy-to-let investors, many of whom typically (perhaps erroneously) also base their investment decisions on recent price growth trends as opposed to yield.*

*With regards to the South African house price outlook, the FNBBER Consumer Confidence Index did point to some mild improvement. returning to very low positive territory (+1) after 4 consecutive quarters of decline. But such a return to positive territory points to little more than confidence stabilizing at a very weak level after a major deterioration. SA's economic growth rate remains pedestrian, with the SARB again having lowered its 2013 GDP growth projection down to 2% (and FNB's at 1.9%). Therefore, despite a recently more positive South African housing market period, it is expected that the slower period of economic growth since late 2012 will weigh on the home buying market, restricting the level of supply constraints, and that price growth will moderate mildly in 2013, averaging nearer to 5% next year after an expected 6.6% growth rate in 2013.*

**1. HOTSPOT - NAMIBIA**



In the 2<sup>nd</sup> largest economy within the Common (Rand) Monetary Area, i.e. Namibia, our FNB Namibia Average House Price continues to show very strong growth to the tune of 21.4% year-on-year for the 2<sup>nd</sup> quarter of 2013.

It has often been said that the country's major residential market, Windhoek, experiences significant land constraints and thus more constrained new residential supply, it would appear, than SA's cities.

The apparent result is that, while the shape and direction of Namibia's cycles don't look too dissimilar to SA, due to similar economic and interest rate cycles as a result of a high degree of

economic integration, the magnitude of its house price growth has been significantly better of late.

The FNB Namibia House Price Index has risen cumulatively by 515% from the 3<sup>rd</sup> quarter of 2000 to the 2<sup>nd</sup> quarter of 2013. While our index methodologies differ a little (Our Namibia Index being a simple average as opposed to the SA Index where we have fixed the weights of sub-segments), the South African FNB House Price Index rose over the same period by only 239%. Up until the end of 2007, the 2 countries' cumulative price growth was of a similar magnitude, but thereafter the South African market slowed dramatically while Namibia continued its strength.

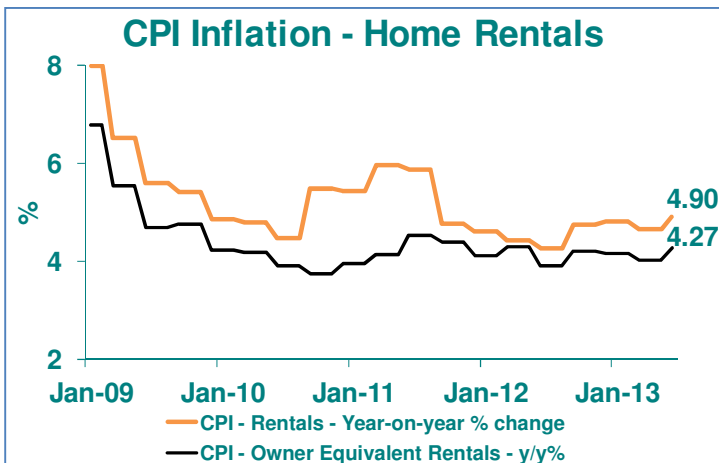
Needless to say, questions have been asked as to the sustainability of the Namibian Housing Market strength, including by the Bank of Namibia. See Addendum 1.

**2. FOCAL POINT: SOUTH AFRICAN RENTAL MARKET – ONE FOR FIXED INCOME ANALYSTS TO WATCH IN THE NEAR TERM.**

Last week saw the Consumer Price Inflation numbers being released, and besides for the implications for future interest rate policy, the key relevance for the residential property market lay in the Consumer Price Sub-Indices for Rentals and Owner Equivalent Rentals.

Over the past few years, the low inflation rates of rental components, which account for 16.2% of the total CPI together and thus exceed the big ticket Food and Non-Alcoholic Beverages component, have been helping to contain overall consumer price inflation.

As interest rates were reduced rapidly through 2009, and households streamed back into the home buying market in larger numbers, we saw a steady weakening in the rental market, and a resultant decline in both rental-related CPIs. Whereas at January 2009 the CPI for Rentals was inflating year-on-year at 8%, and the CPI for Owner Equivalent Rentals at 6.8%, these rates were down to 4.3% and 3.9% in the June survey of a year ago.

