PGIM REAL ESTATE

EUROPEAN REAL ESTATE DEBT: WHERE NEXT?

Significant Opportunity for Nonbank Lenders to Grow Market Share

September 2021 | Investment Research

Executive Summary

The European commercial real estate (CRE) debt market presents a significant opportunity for nonbank lenders to enter and grow market share.

Regulatory change has affected the UK commercial real estate debt market with the introduction of slotting; Basel III finalization will have further impact on reducing bank appetite for lower-credit-risk exposures, which will be felt especially across the rest of Europe.

As banks continue to restrict lending to certain parts of commercial real estate, it will create opportunities for nonbank lenders across the risk spectrum of debt strategies.

We expect the transfer of debt capital from banks to nonbanks to happen more quickly than originally anticipated, accelerated by the COVID-19 pandemic.

The size of the opportunity for nonbank lenders in Europe could potentially reach €720 billion (US$900 billion).

> **The European lending landscape has been changing, with more-varied sources of capital willing to finance the commercial real estate sector.**

Note: Conversions from euros (€) to U.S. dollars ($) use exchange rates from Oxford Economics.

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The Regulatory Environment Creating the Opportunity for Nonbanks

Regulatory Framework

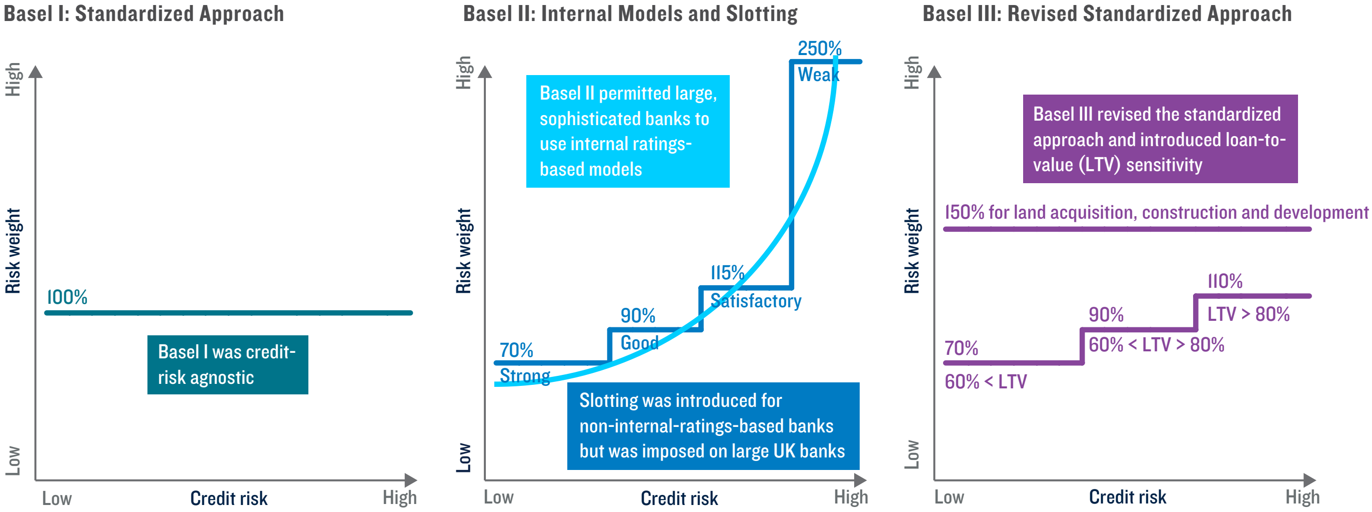
The banking sector's increasingly rigorous regulatory environment continues to play a significant role in the European commercial real estate lending market. One aspect of it is the Basel Accords, which at their heart stipulate that banks are required to set aside adequate capital to cover unexpected losses (exhibit 1).

In Basel I—the first iteration, also known as the *standardized approach*—capital requirements depended largely on asset type and had limited variation due to credit risk. For example, commercial real estate exposures carried 100% risk weight regardless of the quality and characteristics of the underlying collateral.

