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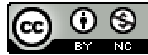

COMMERCIAL REAL ESTATE LOANS – AN EXPLORATION ON DETERMINANTS OF INSURERS' INVESTMENT DECISIONS

Abstract: *In order to gain additional alpha in a perpetual low interest yield environment, some insurance companies have decided to invest in commercial real estate loans. Insurers' comprehensive motives for their investments in this asset class, however, are largely unexplored. This paper provides unique insights on insurers' investment determinants and their interrelations. It reflects inter alia that the commercial real estate markets and the insurers' regulatory regime may have a strong influence on investment decisions. In addition, this study establishes a framework for insurers' strategies for commercial real estate loan investments. Survey results and semi-structured expert interviews are the basis for the analysis. The respondents cover nearly 390 years of work experience in this specific segment. The exclusive panel of interviewees includes representatives of European insurance undertakings totaling more than €60 billion gross written premiums. This study contributes to the topical discipline of investment decisions of institutional investors. The results might be utilized by academia, insurers' internal or external investment managers, arrangers of syndicated loans, and debt fund providers.*

Keywords: *Institutional Investors, Investment Decisions, Benchmarking, Commercial Real Estate*

1. Introduction

The enduring low yield environment has caused European insurance companies to diverge from their traditional investments in order to generate higher returns. Especially life insurance companies that guarantee minimum returns to policyholders are challenged (Berdin & Gründl, 2015; Eling & Holder, 2013; Möhlmann, 2017). Some insurers started to invest in commercial real estate loans (CREL) to generate additional alpha and to outperform internal and external investment benchmarks. In this study, CREL investments include direct lending either bilaterally or through loan participations and/or investments in debt funds or private securitization transactions. Following Gründl et al. (2016), life insurers might appreciate the duration matching of the habitually long-term CREL with their long-term liabilities. Despite the fact that CREL have become an established investment segment, insurers' comprehensive CREL investment motives have not been thoroughly researched in academia to this author's knowledge.

This study provides three main contributions in the field of financial economics with the focus on investment decisions of institutional investors. First, this examination gives insights of insurers' essential CREL determinants, their prioritization and interrelations. The results confirm eight pre-selected essential determinants and are

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evidence of four additional determinants. The analysis discloses a sequence of prioritization that depicts commercial real estate (CRE) markets, followed by Solvency II and key economic criteria as main investment determinants based on total group results. In the context of CRE markets, this paper delivers insights of relevant market indicators that are utilized for the market evaluation. Second, this examination unites identified determinants in a basic framework that might serve as a foundation for insurers' CREL investment strategy. Third, insurers' internal and external benchmarks are exposed that are utilized to reconcile their CREL investments with the goal to outperform competing investment products. Benchmarking might be applied by an insurance undertaking to compare its potential investments. This method is similar to other enterprises of the economy that benchmark their performance within a competitive setting. This connects with Vujovic et al. (2013) who tested their hypothesis on benchmarking methods and multi-criteria decision in relation to Montenegrin firms. The parameters of insurers' asset-liability-management (ALM) might serve as an internal benchmark according to the study results. Covered bonds or government bonds might be employed as external benchmarks for senior secured CREL.

This examination is based on semi-structured interviews and integral surveys in order to receive comprehensive results, an approach comparable to Vujovic et al. (2013) who conducted interviews in order to complement their survey results. This procedure was as well employed by Kamberi et al. (2021) when they supplemented their survey results with the outcomes of semi-structured interviews. The insights of this study are exclusive as they are based on a panel that comprises representatives from European insurance companies combining more than €60 billion gross written premiums. The interviewees have a combined total of approximately 390 years of work experience in the CREL segment. Beside its contribution to academia, this study may be of interest for internal and external investment managers of insurance companies as well as for CREL product providers in order to confirm or adjust their business strategies.

2. Method

2.1. Data Collection and Analysis

This qualitative analysis is based on 20 semi-structured expert interviews that were conducted by the author between March and June 2021 following 21 interview invitations. Due to the Covid-19 pandemic, the interviews were performed remotely via 18 telephone calls and two video calls. All interviews were audio taped and subsequently transcribed by the author. In addition to responding to open-ended questions, the interviewees were asked to conduct surveys as an integral part of the interviews. The software MAXQDA Plus 2020 was employed to systematically analyze the qualitative data that was based on German transcriptions of the interviews.