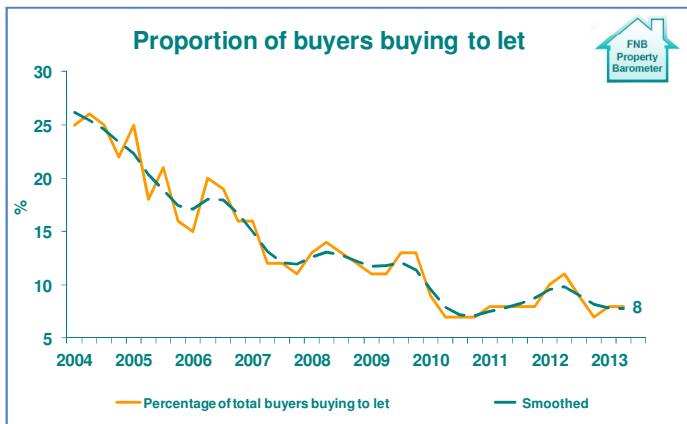


Thereafter, however, there has been some mild broad acceleration in rental inflation, with June 2013's actual rental rate reaching 4.9% (up from 4.7% in March survey), and owner equivalent rentals inflating by 4.3% (up from 4% in the previous survey).

But while the latest rental-related CPI inflation rates are off their lows of a year ago, one may be forgiven for asking why we would read so much into what really has only been a small move to date?

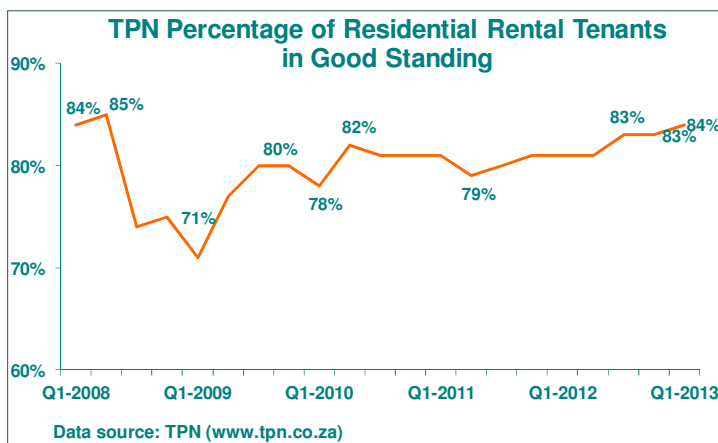
The answer lies in the rental market's fundamentals. Certainly the slight upward moves in these rental inflation rates from a year ago do not yet point to a strong trend. But examining the noises emanating from the rental market as of late, we expect more significant acceleration in the near term.

Firstly, we have seen a far more constrained growth in supply of properties to rent since the end of last decade's property boom. This is reflected in the FNB Estate Agent Survey estimate of buy-to-let buyers expressed as a percentage of total residential buyers, which dwindled from a massive 25% early in 2004 to recent levels of around 8% of total buying. The result (using Deeds data to estimate) was a dramatic slowdown in the rise in the estimated percentage of properties that were not primary residences owned by individuals (i.e. they were 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> etc properties), since around 2008.



At some point, as demand for rental property gradually rose in line with employment which (although anaemic) has been growing positively, one would expect oversupplies of rental property created in the boom years to gradually dry up. At that point, faster rental inflation could be expected.

By the Summer of 2012/13, this appeared to be happening. In a survey of letting agents undertaken by TPN (Tenant Profile Network) in the 1<sup>st</sup> quarter of 2013, 94% of respondents indicated a shortage of stock available to rent. And TPN goes further, indicating further improvement in the payment performance of rental tenants (which implies an improvement in their financial strength).



Whereas at the height of the recession of 2008/9, the percentage of tenants "in good standing" regarding their rental payments bottomed at 71% in the 1<sup>st</sup> quarter of 2009, thereafter there has been a gradual rise to 84% by the 1<sup>st</sup> quarter of this year.

The combination of slow supply growth in rental stock, combined with improving financial strength of tenants and presumably aspirant tenants, aided by very low interest rates on consumer debt, should conspire to boost rental inflation, and we suspect that such an upward trend is now due.

We therefore expect the 2 rental-related CPIs to end 2013 higher at 5.5% year-on-year in reaction to recently stronger rental market fundamentals.

