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Real Estate Debt

Financing Options in an Environment of Rising Interest Rates and Limited Bank Financing

RESEARCH REPORT
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Real Estate Debt

Financing Options in an Environment of Rising Interest Rates and Limited Bank Financing

The German construction and real estate markets are still seeing very dynamic growth. Even if new calculations are necessitated by recent effects on the interest rate side, related to inflation or construction costs, the consistently strong demand for housing space is a given fact – not least because of sustained immigration most of all into metropolitan regions. In addition to new residential construction, the total market as a whole also includes numerous other projects, including new commercial buildings and special real estate along with renovation and modernization projects, of course, ensuring that project developers, the construction industry, and the real estate sector in general will continue to see high levels of capacity utilization.

At the national and European levels, prices and qualities are influenced in particular by heightened ESG and CO_2 regulations. These tend to cause further price increases and, as a result, rising investment volumes.

In the past, real estate investors' financing needs were primarily met by conventional Bank loans (collateral loans). Whether the growing demand for financing arising from institutional and private investors can continue to be fully satisfied from this resource is doubtful. Rising interest rates, higher loss allowances at banks, and tighter eligibility criteria make utilizing this conventional financing source appear more difficult. Adjustments to financing volumes and financing interest rates tend to diminish profitability and liquidity. Players in the real estate markets are therefore bound to also tap into alternative sources of financing in order to satisfy their ongoing high investment and financing demand.

A real estate investment can be financed using a business's existing or internally generated funds (internal financing) or externally sourced, in other words, contributed by a third party (external financing). Depending on the type and accounting method, these funds are classified as either equity or debt. Banks are not the only source of capital. Private debt is an umbrella term encompassing debt funds that are predominantly provided by private sector institutional investors such as pension funds, insurance companies, funds, and investment foundations outside the banking sector.

The numerous tradable risk and opportunity positions – especially of mezzanine capital – appeal on the lender side to a wider range of investors and can contribute to an efficient capital structure. In order to provide risk diversification, capital is generally provided or refinanced through funds or pools, thus indirectly through insurance companies and pension funds, for example.

Overall, the non-bank financial institutions market is growing very rapidly. This refers to financial enterprises that offer financial services typical for banks such as lending, risk pooling, etc., but do not hold a full banking license themselves and that are, therefore, not subject to national or international banking supervision. At the same time, though, this market is much less transparent than the heavily regulated banking sector, for instance.

This study introduces the key drivers of the alternative financing market, particularly real estate private debt. Various financing options are compared, and the respective market potentials analyzed. Additionally, the main market volumes and developments in capital demand, in the banking sector and with other financing variables are presented. This brings slightly more transparency into a complex market segment, both for real estate investors with capital needs as well as for capital investors as potential financing providers.

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1. Dynamic Trend Continues in German Construction and Real Estate Markets

The German construction and real estate markets are still seeing very dynamic growth. The total market as a whole includes numerous other projects in addition to the commonly highlighted residential construction including new commercial buildings and special real estate along with renovation and modernization projects, of course. Nevertheless, the construction industry is seeing somewhat lower utilization rates due to the economy coupled with a lack of adequate financing options for project developments.

A variety of other special effects are also impacting the complexity and dynamics of these events. As is well known, a major role is played by higher construction costs driven by material costs and wage adjustments as well as by supply chains that are still not fully intact. At the national and European levels, prices and qualities are influenced in particular by heightened ESG and CO_2 regulations.

Above all, market changes are being driven by the significantly higher key interest rates and consequently also by real estate financing interest rates. Players in the real estate markets are therefore bound to also tap into alternative sources of financing in order to satisfy their ongoing high investment and financing demand.

Development of Housing Industry Projects

Regardless of the fact that volume targets previously defined in public policy such as "400,000 new housing units per year" are probably not achievable for the time being (current Ministry of Construction estimates: 250,000 in 2022), project developments – measured by construction permits and construction completions – even in the residential housing sector continue at a high level. The multifamily property segment, reported separately in official statistics under the heading "from 3 housing units", is especially interesting. Small projects, particularly construction of private residences, are therefore excluded for now. The professional market with businesses involved on both sides of the transaction (B2B) is primarily of interest for the purposes of this study.

Significant fluctuation is evident when considering the monthly figures for construction permits. Seasonal effects play a role here, along with specifics related to application processing and collection, as well as short-term market effects resulting in time lags or advance submissions (e.g., changes in laws, statutes, or subsidy requirements).

The recently intensely debated supply chain problems and jumps in prices are not yet evident in the

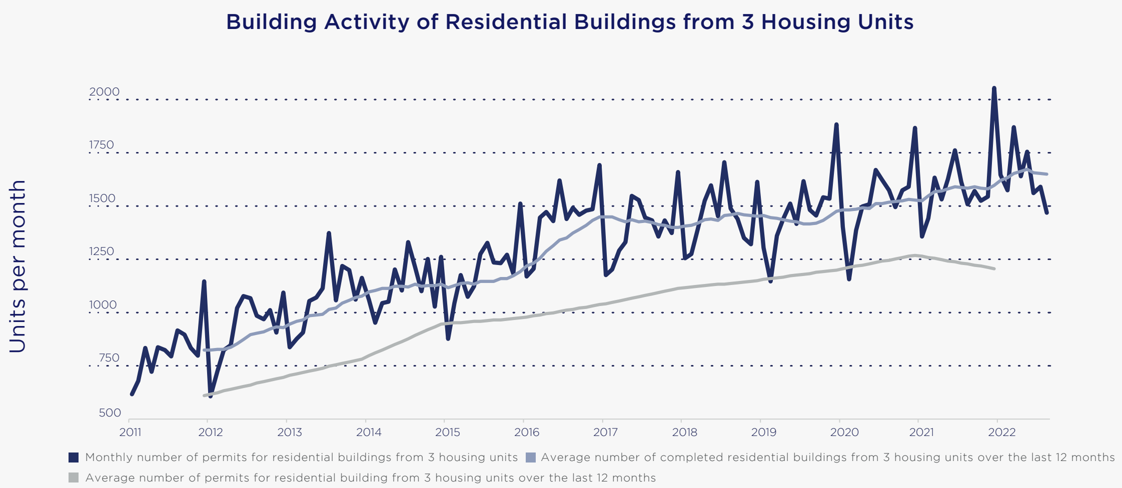

Figure 1: Number of construction permits and completed construction of residential buildings from three housing units, Germany (monthly and monthly average); source: Federal Statistical Office, own calculation and presentation.

smoothed figures (12-month trend); the favorable fundamental trend still seems intact in the long-term analysis. Here, the monthly construction permits (averaged over the past twelve months) increased within ten years from 825 then to 1,650 now in 2022. Apparently, however, all of the plans are no longer being realized. Completion figures show a perceptible decline, perhaps even a trend reversal.
The actual construction projects and their completions occur with a time lag, usually their numbers are also significantly lower than those of the permits. In 2021, for instance, only 14,483 properties were completed, representing a monthly average of approx. 1,200. That is approx. 25% lower than the respective permits in 2021; 11% below the permits in 2020; and still 8% lower than the permits in 2019. Included here are differences arising from abandoned or replanned projects and time lags typical for the market.
This plainly shows that the share of projects actually completed has recently fallen. This could also be attributable to a lack of financing and/or construction services that are too costly or unavailable. Generally speaking, the demand for financing grows along with the number and size of the projects.

