RESEARCH

German property, 10 years on

A decade after the financial crisis, Nikodem Szumilo and Thomas Wiegelmann explore how German real estate has correlated with other asset classes

Frankfurt Stock Exchange during the financial crisis in 2008

It is difficult to overstate the impact of the global financial crisis on the markets. In fact, many argue that the financial meltdown of 2008 changed many of the patterns that investment professionals were used to. In particular, the correlation between asset classes after the financial crisis was not what many were expecting from a recovering market.

One surprising pattern that has emerged since the crisis is the rapid increase in direct property investment. In a paper we published in the Journal of Property Investment and Finance, 'The real alternative? A comparison of German real estate returns with bonds and stocks', we analysed the impact of the financial crisis on the potential of real estate portfolios to provide diversification benefits to portfolios constructed from bonds and stocks. We focused on German real estate markets, which after the crisis experienced an unprecedented level of investment from domestic and foreign investors. We compared the DAX and REX indices which reflect the returns of equities and bonds respectively, with the MSCI index of total direct property returns for Germany (de-smoothed annual returns from 1998 to 2015) and the RX Real Estate index returns (daily from 2007 to 2016).

Historically, the returns offered by real estate assets were below those offered by equities and above those of bonds. At the same time they offered a similar risk/return ratio, making them a safer alternative to stocks but a riskier alternative to investing in bonds. Fundamentally, the performance of real assets should be determined by the same risk factors applied to equities and bonds. Like bonds, many buildings offer regular expected cash flows, which makes their value sensitive to the same risk factors – interest-rate risk and the premium for the risk of default.

On the other hand, those cash flows are determined by lease terms, which are forward looking and periodically renegotiated. This exposes real estate values to fluctuations in the expectations of economic growth – a feature they share with equities.

Until recently, the German and European investment markets were going nowhere but up, a trend that has continued for about nine years. Naturally, the global factors behind this trend are beyond the control of the ordinary investor.

In particular, the interest in German assets can be explained by the global flight to politically and economically stable locations. In this context, the ability of real estate markets to offer returns that have a stable cash flow, but which also offer the upside potential of capital returns, seems like a considerable natural advantage. In a recovering market, real estate offers returns safer than equities but with a larger upside potential than bonds.

The capital value potential is evidenced in the market behaviour after the dotcom bubble. Between September 2003 and September 2007 yields declined and capital values rose by some 60%. At the same time, the index of volatility VIX declined and investment volume tripled, and in 2007 reached about €255bn. In hindsight, these patterns might seem irrational and the expectations of growth short-sighted, but they were firmly based on strong demand from tenants and improving economic conditions. This was implied in the equity-like appreciation of capital values.

In 2007, the expectations of economic growth were dramatically reduced. Before central banks reacted by providing additional liquidity in 2009, transaction volume had reduced by 70% and settled at 2003 levels. International demand also weakened significantly. However, as capital values crashed owing to the low expectations of demand growth, income return on existing leases remained consistent, providing investors with much-needed liquidity. This highlights the bond-like characteristic of property investment.

To fully understand the similarities and differences between stock, bond and real estate markets, we examined the changes in their conditional correlations since 2001 and found some structural changes over the period. In particular we identified three distinct periods – pre-crisis, crisis and post-crisis.

We concluded that during different stages of the economic cycle the three types of assets appear to be correlated differently. Critically, the correlation between bonds and stocks remains very similar throughout the sample period, while the relationship of the two main asset classes to real estate changes over time.

During and after a crisis investors turn to safe assets but low interest rates and high demand for bonds motivate them to turn to real assets. This reduces the correlation of property returns with equities and makes them more correlated with bonds.

When the market is recovering, real estate attracts investors by offering higher returns than bonds but also some exposure to recovering economic expectations. This increases their correlation with stock market returns.

However, the main result of our research is that investors who can replicate the index of direct real asset returns will benefit from the diversification it offers and improve the performance of their portfolios.

Nikodem Szumilo is fellow in economic geography at London School of Economics and Political Science, and Thomas Wiegelmann is managing director at Blue Asset Management, and honorary adjunct professor at Bond University