Are the property market's hurdle and escalation rates too high?

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Hurdle rates required by investors to induce them to invest in property were basically unchanged at 19% in quarter 2003:1 — a level at which they have been for many years. At the same time, the leaseback escalation rate got stuck at 10% or higher. This is in spite of the disinflationary environment in SA, the generally favourable prognosis for long-run inflation and the long-term character of property investments.

The minimum total return required by potential investors to induce them to invest in property is known as ***the hurdle rate*** *(income yield plus expected capital appreciation). As such, it is the correct discount rate to use for valuations and viability studies. One way of measuring the total rate of return on an investment — ex post or ex ante — is the internal rate of return (IRR) method.*

Thus the purpose of this article is to check whether the property market's hurdle and escalation rates are realistic in an environment in which inflation has been declining secularly for more than a decade, and is probably heading for a sustainable 5% or lower.

In deciding on a method to approach this problem, we must first of all consider that the property market is quite inefficient and unsophisticated. A further problem, which follows from the first, is that our evidence regarding the property hurdle rate is based on a small sample of respondents. The statement above, namely that the ruling property hurdle rate is about 19%, is based on the answers of only about three to four respondents replying, on a quarterly basis, to a survey conducted by *Rode's Report*. Fortunately, our knowledge regarding market escalation rates and market capitalization rates is on firmer ground.

As will soon become clear, an important element in determining the level of the hurdle or escalation rate is the expected inflation rate, and fortunately we can use the far more efficient financial market to gauge this magnitude. The SA government has issued three inflation-hedged long bonds, and by calculating the spread between the yields of these bonds and conventional bonds' yields for the same periods to maturity, we can calculate the inferred inflation rate expected by the financial market. The results are shown in Table 1. We see the expected inflation rates varying from 5,6% (20 years' time horizon) to 6,6% (5 years).

So how can we use this knowledge to verify the property market's hurdle and escalation rates? To answer this question, we first have to consider Gordon's Growth Model. This model is widely used to value income-generating assets, and where the valuer is prepared to assume (for want of better information regarding the future) that the cash flow (D) will grow at a constant growth rate (g) in perpetuity.

Table 1: How the financial market forecasts inflation as at 31 March 2003

Term to maturity (years)	Yield to maturity (%)		Inferred expected inflation rate (%) (rounded)
	Conventional long bond ex Besa(4)	Less: inflation-hedged bond	
5	10,43	3,85 (1)	6,6
10	10,01	3,93 (2)	6,1
20	9,60	3,96 (3)	5,6

(1) R198 maturing 2008; (2) R189 maturing 2013; (3) R197 maturing 2023; (4) Read off yield curve of Bond Exchange SA.

Restating this model, we get:

$$r = \frac{D_1}{P_0} + g$$

where

r = Total return required by investors (hurdle rate)

D_1 = Net income or dividend in period 1

P_0 = Price or value in period 0

g = A constant growth rate of the cash flow in perpetuity

where

$\frac{D_1}{P_0}$ = k (capitalization rate)

hence

$r = k + g$

So, if r = 19% and k = 13% (say for Sandton CBD prime offices in quarter 2003:1), then g = 19% - 13% = 6% p.a. in perpetuity.

This implies that investors in individual properties in Sandton CBD expect office rentals of properties that are prime today to grow at a constant 6% in perpetuity. For the cash flow of an ageing property to grow at 6% p.a., building-construction inflation must be around 6% + 2% (for ageing) = 8%. Note that in the long run (about 17 years) building-construction inflation and consumer inflation should show similar growth rates.

Throughout this article we tentatively assume a property-ageing factor of 2% p.a. This means an individual building's market rent will depreciate by 2% p.a. relative to that of new properties. This ageing factor will be validated in future research.

The property market's 8% inflation rate in perpetuity seems high when compared to the financial market's verdict of 5,6% (Table 2). There is a mismatch of periods here, in that the property market's 8% inflation is in perpetuity whereas the financial market's inferred inflation is for only for 20 years. However, in practice the difference between 20 years and perpetuity is slight, financially speaking (see Table 3).

If the inflation rate is expected to be 5,6%, then a prime property's cash-flow growth must be lower — say by 2% points to cater for ageing — which gives us an inferred financial-market property cash-flow growth in perpetuity (g) of, say, 4% p.a. (rounded up). We can now recalculate the hurdle rate (r): 13% capitalization rate plus 4% (g) = 17%. This can be compared with the property market's hurdle rate of 19%.

This confirms our personal view that the property market's hurdle rate of 19% is unrealistically high. With such an excessively high hurdle rate, many an otherwise sound investment would not pass muster.

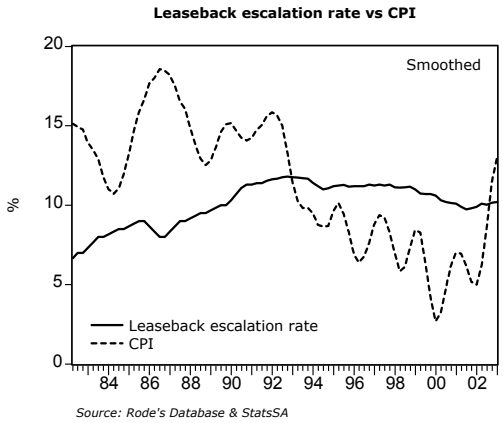
Table 2: Hurdle rates surveyed by *Rode's Report*
Quarter 2003:1