Housing Industry Transaction Volume Trend

In addition to new construction activity, considered here primarily in the sense of growth in institutional portfolios, transactions with existing real estate also generate demand for financing from the respective buyers. In this regard, examining the transaction volume in residential real estate portfolios is interesting, too. Transactions with slightly higher volumes (excluding individual condominiums or small rental houses) are primarily relevant for the alternative types and sources of real estate financing in the B2B segment which will be discussed later. A lower threshold for this analysis should be set at 30 housing units, which should also correspond to a minimum volume of EUR 5.0 million, even for the most affordable real estate portfolios.
A certain trend can be recognized in these figures, too, from BNP in this case. The volume amounted to just under EUR 20 billion per year in 2019 and 2020. 2021 can be seen as a clear spike; however, this is attributable to the special effect of Vonovia's takeover of Deutsche Wohnen (a share of approx. EUR 22 billion). Following the peak in 2021, the latest quarterly figures support the assumption that target values in 2022 will be approximately the figures achieved in 2020.
This suggests that the transaction activity associated with residential real estate portfolios will also drive a high demand for financing, yet one that will have very little volatility in the medium-term analysis

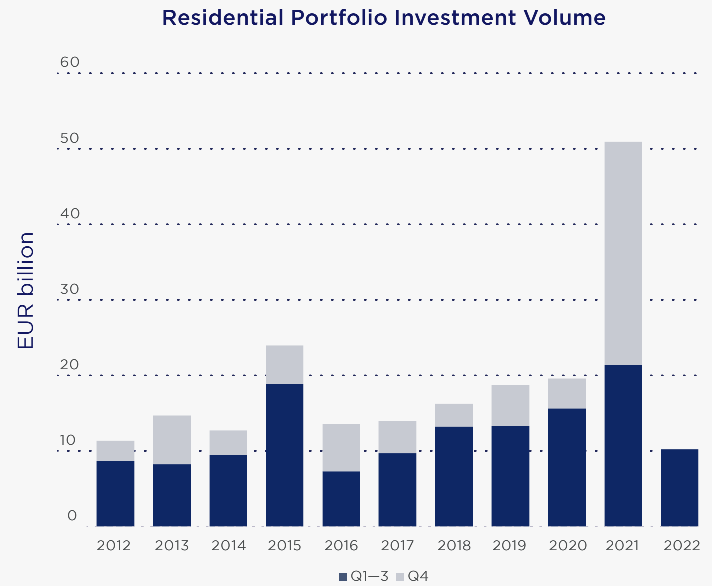

Figure 2: Residential real estate portfolio transaction volume (minimum 30 housing units, Germany); source: BNP Paribas Real Estate, residential investment market Germany at a glance Q4 2021, Q3 2022; own calculation and presentation.

Other Transaction Volume Trend

The transaction volumes for other types of use, particularly for the various types of commercial real estate (office, trade, logistics, etc.), generate yet another financing demand from commercial investors. The transaction volumes in this market segment are traditionally higher than in the previously described residential real estate portfolios. BNP assumes that commercial real estate in a volume of approx. EUR 15 to 20 billion is traded every quarter (some EUR 60 to 80 billion annually). The respective market volume is somewhat more volatile as shown in Figure 3 for the office real estate segment. The same applies to logistics, a segment recently in high demand, whose volume still only comprises less than 50% of the office revenues.
On the whole, demand for financing in the commercial real estate sector is to be viewed as quite specific and volatile.

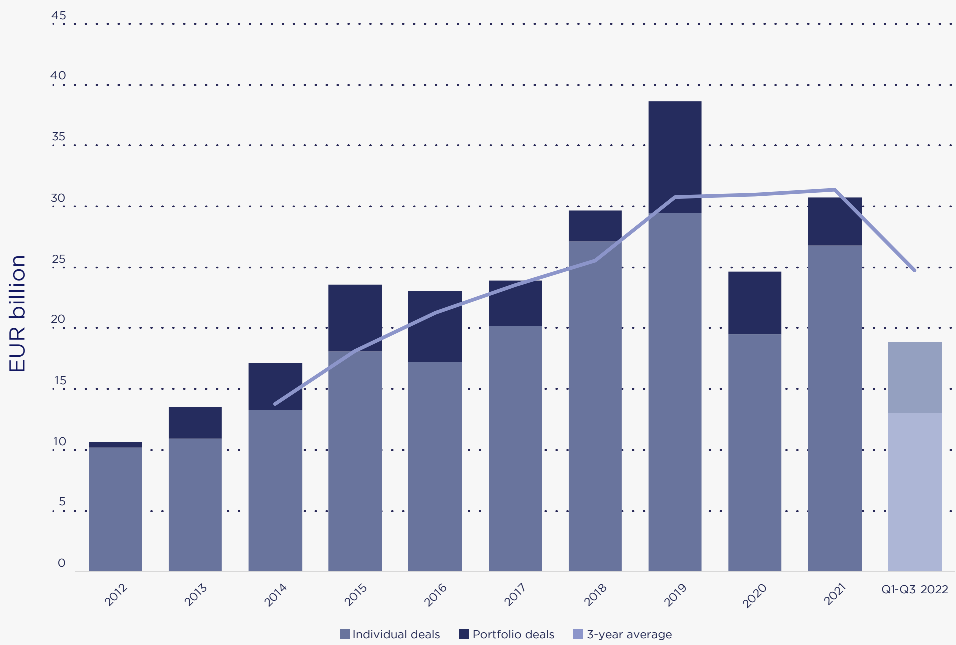

Figure 3: Office real estate transaction volumes (Germany); source: BNP Paribas Real Estate, office investment market Germany at a glance Q3 2022; own calculation and presentation.

Strong and Volatile Demand for Financing

Demand for financing from commercial investors, which should be the primary focus of this study, is generated, on the one hand, by new construction activities and, on the other, by transactions with existing real estate and real estate portfolios. Corresponding refinancing also has a role in this.
An analysis of the corresponding market volumes shows that the transaction activity is growing slightly over the medium term. Cycles and case-by-case spikes are typical, particularly for commercial real estate. In this sense, not only investment volumes are highly volatile, but also the corresponding demand for financing.
There is a strong upwards trend in the field of new construction of residential real estate. Corresponding data is available for basic parameters such as the number of projects, housing units, and in some cases also area, however not for the overall volume to be financed in monetary terms. Still, at least this can be estimated using construction price and real estate price trends. Accordingly, the construction price index for residential buildings (according to Destatis) increased by around 50% over the past five years. The property price index published by the Association of German Pfandbrief Banks (VDP) for owner-occupied residential properties also depicts an increase of a similar degree in the same timeframe.
With volume and price effects therefore occurring simultaneously, investment volume and the accompanying demand for financing rose considerably. This dynamic should now be compared with the available sources of financing.

2. Demand for Financing Only Partially Met by Conventional Real Estate Loans from Banks

In the past, real estate investors' financing needs were primarily met by conventional bank loans (collateral loans). Whether the growing demand for financing arising from institutional and private investors can continue to be fully satisfied from this resource is doubtful. Rising interest rates and higher loss allowances at banks (along with more stringent audits, lower LTVs, higher interest rates, and event denials) tend to make conventional financing appear more difficult. Adjustments to financing volumes and financing interest rates serve to diminish the profitability and liquidity of the total project.

Cost Development of Real Estate Financing in the Banking Sector

After a virtually zero-interest policy, under which governments as well as businesses and private borrowers could borrow at relatively low cost, was pursued in the euro area – and even in other currency areas such as Switzerland – for many years, interest rates have risen considerably in recent months (Figure 4). As a result of severe, even double-digit inflation rates, central banks were forced to increase key interest rates in order to curb demand unmet by goods and services.
Several interest rate hikes were implemented at brief intervals. While the U.S. central bank, the Fed, assumed a pioneering role and meanwhile sets key interest rates above 4.0%, other central banks followed a short time later. The European Central Bank (ECB) increased its key interest rate several times, and it is now at 2.5%. Consequences are expected for all other interest rates in the market, including consumer loans and real estate financing.

Although it is true that real estate loans do not directly depend on ECB funds in terms of their volumes and interest rate, since for the most part they can be refinanced through mortgage pfandbriefe, it goes without saying that this dynamic interest landscape plays a role in this financing segment as well. Interest rates on construction loans are aligned with the returns of long-term federal bonds and pfandbriefe, covered bonds issued on the capital market. Banks refinance the real estate loans they issue by means of pfandbriefe which are tradable on the capital market. As a specific capital market product, pfandbriefe are government regulated on the basis of the German Pfandbrief Act (PfandBG) and mostly collateralized by real property (land charge).
Meanwhile, marketable mortgage pfandbriefe have a return of around 3.2%, depending on the remaining term. When new pfandbriefe are placed on the market, they will have to use this normal market return as orientation, in other words, they will be equipped

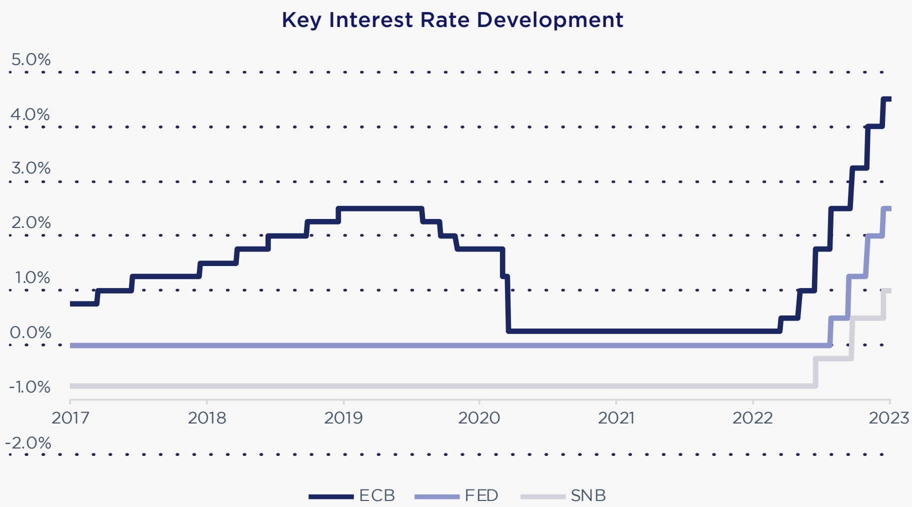

Figure 4: Rising key interest rates of various central banks; source: ECB, SNB, Fed, own calculation and presentation.

with an interest coupon of this amount. Standard banking margins, administrative costs and risk premiums are to be added to this. The development of the pfandbrief market is therefore a good indicator for potential financing terms that banks can allow for real estate investments.

