ж	$\boldsymbol{\sim}$	v	
	u	^	

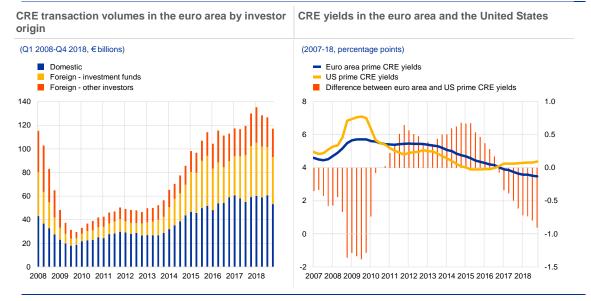
Explaining cross-border transactions in euro area commercial real estate markets

Prepared by Barbara Jarmulska and Dorota Ścibisz

The upswing in euro area commercial real estate (CRE) markets in recent years has reflected, in part, a strong appetite from international investors, including US investment funds. Since 2013 transactions in euro area CRE markets have more than doubled, alongside a 20% increase in prices (15% in real terms) and a decline in average yields from 5.2% to 3.5%. In parallel, the share of transactions by foreign investors increased to 54% in 2018, from an average of 49% in 2013 when a particularly strong pick-up in transaction volumes started. Furthermore, the role of investment funds in foreign transactions increased to 63% in 2018 from 48% in 2013 (see **Chart A**, left panel), with around 40% of these on average originating from the United States.

Chart A

Foreign CRE transaction inflows into euro area countries increased substantially in the recent upswing, while CRE yields in the euro area were until recently higher than in the United States



Sources: Real Capital Analytics, Jones Lang LaSalle and ECB calculations.

Notes: Left panel: Transaction volumes are calculated as four-quarter moving sums. Foreign transactions include purchases from other euro area countries and non-euro area countries. Other investors include banks, pension funds, insurance companies, non-bank financial institutions and private investors (e.g. developers, high net worth individuals, corporate investors, cooperative investors). Right panel: US yields reflect the office market, which is the largest CRE sector and is treated as a proxy for the entire US CRE market.

The higher share of foreign investors could make domestic CRE markets more exposed to a sharp or disorderly adjustment as exuberance fades. Generally, a higher share of foreign investments implies better risk sharing across countries, but foreign investors might be more sensitive to changes in global financial conditions and could be more likely to rebalance away from euro area CRE markets if relative returns shift. This could prompt an abrupt shift in the CRE market. In particular, the volume of property purchased by investment funds tends to be relatively volatile, and funds may also be pressured into selling CRE portfolios in the event of shifts in investor sentiment resulting in increased redemptions. Given the volatility that could be generated by an abrupt flight of foreign investors away from euro area CRE markets, this box investigates what factors have supported the attractiveness of euro area CRE and might prompt a reversal, focusing on purchases by foreign investment funds. Data availability limits the analysis to investment funds domiciled in the United States, the United Kingdom and the euro area, which on average together accounted for close to 80% of annual CRE purchases by funds in the euro area over the review period. Funds domiciled in Asia, which have an almost 10% average share in funds' euro area CRE market purchases, are not covered.

An analysis of recent trends in CRE markets suggests that search-for-yield behaviour could have been a significant driver of foreign transactions. Examining the relationship between transactions, yields and fundamentals for CRE markets for a panel of euro area countries, the United States and the United Kingdom between 2007 and 2018 shows that CRE investors invest abroad if yields are higher there than at home⁷ (see Chart A, right panel). This behaviour seems to have contributed to the strength of cross-border transaction flows into euro area CRE markets. Comparing actual transaction volumes with a simulation of how transaction volumes would have evolved if yields were the same in all countries (see Chart B, left panel) suggests that since 2010 there has been an

The same relationship also holds when yields are replaced with spreads between yields and risk-free rates (risk premia), suggesting that cross-border transaction flows are driven also by risk-taking behaviour by investors.

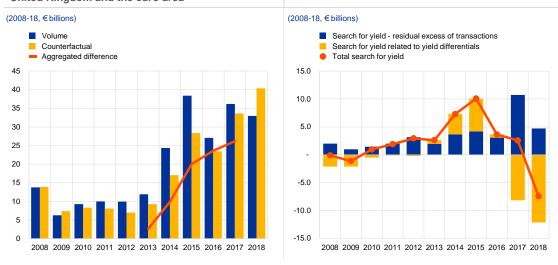
excess of transactions. This implies that search for yield was important during the recent market upswing. From 2013 to 2017, the overall aggregated excess of foreign transactions related to both the yield differentials and the additional exuberant behaviour of investment funds stood at over €26 billion (19% of transactions in this period). In particular, the part of the excess of transactions driven by yield differentials was positive in the years 2013-16, and in this period the aggregated excess of foreign transactions in euro area CRE markets by investment funds driven by this factor stood at over €10 billion, amounting to 11% of transactions (see **Chart B**, right panel).

Chart B

The aggregated excess of foreign transactions in euro area CRE markets by investment funds driven by yield differentials and not explained by expected drivers is substantial

Cross-border transaction volumes in the euro area by investment funds domiciled in the United States, the United Kingdom and the euro area

Excess of transactions driven by yield differentials and the residual



Source: ECB calculations

Notes: Computations based on a panel model focusing on the impact of the differential between prime CRE yields in country j and i on CRE cross-border transaction flows. Models control for the price dynamics over the last two years, overall macroeconomic conditions and risk-free rates in the buyer country, and include country pairs and time fixed effects. Counterfactual volumes are computed as fitted values with yield differentials at zero.

Having benefited from foreign investors in the upswing, euro area CRE markets might be vulnerable to an abrupt withdrawal of foreign investors, triggered by shifts in relative returns. Such an outflow could cause a correction of potentially stretched prices, and a downturn in CRE markets would have implications for both banks (higher potential loss given default) and firms (lower than expected credit availability). And while purchases by US investment funds, which have been particularly important to the euro area market, are still robust, since 2017 there have been net outflows as US investment funds have rebalanced away from euro area CRE. This has coincided with CRE yields in the United States starting to exceed those in the euro area. This suggests that US investment funds have already started reacting to the lower relative attractiveness of the euro area CRE market.