	Buy %			Develop on speculation (%)		
	Mean	SD	N	Mean	SD	N
Office buildings (CBD)						
Johannesburg	19,3	1,04	3	22,5	1,80	3
Sandton	19,9	1,03	4	22,7	1,89	3
Pretoria	19,3	1,04	3	22,3	2,47	2
Durban	19,3	1,04	3	22,5	1,80	3
Cape Town	19,3	1,04	3	22,7	1,89	3
Industrial leasebacks						
Central Witwatersrand	19,8	1,06	2	21,3	1,06	2
Pretoria	19,8	1,06	2	21,3	1,06	2
Durban	19,5	0,87	3	22,2	1,76	3
Cape Town	19,8	1,06	2	21,3	1,06	2
Regional shopping centres						
Witwatersrand	19,7	0,76	3	22,2	1,76	3
Pretoria	19,7	0,76	3	22,2	1,76	3
Durban	19,8	0,76	3	22,5	2,29	3
Cape Town	19,8	1,06	2	21,3	1,06	2

N = Number of respondents; N/A = Not available (fewer than two respondents); SD = See Glossary of terms and abbreviations in Annexure 1.

Leaseback escalation rate

The leaseback escalation rate saw little change in quarter 2003:1, after dropping 0,2% points from 10,5% in quarter 2002:4 to 10,3% in quarter 2003:1. This follows an uptick in escalation rates since quarter 2001:4, which has been the result of higher inflation rates after the rand's radical drop at the end of 2001. Despite last year's acceleration in inflation, the expectation is still that inflation will soon continue on its secular downward path, with escalation rates eventually following in its wake. The latest consumer-inflation data (March 2003) already points to a levelling-off, which could explain the sideways movement of escalation rates in the quarter under review.



Source: Rode's Database & StatsSA

A 10% escalation rate on leasebacks implies that the property market expects market rentals of now-prime individual properties to grow at this rate over the next 10 years. This figure immediately seems high when compared with the inferred inflation expectation of 6,1% of the financial market (Table 1).

The leaseback escalation rate is a proxy for the property market's expected rental growth rate of an individual property over the next ten years.

To check this proposition, our sums are similar to those of the hurdle-rate calculations. The only difference is that we now do all our calculations over a 10-year period, in contrast to "perpetuity" (actually, 20 years serving as a proxy for perpetuity), as was the case with the hurdle rate calculations.

The inferred expected market-rental growth rate over a 10-year time horizon is thus 6,1% – 2% (for ageing) = 4% (rounded) p.a. So, whilst the property-market's escalation rate stands at 10%, the financial market implies that it should be closer to 4%. This means that landlords who are signing leases with escalation rates of 10% p.a. for 10 years will show super returns.

The flipside is that tenants signing at 10%, whilst the market growth rate in rentals is only predicted to be 4%, will be losing out — unless there is a clause in the lease that provides for a market-revision of the escalation rate (as well as the rental itself) after, say, five years.

5-year term

So let's investigate the escalation rate for 5-year time horizon. With reference to Table 1, we see the financial market tells us by implication that market rentals of an individual, ageing, building will grow at 4,6% p.a. over the next five years (6,6% - 2% for ageing). Note that this is purely a mechanistic calculation and ignores cyclical factors like the demand and supply of space.

The financial market's inferred forecast of 4,6% p.a. over the next five years compares with our *Trends* sister publication's average 5-year forecast of 5,4% p.a. (7,4% minus 2% points for the ageing of buildings) for Central Witwatersrand industrial rentals. It seems Rode's econometric model is much more realistic than the property market's forecasts via its escalation rates.

Table 3 sums up the findings of this article.

Table 3: The market's prognosis for rental growth
March 2003

Time horizon (years)	Financial market			Property market
	Inferred inflation (ex Table 1)	Less: property's ageing factor	Inferred individual property's rental growth p.a. (3)	Inferred individual property's rental growth p.a.
5	6,6%	2%	4,6%	10% (1)
10	6,0%	2%	4,0%	10% (1)
20	5,6%	2%	3,6%	N/A
30(4)	5,3% (4)	2%	3,3%	6% (2)

(1) Market rental escalation rate
(2) Hurdle rate of 19% less 13% capitalization rate.
(3) The 5-year time horizon's forecast derived from the financial market is not a serious attempt to forecast the property market because it ignores short-term factors like the current (lack of) demand-supply equilibrium. The longer the time horizon, the higher the validity of this approach to forecasting.
(4) The writers' attempt at guessing the financial markets' verdict. We regard 30 years as practically perpetuity.

To conclude, using the financial market's inferred forecast of inflation over the next 5, 10 and 20 years — and adjusting these for the ageing of individual buildings — provides powerful evidence that today's escalation rates in the property market are amazingly high. A correction is overdue. In the meantime, long-term investors might consider lowering their hurdle rate to about 17%, and their rental-growth expectations to the inferred rental growths in Table 3. Alternatively, they might consider investing in *Rode's SA Property Trends*' 5-year forecasts produced by an econometric model. To use 10% market-rental growth rates in viability studies and in forecasts of total returns is simply not credible. This much is abundantly clear from our investigation.

Table 4: Leaseback escalation rates surveyed by *Rode's Report*
Quarter 2003:1

Mean	SD	N	Change 2003:1 less 2002:4	Broker-contributor codes
10,3%	1,5	12	-0,2% pts	AN, BM, DD, DP, GR, HL, HP, HS, IN, JP, JS, ML, PT, ZZ

However, valuers cannot change the market — they are merely the messengers. Hence Rode's valuation department generally still uses 19% as the hurdle rate for well-located prime properties, and it is recommended that when market valuations are done, this rate still be used for discounting the cash flows of existing prime properties. ■