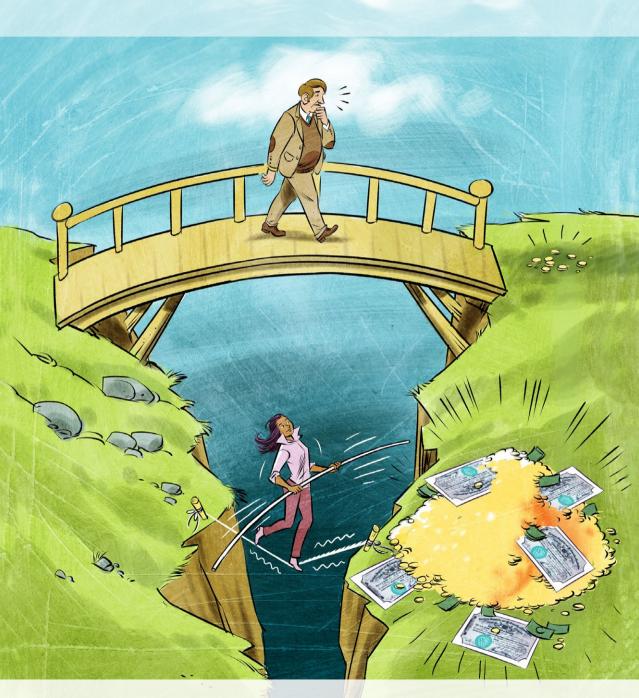
Property shares in turbulent times

- What do we know? How can we act?



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What do shares in property companies offer investors? Exposure to property, exposure to the stock market or both? How are properties and property shares linked? In this article we will try to establish how all this works. For illustrative purposes we will use the Swedish market, but the principles and mechanisms are the same in any jurisdiction.

Property shares: risk, reward and volatility

Going back a couple of decades, listed property shares were known for being safe and rather boring. They were seen as a defensive ingredient in a portfolio; they almost were a middle ground between stocks and bonds. Assuming increasing interest rates in boom times and decreasing interest rates in recessions, property shares were thought to have a natural hedge, in a similar way as a portfolio with a combination of bonds and stocks.

However, after the global financial crisis, followed a long period of healthy economic growth and

low interest rates, which created a boom for the property sector and for property shares. To illustrate this, the listed property sector used to account for about 2% of the Stockholm Stock Exchange during a long period of time until 2013, but thereafter it ballooned to almost 8%, a fourfold increase! Most of the increase came from share price increases in existing companies, while a smaller part came from new companies coming to the stock market through IPOs and reverse takeovers, see graph below.

Property shares now a larger share of total market capitalisation in Sweden¹



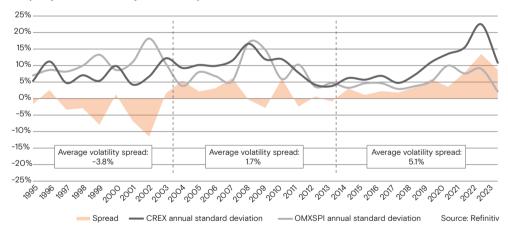
¹ Calculated as total market capitalisation of property companies in the Nordanö Company Overview divided by total market capitalisation of all listed equities in Sweden.

Where do we stand today? On the Swedish market, the volatility of listed property shares (CREX) has increased significantly over time, while the general stock market (OMXSPI) volatility went the other way. Listed property shares used to have much lower volatility than shares in general, but now it is the other way around, as you can see in the graph below.

What might be the reason for the increased volatility on property shares? One explanation might be that the net operating income (NOI)

of property companies used to be quite stable, but during the last 10 years, the volatility of the underlying NOI of commercial real estate has increased because of structural changes (e-commerce, work from home) as well as external shocks (COVID19 and to a lesser extent the war in Ukraine). Simultaneously, interest expense volatility has also increased for the companies due to ever lower interest rates during a long period of time, followed by a historically rapid shift upwards in interest rates.

Property shares' volatility, CREX compared to OMXSPI





Stock market valuation correlated with interest rates

Since 1996 Nordanö has followed the listed sector in Sweden with a proprietary valuation model, that gives a standardised valuation of all the assets of all² the listed property companies. Since this valuation tool is consistent over time and between companies, it enables us to calculate premium/discounts on the listed property sector in a consistent and standardised way.