Interest rates of approx. 4.0% are frequently already demanded by banks for 10-year fixed-rate loans, depending in the individual case of course on other parameters such as the specific property to be financed, volume, loan-to-value ratio, etc. Compared to the historically very low interest rates, particularly over the past five years, this current interest rate hike is driving at least a two-fold increase – and, in many cases, a three-fold increase (depending on the point of reference) – in financing costs compared to the previous amounts to be calculated.

As a result, some acquisitions or construction of some real estate properties could become increasingly unprofitable and therefore be put on hold. This perspective applies especially to investors in the professional realm. In contrast, the focus of the private buyer and private usage segment is on consumption and liquidity considerations. Rising financing costs will also often have the effect of at least temporarily postponing acquisitions or forcing the buyer to tap into alternative sources of financing.

Interest Rate Development for Mortgage Pfandbriefe

Interest Rate Development for Residential Construction Loans

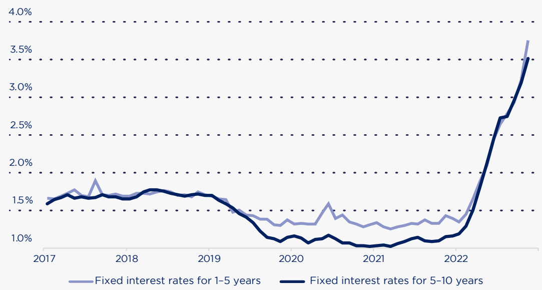

Figure 5: Rising financing interest rates in residential construction (loans to private households) and equally rising costs of bank refinancing through Pfandbriefe; source: German Bundesbank, own calculation and presentation.

Smaller Range of Financing Options by Banks

Besides the impact of financing interest rates as a price factor discussed above, the financing frameworks that are actually available are an interesting volume-related variable. The various different financing needs of the real estate industry can only be met in the breadth of the market with a sufficiently large financing volume that is also available to provide funding for special or difficult financing projects.

The German Bundesbank monitors and reports in detail on the corresponding lending of the different banks operating in the financing market. A striking feature in this connection is that both lending for housing acquisition and housing construction of private households as well as mortgage loans granted for commercially utilized properties have recently stagnated in Germany. Adjusted for price increases in the real estate industry (construction cost index), these figures even decreased significantly and are currently lower than the level in 2017.

It still remains unclear whether this decline is driven by the independent decision of the borrowers or by the explicit restraint of the banks (e.g., including due to regulations). However, it is likely that financing negotiations with banks are becoming increasingly difficult. It is unrealistic to assume that, going forward, the banking sector will be able to continue providing adequate funding for any real estate projects and real estate transactions.

Difficult financing terms will occur, especially when it comes to certain situations such as properties that are not particularly sustainable, or in the context of refinancing of formerly low-interest rate loans that are now facing a changed interest rate landscape.

Mortgage Loans to Domestic Companies and Persons

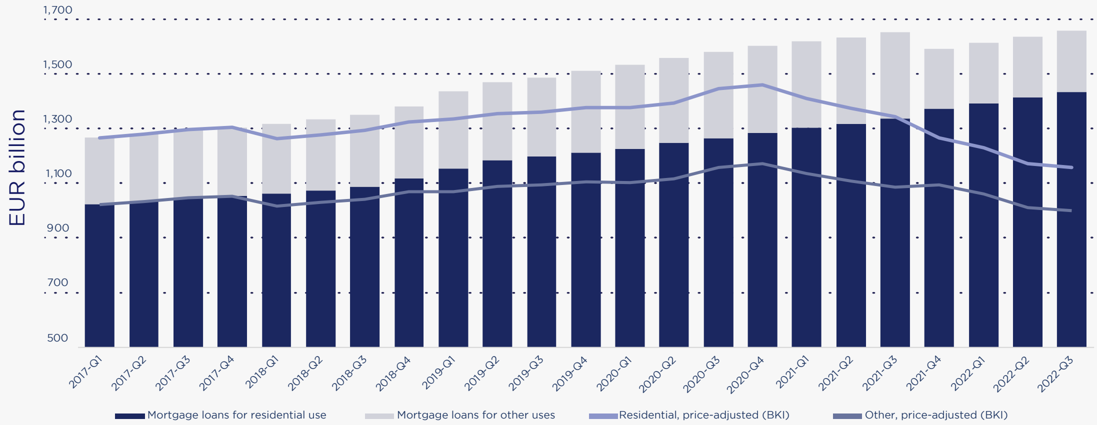

Figure 6: Declining real estate lending (businesses and private households; nominal and price-adjusted pursuant to construction cost index); source: German Bundesbank, own calculation and presentation.

Growing Need for Alternative Sources of Financing

A widening gap is revealed when comparing the growing demand for financing in the real estate and construction industry, on the one hand, and the banking sector's limited financing resources, on the other hand. The gap between demand for and supply of financing in the field of conventional, regulated collateral loans cannot be reduced within this market segment for the time being.

The total assets of the relevant banks have only grown slightly for several years. They are significantly below the growth in asset prices within the real estate industry as reflected, for instance, in various statistical indices (Figure 7). The corresponding assets include the financing volume, the related liabilities, and their sources in terms of refinancing on the capital market or with the central bank.

This results in a growing need for alternative sources of financing. Thus, the offers of the B2B market such as real estate private debt continue to be of particular interest. The trend towards B2B or private debt financing will continue to strengthen in years to come. In addition to the necessary financing volume, particularly in the project development business, another key explanation for this development is the necessary flexibility. Fixed terms and repayment dates in the banking business model are difficult to implement in some cases if special situations such as bad weather conditions or interruptions to supply chains require business be done in a more entrepreneurial fashion.

Stricter and stricter regulatory requirements and assessment specifics (ratings, equity backing) could also be a reason that banks are hardly in the position to finance certain industry segments, sub-markets, and projects, or only at very unfavorable terms. In market terms, banks tend to act in a pro-cyclic manner. Economic slowdowns cause corporate profits to fall and thus to lower ratings. The equity backing required for banks rises, leaving hardly any leeway for new business. In such an environment, anti-cyclic investment and financing strategies are impossible. Especially in a situation like this, alternative, entrepreneurially oriented financing partners become more and more important.

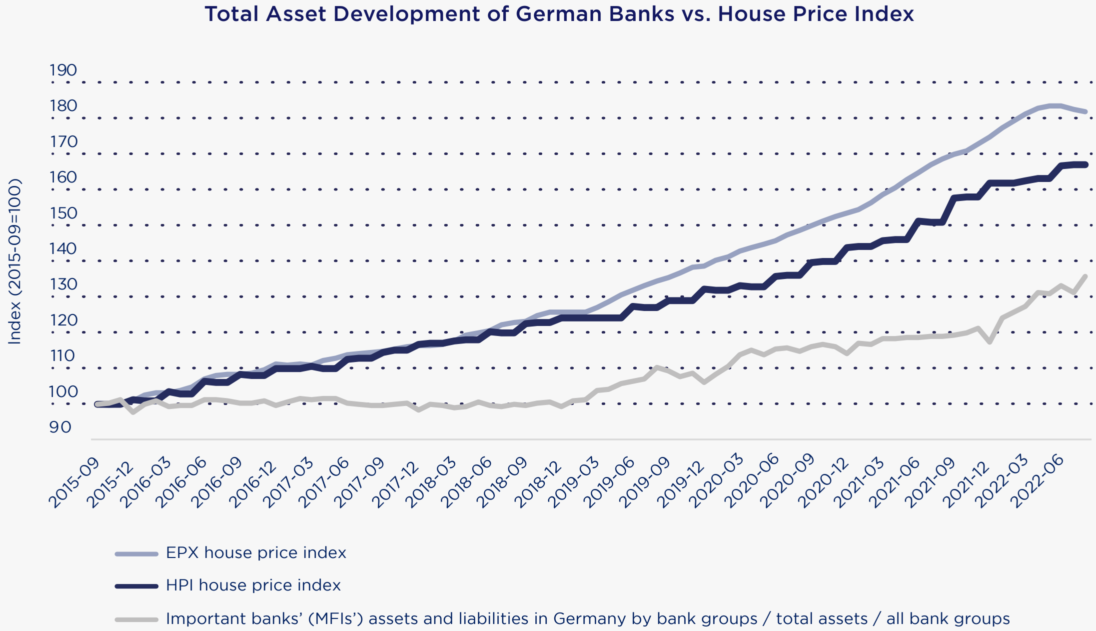

Figure 7: Growth of bank assets or total assets vs. increase in real estate values (house price index HPI or EPX); source: German Bundesbank, Federal Statistical Office, Europace; own calculation and presentation.