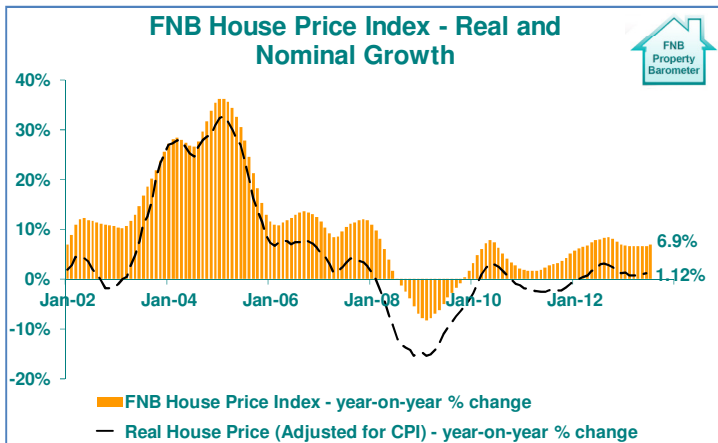
Such a trend, in turn, would have a positive and a negative side to it. Stronger rental growth would be positive for landlords, and should rental inflation ultimately exceed house price growth, that would be good for future buy-to-let investors as it would imply further rise in residential yields.



*But the flipside is that higher rental inflation would exert upward pressure on consumer price inflation, which in turn poses upside risks to interest rates. A 5.5% rental inflation rate would not yet have an extreme impact on overall CPI, and recent signs of slowing global food price inflation may imply a positive impact from the Food CPI to offset any rental inflation negative.*

*But analysts who make their living off watching monetary policy, and analyzing data such as the monthly CPI, would do well to watch the residential rental market closely in the near term.*

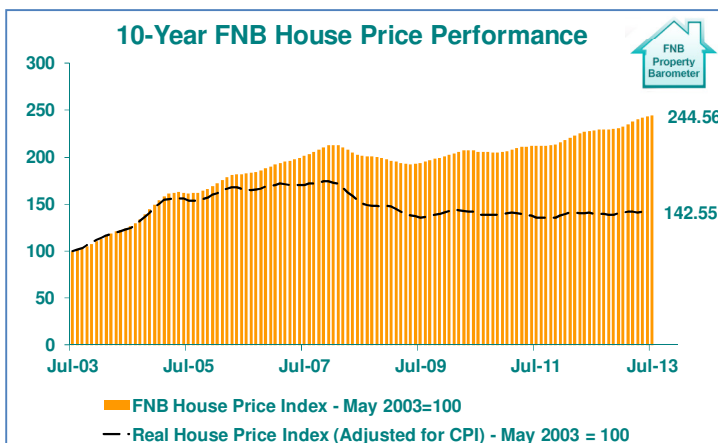
### 3. FNB HOUSE PRICE INDEX SHOWS MILD FURTHER YEAR-ON-YEAR GROWTH ACCELERATION, BUT IT ISN'T NAMIBIA



*The FNB House Price Index continued to accelerate, albeit only very slightly, in July, From a revised year-on-year growth rate of 6.7% in June, the July growth rate reached 6.9%.*

*The average value of homes transacted in the FNB House Price Index was R893,981*

*In real terms (adjusting house prices for general inflation in the economy using the CPI), as at June we were still seeing mildly positive year-on-year inflation to the tune of +1.12%, with consumer price inflation at 5.5% year-on-year in that month compared to a higher 6.7% nominal house price inflation rate.*



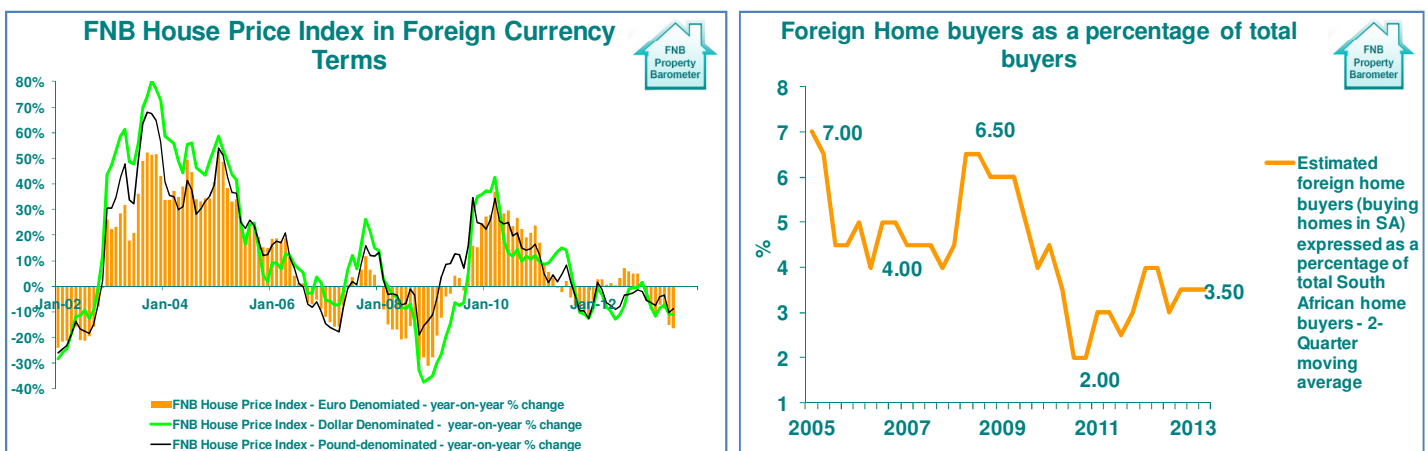
*Evaluating longer term performance of the FNB House Price Index, in real terms the index is -18.2% down on last decade's revised real price peak reached in December 2007, while in nominal terms it is a mere 15.1% higher.*