As you can see in the table below there is a strong negative correlation between interest rates and premium/discount to NAV on listed property shares. This relationship holds no matter which metric we use for interest rates. As interest rates decrease, the premium on listed companies increases and vice versa. The stock market seems to react quicker than the direct market and adjusts pricing to changes in interest rates

(although some of this is due to the inherent lag in property valuations).

Lower interest rates push property shares up for two reasons: 1) lower interest expense 2) lower required returns for equity investors. Another way of saying this is that lower interest rates result in a lower weighted average cost of capital (WACC), since both equity and debt gets cheaper. The mechanisms on the direct property transaction market should be the same, but apparently the transmission of interest rates to property prices is not as direct. This could be due to several reasons including: 1) many investors in the direct property market are institutional investors, who do not use debt/leverage 2) property yields are somewhat "sticky" and do not move with real interest rates.

Correlation between interest rates and stock market valuation

Interest rate metric	Premium/discount listed properties
3-month STIBOR	-0.69
5-year swap rate	-0.70
Inflation linked bonds	-O.65
Interest expense of listed property companies	-0.63

² Listed on the main Nordic lists.

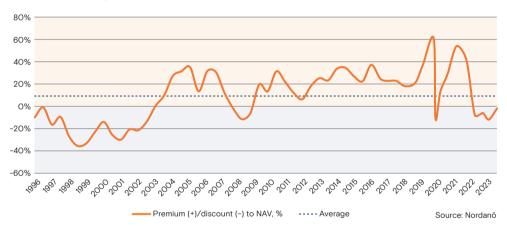


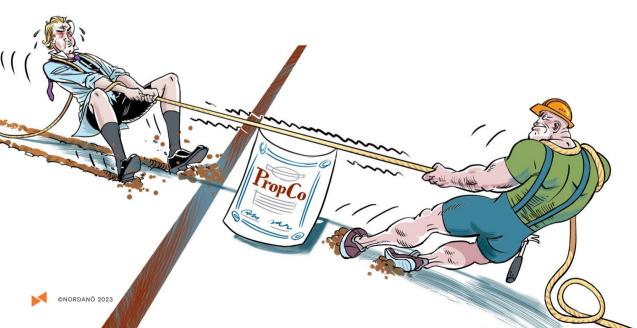
Property shares and properties - how are they linked?

Properties trade on two different markets; the direct property transaction market and, indirectly, on the stock market. This is a very interesting and somewhat unique characteristic. Property prices and prices on property shares have historically diverged from each other many times. In the late 1990s and early 2000s most property shares traded at a steep discount compared to net asset

value (NAV). Thereafter there was a period of more than 15 years with huge premia on the listed shares. Now, once again, property companies are trading at a discount. Can property prices and property shares diverge indefinitely or is there a reversion to the mean? There are several mechanisms that make prices of properties and prices of property shares converge over time.

From discounts to premia and back





Premium or discount - what should it be?

Is discount or premium the "normal" pricing for listed property companies? There are arguments for permanent discounts as well as for permanent premia.

One could argue that there should be permanent discounts on listed property companies for several reasons:

On the other hand, one could argue that property companies should trade at a *premium:*

- Property companies may introduce tax inefficiencies, i.e. "tax leakage", in non-REIT jurisdictions, as well as double taxation.
- 2. An investor should get a discount when buying a basket of assets since the investor is not getting to choose exactly what assets to own. This is similar to the discount on investment companies/ trusts and conglomerates, that have been documented extensively in other sectors.
- 3. Agency problems: there might be situations when there is a misalignment of interest between the general shareholders and 1) the management team and/or 2) the main shareholder(s). For instance, the management team might have a growth agenda for personal reasons, or the main shareholder might be in a liquidity squeeze.

- Management can add value through their know-how, particularly in more management intensive assets like hotels and shopping centres.
- 2. A property company can add value just by aggregating assets, for instance building a diversified portfolio of light industrial assets across the country, which takes a substantial effort and time to achieve. Since this is difficult to do for a less active investor, it motivates a premium on the listed share
- Liquidity: property companies add value by making property investments accessible to retail investors, who cannot afford to buy properties, but are able to buy property shares.
- 4. (Some would also argue that property companies add value by diversifying risk, but risk diversification can always be done more easily at the investor level.)



