UBS Asset Management

The nature of income

The true and reliable nature of commercial real estate income

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Private real estate income is steady and reliable. We should not oversell the return point but rather take comfort in its absolute persistence.

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Income versus income return

Income stability is one of the key features attracting institutional investors to private commercial real estate. The total return produced by real estate is dominated by its income component, encouraging many to use income return as evidence of the sector's low volatility. We agree with the stable income conclusion but question the analysis. So, we want to substantiate our belief with absolute income figures. The straight-forward evidence provided by income returns certainly supports the stability claim but may be a bit too convenient and could exaggerate the point. This result is due to the denominator effect. Fortunately, when stepping back from the returns calculation and turning our attention to the income collected at the property level, the results are similarly compelling.

To return or not return

There is a subtle difference between income and income return. Property-level income is the absolute amount (in any currency) produced from property operations. Simply stated, it is the collected rent minus operating expenses. Real estate investors refer to this as Net Operating Income (NOI) and it is directly comparable to Corporate Earnings.

Like Earnings, NOI represents an asset's performance from conducting business in a specific market. It is measured before the decision to reinvest in the asset and before the impact of financing. It represents the basic periodic performance of an asset, recognizing that some of the income will be either reinvested or retained, used for debt-service or made available for distribution.

The Income Return figure most frequently used to demonstrate stability is calculated by dividing NOI by the asset's value. This ratio of income to value represents an asset's performance yield and describes the realized earnings on the amount invested for a given time period. In real estate, this yield is referred to as a Cap Rate.

Comparing listed stocks to private real estate reveals that the terms differ but the yield concept is the same. The real estate valuation of NOI divided by Cap Rate equates to the stock dividend discount model (DDM) of Dividend divided by (Required Return – Growth Expectation), see Figure 1. Both methods connect period income to asset value through this ratio.

Figure 1: Converting NOI into income return

	Stock	Real Estate
Income	Income	NOI
Value	$\frac{\text{Dividend (1)}}{\text{(k-g)}}$	$\frac{\text{1st year's NOI}}{\text{Cap Rate}}$

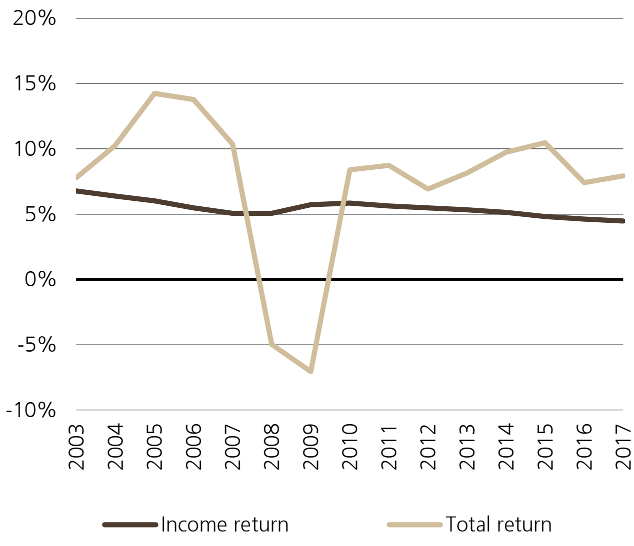
The income to value ratio for both listed stocks and private real estate is employed to both measure historical performance (actual income divided by value invested) and estimate current value (expected income divided by required yield). In the case of listed stocks, analysts estimate an asset's value using expected income and a selected required yield. However, the historical yield calculation typically uses the stock price determined by the trades on an exchange. The private real estate industry estimates value in a similar way and that value estimate is used in the historical yield calculation. Thus, the income return in private real estate is the realized income divided by estimated value, which is the expected income divided by the required return.

