# The rental peak - promise or peril?





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Over the past thirty years, property prices have peaked when the prospects for rental growth have been limited. Similarly, as rents bottom out and expectations for rental growth should be high, few appear to be willing to invest in property. Can the rental market provide guidance to the direction of property prices, and if so; is there a strategy which allows investors to benefit from the prevailing market patterns?

In addition to the current rent level, property prices are driven by the real risk-free interest rate, the risk premium<sup>(1)</sup> and expected rental growth. The latter three drivers impact property prices through the yield that investors require on their investments<sup>(2)</sup>.

This report is mainly concerned with the relation between yields and expected rental growth. A minor focus is placed on the relation between yields and the real risk-free interest rate. This report does not, however, analyse the impact of the risk premium on yields. Due to its asset-specific nature, a general risk premium for property is difficult to estimate.

The analysis is based on central Stockholm office property data. The Stockholm office property investment and rental markets are highly transparent and liquid, with accessible and verifiable information on yields and rent levels.

#### What drives property prices?

In a simplified manner, the property price (P) can be described as a perpetual stream of net operating incomes (rents after costs) which are capitalised at a real yield (y). NOI denotes the current net operating income level.

#### P = NOI / y

The real yield is composed of the real risk-free interest rate (r), the risk premium (p) and expected growth in NOI above inflation (g).

#### y = r + p - g

Hence, a higher property price can be the result of a higher current NOI, a lower real risk-free interest rate, a lower risk premium and/or a higher expected real growth rate in NOI.

(2) Throughout this report, 'yield' means the asset-level return an investor requires to invest in a particular property or property portfolio, not the current or ingoing yield.



<sup>(1)</sup> Including liquidity premium, that is the extra return an investor requires to take on the risk of not being able to divest the property at a favourable time and/or at the expected price.

# Prices and rents in the rearview mirror

Property prices in central Stockholm have varied substantially over the past three decades. From 1989 to 1993, property prices decreased by almost 70 per cent in real terms, while from 2004 to 2007, they gained almost 60 per cent.

Part of the price fluctuations is explained by changes in current rents and rental expectations since property prices can be described as a capitalised stream of rental payments<sup>(3)</sup>. Prices and rents have indeed followed similar patterns for most of the past three decades. Although property prices and rents show substantial volatility, which emphasises the importance of timing, historic data also tells us that neither prices nor rents can be expected to increase indefinitely, nor decrease forever.

Furthermore, real rental growth has been modest unless the property was acquired at a favourable time. An acquisition made in 1993 would until 2011 have generated a real rental growth of more than 100 per cent. Had the acquisition instead been made in 2000, the investor would have seen real rents fall by 15 per cent.



#### Central Stockholm office property real price and real rent, 1982–2011<sup>(4)</sup>

(4) Sources: The Riksbank, Leimdörfer. Indices used are the same as having been used by the Riksbank in the Financial Stability Report, supplemented by Leimdörfer market research for years not covered by the Riksbank data series.



<sup>&</sup>lt;sup>(3)</sup> For the purpose of simplification, costs are disregarded throughout this report.

# Relation between yields and rents

In theory, the yield is a function of expected rental growth: increasing with lower expectations and decreasing as the outlook for rental growth becomes brighter. If current rents increase, the room for rental growth contracts, and vice versa. Hence, investors should require *higher* yields as the current rent level increases.

Over the past thirty years, however, yields have been inversely correlated with current rents meaning that investors actually require *lower* yields as the rent level increases.

With soaring rents, not only have property prices increased as a result of higher current rents, but *also* as a result of yield compression. During times of falling rents, prices have dropped as a result of both decreasing rents *and* yield expansion.

Central Stockholm office property yield and real rent, 1982–2011<sup>(5)</sup>



#### Central Stockholm office property yield and real rent, 1982–2011<sup>(5)</sup>



(5) Sources: The Riksbank, Leimdörfer. Yields used are the same as having been used by the Riksbank in the Financial Stability Report, supplemented by Leimdörfer market research for years not covered by the Riksbank data series.