3. Integrating Alternative Sources of Financing into the System for Real Estate Investments

A real estate investment can be financed using a business's existing or internally generated funds (internal financing) or externally sourced, in other words, contributed by a third party (external financing). Depending on the type and accounting method, these funds are classified as either equity or debt.

When it comes to financing resources, a key distinction is therefore whether the investor provides the business with equity or debt capital. In short, this is referred to as equity financing or debt financing.

Debt capital is provided to the borrower for a limited time within a contractual relationship. Lenders do not assume a position similar to ownership; they do not make business decisions at the level of the financed object and, to this extent, can not be made liable (creditor position). Their claims have priority, so that the capital contributed appears to have a lower risk of loss than for the equity investors. In most cases, lender rights are limited to information and control rights. In accounting terms, these characteristics result in the funds being reported as debt (e.g., on the balance sheet and for ratings). From the investor's perspective, there are benefits such as the preservation of decision-making rights, but also disadvantages, such as fixed payment due dates, independent of profit, which apply even when business is poor (e.g., when the property is vacant). For equity financing, the opposite generally applies with regard to these parameters. Participation rights apply, however the date and, for the most part, payment amounts (distributions) are largely flexible or set under resolutions.

From a different perspective, capital requirements can be met by means of instruments based on internal or external financing. In each case, this can take the form of equity or debt capital. Equity-based internal financing occurs through revenues (for real estate, revenues include rents, leases, and other revenues) and other equity releases as equity. Revenue-based financing includes retained earnings, earned depreciation and provisions. Equity releases are also possible through rationalization measures or asset restructuring. Debt-related internal financing describes the utilization of provisions attributable to third-party ownership or claims. Pension provisions recognized for the pension claims of current employees are one example of this. The significance of such internal financing options can be considerable, particularly for large enterprises. The injection of new funds from outside the business occurs as external financing and, in turn, is possible as equity, mezza-

nine capital or debt. If new investors participate in the business, this financing is classified as external equity. Debt in the form of conventional Bank loans is also a typical case of external financing.
The following financing sources matrix is produced by combining the basic options for internal and external financing:

	Internal financing	External financing
Equity financing	Funds from own business activities, e.g., retained earnings	Owner-provided funds, e.g., new investments
Debt financing	Funds generated in the company subject to third-party ownership, e.g., pension provisions	Funds provided by external third parties, e.g., loans

Figure 8: Matrix of basic sources of financing; own presentation.

Mezzanine Capital as a Variable Form of Financing Between Equity and Debt

Use of innovative financing instruments can further structure the characteristics of these basic forms of financing. The resulting financial products will in part be highly complex. Ultimately, only the specific contractual structure and the simulation of its impact scenarios will determine the financing product's opportunities and risks and also its corresponding classification as equity, mezzanine or debt capital.
Equity is only available for real estate financing to a limited extent. Furthermore, when it comes to adding new shareholders or partners to a company, there are often concerns about expanded co-determination rights, profit entitlements and corporate structures. On the other hand, debt capital is often in scarce supply, driven not least by bank supervision requirements and more stringent ratings.
When conventional sources of capital have been exhausted, forms of mezzanine financing can be used to close this gap in capital. Mezzanine capital is an intermediate type of equity and debt (the term “mezzanine” – derived from architecture – refers to an intermediate floor). The volume of capital achievable increases with this additional source of financing.
Mezzanine capital is used mostly for investments with a high return potential such as real estate project developments. For project financing such as this, a legally independent real estate project company (generally as a corporation) is established to serve the purpose of developing the real estate. The company can enter into loan agreements; the real estate project company (comprised of the owners, e.g., the project initiators) is the financing recipient. However, mezzanine capital is also becoming increasingly common for financing optimization or refinancing of other real estate investments.

Equity	Mezzanine capital	Debt capital
Private Equity - Cooperation types: + Consortia + Syndicates + Cartels + Joint ventures - Types of business concentration: + Majority interests + Minority interests	**Equity structure** - Profit participation rights - Atypical silent participations **Debt-like structure** - Typical silent participations - Vendor loans - Subordinated loans / Profit participation loans - Hybrid loans	**Conventional debt financing** - Collateral loan (secured by mortgage) - Personal loan (corresponding to borrower's creditworthiness) - Combinations and special forms (e.g., saving plans with building societies)
Public Equity - IPO, issue of shares	**Intermediate form** - Convertible and warrant bonds	**Modern debt financing** - Bonds - ABS/securitization - Leases (finance leases)

Figure 9: Classification of mezzanine financing in the context of equity and debt; own presentation.

Mezzanine capital features a mix of equity and debt characteristics. In particular, mezzanine capital is characterized by a short- to medium-term maturity: The term varies in accordance with the financed object. If the financed objects are real estate or projects (real estate mezzanine finance), the capital is generally lent out for up to four years. If the financed objects are real estate companies (corporate mezzanine finance), terms of up to seven years are also common.

Claims of mezzanine lenders are placed behind those of the creditors of conventional debt but ahead of the claims of the original equity investor. As a result, mezzanine capital corresponds to some extent to the risk structure of equity. The subordination relates to both the repayments of interest and principal as well as to compensation payments in the event of insolvency and liquidation. Thus, reimbursement is generally only made after the borrowed capital is repaid or with the consent of the lenders. However, there is no joint liability similar to that of an owner. Rights of co-determination, control and information are basically determined by the parties involved. As a rule, however, they are limited to the rights of a lender, in other words, they are relatively minimal.

Mezzanine financing allows for an arrangement that is specifically tailored to the real estate property. Due to its great flexibility, the financing can assume more of an equity character or more of a debt character in an individual case, and be either securitized or unsecuritized.

The usually higher cost of capital compared to debt capital is attributable to the higher risk of subordination while, in addition to the default risk, it is also impacted by additional collateral. The cost of capital is typically higher than capital market interest rates for loans but still lower than the cost of full equity.

Profit Participation and Subordinated Loans

For the most part, mezzanine capital is provided in the form of profit participation and subordinated loans. In the mezzanine financing group, these are generally classified as debt-like forms.

Mainly, the conclusion of a contractual loan agreement with a fixed term is an important characteristic similar to debt. This agreement also determines the rights of information, control and co-determination that are usually limited to those of a lender. To the extent that the agreement stipulates co-determination rights, these are mostly limited to veto rights. As a rule, no collateral is agreed. In addition, the contract often takes the assignability of the repayment claims into account with regard to refinancing.

Subordination refers to the satisfaction of lender claims only after those of preferential creditors. Thus, for subordinated loans, the financing agreement also involves concluding a subordination agreement in order to place the claims of the mezzanine lenders behind those of the conventional debt creditors (e.g., a parallel financing bank with a collateral loan). Within the scope of this, an intercreditor agreement is generally also drawn up with further creditors.

In the case of profit participation loans, a share of profit or revenue is paid to the lender instead of a fixed interest rate. An agreed base interest rate is also possible.

Repayment of the principal is usually due at the end of the term for both variants. In the event of insolvency, the subordinated lender cannot be made liable; there is no loss participation. These loans are therefore generally accounted for as debt.

Profit Participation Rights

In the past, profit participation rights were often granted upon founding or restructuring a company and issued in the form of so-called profit participation certificates. Today, however, they are an increasingly utilized form of equity financing, and their structures can range from securities similar to promissory notes to those similar to shares.