If you followed this winding path, you might notice a circular reference in the stable income return measurement. Property income is divided by value, which is a function of income and Cap Rate, which in turn is a function of income and value. If the Cap Rate captures the required return and expected growth (recall DDM), then it follows that the Cap Rate may adjust to market changes and leave income return to remain steady. This relationship leads to the well-recognized chart of income return to total return, as shown in Figure 2.

This chart is extremely compelling. Comparing the income return to total return reveals that values may move according to market conditions but income returns remain very steady at around 5%. It appears that income never falls and negative income is an impossibility. This is not true, as the level of income rises and falls with rent changes and revenue minus expenses has the potential to be negative.

There is nothing wrong with this return comparison or its conclusion. However, one could be challenged by the recognition that changing income (up or down) may be offset (and in-fact is by design) by a rise or fall in Cap Rate. Thus, it need not be necessary that income be stable for the income return to be stable. Adherence to this is a measure proof of real estate income's stability, leaving proclaimers open to criticism.

Figure 2: Income return to total return



Source: Global returns from MSCI, September 2018

We hope to remove this offsetting effect and examine the more frequently changing property-level income and still convince ourselves that real estate income is reliable and stable, on a relative basis, without the smoothing denominator effect.

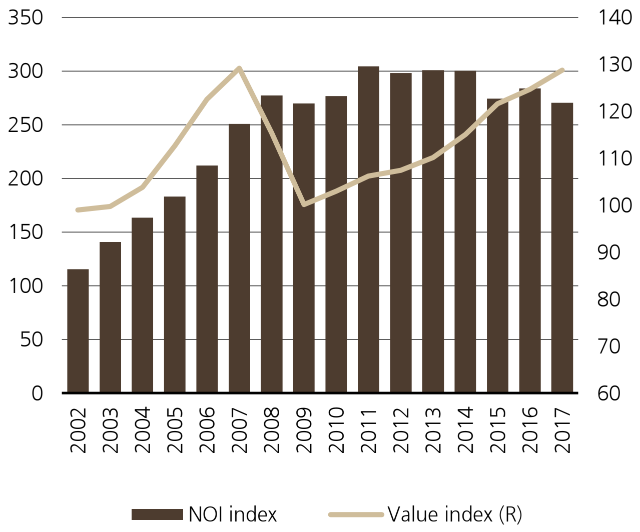
Income only

Let's turn our attention to the income produced by property operations: NOI. Recall that property NOI is the equivalent of Corporate Earnings. It is the periodic production of Cash from Operations from which the owner may choose to pay debt-service (if debt is involved), retain for asset enhancement or distribute in the form of a dividend. The income component of performance is considered the lower-risk component of the total return, compared to appreciation. Due to its periodic receipt and attachment to fundamentals, it is viewed as more consistent and reliable than the appreciation component, which may come or go over time and is only realized upon sale.

These are the characteristics that drew our attention to the income component in the first place. Thus, showing that property income insulates our investments from some pricing dynamics will be an important feature of real estate assets. The higher proportion of total return that is delivered from income, the more reliable the investment performance and the shorter the duration. Furthermore, if it can be demonstrated that property income is less than perfectly correlated with market pricing, the volatility of performance is mitigated.

Figure 3 compares an index of same-store NOI to a same-store value index. Several points of this chart are important to our understanding of stable real estate income and the impact of market pricing. First, notice that the columns, representing the NOI index, are not always rising but vary only slightly from year to year. There are many factors affecting this result and one of those factors is the contractual nature of commercial real estate. Property generally operates under a series of rent contracts for various spaces within the asset. These are typically multi-year contracts which vary depending on the property type. Thus, when market rents change, only the space transferring from one contract to another is affected by the market change. Over time, the entire property will turn but this typically occurs gradually over years.