2.2. Participants

A total of 20 experts participated in this study. In order to obtain comprehensive qualitative data, 10 investment managers of European all lines of business insurers (Group 1) and 10 representatives of CREL product providers (Group 2), explicitly European banks and debt funds, were interviewed. The majority (16 participants) held executive positions, the remaining interviewees were senior specialists.

3. Results

3.1. External Determinants

CRE Markets

The interviewees were asked to outline CRE market indicators that might impact insurers'

CREL investment decisions. Four respondents of Group 1 and two members of Group 2 referred to *macroeconomic factors* as indicators for the CRE market. Alternating rent levels and vacancy rates are responses to the oscillation in the economic cycle as a participant illuminated. This connects with Ferrari et al. (2015) who utilized the real GDP growth within their study of early warning indicators for the real estate-based banking crisis and to the examination of Wang et al. (2020). In addition, this follows Davis and Zhu (2004) who point out that CRE market developments depend on rents that are affected by the economy in contrast to the residential real estate (RRE) market. CRE that accommodates basic needs of the general public, like residential real estate or food-anchored retail, reacts less sensitive to economic downturns as a representative of Group 1 noticed. Some members of Group 1 mentioned the macroeconomic indicators "demographic development" and "growth rate of households" which goes along with Dick and Westerheide (2010). Changes in the office market might be related to the development of the white-collar workforce as outlined by an interviewee of Group 1. An expert portrayed that CRE property owners might benefit from property value growth based on an increasing inflation rate when rents are linked to the consumer price index (CPI). Inflation is associated with the study of Ferrari et al. (2015) who employ this factor. The interviewees of Group 2 reiterated the delineated macroeconomic framework without further additions. None of the panelists alluded to the ratio of real estate prices to income (Dreger & Kholodilin, 2011).

Nine respondents of Group 1 and four interviewees of Group 2 touched on the *real estate market cycle*. Davis and Zhu (2004) employed a model of the real estate market cycle in their investigation. The interaction of supply and demand may be affected by external circumstances according to several practitioners of Group 1. This connects with Wang et al. (2020) who outline the importance to monitor the market's supply and demand factors. "Profit lies in purchasing" a member of Group 1 pointed out. In a mature real estate market, risk averse insurers might tend to senior CRE debt investments where the lender is protected by an equity cushion in case of market deteriorations rather to invest in CRE equity. One respondent noticed that changes in the utilization of office space affect the demand side. Another interviewee referred to the coronavirus pandemic that has ultimately accelerated the demand for flexible work space because of new work behavior. An interviewee of Group 2 added that online trade is an external factor that jeopardizes the stationary retail market. By contrast, the demand for food-anchored retail and logistic properties is fueled by the external factor Covid-19 pandemic.

The market value of the premises is impacted by the estimation of future rents generated by the property according to Davis and Zhu (2004). Two interviewees of Group 1 and one participant of Group 2 emphasized that the *development of rents* is essential. In order to evaluate the releasing risk, an expert compared the contractual rent levels with market rents. Four members of Group 1 and five representatives of Group 2 underscored that the *cash flow of the commercial property* is crucial to determine the CRE market phase (Belke & Keil, 2018). A respondent of Group 1 would rather finance refurbishments with ongoing cash flows than real estate developments. Another participant highlighted the importance of the creditability of tenants for a stable cash flow. Lease terms tend to have shortened especially in the retail segment but lately as well in the office sector pursuant to a respondent's observation. This development might jeopardize property cash flows. Only few office leases depict a lease term of 10 years or longer. Interviewees of Group 2 basically repeated the portrayal of Group 1. One respondent of Group 2 observed that for insurers a reliable cash flow of a premises in

a B-location might compensate for missing A-location parameters. Stable cash flows might be generated from a granular diversified tenant base of residential portfolios according to a member of Group 2.

None of the interviewees mentioned *monetary policies* of the ECB in connection with CRE markets. Monetary policies have been in focus within the examinations of Xu and Chen (2012) and Coën et al. (2018). One expert (Group 1) referred to the *interest rate level*. Several literature findings are connected to the interest rate level as impacting factor for the real estate markets.

Two respondents of Group 1 and one interviewee of Group 2 turned to the market liquidity as an essential market indicator. The importance of a "lively market" with a significant transaction volume was illustrated by an expert of Group 1. This matches with Devaney at al. (2019) who utilized real estate transaction activity as a measurement for a liquid market. In non-liquid markets "the appraised real estate value reacts more sensitive and therefore the loan is more exposed to risk" according to a respondent. A *liquid real estate market* and its market size impact the fungibility of real estate transactions. This connects with Wang et al. (2020) who deem total sales and the investment volume of CRE as indicators for market liquidity. An expert of Group 2 confirmed these reflections based on the observation that some insurers are rather reluctant regarding the access of the dense Nordic office market.

