



EUROPEAN CENTRAL BANK

EUROSYSTEM



ESRB
European Systemic Risk Board
European System of Financial Supervision

CRE and Covid-19

Implications of the
Covid-19 crisis for EU
commercial real estate

18/05/2021

Ellen Ryan, Dorota Scibisz (ECB)
Christoph Fricke and Giovanni Di Meo (ESRB)

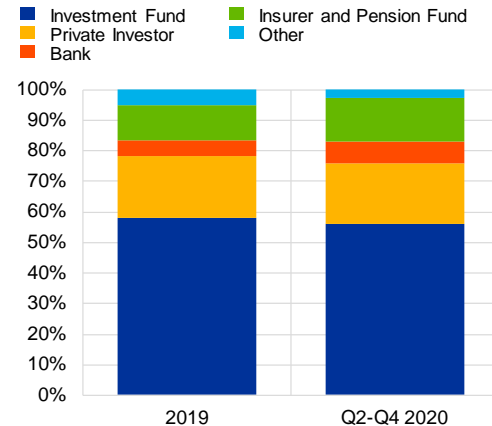


CRE market dynamics can have adverse financial stability implications

- The COVID-19 crisis represents a sizeable negative shock to the European CRE markets, which may have implications for financial stability
- **Banks** may be affected via materialisation of credit risk and drop in collateral values
- **Non-banks** may be affected via losses on direct holdings
- The financial system also has the capacity to amplify the shock – **Banks** by reducing credit provision and **Non-banks** via firesales (e.g. following fund redemptions)

Share of EU transactions by buyer type

Value of transactions



Source: RCA. Note: Sample includes transactions carried out in the full EU27.

Overview

- 1 CRE market developments and forward looking indicators
- 2 Banking sector exposures and vulnerabilities
- 3 Investment fund exposures and vulnerabilities
- 4 Insurer exposures
- 5 Conclusions

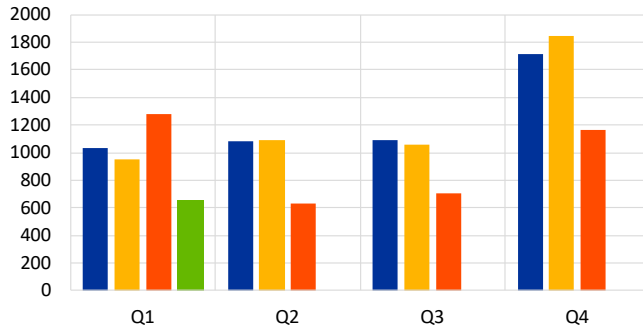
Covid-19 has had clear impact on CRE market

- The outbreak of the crisis saw activity in CRE markets drop sharply, with 25% fewer transactions in 2020 than in 2019 (left chart). Market intelligence confirms that normal market transactions are not occurring at present.
- Both model and market based indicators suggest a substantial price correction may occur as market activity resumes (middle and right charts). Traditional price indices are also beginning to show this correction.

CRE transactions in EU CRE market

Number of transactions

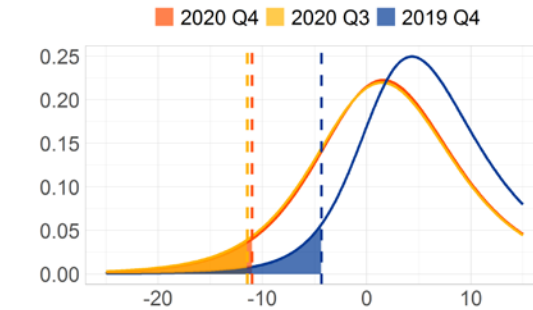
■ 2018
■ 2019
■ 2020
■ 2021 (preliminary)



Left: Source: RCA. Note: Sample includes full EU27. **2021 Q1 data is preliminary and transaction numbers may increase.** Middle: Source: ECB calculations. Note: Sample includes AT, FR, DE, IE, BE, PT, IT, ES, NL. CRE price-at-risk model based on panel quantile regression of one year ahead CRE price growth. Explanatory variables are cyclical indicator (SRI), overvaluation, prime yield and lag of CRE prices. Right: Source: Bloomberg.