Figure 3: NOI index



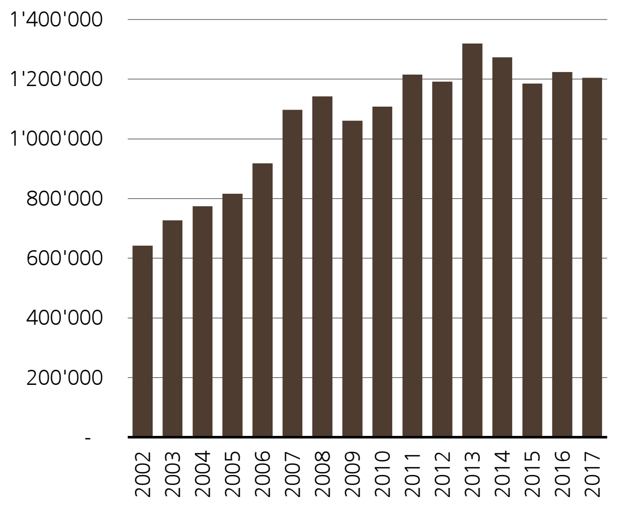
Source: MSCI Global Intel, September 2018

A second point to note in Figure 3 is the relationship between NOI and value. Recall the severity of the Global Financial Crisis during the years of 2008 and 2009. Values fell dramatically, in response to the extreme uncertainty entering the financial market. All asset values were affected and commercial real estate was not spared. However, note how the values fell but income remains virtually unchanged. Since the crisis was one of spiking uncertainty and rising risk premiums, values of all assets were affected. During this time, tenants continued to operate, allowing them to occupy contracted space and pay current rent. This resulted in very stable income, during a time of value volatility. Those who held property through this event witnessed a dramatic recovery and avoided realized losses – all the while collecting similar periodic income.

Every property is unique and individual properties may experience a wide range of income levels and value changes. In aggregate, the nominal income performance of a "typical" property looks similar to the pattern of the calculated index. Using sampled actual income data in aggregate and dividing by the number of properties measured, the annual per-property income is shown to be very stable over time as shown in Figure 4.

Unlike the income returns data, Figure 4 reveals that there are times when the level of income declines (due to increased vacancy or declining marginal rent). This should not diminish the claim that real estate has a stable income. Even during short time periods when income is reduced, the vast majority of the income continues to flow to the property owner. This income stability is without the smoothing effect of producing a ratio, such as the income return.

Figure 4: NOI per property

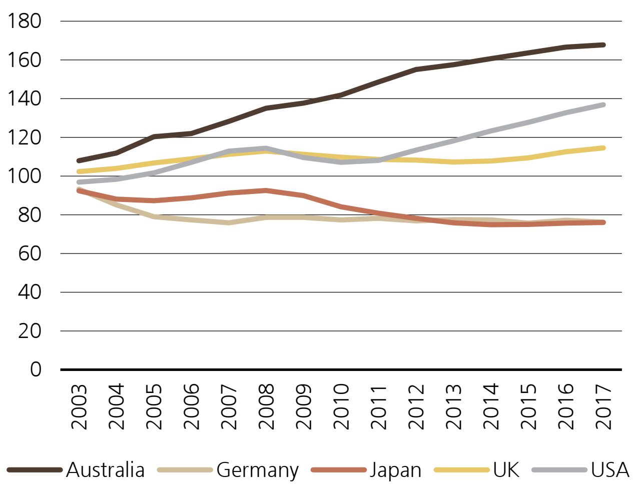


Source: MSCI Global Intel, September 2018

Stable but not the same

The fact that real estate income is stable, at the property level, does not imply that all assets and all markets produce the same income. There are diversification benefits to combining multiple assets of different property types across various locations, as shown in Figure 5. This chart shows the compound income growth pattern across different countries in local currency. Each line represents a country index following the average nominal NOI growth for all measured property. Investors can select property-type, country, currency, and various other features to fit specific goals. Building a portfolio of different assets following these characteristics will diversify specific risks, while achieving desired objectives.

Figure 5: Compound income growth



Source: MSCI Global Intel, September 2018

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