*However compared to July 2003, 10 years ago, the index is up 42.55% in real terms and 144.56% in nominal terms, still suggesting that the price effects of last decade's residential demand boom have far from worn off, despite a significant downward real correction since late-2007.*

#### 4. THE SOUTH AFRICAN HOUSING MARKET IN FOREIGN CURRENCY TERMS REMAINS CHEAP

In foreign currency-denominated terms, the FNB House Price Index reflects a very different picture to the Rand-denominated index, i.e. a domestic residential market dropping in value in “hard currency terms”, as a result of a recent deterioration in investor sentiment which has seen a major weakening in the Rand during 2013.

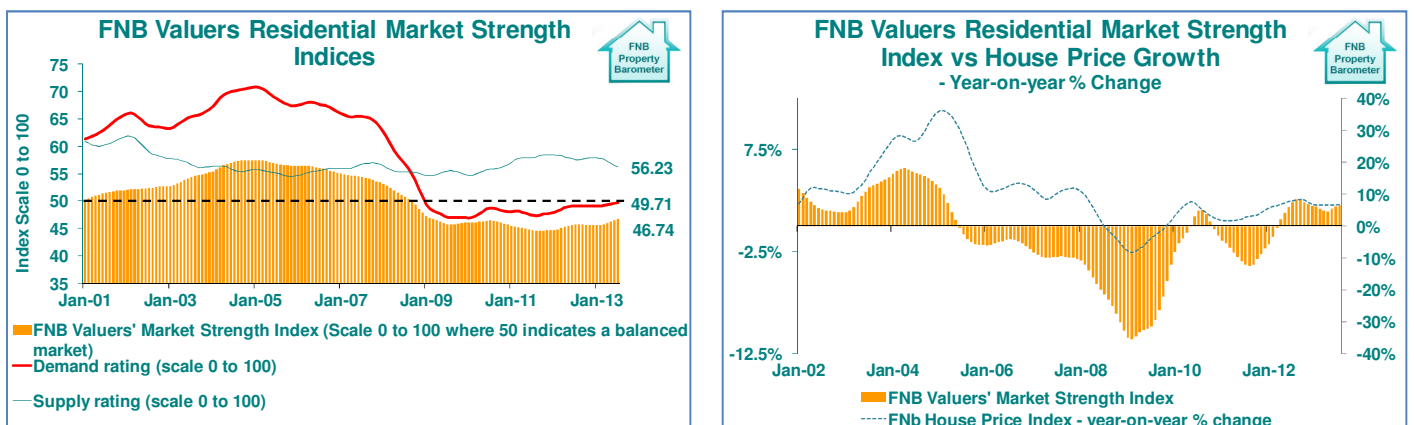
In dollar terms, the July FNB House Price Index declined year-on-year by -11%, in Euro terms by -16.4%, and by -10.2% in UK Pound terms. South African property has thus recently become significantly cheaper for aspirant foreign buyers in recent times. Has this attracted a higher number of foreign buyers? Tough to draw conclusions, because other factors also drive foreign buying. However, looking at recent years performance, our Estate Agent Survey respondents estimate foreign buying to have deteriorated significantly as a percentage of total buying through 2009 and 2010, a period of relative rand strength in which the foreign-denominated FNB House Price Indices grew strongly, implying a steady deterioration in domestic housing affordability for foreign buyers. In contrast, much of the 2011-2013 period has seen declines in the foreign-denominated indices as the rand has come under pressure, and has co-incided with something of a rise in the percentage of foreign buyers. So there may well be something in it, although at 3.5% of total buying, foreigners are not back to pre-2008 recession levels.