4q ahead price growth distribution from quantile model

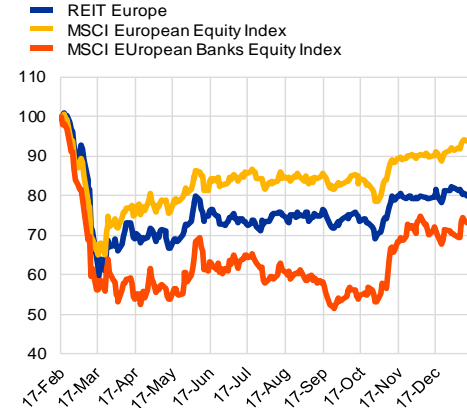
Percentage price change (x axis)



Prob. of neg. growth 4q-ahead (2019 Q4): 0.17
Prob. of neg. growth 4q-ahead (2020 Q3): 0.40
Prob. of neg. growth 4q-ahead (2020 Q4): 0.39

REIT price dynamics vs. other assets

Index Feb 17th 2020 = 100

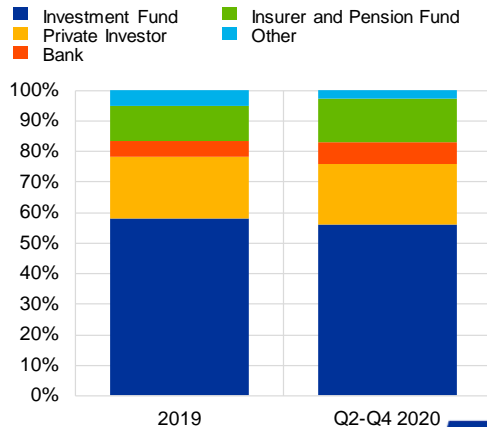


Investor composition remains broadly stable

- The 2020 drop in market activity has not been driven by a single geographic or sectoral group, as all investor types withdrew from the market.
- Sectoral composition of remaining buyers has been broadly stable, although the role of funds decreased marginally and insurers increased (left chart).
- Non-European investors have disproportionately withdrawn from the market (right chart). Market intelligence highlights the role of travel restrictions in limiting property visits – so it is not clear if this is flight to safety behavior or the result of more practical limitations.

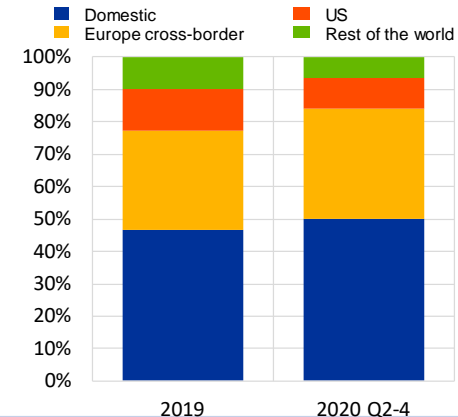
Sectoral composition of EU CRE market buyers before and during crisis

Value of transactions



Geographic composition of EU CRE market buyers before and during crisis

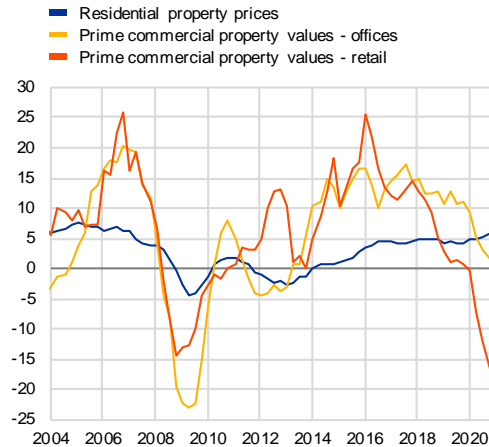
Value of transactions



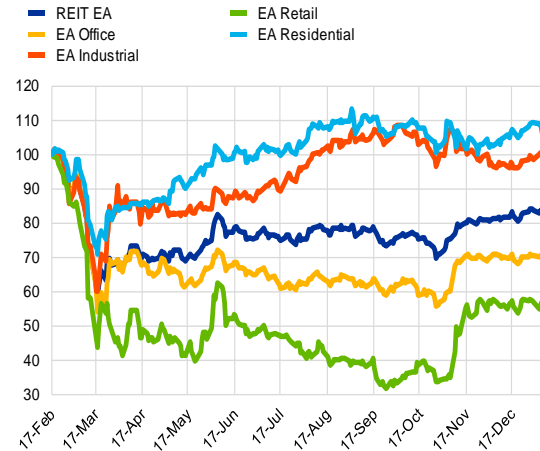
Clear sectoral heterogeneity....