Basel II, the second iteration, introduced a more risk-sensitive approach to risk weighting. The risk weighting was done in two ways. First, banks deemed to have adequate data and models were permitted to take an internal ratings-based approach. And second, even for those banks, a simplified risk-weighting methodology called *slotting* was made available as a fallback.

> **The increasingly rigorous bank regulatory environment plays a significant role in shaping the European commercial real estate lending market.**

EXHIBIT 1: BANK REGULATORY CAPITAL REQUIREMENTS ON COMMERCIAL REAL ESTATE LENDING



Note: This diagram is for illustrative purposes only. It is intended to be a simplified expression of the risk weights for income-producing real estate exposures (nonrecourse-secured commercial real estate lending) rather than a precise representation.

Sources: Peter Cosmetatos, CEO of CREFC Europe in Real Estate Capital *Regulation: The Arrival of Basel IV*, January 2018, PGIM Real Estate. As of September 2021.

The UK Experience

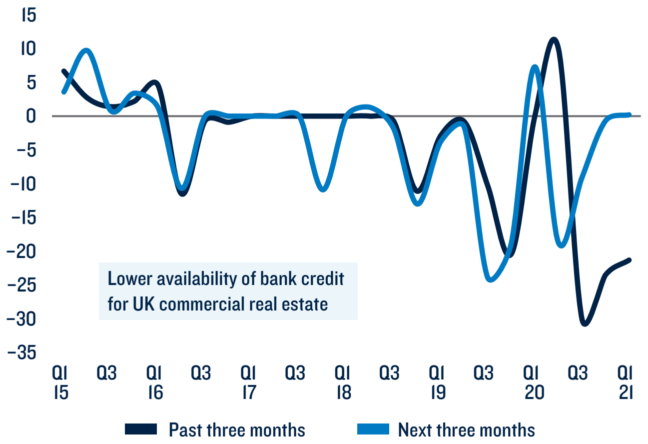
Under Basel II, the UK regulator imposed *slotting* on large UK banks,* which led to bank retrenchment from higher credit risk exposures, leaving a funding gap in the UK market. Nonbanks stepped in to provide the much-needed financing that led to their market share's almost trebling—from 9.4% in 2012 to 27.8% in 2020, according to Bayes Business School[1] (exhibit 2). This equates to €58.9 billion (US$70 billion) of outstanding debt compared with a market total of €212.2 billion (US$253 billion) at year-end 2020.[2]

That change in market composition was not seen to the same extent elsewhere in Europe, largely because banks in those markets adopted the internal ratings-based approach. For example, in France, banks still hold a 90% market share.[3]

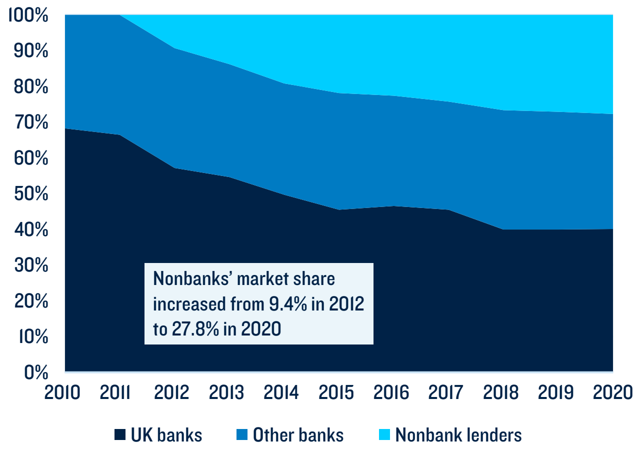
> **In less than 10 years, nonbank lenders have trebled their market share in the UK.**

EXHIBIT 2: REDUCED BANK APPETITE FOR UK COMMERCIAL REAL ESTATE LED TO NONBANKS' GROWING MARKET SHARE

Availability of Bank Credit for UK Commercial Real Estate
(Net Percentage Balance)



Composition of UK Commercial Real Estate Debt
(% Outstanding Loans)



Note: Nonbanks as defined by Bayes Business School include insurance companies, debt funds and other nonbank lenders.
Sources: Bank of England, Bayes Business School, PGIM Real Estate. As of September 2021.