A characteristic feature of this means of financing is that it allows for a high level of flexibility in terms of structure and use, which is made possible by a lack of legal differentiation (unlike in the case of shares), among other things. Profit participation certificates are considered to be an essential instrument of mezzanine financing due to their broad variety of different structures.

The issuer (e.g., a real estate company) can structure the securitization as a profit participation certificate in accordance with its own individual goals and anticipated cash flows. As an example, a project development with subsequent leasing and a resale in, for instance, eight years can best be financed so that no capital payments (interest, profit distributions) are made until construction is completed, ongoing payments to be made during the leasing phase are minimized, and a larger profit is distributed as a single lump sum after the sale of the property. In this way, liquidity is not unnecessarily burdened at any stage.

Generally speaking, any type of property rights in a company, like rights to corporate profits or residual profits (= liquidation proceeds – carrying amount) can be securitized. But there is also a great deal of flexibility when it comes to the issuer's legal form and the term (limited/unlimited). However, in order to be categorized as a profit participation certificate, auditors require a term of at least five years, explaining why financing through profit participation certificates is more suitable for long-term and larger placements on the capital market.

Securitization of contractual agreements or profit participation rights generates an entitlement to participate in profits and assets. Forms of securitization can be, for example, solely documentary evidence (for safekeeping with the holder and for later presentation in the event of claims) or a security on the stock exchange (suitable for fast and easy resale). In this sense, the type and manner of securitization significantly influences the tradability of the profit participation certificates and thus also their general attractiveness for potential investors. Due to their easy transferability, bearer securities are very commonly used in practice, as they can be resold to subsequent investors without the issuer's approval or any particular formal requirements. The creditworthiness of the issuer, a factor that influences the scope and terms of the securitization, is also a key parameter of securitization.

In the event of insolvency, the investor's loss participation is limited to its contribution. In most cases, there is no further liability, as this would negatively impact marketability. The holder of the profit participation certificate is also entitled to the information rights of a creditor. If necessary, these can be expanded to include special control rights.

In the real estate sector, there is also the option to grant investors mortgages, rights of use, subscription rights and conversion rights. Profit participation certificates often have a good risk/opportunity profile due to these special rights. However, investors in profit participation certificates do not have any entrepreneurial co-determination rights and are treated as subordinated creditors. This higher risk compared to other creditors is compensated by an appropriate risk premium, which may well be as high as the return of pure equity investors.

Silent Participations

In a typical silent participation, a shareholder or partner contributes assets to a company anonymously. This means that it is not recognizable to third parties, occurs independent of the legal form and with no entry in the commercial register and without notarization. There is a great deal of flexibility in the contractual arrangements. This flexibility includes, for instance, the duration for which funds are transferred, which can be stipulated as both indefinite as well as subject to termination, or the stipulation of control rights. Typical silent participations do not require minimum amounts.

Loss participation exists in principle up to the amount of the contribution. The agreement can exclude any liability in excess of this amount. However, the shareholder's claims are subordinate to those of the lenders; its rights are limited to those of a lender. In other words, although the shareholder has information and control options and, if necessary, also holds approval and veto rights in accordance with legal or contractual provisions, it holds no entrepreneurial co-determination rights whatsoever.

The contribution gives rise to contractual claims, which are usually settled in the form of a fixed remuneration and a variable share of profits. However, the profit-related remuneration components exclude (as in the case of atypical silent partners) participation in increasing enterprise value and hidden reserves. The variable profit participation acts as a risk premium since, in a normal case, no collateral is available to the typical silent partner. The funds are usually considered to be repaid upon final repayment of the contribution.

The funds are classified as economic equity for rating purposes. However, their accounting treatment is determined by the specific structure chosen. They tend to be classified as debt since they do not participate in value growth; consequently the interest payments and/or distributions are generally deductible as operating expenses. One disadvantage is the limited tradability of silent participations compared to other types of mezzanine financing. This also precludes capital market-oriented trading, for example.

The atypical silent partner normally contributed its funds for an unlimited period of time but subject to termination. As with typical silent participations, minimum amounts are not required. An atypical silent partner holds the typical ownership rights of entrepreneurial co-determination and control. In addition to the partner's co-entrepreneurial initiative, its position as co-entrepreneur also results from the fact that the partner bears entrepreneurial risk that arises from its participation in the company's losses and assets. Liability in the event of damage and insolvency depends on the respective agreement.

The atypical silent partner participates in the company's profits, value growth and hidden reserves. Due to the characteristics similar to those of an owner, the financing is usually classified as equity for accounting purposes, although this is also generally determined by the structure agreed. If the characteristics of a co-entrepreneurship are met, the financing is reported as equity for tax purposes. For rating purposes, it is generally reported as economic equity.

Bonds and Debt Securities

Debt securities are instruments that securitize rights to claims (the right to repayment and the right to interest). They are issued by a (real estate) company in order to raise external funding. Bonds represent a specific form of debt securities which – unlike loans, which include an agreement with a specific bank – are usually issued to the public so that anyone can lend capital to the bond's issuer for the duration of the term. Bonds are also often tradable on stock markets.

On the other hand, warrant bonds and convertible bonds are specific bonds (or debt securities at the same time) in which the investor has the opportunity to participate in the company's profits as a shareholder or equity investor. More favorable capital costs can be achieved than with pure debt financing because of additional options (right to purchase a share at a certain price) or conversion rights (exchange/conversion of the bond into share capital). However, creation of additional equity is uncertain in terms of the timing and amount. Maturities are typically set in the long-term range, as the real estate company's performance only increases over time and only then are the conversion and option rights profitable for the investor.

Loss participation and liability are not common, but the claims are subordinated to those of other creditors. Investors receive a fixed remuneration in relation to the capital invested for providing capital in the form of the nominal amount of the bonds. When the option is converted or exercised, this is supplemented or replaced by a variable profit-related component; there are various options for structuring this, as well. Repayment is made at final maturity or upon conversion of the bonds into participation rights. Prior to conversion or exercise of the option, the capital is classified as debt for the purposes of balance sheet accounting and the ratings. After that, it is reported as equity. Accordingly, the interest is initially tax-deductible as operating expenses and thereafter treated as profit distributions for tax purposes.

Bonds with warrants (cum warrants) securitize an interest claim during the term of the bond in addition to the claim to redemption at maturity. The right but not the obligation to acquire a share in the company in the future (right to subscribe for shares) is also traded. This occurs at a price agreed upon today, under certain conditions and by a defined deadline before which the warrant may be exercised. For the investor, the advantage of this type of financing is its flexibility since the option (warrant) can be traded separately from the bond (ex warrant). The greater flexibility of the investor also impacts the borrower by means of more favorable capital costs. The terms are ten to twelve years and are thus suited to long-term real estate financing. When it comes to warrant bonds, the status of the lender is unaffected, but the lender also becomes an equity investor. For the real estate company, this inflates the balance sheet (total of debt + equity).

For convertible bonds as well, the bondholder has the option to exchange the claim to repayment of its bonds for shares in the company (usually stocks) – in other words for equity – within a predefined period at a similarly predefined conversion rate. The lender

thus becomes an equity investor, and the real estate company exchanges debt for equity. In this way, the lender can participate in the company's profits and performance but waives a portion of its claims to interest in exchange for the option. This translates to affordable debt with no rights of co-determination prior to conversion; however, after conversion into shares, equity capital is available. Unlike the warrant bond, where the bond continues to exist after the warrant is exercised, the conversion right and the bond cannot be traded separately; the bonds are exchanged for the debt securitization.
Convertible bonds and warrant bonds are suitable for investors with a medium risk profile looking for additional protection (a minimum return) compared to pure equity investment, who nevertheless want to participate in market opportunities. For the issuing real estate company, both bond forms offer the advantage of relatively favorable financing of its projects.

4. Market Growth for Alternative Financing Options (B2B, Private Debt)

The numerous tradable risk and opportunity positions especially of mezzanine capital appeal to a wider range of investors and can contribute to an efficient capital structure. The main players (= capital providers) in providing hybrid capital are institutional investors such as insurance companies, universal and specialized banks as well as funds of capital investment companies. The capital is provided either through direct investments or through companies set up precisely for this purpose. The capital investment companies in turn refinance through financial intermediaries such as credit institutions, insurance companies and pension funds. Financing consortia and associations are formed mainly for the purpose of risk diversification.
The capital provider structure of real estate mezzanine capital is significantly different from that of corporate mezzanine finance. In the field of real estate mezzanine finance, banks are the main players, while corporate mezzanine finance also commonly takes place through private equity funds, mezzanine funds and high net worth individuals (family offices, foundations).
Particularly in the field of mezzanine capital – but also beyond that – recent years have seen the emergence of a large range of financing offers unrelated to banks, and these are reflected in terms such as B2B financing, non-bank financial intermediation and private debt.
Private debt is an umbrella term used to encompass debt funds that are predominantly provided by private sector institutional investors such as pension funds, insurance companies, funds, and investment foundations outside the banking sector.