- Retail sector already showing large price correction. Market intelligence confirms that firms in this sector expect depressed rents for 2-3 years and that extensive rent forgiveness took place during lockdowns
- Industrials outperforming – flip-side of e-commerce trend
- Office sector also badly affected - market intelligence suggest “K” recovery with prime properties outperforming

Annual growth in prime CRE price indices
(% annual growth)



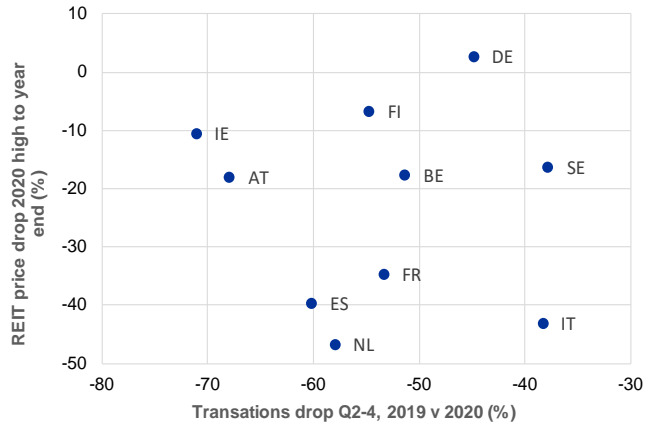
REIT share prices by sector
(100=Feb 17)



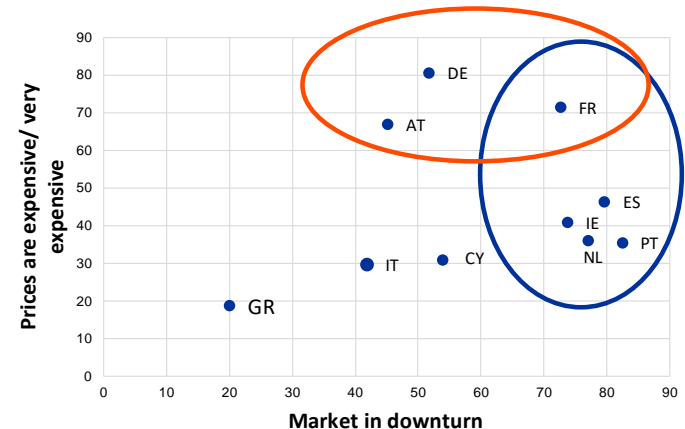
... and geographic heterogeneity

- Impact of COVID-19 shock on CRE markets in 2020 seems most severe in the Netherlands, Spain and France. Instead, CRE in Germany remained resilient.
- Forward looking indicators identify countries most at risk of a correction and those where prices have furthest to fall in adverse outcome

REIT price vs. Transactions drop (%)



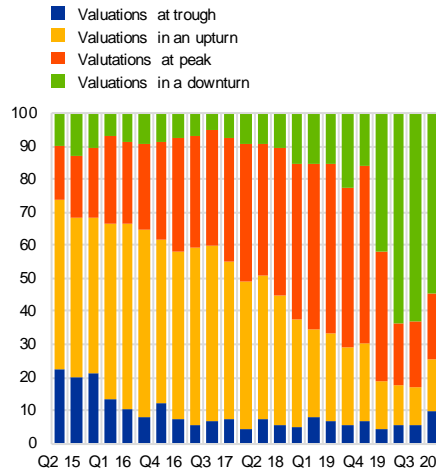
Investor perception of overvaluation vs. likelihood of a downturn (%)



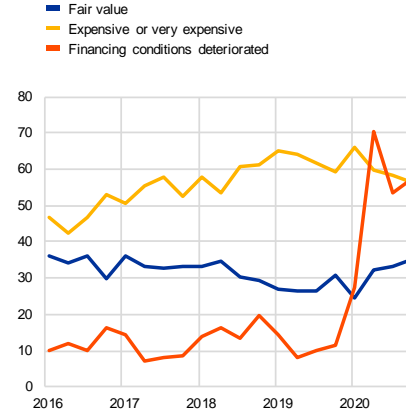
Investors reporting pro-cyclical credit provision

- Concerns of overvaluations pre-existed Covid crisis, with warnings from both ECB and ESRB
- Price correction arising from Covid-19 shock could be amplified by a contraction in credit provision by banks/ capital markets.
- Market intelligence from Retail CRE sources confirms a sharp contraction in credit since the start of the crisis which could result in forced asset sales.