* Throughout this paper, the terms *large UK banks* and *large, sophisticated banks* are as defined by national regulators.

[1] Bayes Business School is renamed effective September 2021; formerly, the Business School and Cass.

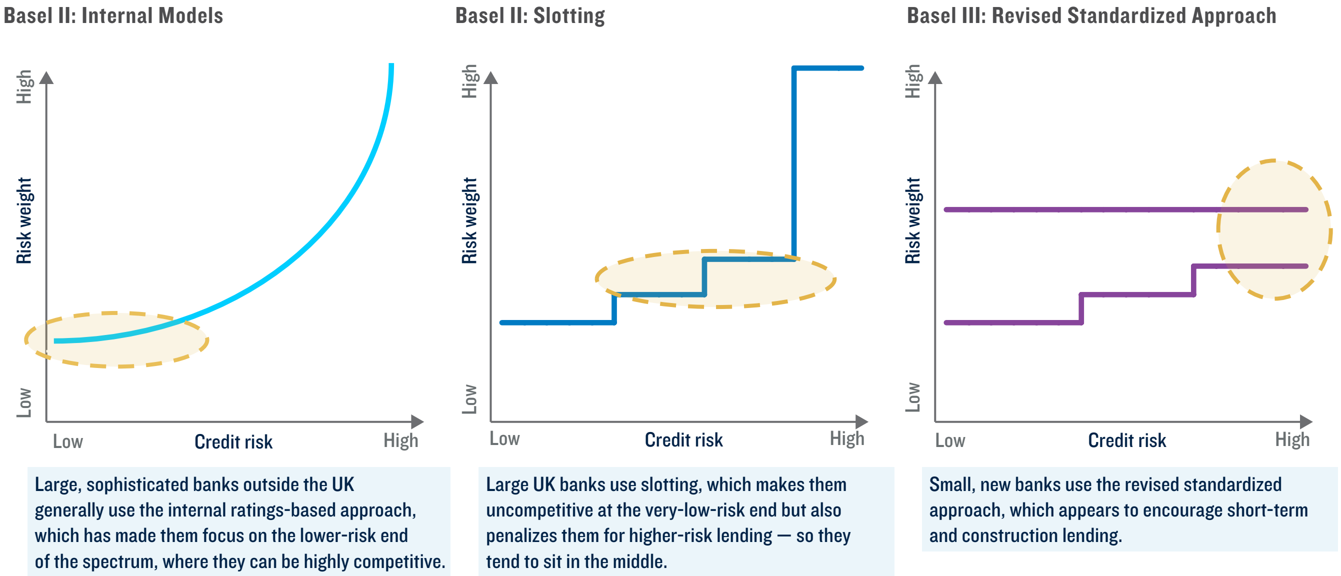
[2] Source: Bayes Business School Commercial Real Estate Lending Report Year End 2020.

[3] Source: IEIF and PwC Strategy& The French Professional Real Estate Financing Market 2020.

Today's Regulatory Environment

Basel III, which is also known as the *revised standardized approach*, introduced loan-to-value sensitivity, which led banks to move away from higher loan-to-value lending and nonbanks to move into that space. Today's European commercial real estate lending market operates under three different capital frameworks (exhibit 3).

EXHIBIT 3: TODAY'S ENVIRONMENT CONSISTS OF THREE CAPITAL FRAMEWORKS



Note: This diagram is for illustrative purposes only. It is intended to be a simplified expression of the risk weights for income-producing real estate exposures (nonrecourse-secured commercial real estate lending) rather than a precise representation.

Sources: Peter Cosmetatos, CEO of CREFC Europe, PGIM Real Estate. As of September 2021.