This finding implies that investors are paying dearly for limited rental growth as it should be more probable that a high rent level is followed by a rental decline than by a further increase in rents. Contrary to historical evidence, investors seem to believe that a rental increase will be followed by a continued rental hike, rather than bringing the rent level closer to the point where the trend will reverse. How can this be explained?

Firstly, investors may argue that what they pay for is not expected future rental growth but rather a high current rental income. However, as the typical Stockholm office lease term is a mere 3–5 years, the investors will soon find themselves collecting lower rents than they did at the time of the acquisition. While this strategy may be profitable in the short run, it most likely results in a loss in the medium term. Secondly, investors may extrapolate an upwards trend too far into the future, under a belief that soaring rents will continue to climb even further. These are the same mechanics that give rise to asset price bubbles.

Thirdly, both investment and rental markets are affected by the business cycle. When financing terms improve and new players enter a booming market, risk premia and yields are compressed, usually coinciding with corporate expansion and stronger demand for larger, more central and/or higher quality offices.

With regard to institutional investors, which are less dependent on debt financing than many other investors, the market value of other assets than property, such as equities, increases in a bull market making it possible for these investors to allocate more capital to property, thus contributing to higher prices.

## Comparison with the stock market

On the stock market, one would expect to find an inverse relation between the earnings multiple and the level of earnings. When earnings are high, prospects for further growth in corporate profits are limited, resulting in a low earnings multiple.

As expected, the EBITDA<sup>(6)</sup> multiple (price to EBITDA) is inversely correlated with EBITDA. Hence, the stock market pricing seems to more accurately take growth expectations into account than the property market pricing does.

(6) Earnings before interest, taxes, depreciation and amortisation.

(7) Source: Bloomberg



EBITDA 200 175 150 125 100 75 50 25 0 0 5 10 15 20 25 30 35 Price to EBITDA

EBITDA and price to EBITDA for OMX Stockholm 30 Index, 1994–2011 (guarterly)<sup>(7)</sup>

# Relation between yields and the real risk-free interest rate

One expects yields to be positively correlated with the real risk-free interest rate<sup>(8)</sup> which is in fact the case after Sweden's banking crisis in the early 90s. This is represented by the blue observations and the blue trendline in the chart to the right. This finding should come as no surprise as both yields and interest rates have trended downwards since the beginning of the 90s.

Should the time period be extended to include the years 1982–1990, this correlation disappears. In the chart to the right, this is represented by the grey observations and the grey trendline.

The real risk-free interest rate appears to have been a driver of property prices in later years, but not in the 80s. One explanation for this may be that since 1993, the target for monetary policy has been price stability, whereas before that, monetary policy focused instead on defending a fixed exchange rate.

In addition, the 80s were characterised by a vast credit expansion and a highly speculative property investment market. Central Stockholm office property yield and real risk-free interest rate, 1982–2011<sup>(9)</sup>



Central Stockholm office property yield and real risk-free interest rate, 1982–2011<sup>(9)</sup>



<sup>(8)</sup> The real risk-free interest rate is proxied by deducting households' inflation expectations from the nominal Swedish five-year government bond rate. The conclusion of this report remains unchanged should the nominal rate be used instead.

(9) Sources: The Riksbank, the National Institute of Economic Research, the Swedish National Debt Office, Leimdörfer



### Investor recommendation

Contrary to logic, yields have been inversely correlated with rents over the past three decades, which is to say that investors require lower return as the prospects for rental growth decline. Put differently, demand for properties is at its peak when there is limited room for rental growth, and vice versa.

Hence, acquiring properties close to rental peaks exposes an investor not only to the risk of a rental decline *but also* to the risk that prices fall even more than is motivated by this decrease in rent, as a result of yield expansion. Provided that there is a mean reversion in prices and rents, this is a highly probable scenario. A 'contrarian' strategy emerges as more attractive: acquiring properties when rents are low and yields are high. This would make it possible for an investor to benefit from yield compression in addition to rental growth.

One relevant question for investors to ask themselves is thus whether rents are high enough to motivate a divestment, or low enough to constitute a signal to buy.

Answering this question may be difficult, but taking a closer look at the past decade may provide some guidance. Has the rental market reached its peak now?