Commercial real estate market sentiment (% surveyed investors)



Commercial real estate price and financing perceptions (% surveyed investors)

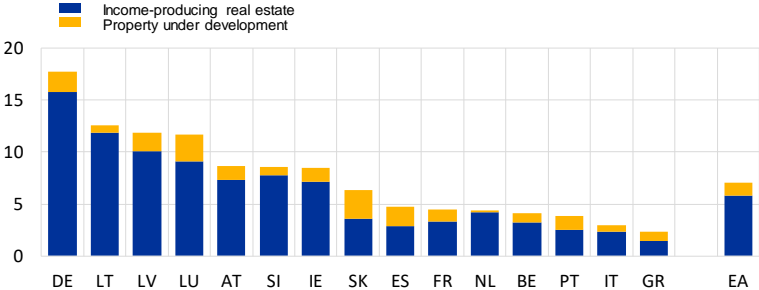


Banks are exposed to CRE via loan purpose and collateral

- A CRE price correction/ drop in rental income could push up PDs among firms involved in CRE activities (development, leasing)
- A CRE price correction will push up LGDs on loans collateralised by CRE
- Use of CRE as collateral often extends beyond CRE purposed loans – could have implications for access to credit in wider real economy

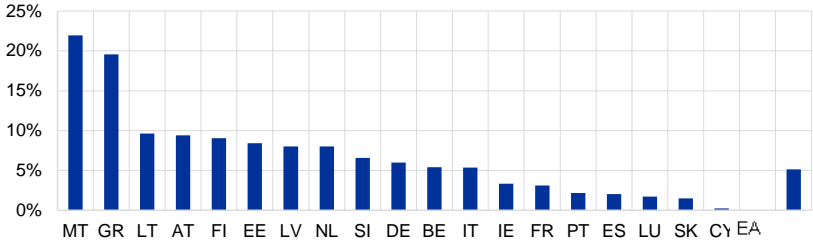
Stock of loans for CRE purpose

Percentage of exposure to the non-financial private sector



Stock of loans with CRE collateral

Percentage of exposure to the non-financial private sector

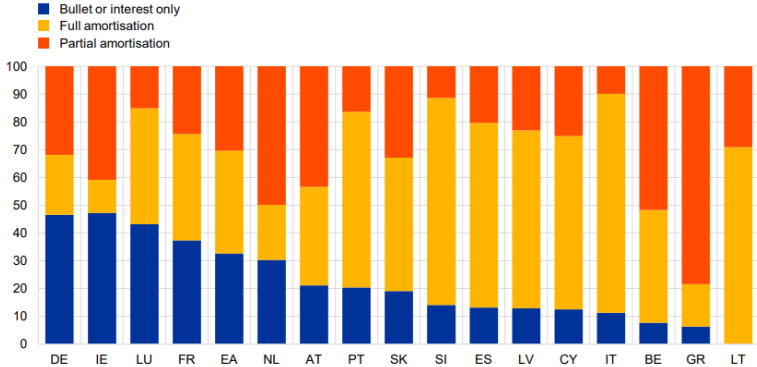


Left: Source: SSM credit underwriting data collection 2019 for significant institutions (upper panel) Right: CBD (lower panel) and ECB staff calculations. (last obs. Q4 2018)

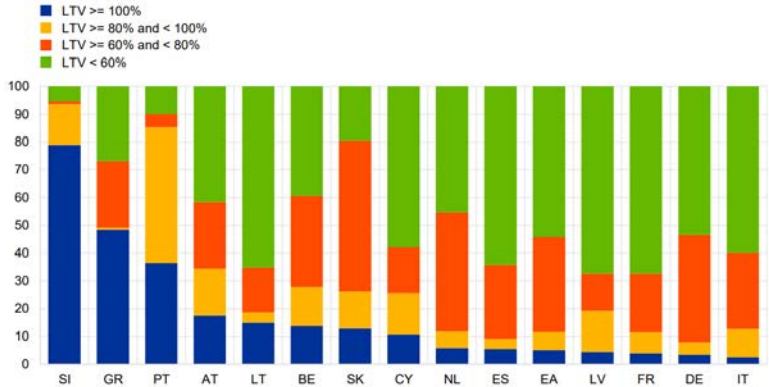
Pockets of risky lending can be seen in CRE portfolios