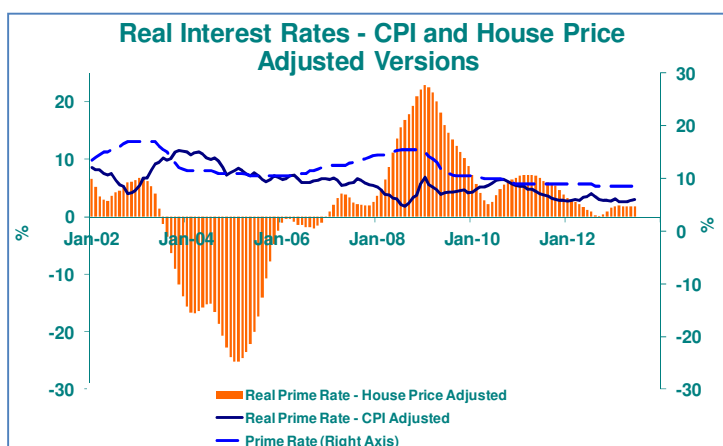
#### 5. FNB'S VALUERS PERCEIVE AN IMPROVED BALANCE BETWEEN SUPPLY AND DEMAND

Turning to the FNB Valuers' Market Strength Index, FNB's Valuers have indicated that recent relative market strength has been the result of the combination of positive residential demand growth as well as a more constrained supply of residential stock on the market.

Since early-2012, the FNB Valuers' Market Strength Rating Index has shown gradual positive year-on-year growth after a 2011 decline. It remains below the crucial level of 50, at 46.74, implying that the residential demand rating at 49.71 is still weaker than the 56.23 Residential Supply Rating. This arguably explains why we have not yet seen strong house price growth in real terms, because, while they do see supply being a little more constrained, the constraint is still far from being extreme.



## 6. MONETARY POLICY STANCE CONTINUES TO SUPPORT A “RATIONAL” BUYING MARKET , WORKING AGAINST WIDESPREAD SPECULATIVE BUYING



A key event during July was the Reserve Bank’s (SARB) Monetary Policy Committee (MPC) meeting to deliberate on interest rates. The outcome was one of unchanged interest rates, with the MPC continuing to highlight economic growth risks to the downside and consumer price inflation risks to the upside (emanating from a volatile rand and high wage demands).

While the outcome was hardly exciting, it still has significance. Against the background of single-digit house price growth, the current repo rate level of 5% implies a still-positive alternative measure of real prime rate when adjusting using the house price

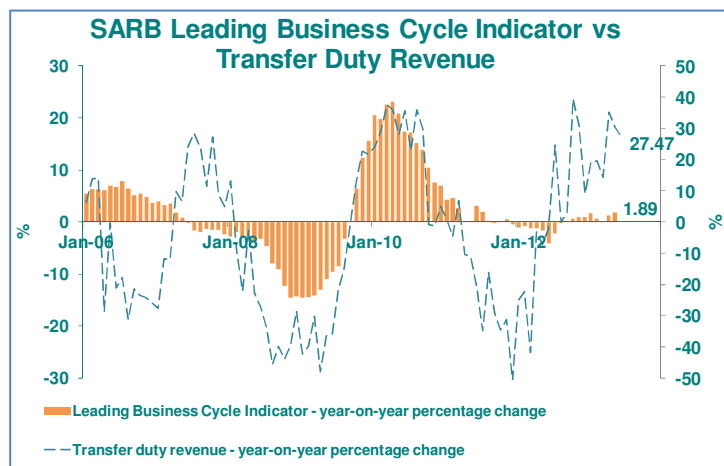
inflation instead of CPI.

In other words, house price growth remains lower than prime rate, according to the FNB House Price Index, not making it wildly attractive for speculators wanting to use cheap credit to profit rapidly from strong house price growth. This may also be curbing the less seasoned buy-to-let investors, many of whom typically (and perhaps erroneously) also base their investment decisions on recent price growth trends as opposed to looking at the yield.

**This remains a far cry from back in 2004/5, when estimated real prime (based on house prices) dipped to as low as –25%, creating the perfect environment for speculators and capital growth-driven buy-to-let investors. This all has significance for the buy-to-let and rental market, promising to contain buy-to-let buying in the near term.**

## 7. AND TRANSFER DUTY REVENUE GROWTH ALSO CONFIRMS A BRISK TRADING PERIOD

Certain high frequency indicators also confirm the recent period of relative residential market strength. After slowing somewhat in the Summer months, year-on-year growth in Transfer Duty Revenues came back strongly in the 2<sup>nd</sup> quarter of 2013, and as at June were growing by 27.5% year-on-year.