Capital Growth at Non-Bank Financial Intermediation (NBFI)

Non-bank financial institutions or NBFI companies are defined as financial enterprises that offer financial services typical for banks such as lending, risk pooling, etc., but do not hold a full banking license themselves and that are, therefore, not subject to national or international banking supervision. Insurance companies and microcredit organizations are examples of these. Non-bank financial intermediation, which is referred to using the same abbreviation NBFI, encompasses a diverse range of financial activities, financial investments, and financing offers. In the fundamental sense, financial intermediation encompasses matching capital demand and supply, including on the B2B market, for instance.
Although the market is considerably less transparent than perhaps the well-monitored banking sector, there are still companies and organizations for market analysis and supervision. The Financial Stability Board (FSB), for instance, is an international organization dedicated to the global financial system and, in particular, to the private debt market, and it also monitors this area in a certain sense. Among others, the national banks of the G20 nations are members of this council or board.
The FSB publishes several key figures that make it possible to quantify the dynamic market growth. In addition to the market's total volume, the publications also include several sub-categories distinguished as "NBFI Narrow", among others. This refers to NBFI in the narrower sense, which is defined as the sum of another five subgroups, the so-called

economic functions EF1 to EF5, which can essentially be inferred as financing transactions. According to FSB's original definition, this encompasses the following areas:

- EF1 Collective investment vehicles with features that make them susceptible to runs
- EF2 Lending dependent on short-term funding
- EF3 Market intermediation dependent on short-term funding
- EF4 Facilitation of credit intermediation
- EF5 Securitization-based credit intermediation

Over the five-year period from 2014 to 2019 that can be evaluated, the NBFI sector has grown much faster than the conventional banking market in almost all FSB member states. The value of all financial assets in the member states grew by an average of 5.0% per year over this period. While this value has only grown at a below-average rate of 3.7% p.a. in the conventional banking sector, it has grown at an above-average annual rate of 5.9% in the NBFI sector. The NBFI sector is significantly larger than the banking sector. The NBFI sector, of which the private debt market is a sub-market, of the FSB members had a total volume of USD 469 trillion in 2020, while the banking sector had a volume of only USD 180 trillion.
Non-bank financial intermediation has also seen very dynamic growth in Germany in recent years. Figure 10 shows financial intermediation, in other words, the lending activities, among other things, of all NBFI. These grew by 38.3% over the five-year period analyzed. Thus, a generally increasing trend can be observed in the entire private debt market in Germany. In absolute terms, the total volume of NBFI amounted to USD 5.84 trillion in 2002 and USD 8.07 trillion in 2020.
It is not possible to precisely estimate the real estate business included in the NBFI over the years. The reports show only individual figures. Accordingly, the EU Non-bank Financial Intermediation Risk Monitor 2021 uses European data to quantify the volume of NBFIs for 2020 at around EUR 400 billion in relation to real estate funds and at EUR 800 billion in relation to private equity funds, but it provides no data for the private debt funds class, also covered by the analysis. Consequently, there are also no values provided for the even more specific category of the debt market for real estate financing. In this respect, it can only be assumed that the volume of these funds is growing at least at a rate in line with the market as a whole.

Global Market for Commercial Real Estate Debt

Both for banks as well as for the non-bank financial institutions addressed above, the global market for commercial real estate debt represents an alternative option for generating cash flows and diversifying risks. Especially in times of limited investment alternatives for direct investment, debt investments offer a special path to investing in real estate markets.
Larger, professional investments are considered par-

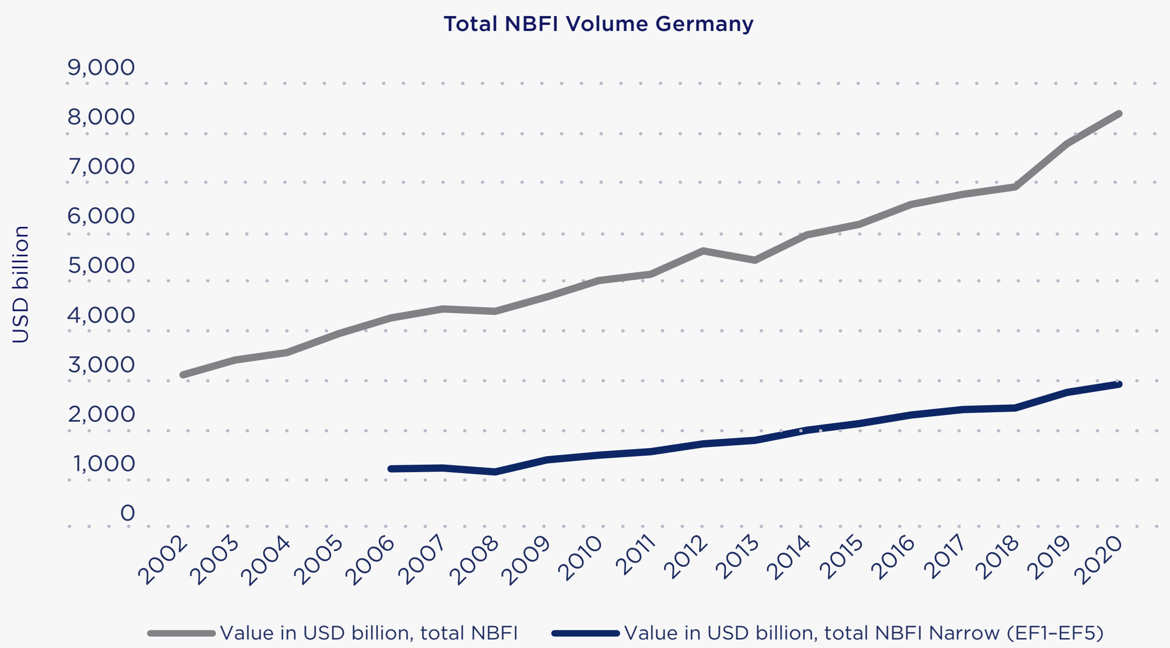

Figure 10: Growth of overall NBFI and NBFI Narrow fom 2002 to 2020; source: Financial Stability Board (FSB); own calculation and presentation.

ticularly suitable in regard to the sub-markets and types of use due to their efficiency and transparency. Commercial real estate debt in this sense primarily encompasses the financing of purchases and project developments in the office, hotel, retail, and logistics areas. However, larger, professionally managed residential complexes (multifamily residential) are certainly also considered part of the "commercial" category in the understanding of the U.S. market, in other words, they are distinguished from the small-scale, privately used or leased "residential" category.

The global market for commercial real estate debt comprises – depending on the source – a total volume of at least USD 6.0 trillion (Figure 11). The CRE debt market in North America accounts for by far the largest share, with a total volume of approx. USD 2.6 trillion, representing more than 40% of the total market. The European market accounts for just under another third – however, in relation to the significantly larger population, it is even less pronounced than in North America at just under USD 2.0 trillion. A further USD 1.3 trillion is accounted for by the APAC region, which includes Southeast Asia and Australia. The rest of the world plays a subordinate role.

In a comparison of the market volumes with the respective populations, it is striking that the CRE debt market in North America is already very large, whereas its role in Europe and the APAC region is rather minor. Although North America has only 86% of the population of Europe, it has a 38% larger CRE debt market.

The growth potential for CRE debt is also enormous due to the generally high availability of capital among non-bank financial institutions. In view of the sometimes tight supply of credit in the conventional banking landscape and the ongoing strong demand for financing in Europe as well, catch-up processes can certainly be expected. If larger shares of these investment volumes are allocated to the debt market in the future, it will be able to provide the necessary funding for real estate purchases and projects alongside the banks.