- A higher share of bullet or interest-only financing increases the credit risk. Most CRE loans, i.e. approximately 64% of new lending in 2018, were not fully amortising loans
- Where loans are well collateralised ultimate losses for banks may be limited – even with a drop in CRE prices
- However, large pockets of high LTV lending can be seen across euro area countries

“Bullet loans” prominent in certain countries (share in New Business Volume, in 2018; percentages)



Pockets of high LTV loans (share of LTV bucket in CRE New Business Volume, in 2018 ; %)



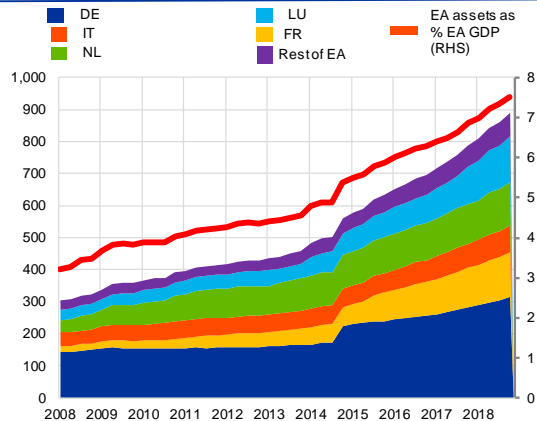
Source: [Trends and risks in credit underwriting standards of significant institutions in the Single Supervisory Mechanism, June 2020.](#)

Liquidity risk in fund sector but flows stable

- Total assets of EA real estate funds have tripled since 2008 and are almost equal in size to bank CRE purposed exposures (7-8% of GDP, left chart). A CRE price correction would have significant wealth effects for investors.
- 80% of real estate fund assets are in open-ended structures and large scale redemptions could lead to firesales.
- Flows have remained stable since the start of the crisis, with cumulative 2020 flows resembling those seen in 2019 (right chart). However, as the CRE price correction fully materialises this may still trigger large scale redemptions (e.g. as government support policies are withdrawn and firm defaults rise).

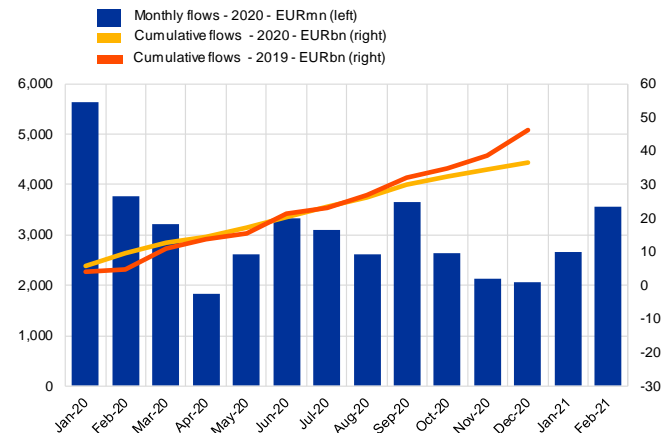
Total assets of euro area real estate funds

Left: € billions, Right: % of euro area GDP



Cumulative and monthly flows to real estate funds

Bars: monthly flows (mn), Lines: cumulative flows (bn)

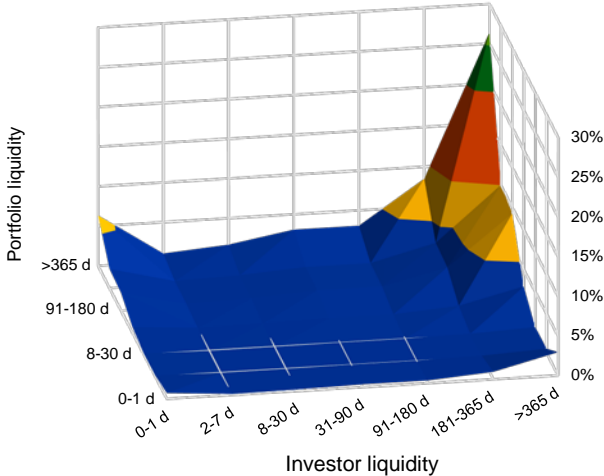


Source: IVF, Eurostat, ECB calculations.