Then there was the SARB Leading Business Cycle Indicator, which has shown mild positive year-on-year growth since late-2012 after a prior negative period, and the pace of residential demand and especially mortgage lending normally correlates quite well to this in terms of direction.

The Leading Indicator, however, has shown far more moderate growth than was the case back in 2009/10 as interest rates were rapidly cut, suggesting that residential demand growth should not have been nearly as rapid in 2012/13 as was the case back in 2009/10. Why then has the more recent period yielded better house price growth than the former? The answer lies arguably in that

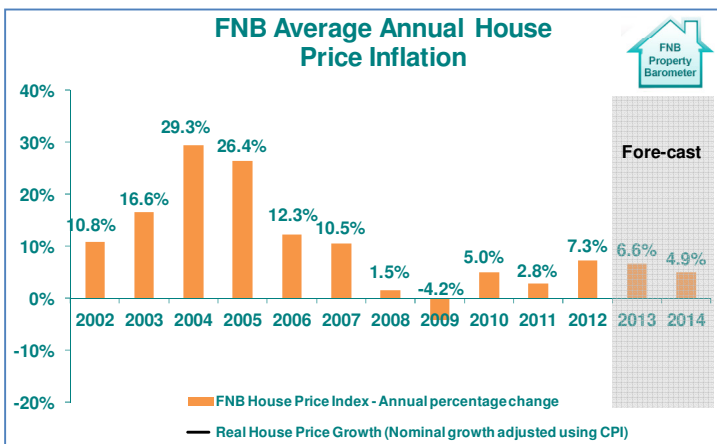
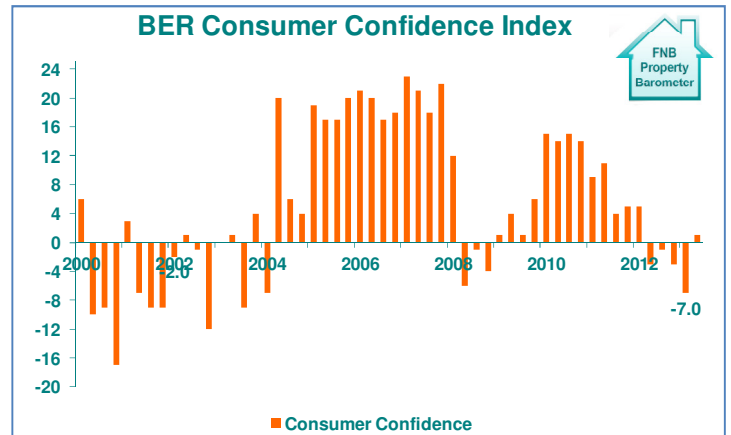
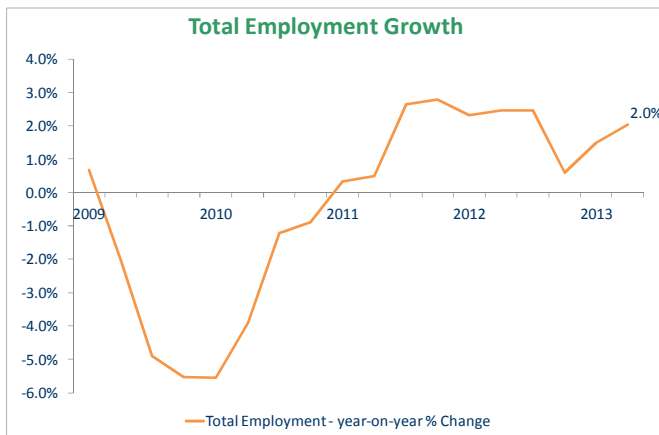
there have been more stock constraints in more recent times, thus necessitating less demand growth to raise prices than was the case back in 2010 where there were far higher levels of financial stress amongst homeowners, and as a result very good supply.

## 8. OUTLOOK –MILD IMPROVEMENT IN EMPLOYMENT, AND STABILISATION IN CONSUMER CONFIDENCE, BUT NOT ENOUGH YET TO ALTER EXPECTATIONS MEANINGFULLY

Our perception is that rental inflation is due for some increase, having been on the low side for a while and coming off a low base, and our impression is also that the rental property supply constraint may be higher than the home buying supply constraint at this stage. Admittedly, this is based on perception, and it is difficult to measure.