The location of the property might attract investors as well as tenants and fuel the real estate market (Dick & Westerheide, 2010). Key findings regarding location were identified in five interviews of Group 1 and three interviews of Group 2. Group 1 members underscored that the *parameters of the macro- and micro-location* of the property are of high relevance for insurers' evaluation of the real estate market. A representative of Group 2 responded "I rarely receive questions from insurers regarding the real estate markets". This corresponds with the perception of another interviewee who pointed out that insurers are well informed regarding real estate market parameters. None of the interviewees explicitly referred to *developed capital markets*. Lieser and Groh (2014) and Coën et al. (2018) showed a link between developed capital markets and the development of real estate markets. *Cap rates* might be indicators for real estate market developments following Devaney et al. (2019). Two respondents of Group 1 touched on cap rates in the context of the performance of real estate. One participant of Group 1 alluded to the rent multiplier. This gauge was employed by Dreger & Kholodilin (2011) as an early warning indicator. Accompanying Wang et al. (2020) and Ferrari et al. (2015) who employed the *growth rate of CRE prices* in their studies, two interviewees of each group emphasized the indicators CRE prices and market values. Belke and Keil (2018) focus on future rents as determinants for property values. One interviewee of Group 1 and one participant of Group 2 picked up on *market transparency*. "Real estate markets with clear transparency", predictability of the jurisdiction, and reliable enforcement rights are relevant pursuant to specialists of Group 1. Unrestricted inter-country money transfers are a precondition for insurers' engagement in a country as a respondent reported. The aforementioned factors are captured in JLL's Global Real Estate Transparency Index (2020), in Lieser and Groh (2014) and Gholipour et al. (2020). An interviewee of Group 1 underlined the importance of the *vacancy rate*, an indicator that has been utilized in several examinations (Wang et al., 2020; Dreger & Kholodilin, 2011; Coën et al., 2018). The indicator *growth rate of new construction* was employed by Wang et al. (2020) but was not explicitly outlined by the panelists. *Technological progress* (Connor and Liang (2000), as cited in Lieser and Groh (2014)) was not mentioned by participants.

Both panels added indicators beyond the findings in literature. Five members of Group 1 and one interviewee of Group 2 referred to *third-party usability*. For long-term CREL that might be exposed to several economic cycle phases, this factor is relevant according to a respondent of Group 1. The *development of rent incentives* including rent-free periods, step-rents, or shifts to disproportionate fractions of turnover rent are essential indicators according to a representative of Group 1. A shift from fixed rent to turnover rent might protect the landlord from defaulting leases in an economic downturn which could ultimately be positive for the lender. In any case, lenders should require adequate contractual debt service coverage ratios (DSCR). An overview of the findings in literature and the number of interviewees who raised the factors are presented in the Appendix.

Solvency II

Pillar 1 is in predominant focus of both panels. A participant reported of a shift from higher risk investments to low risk investments since Solvency II has been implemented. Another interviewee denoted that the Europeanization as one core target of the regulation is reflected in the context of the market value that is uniformly valid for all member states. The targeted harmonization of the supervision is outlined in The Directive 2009/138/EC (Solvency II) (2009), recitals No. 16 and No. 11. An interviewee hinted at the diametrical targets between the ALM and Solvency II. Long-term CREL investments, that comfort the ALM of life insurers, are punished by high SCR requirements based on the standard formula. An interviewee considered the implementation of a partial internal model for the SCR optimization of CREL investments. In order to compare returns on investments, an interviewee has employed the ratio "return on Solvency II capital". A participant of Group 2 perceived Solvency II as a "clear booster" for the insurers' CREL engagements. Another participant of Group 2 was of the opinion, that the acceleration of insurers' CREL investments is triggered by the low yield environment. Insurers have gained higher flexibility due to the regulation which is demonstrated by the pursue of CREL investments beyond the national borders as a respondent observed. This follows Wandt (2012) who explains that Solvency II represents a shift in paradigm from a rules-based to a principle-based approach which might offer insurers a higher flexibility regarding their investments.

