

A new tool to calculate the capitalisation rate of shopping centres

**by Erwin Rode
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Ever since the fourth quarter of 1991, *Rode's Report (RR)* has been publishing regression equations to calculate the capitalisation (cap) rate of office-building and industrial-building properties. These equations are based on the premise that the gross market rental commanded by a property, is a crucial determinant of its cap rate.

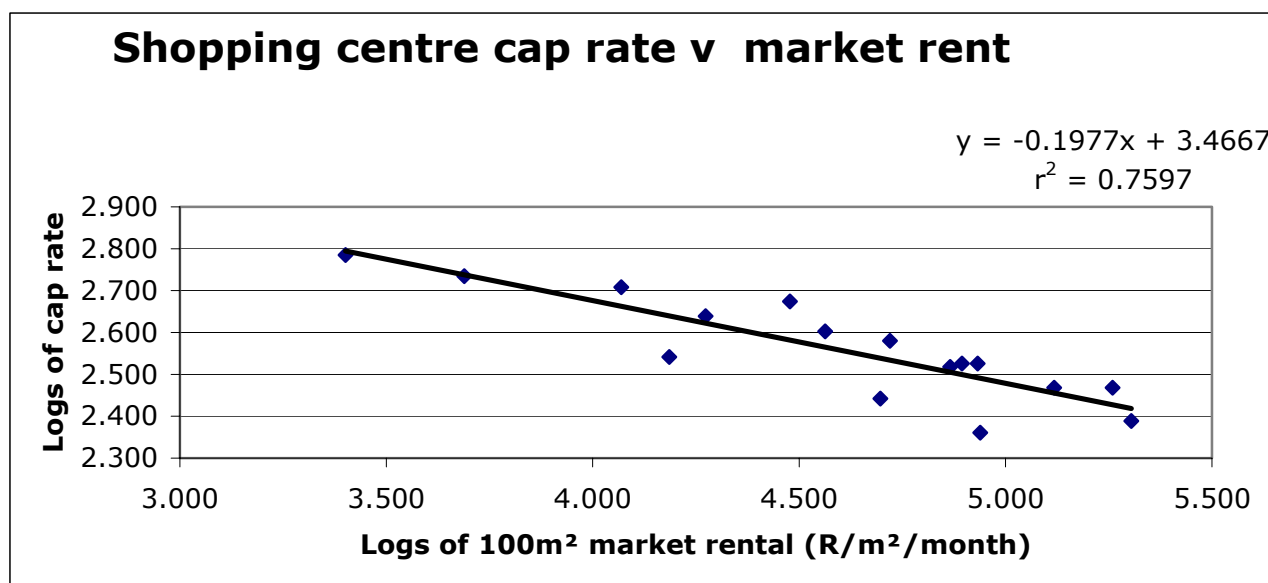
The postulated negative correlation between market-rental rate and cap rate is not such an outrageous proposition, considering that the market rental of a property reflects important value-determinants such as location, grade (quality of finishes and quality of facilities) and tenant mix (the latter in the case of shopping centres).

The source of the data to calculate these regression equations is gross-market-rental surveys and cap-rate surveys conducted every quarter by Rode and published in *RR*. The equations are updated every quarter (see our regular article elsewhere in this issue). However, shopping centres have always been excluded from this exercise because we had no way of directly linking shopping-centre cap rates with gross market rentals. The link has always been between centre *size* and cap rate (as per the *RR* surveyed cap rate tables, see cap rate article elsewhere in this issue) — and centre size is only an imperfect proxy for market rental rate.

The logic that connects centre size and cap rate is as follows: larger centres tend to attract more customer feet, which push up retailer turnovers, which push up the rentals the retailers can afford to pay, which push down the cap rate. However, this is a long logic chain, hence the relationship between centre size and cap rate being imperfect. For instance, the foot count does differ enormously between, say, regional shopping centres, even of the same size. In addition, foot count is not the same as turnover because the average "basket" might differ significantly between centres. Thus, as in the case of office and industrial properties, market rentals would be a better determinant of cap rates.

However, the problem has always been to establish the market rental of individual centres, and then, more importantly, to link these rentals to the individual centres' cap rates. Why? Because we do not, and cannot, establish the cap rates of *individual* shopping centres through regular surveys. Even establishing the market *rentals* of individual centres is a problem, because some landlords as a matter of policy are not prepared to divulge the ruling rental rates of their centres. Why landlords would have such a policy is unclear, because any competitor who seriously wanted to establish the market rental levels in a given centre can easily do so by making enquiries with the tenants — albeit at a cost. Also, a transparent policy of charging sustainable market rentals should improve landlord-tenant relations and should be good for long-term, sustainable profit maximisation. Hence, should tenants be aware of what the landlord considers to be market rentals, it should do no harm.

Despite these obstacles, we believe we have now, at least partially, bridged this problem in the following way. Rode is a major valuer of shopping centres in SA, and in the third quarter of 2002 we valued a large number of centres, ranging from big to small and spread all over the country. In assigning cap rates to these properties, we considered, *inter alia*, the cap rates as per the RR surveys (i.e. the cap rates by type of centre/centre size) and, more importantly, the gross market rental rate the centres command for 100m² of space. In this way we ensured that our resulting cap rates were within the RR survey frame, and we ensured a consistent correlation between cap rates and market rental rates. This relationship between cap rate and market rental rate applicable to 100m² shops now allows one to build a regression equation to estimate cap rates of a centre given its market rental rate for space of 100m². One can argue that this approach is not 100% empirical, but at least it is internally consistent.



The best function turned out to be an exponential relationship. The equation is:

$$\text{shopping centre cap rate \%} = \exp(3,467 - (0,198 * \ln(\text{gross rental})))$$

where:

- shopping centre cap rate % = the cap rate applicable to the third quarter of 2002.
- gross rental = gross market rental rate per m² per month in the third quarter of 2002 for a shop of 100m² with an average location within the centre.

The correlation coefficient $r = -0,872$; standard error = 0,063; $n = 16$ observations.

This equation should not be used for gross market rentals that are much beyond the range of R30 to R200 per m² for space of 100m². Note too that this equation applies to the *third quarter of 2002*.

An example using the above equation:

If the gross market rental rate is R150/m² for space of 100m² of rentable area, then the cap rate is 11,9%.

Enjoy!