Liquidity situation deteriorated in 2020

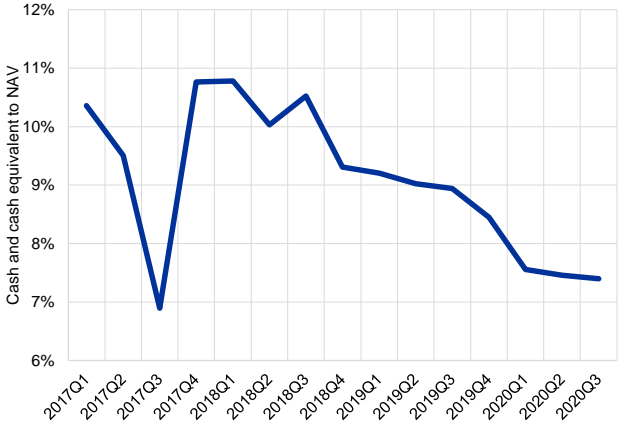
- Liquidity mismatch remains a key vulnerability in the real estate fund sector and liquidity buffers decrease to historic lows in 2020
- Liquidity management tool usage concentrated in some funds and not harmonised EU-wide (ESMA 2020).

Liquidity transformation profile



Source: AIFMD data for 2020Q3, ESRB calculations.
 Notes: The graph shows the joint distribution of portfolio liquidity and investor liquidity for non-closed-end CRE funds

Liquidity buffers and management tools Cash and equiv as %NAV

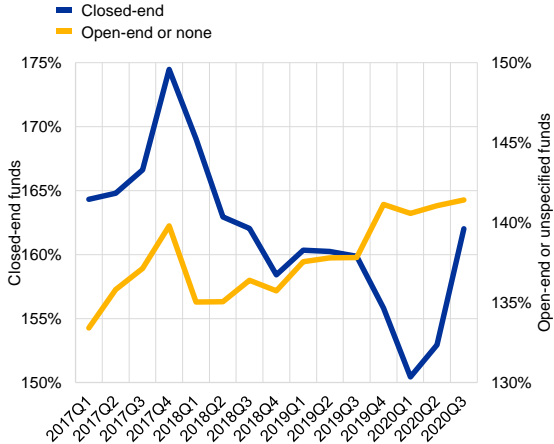


Source: AIFMD, ESRB calculations.
 Notes: The blue line in the graph shows the NAV percentage of the AIF's assets that are currently subject to Liquidity Management Tools (LMT). The yellow line shows the real estate fund sector average percentage share of liquidity buffers at the sectors cumulative net asset values (NAVs).

Funds increased their leverage and thus their exposure to price fluctuations

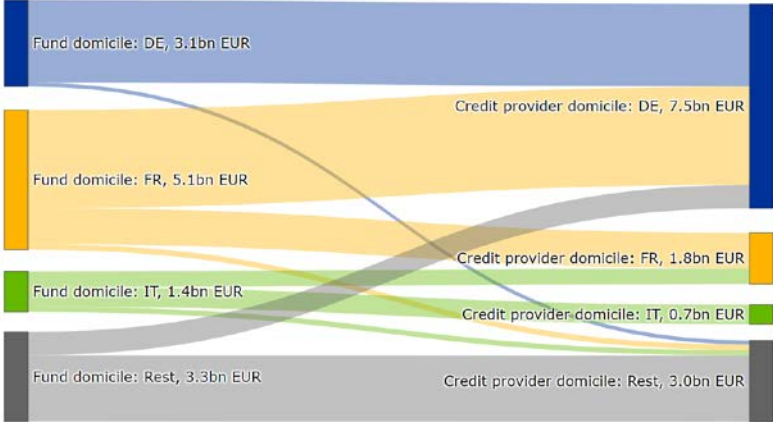
- Increase of leverage raised open-end fund exposures to property price fluctuations.
- Locally domiciled intermediaries, mainly banks, predominantly provided credit to funds. Significant cross-border linkages exist for French and Irish funds which reveal significant connections to German and French credit providers.