In times of *discounts* on property shares, the following mechanisms should make prices converge:

- 1. Public-to-privates: when property companies trade at a discount for a long time, eventually they are taken private since the sum of the parts is greater than the price of the whole company. After taking the company private, an opportunistic investor can divest the underlying assets and make a profit. There were many examples of this at the turn of the millennium in Sweden when many property companies were taken private over a short period of time.
- 2. Share buybacks: if the shares are trading at "true" discount to NAV, it is accretive for the (remaining) shareholders to buy back shares. It seems as if it should be a no-brainer for the company to buy back shares when they are trading at a discount. However, periods when shares are trading at a discount often coincide with periods when debt financing is scarce, thus making share buybacks difficult in practice.
- 3. Property divestments: besides share buybacks, the other instrument at management's disposal in times of discounts is to sell the underlying property. If the properties can be sold at NAV it is rational to sell properties and hand the money to shareholders (for instance through buybacks). This presumes that there is a "true" discount to NAV, i.e. that NAV is based on the price at which the properties truly can be sold. in a reasonable time frame. In downward markets, sometimes book values lag. creating an "optical" discount to NAV. which may seem much higher than the discount to "true" NAV (the opposite is true in a bull market).

In times when property shares are trading at a premium, the following mechanisms should make the direct market and the public market converge:

- 1. IPOs: when property companies trade at a premium, new property companies come to the public markets through IPOs. This increases the supply of investable listed real estate on the stock exchange. In theory, this could lead to an oversupply, putting downwards pressure on property shares, although there is no evidence that this is the case. In any case, the effect on pricing would be very weak.
- 2. Buying sprees: when property companies trade at a premium they, rightfully, buy more assets. If buying a property immediately adds shareholder value, thanks to the premium, property companies should continue acquiring properties. When listed property companies buy properties in scale, they push up the prices of properties on the direct market, thereby reducing the price disparity between the two markets. This dynamic has been clearly observable in the direct transaction market in times of premia.

Summarising, there are several mechanisms that narrow the price disparity between the direct property market and the public market. However, the mechanisms that reduce discounts are somewhat stronger than those that reduce premia.

Are property shares a proxy for properties or for the stock market?

To answer this question, we have analysed the correlation between property shares and a) the direct property market and b) the listed property market, for different holding periods, between 1 and 10 years.

Property shares correlate with direct property in the long run



The graph above shows how correlations vary depending on the holding period. For short holding periods, property shares are more correlated with the stock market, while for medium and long holding periods, property shares are more correlated with the underlying property market. The "cross-over" holding period is 4 years.

We did a similar analysis in our article "Property Shares – property or shares?" from 2011 and the findings were the same, implying that this relationship is stable over time³.

Method

Based on annual returns for the time period 1988-2022, we calculate the correlations of total returns between

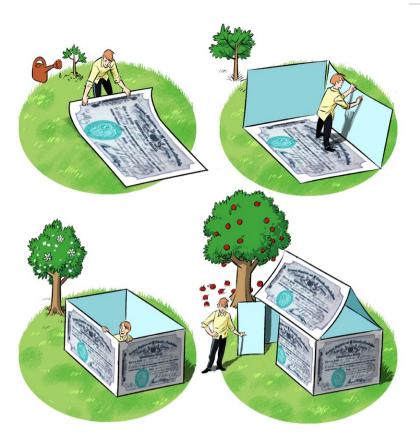
Swedish property shares (SIXRX) and

- a) Swedish direct property (MSCI Sweden Annual Property Index)
- b) All Swedish shares (OMXSGI)

for rolling holding periods ranging from one year up to ten years.

³ In the present article, the time series are significantly longer than in the article from 2011, and thereby more statistically significant.





Conclusions

What have we learned and how can an investor act on this? Let's look at our four main findings and see what conclusions we can draw.

Firstly, volatility has increased substantially in the public real estate market. Volatility used to be lower than the general stock market, but now it is the other way around. For an investor this means increased risk, but also more opportunities for active and opportunistic investments.

Secondly, we have shown that there is a strong correlation between interest rates and premium/discount on the listed property companies. Thus, an investor that believes in falling interest rates should buy property shares and vice versa. Having said that, there are other ways to bet on interest rates than buying/selling property shares.

Thirdly, there seems to be a reversion to the mean regarding premium and discount on listed property companies. Given that the companies presently trade at a discount, it might be interesting for an investor, that wants exposure to real estate, to invest in property companies rather than in properties. One should keep in mind that the valuation of property companies is very heterogeneous; the current discount/premium varies massively between different companies.

Finally, we have once again established that shares in property companies in the short term have more in common with the general stock market, whereas in the long run they have more in common with directly owned properties. For investors with a longer investment horizon than four years, property companies are a good proxy for investing in property.

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