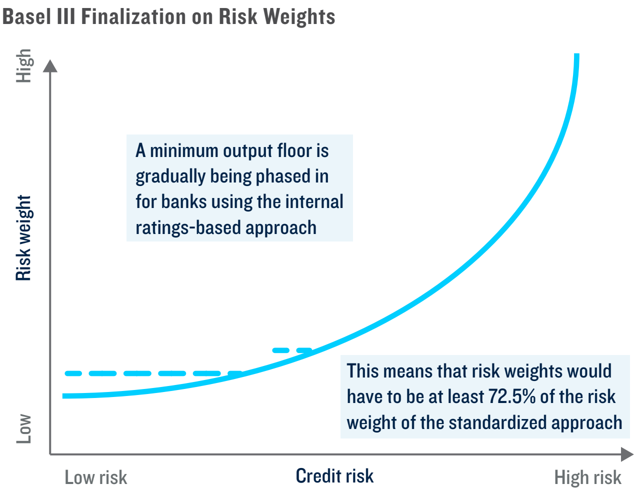
Tomorrow's Regulatory Environment

The finalization of Basel III includes, among other things, revisions that seek to address the differences between internal models and the standardized approach. One such revision is the introduction of a minimum output floor on internal models, which essentially places a minimum requirement on bank regulatory capital (exhibit 4). As a result, banks will be forced to hold more regulatory capital along additional parts of the risk-and-return spectrum.

According to the European Banking Authority, the increase in minimum required capital could lead to a total capital shortfall of €125 billion (US$156 billion).[4] In response to that, banks are likely to reduce overall lending as well as further retrench from certain pockets of the markets as they seek to address this capital shortfall.

Larger, sophisticated banks across Continental Europe tend to use the internal ratings-based approach and are most likely to be affected. This is because the minimum required capital will simply increase the amount of regulatory capital they would need to hold against their risk exposures. This is expected to have a greater effect on lower-credit-risk loans, which currently carry no minimum regulatory requirement.

EXHIBIT 4: TOMORROW'S ENVIRONMENT INCREASES BANK REGULATORY CAPITAL



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Sources: Peter Cosmetatos, CEO of CREFC Europe, PGIM Real Estate. As of September 2021.

[4] European Banking Authority Basel III Reforms: Impact Study and Key Recommendations – Macroeconomic Assessment, Credit Valuation Adjustment and Market Risk December 2019.

Rotation of Debt Capital from Banks to Nonbanks Will Happen Apace

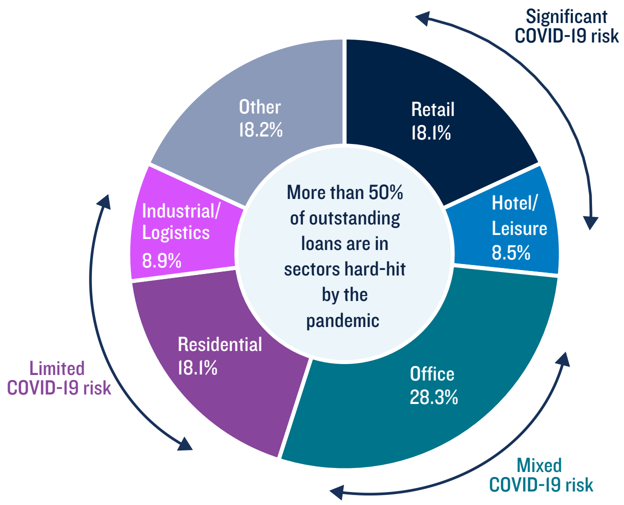
In addition to the increase in regulatory capital caused by Basel III, the market effects from the COVID-19 pandemic may further create opportunities for nonbanks.

The European commercial real estate loan market is typically a five-year, floating-rate market, meaning that loans due to be refinanced today would have originated around five years ago. However, the refinancing backlog caused by the pandemic means that loans due to be refinanced today include both those originated around five years ago *plus* the delayed refinances caused by the pandemic.