But with regards to house price growth in South Africa, the expectation is that after a relatively nice run, some mild slowing towards 2014 may be on the cards.

Two key data releases in May, namely employment estimates by StatsSA and the FNBBER Consumer Confidence Index, did point to some mild economic improvements. Year-on-year, 2<sup>nd</sup> quarter employment was estimated to have risen by 2%, up from 1.5% after a prior dip, while the Consumer Confidence Index returned to very low positive territory (+1) after 4 consecutive quarters of decline. Such a return to positive territory, however, points to little more than confidence stabilizing at a very weak level after a major deterioration, a deterioration which is explained by a multi-year slowing in real household disposable income growth since a 2010 peak.



Any improvement in employment growth and consumer confidence is encouraging. But with still-very weak consumer confidence, significantly slower economic and disposable income growth in recent times compared with the stronger period prior to mid-2012, and no expectation of further interest rate cutting stimulus in the near term, we remain of the belief that house price growth will slow to late in 2013 and into 2014. This would reflect the lagged impact of a slower pace of economic growth since mid-2012.

Many of the same old non-income factors will also serve to constrain the household spending rate, notably a rising effective income and wealth tax

rate (i.e. tax/income ratio rising further), municipal rates and utilities tariffs remaining above income growth, and of course we have had significant fuel price inflation in recent times driven in part by rand weakness.

The household thus remains constrained, and therefore, despite a recent good period, we remain of the expectation that this will contain house price growth as we head towards 2014.



## ADDENDUM 1: An Extract from the Bank of Namibia Financial Stability Report regarding the Namibian Housing Market

### Box Article I: The Namibian Housing Market

#### Introduction

The box article provides a synopsis of the main findings of two studies which were carried out by the Bank of Namibia (2011) and IMF (2012) to assess the existence and ascertain the extent of house price misalignment in the Namibian property market, so as to establish whether house prices are rooted, or not, in fundamentals. Rising property prices is a concern for policy makers given that high residential property prices not aligned to fundamentals could pose risks to financial stability and the economy at large. In Namibia, this becomes critical given that the banking industry is highly exposed to mortgage loans, which constitute almost half of the total loans extended.

#### Property Price Developments

Since the turn of the millennium, house prices grew rapidly in Namibia. The average price of residential properties financed by First National Bank (FNB) increased from N\$199,670 in 2000 to N\$782,122 during 2010, translating into an average growth rate of 14.7 percent per annum, outpacing the inflation rate which averaged 4.5 percent over the same period. The growth in residential property prices has not only resulted in housing unaffordability challenges for the majority of the Namibian people, but also is a potential risk to financial stability. For instance, with an average house price of N\$720 000, at a mortgage rate of 10.25 percent and a repayment period of 20 years, the monthly repayment is N\$7068. When the 1/3 principle<sup>13</sup> is applied, an individual would have to earn a monthly gross income of N\$21 204 to be able to afford such a property (Table 1). The above case raises three main questions: (a) are residential property prices in Namibia overvalued? (b) What are the main causes of such steep price increases? (c) What tools are available to policy makers to not only arrest the steep increases, but to also ensure that the risks to price stability are minimised without a sharp correction?

Table 1: Mortgage instalments

Mortgage rate	Bond value		
	N\$500,000	N\$750,000	N\$1,500,000
7.5	4,028	6,042	12,084
9.5	4,661	6,991	13,982
11.5	5,332	7,998	15,996
13.5	6,037	9,055	18,111
15.5	6,770	10,154	20,308

#### Are residential property prices overvalued/is there a price misalignment?

Studies conducted by the Bank of Namibia and the IMF revealed that the escalation in property prices could mainly be explained by fundamentals, although there have been signs of overvaluation since 2010. The studies arrived at this conclusion by using regression analysis, which included variables such as real GDP per capita, real mortgage interest rates, and real mortgage credit extension as proxies for economic fundamentals. The IMF study showed that from October 2010 onwards, there was evidence which suggests that *residential property prices were higher than fundamental-based prices*. That is, residential property prices showed signs of overvaluation during recent years. The BoN study, on the other hand, could not, with the evidence presented, confidently reject the null hypothesis that residential property prices were not explained by fundamentals. Nonetheless, the BoN study cautioned that such a conclusion should be treated with care given data limitation and the difficulty in identifying a price bubble *a priori* as shown by literature.