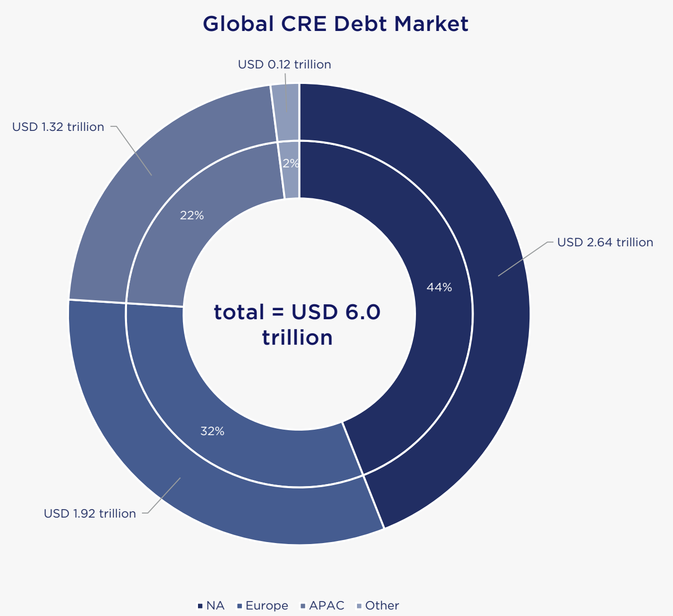

Figure 11: Global commercial real estate debt market; source: Barings Bank, own calculation and presentation.

Reference Market UK With Growing Share of Non-Bank Lenders

Assuming that the non-bank real estate financing market in Europe still has strong catch-up potential compared to North America, the first signs of this trend are interesting. These can already be found quite clearly in the UK market. The United Kingdom is certainly the European country most similar to the U.S., with its Anglo-Saxon influence. This applies to the financial market, at least. Non-bank financial institutions have already taken over larger parts of the real estate financing market in the UK (Figure 12).
While just over 9.0% of all commercial real estate financing was provided by non-banks in 2012 – incidentally, this is the share in other European countries today – the share in the United Kingdom had already reached 27.8% in 2020. This represents a three-fold increase within eight years. The rise in significance is even more pronounced in the new real estate financing business. In the first half of 2022, approx. 38% of new loans came from the non-bank debt segment. Thus, the private debt market continues to grow very rapidly.

The United Kingdom can be seen as a pioneer for continental Europe. This is also confirmed by a study conducted by PwC in 2022, surveying 844 companies from 20 European countries about current trends on the real estate market, including trends in real estate financing. In the study, 73% of the companies surveyed indicated that finance companies would play a more pivotal role in the future. 76% said the same for alternative lending platforms, and 69% for other non-institutional lenders. In contrast, only 31% forecast an increase for conventional banks, while 40% expected these to remain stagnant, and 29% even predicted a decrease in conventional bank financing.

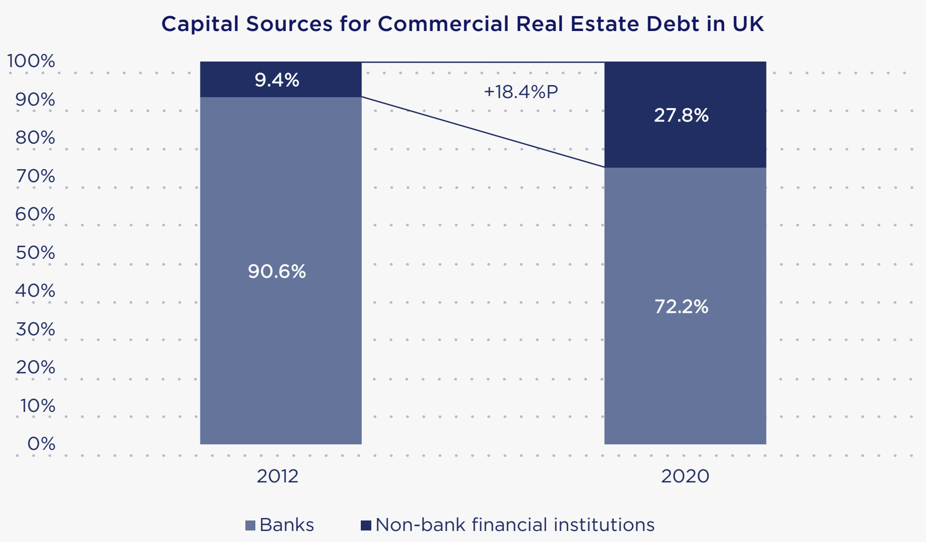

Figure 12: Share of capital sources in UK commercial real estate debt; source: Bayes Business School London, own calculation and presentation.

Steadily Rising Lending by German Funds to Real Estate Companies

A lack of data makes it difficult to conduct a detailed analysis of German real estate loan products; the market is generally far from transparent. Some specific German Bundesbank statistics provide at least an indication of the dynamics that are also in play in this country. For instance, the investment strategy of selected fund segments is highlighted, for instance with the time series “Closed-end investment funds / Closed-end real estate funds / Loans to real estate companies“ along with further subcategories in this area.
Accordingly, the financial intermediaries active in Germany in the “Closed-end investment funds” variant for many decades have discovered the financing business for themselves in addition to the conventional investment in real estate and other assets. Loans are increasingly also extended to real estate companies from the assets acquired through their fund products.
The market shares are still quite small but growing rapidly. The loan portfolio now amounts to not less

than nearly EUR 3.0 billion (Figure 13). Over the past five years, growth in this segment amounted to approx. 65%.

Certain restrictions and disadvantages due to the tax and regulatory frameworks of such products should not be underestimated, however. This is illustrated in particular by examining Luxembourg. According to a study, private debt products in that country have meanwhile reached a volume of approx. EUR 181 billion (KPMG, alfi: Private debt fund survey 2021). Of this amount, around 4.0%, or a good EUR 7.0 billion, is attributable to the real estate financing sector. Even so, it is likely that very few of the properties are located in Luxembourg itself. More likely is that a higher share of the financing is attributable to real estate and projects in Germany. This means that the actual volume of real estate financed by private debt in Germany is likely to be considerably higher than the data shown in the German Bundesbank statistics, which only encompass lending by closed-end funds in Germany.