Some of those loans would have been made to sectors hard-hit by the pandemic, such as retail, hotel and office (exhibit 5). So, those loans' credit risk would have deteriorated, thereby either making it difficult for banks to refinance or forcing them to do so at higher regulatory costs. Therefore, banks may no longer want those exposures or are simply unable to underwrite the risk.

EXHIBIT 5: OUTSTANDING DEBT

Outstanding Loans by Sector (% of Outstanding)



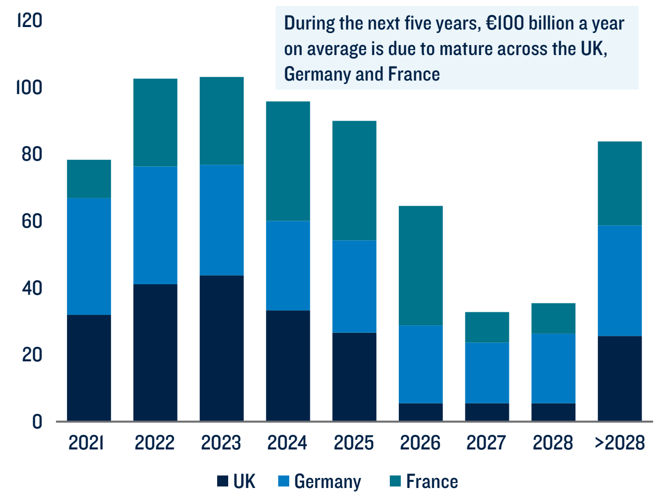
Note: Percentages do not sum to 100 due to rounding.

Sources: Bayes Business School, IREBS, IEIF, PwC Strategy&, Banque de France, PGIM Real Estate. As of September 2021.

With €100 billion (US$125 billion) a year on average due for refinancing during the next five years across the UK, Germany and France,[5] this perennial refinancing feature of the European commercial real estate loans market will likely lead to the regulatory risk transfer from banks to nonbanks happening apace (exhibit 6).

EXHIBIT 6: LOAN MATURITIES

Loan Maturity Schedule Across UK, Germany and France (€ Billions)



Note: Any projections or forecasts presented herein are subject to change without notice. Actual data will vary and may not be reflected here.

Sources: Bayes Business School, IREBS, IEIF, PwC Strategy&, Banque de France, PGIM Real Estate. As of September 2021.

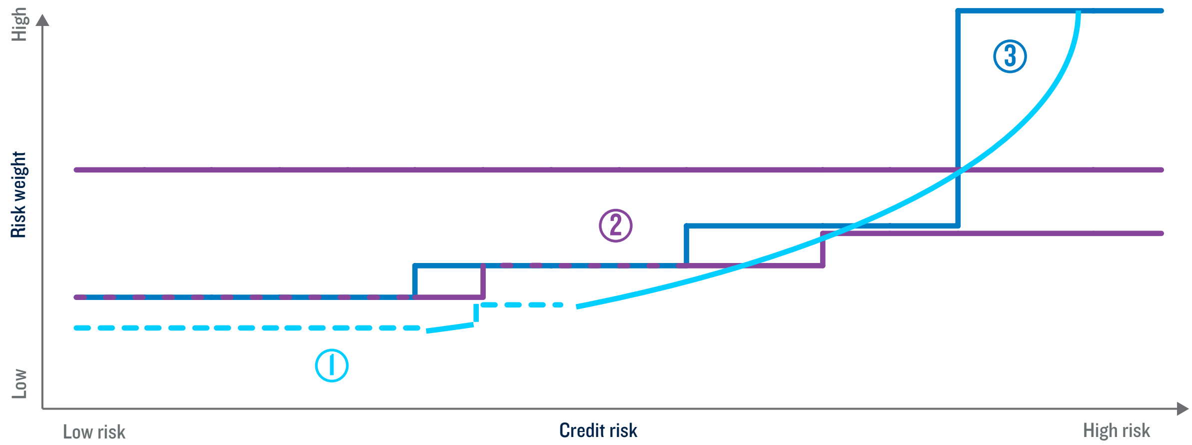
[5] PGIM Real Estate estimates, based on data from Bayes Business School, IREBS, IEIF, PwC Strategy& and Banque de France.