Leverage of open-end and closed-end funds NaV/AuM



Source: AIFMD, ESRB calculations.
 Notes: Leverage defined as NAV/AuM. Unspecified funds are funds for which no information on their fund structure is available.

Credit provision by jurisdiction

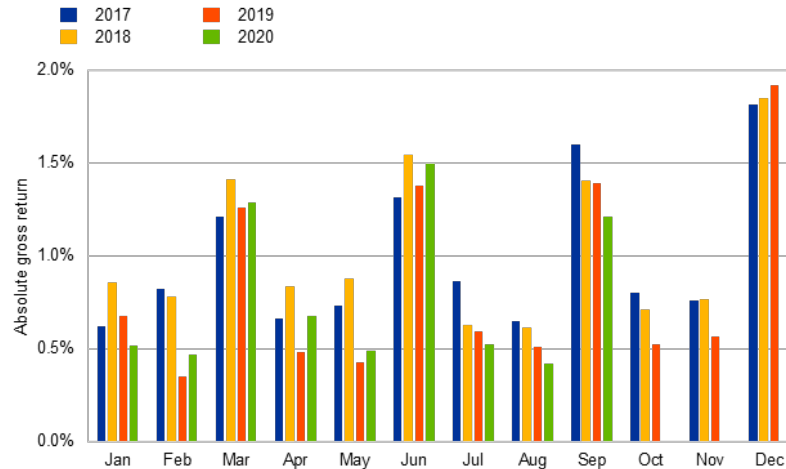


Source: AIFMD data for 2020Q3, and GLEIF, ESRB calculations.
 Notes: The graph shows the credit line linkages for commercial real estate funds between fund domiciles and the legal jurisdictions of credit providers. The category "Rest" subsumes all other countries to achieve data confidentiality.
www.ecb.europa.eu ©

Vulnerabilities stemming from valuation uncertainty

- Low-frequency asset valuations increase valuation uncertainty during periods of market stress which led to fund suspensions during the COVID-19 crisis.
- Only a small proportion of management companies adapted their valuation process to be able to price assets in stressed market conditions (ESMA 2020).

Absolute gross returns



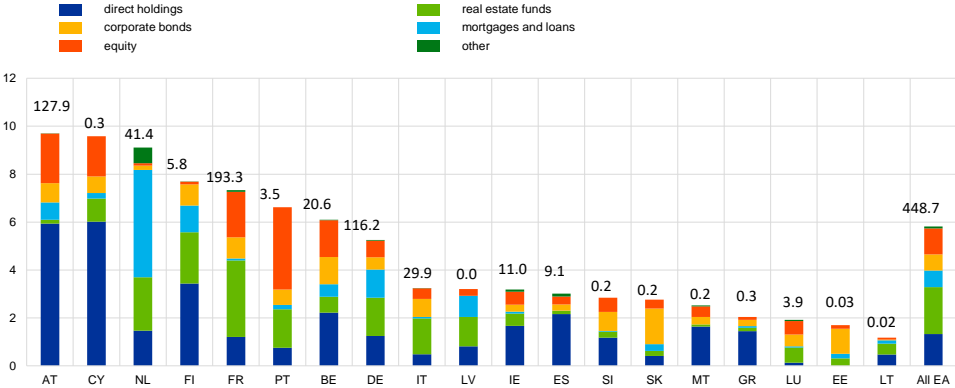
Source: AIFMD data, ESRB calculations.

Note: The graph shows weighted average absolute reported monthly gross returns over time.

Insurers' exposure varies across countries

- Insurer exposures to real estate have also increased in the low interest rate environment and vary substantially at country-level.
- Exposures are largely direct holdings of property and exposures via real estate fund holdings, although in some countries equities play a large role.

Commercial real estate exposure of insurance sector by country
 (left: % of total assets, labels: €billions, as of 2019Q1)



Source: EIOPA.

Conclusions

- The coronavirus outbreak has led to an extended freeze in commercial real estate (CRE) market activity, with market indicators continuing to suggest a substantial price correction.
- In some countries banking systems have sizeable and risky exposures to CRE markets through direct exposures and the widespread use of CRE as collateral.
- In the banking sector, credit risk and adequate provisioning for CRE exposures should be monitored as the impact of the COVID-19 shock continues to materialise.
- Real estate funds show signs of increasing vulnerabilities, which may accelerate as the shock becomes more apparent on fund balance sheets.