From a financial stability point, the balance of evidence suggests that banking institutions' exposure to the real estate market does not, in and of itself, pose a significant threat to financial stability. Nonetheless, close monitoring is required for the following reasons: Firstly, the extent of the banking institutions exposure to the housing market is significant, with mortgages

<sup>13</sup> As a rule of thumb, banking institutions will issue mortgage loans for which the repayment cost is not greater than 1/3rd of the client's gross monthly income.

representing some 55 percent of total loans to the private sector in the banking institutions' balance sheets. Secondly, a reversal in the levels of mortgage rates from the existing historical low rates could adversely affect people's ability to pay. At the same time, the banking sector can suffer considerable losses in the form of declines in collateral values, if house prices decline significantly. However, the capital adequacy of the local banking sector remains sound considering the 50 percent risk weight assigned to mortgage loans. The risk-weighted capital adequacy ratio for the Namibian banking sector stood at 14.6 percent, higher than the Basel II requirements of 10 percent.

### **Determinants of Residential Property Prices**

The steep escalation in residential property prices can be attributed to both demand and supply factors. On the demand side, important factors include the increasing urbanisation trends and the impact of high income earners. Supply side factors include unavailability/shortage of serviced land; increases in the costs of building materials; the use of auctions by local authorities to distribute land and the historically low interest rates. All these factors have and could still further support further escalation in residential prices.

### **Conclusion and Policy Recommendations**

The studies reached a number of conclusions regarding the potential impact of the current trend of residential property prices on financial stability. The BoN study concluded that the empirical results provided little evidence for concern at this point. Also, whilst the risk of default could not be ruled out, the risk of major financial losses to banking institutions from a series of extended interest rate hikes appears minimal, given the existing capital buffers of the local financial intermediaries. The IMF study identified some level of overvaluation in the prices and made the following policy recommendations:

- Close monitoring of the financial system's exposure to mortgage loans and loan guarantees through periodic stress testing,
- Continued encouragement of banking institutions to augment their capital buffers, and
- Identify measures aimed at increasing the availability of serviced land.

## **ADDENDUM 2 - NOTES:**

**Note on The FNB Average House Price Index:** Although also working on the average price principle (as opposed to median or repeat sales), the FNB House Price Index differs from a simple average house price index in that it could probably be termed a “fixed weight” average house price index.

One of the practical problems we have found with house price indices is that relative short term activity shifts up and down the price ladder can lead to an average or median price index rising or declining where there was not necessarily “genuine” capital growth on homes. For example, if “suburban segment volumes remain unchanged from one month to the next, but former Black Township (the cheapest areas on average) transaction volumes hypothetically double, the overall national average price could conceivably decline due to this relative activity shift.

This challenge of activity shifts between segments is faced by all constructors of house price indices. In an attempt to reduce this effect, we decided to fix the weightings of the FNB House Price Index’s sub-segments in the overall national index. This, at best, can only be a partial solution, as activity shifts can still take place between smaller segments within the sub-segments. However, it does improve the situation.

With our 2013 re-weighting exercise, we have begun to segment not only according to room number, but also to segment according to building size within the normal segments by room number, in order to further reduce the impact of activity shifts on average price estimates.

The FNB House Price Index’s main segments are now as follows:

- The weightings of the sub-segments are determined by their relative transaction volumes over the past 5 years, and will now change very slowly over time by applying a 5-year moving average to each new price data point. The sub-segments are:

- Sectional Title:

- Less than 2 bedroom – Large
- Less than 2 bedroom – Medium
- Less than 2 bedroom – Small
  
- 2 Bedroom – Large
- 2 bedroom – Medium
- 2 bedroom – Small
  
- 3 Bedroom and More - Large
- 3 Bedroom and More - Medium
- 3 Bedroom and More - Small

- Full Title:

- 2 Bedrooms and Less - Large
- 2 Bedrooms and Less - Medium
- 2 Bedrooms and Less - Small
  
- 3 Bedroom - Large
- 3 Bedroom - Medium
- 3 Bedroom - Small
  
- 4 Bedrooms and More - Large
- 4 Bedrooms and More - Medium
- 4 Bedrooms and More – Small

The size cut-offs for “small”, “medium” and “large” differ per room number sub-segment. “Large” would refer to the largest one-third of homes within a particular room number segment over the past 5 year period, “Medium” to the middle one-third, and “Small” to the smallest one-third of homes within that segment.

- *The Index is constructed using transaction price data from homes financed by FNB.*
- *The minimum size cut-off for full title stands is 200 square metres, and the maximum size is 4000 square metres*
- *The maximum price cut-off is R10m, and the lower price cut-off is R20,000 (largely to eliminate major outliers and glaring inputting errors).*
- *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.*