OPPORTUNITIES FOR NONBANK LENDERS ACROSS THE RISK SPECTRUM OF DEBT STRATEGIES

Ongoing changes to the regulatory environment and increases in regulatory capital charges have created opportunities for nonbank lenders across the risk spectrum of debt strategies (exhibit 7).

EXHIBIT 7: OPPORTUNITIES FOR NONBANK LENDERS ACROSS THE RISK SPECTRUM OF DEBT STRATEGIES

Tomorrow's Regulatory Environment and the Opportunities It Will Bring



1 Senior Loans

The gradual phasing in of minimum output floors is increasing the minimum required capital for banks and affecting the low-credit-risk end of the spectrum. This is creating opportunities for nonbank lenders in senior loans for both new lending and refinances.

2 Whole Loans, Transitional and Development Loans

Reduced bank appetite for real estate risk has created opportunities in whole loans as well as lending on transitional and development properties, leading to growth of nonbank lenders across the capital stack.

3 Mezzanine Financing

Loan structure risk has created opportunities in mezzanine financing, whereby banks have retrenched from higher LTVs and higher-credit-risk loans. As such, nonbank lenders are providing the financing to fill the gap between equity and bank debt.

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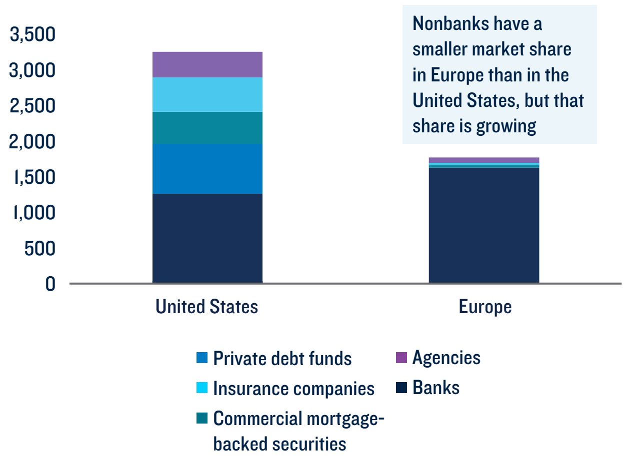
Sources: Peter Cosmetatos, CEO of CREFC Europe, PGIM Real Estate. As of September 2021.

Sizing the Opportunity

The European commercial real estate debt market is estimated to be €1.8 trillion (US$2.1 trillion),[6] with nonbank lenders having around 10% market share, which equates to around €180 billion (US$225 billion) (exhibit 8).[7]

EXHIBIT 8: CURRENT EUROPEAN COMMERCIAL REAL ESTATE DEBT MARKET LANDSCAPE

Size and Composition of CRE Debt Market (€ Outstanding Loans)