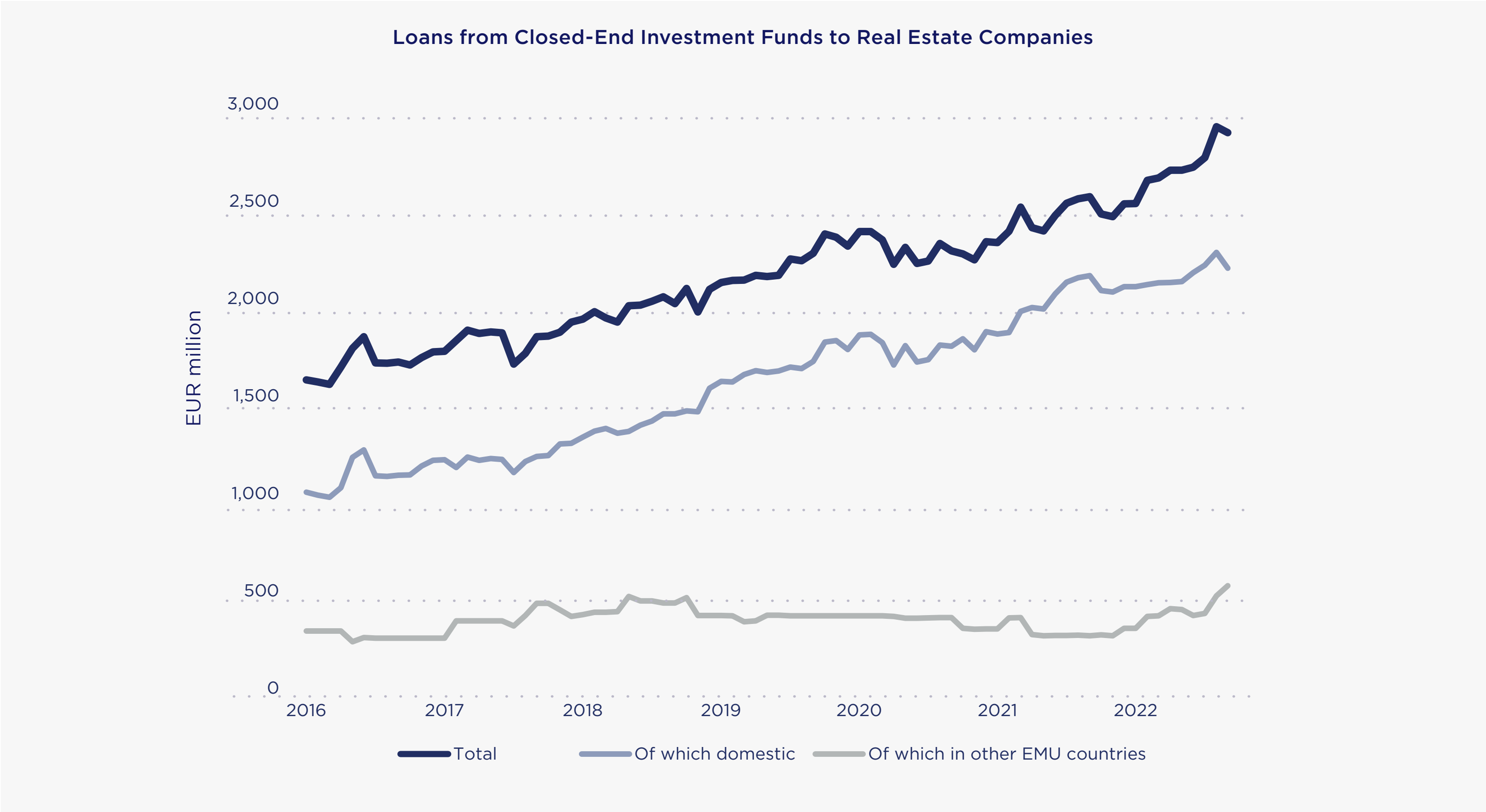

Figure 13: Loans from closed-end investment funds to real estate companies; source: German Bundesbank, own calculation and presentation.

Fundraising by Real Estate Debt Funds

Due to the required volume as well as the complexity in management and controlling, the financing of non-bank private real estate debt is generally carried out by professionally operating debt funds.
Based on a data set totaling approx. 9,300 funds with a focus on the U.S. and Europe, PERE Research & Analytics provides market observations on the market segment of real estate funds operating at the international and national levels. Certain strategies, including real estate debt, are reported individually. According to this, the share of debt strategies within the observed group in fundraising has mostly been around 15% in the observation period since 2017, and was around a quarter in some individual years. The rather high figures are likely attributable to the higher share of U.S. products in the observed group.
Of note is the total volume of private debt, which amounts to approx. USD 35 billion per year in the reported fundraising (Figure 14).

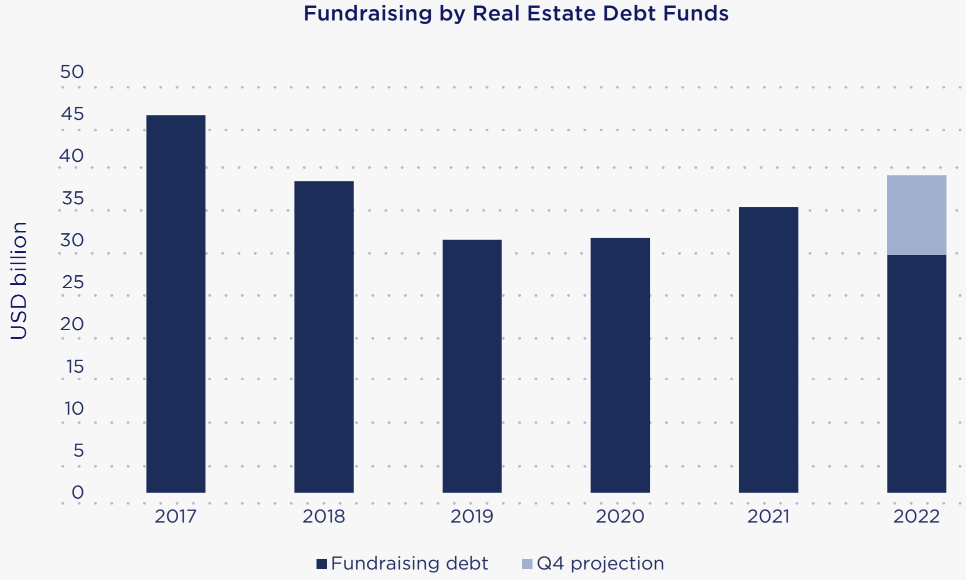

Figure 14: Fundraising by real estate debt funds (international); source: PERE Research & Analytics / PEI Group; own calculation and presentation.

5. Conclusion: High Potential for Non-Bank Real Estate Financing

Even though the private debt market remains rather opaque, some structures and developments have also been presented which allow general statements to be made about this specific market segment. Compared with the financing markets in the U.S. and in the European region, especially in the UK, private debt is lagging far behind in continental Europe. Significant catch-up potential can be assumed in the individual European sub-markets, at least to different degrees.

Even a scenario assuming 10.0% of the European commercial real estate debt market (starting point in Figure 11) would correspond to a capital amount in the non-bank sector of approx. EUR 190 billion. In the current market environment, this target does not seem unrealistic (according to several sources, this is also the estimate of the current market share in Europe). Increases to the level of the UK (28%) or the U.S. (40%) would still result in even much larger sub-markets in the private debt sector, although such a harmonization with the Anglo-Saxon financial system is not very likely for continental Europe in the short term.

Generally speaking, however, it is safe to assume that non-bank real estate financing will grow more significant. For regulatory reasons, this growth will occur almost exclusively in the B2B segment, while lending to consumers in the area of residential financing will remain reserved for banks. Since banks tie up their capital in that area, and commercial real estate financing arrangements are often individual and sophisticated, there are further justifications for the forecast of growing proportions of private debt within the commercial real estate debt market. The high volumes and individual structures common in this country require professional management and controlling. Therefore, high-performance real estate private debt funds will support this expected market growth for the most part. From the investor's perspective, they also offer the possibility of scaling and diversifying investments in the real estate debt market.

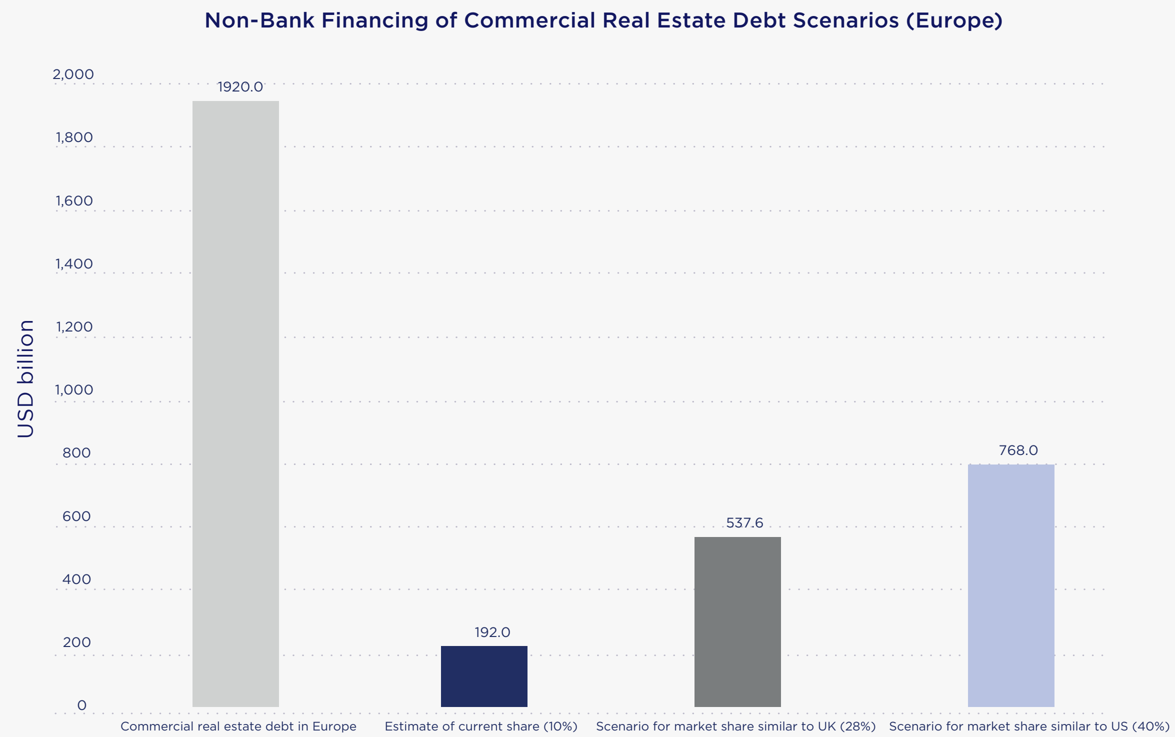

Figure 15: Non-bank financing of commercial real estate debt scenarios (Europe); Source: PERE Research & Analytics/PEI Group: own calculation and presentation

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