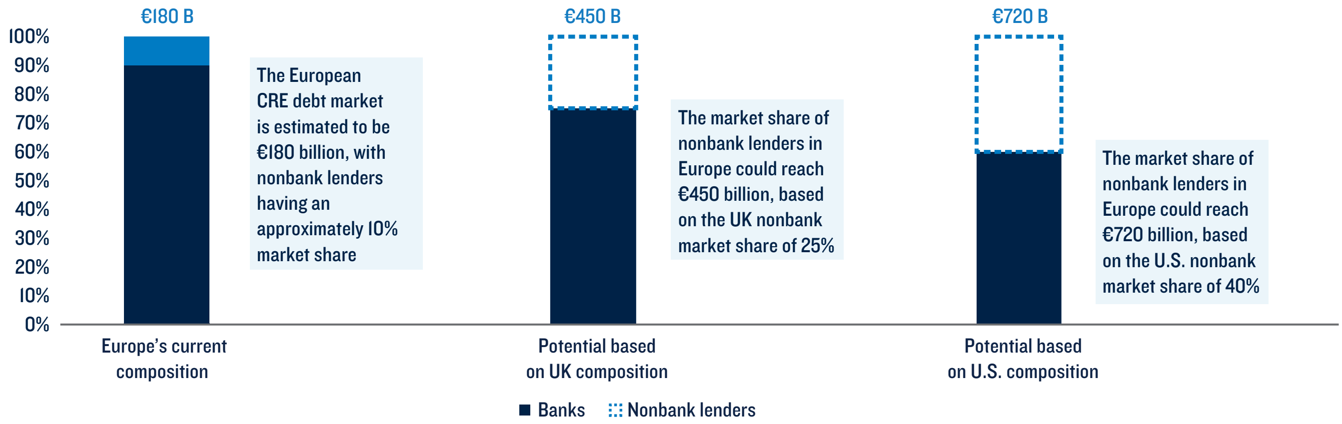
Sources: Mortgage Bankers Association, Bayes Business School, IREBS, IEIF, PwC Strategy&, Banque de France, AFME, PGIM Real Estate. As of September 2021.

The UK market has shown us that nonbank lenders were able to increase market share to just over 25%[8] because of regulatory change. If nonbanks are able to reach a similar penetration rate across Europe, it would translate to a potential market size of €450 billion (US$562 billion).

Looking further afield to the €3.2 trillion (US$3.8 trillion) U.S. commercial and multifamily debt market, in which nonbanks have a market share of 60% (of which 20% is held by agencies[9]),[10] we see evidence of how diversified the debt capital markets potentially could be. If nonbanks in Europe reach the same level of nonbank market penetration (excluding agencies), then the nonbank-lender market could potentially grow to reach €720 billion (US$900 billion) (exhibit 9).

EXHIBIT 9: POTENTIAL SIZE OF EUROPEAN NONBANK COMMERCIAL REAL ESTATE DEBT MARKET

Estimated European CRE Debt Market (% Outstanding Loans)



Note: Estimates of the potential size of the European nonbank lender market are based on data from the sources listed below and UK and U.S. market compositions. Estimates are subject to change and cannot be guaranteed.

Sources: Mortgage Bankers Association, Bayes Business School, IREBS, IEIF, PwC Strategy& Banque de France, AFME, PGIM Real Estate. As of September 2021.

[6] PGIM Real Estate estimates, based on data from Bayes Business School, AFME and MSCI.

[7] PGIM Real Estate estimates, based on data from Bayes Business School, IREBS, IEIF, PwC Strategy&, Banque de France and AFME.

[8] Source: Bayes Business School Commercial Real Estate Lending Survey Year End 2020.

[9] Agencies represent a government-backed form of securitization and are unique to the U.S. market.

[10] Source: Mortgage Bankers Association Commercial/Multifamily Debt Outstanding Q4 2020.

Concluding Remarks

Ongoing changes to the regulatory banking environment have led to increased costs of capital for bank lenders. As a result, banks have been retrenching from certain parts of the commercial real estate lending market, which has led to increased market share for nonbank lenders. To date, the increased market share has been mostly at the medium-to-higher-risk end of the scale and in development financing.

Basel III finalization further increases the banks' regulatory costs of capital. This time, the impact will likely be at the lower-credit-risk end of the spectrum and especially across Continental Europe, yet there is no shortage of financing from nonbank lenders. Capital-raising figures indicate that commitments to private real estate debt strategies have been growing steadily, with year-on-year growth averaging 15.4% from 2005 to 2021 to date, according to Preqin.[11]

Growing investor appetite from both real estate and fixed income[12] points toward further capital flowing into private real estate debt.

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[11] Source: Preqin Historical Fundraising data as at June 28, 2021.

[12] Sources: ANREV, INREV, PREA Investment Intention Survey 2021 and Alternative Credit Council Investor Intentions, H1 2021.

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