Only one panelist of Group 1 cited *Pillar 2* in connection with the separation of insurers' investment and risk management departments and the implementation of investment procedures. None of the members of Group 2 denoted Pillar 2. One expert of Group 1 picked up on reporting requirements of *Pillar 3* in connection with required line by line reporting of indirect CREL investments.

Environmental, Social, & Governance (ESG)

A representative of Group 1 compared ESG with an "avalanche that cannot be stopped". Veenstra and Ellemers (2020) discuss the necessity to establish ESG in a corporation's core businesses and daily processes to demonstrate the firm's genuine ESG commitment. ESG has become a solid target and is no longer a "nice-to-have" criteria as a participant explained. Non-compliance with ESG standards might negatively impact the reputation of an insurer according to a respondent. The factor reputation was examined by Nirino et al. (2021) who refer to the negative impact on a corporation's financial performance due to negative publicity. Some participants believe that the pressure caused by regulation, the political environment, policyholders, and other stakeholders will continuously increase and force insurers to invest in ESG-compliant CREL. The panelists mainly contributed to the ESG criterion *environmental*. Key findings were intertwined with nine interviewees of Group 1 and seven

respondents of Group 2. A participant of Group 1 gave examples for the usability of smart metering and referred to the monitoring of carbon dioxide emission, water usage, and energy consumption. Even waste production or waste management might be measured. Some participants touched on energy conservation by the use of sustainable building materials like wood or the attachment of building isolation as relevant environmental criteria. One member hinted at the negative impact of contamination. This connects with Diaz et al. (2021) who outline the negative impact of environmental law suits on companies' performance. Building certificates are a precondition for the loan origination according to a participant. The green building standard is a beneficial aspect for the re-leasing of properties a respondent pointed out.

Four representatives of Group 1 and one interviewee of Group 2 explicitly mentioned *social* attributes of ESG. This facet of ESG is difficult to measure. The borrower's capital expenditures used for building improvements might be referred to in order to measure the social factor of ESG. An interviewee of Group 2 suggested to quantify the sponsor's engagement in social housing projects. The factor *governance* was enumerated by seven representatives of Group 1 and two interviewees of Group 2. One participant of Group 1 referred to the Know Your Customer (KYC) requirements. Transparency regarding the borrowing entity structure is a governance criterion for a further interviewee.

Covid-19 Pandemic

The coronavirus pandemic is not comparable to a disruptive event like the financial crisis in 2008 as an interviewee of Group 1 specified. This time, no real estate market breakdown has been observed, solely *a shift in demand for distinct asset classes*. In some respect, the pandemic has functioned as a catalyst for change. Some market modifications have already started ahead of the Covid-19 pandemic. Shopping centers have been negatively impacted by online trading. The worldwide lockdowns during the crisis have accelerated the challenges of the stationary trade. A positive example for the impact of the coronavirus pandemic is logistics. The crisis has extremely fueled the demand for this asset class according to several Group 1 representatives. Several participants of both panels declared the residential real estate sector, logistics, food anchored retail, and do-it-yourself-facilities as "winners" of the pandemic. In contrast, high-street retail, the hotel segment, restaurants, and stationary retail were left behind according to several interviewees of both groups. Some specialists observed that several insurers have adjusted their focal point for property financing accordingly. Office developments are structured to respond to altering operation concepts as a member of Group 1 explained. After months of working in the home office, an interviewee of Group 1 appreciated office buildings as meeting points for interaction and collaboration. Office buildings that offer flexible space concepts will experience market value increases according to an interviewee of Group 1. During the pandemic, insurers' CREL investment budgets have remained unchanged or have even increased as one interviewee of Group 1 clarified. After a short period of careful hesitation at the beginning of the coronavirus pandemic, insurers turned back to the lending market. Their general demand for the financing of premises that were less affected by the tremor of lockdowns is unbroken as a participant denoted. Due to the pullback of some banks, an interviewee of Group 1 identified attractive financing opportunities regarding development finance. Insurers, however, act cautiously in the current market phase as a further respondent observed. This translates for instance in the requirement of higher cash reserves to cover for interest during a development financing. Another member of Group 1 mentioned that distinct concepts for

third-party usability are required. Alternative exit strategies are contemplated as several specialists of Group 1 pointed out. These include for instance debt to equity swaps. As a consequence of the mainstream of targeted assets, some participants of Group 1 envisioned that the insurers' portfolios might reflect decreasing diversification effects over time. An investment in granular fund structures provided by external investment managers might mitigate this aspect. The Covid-19 pandemic has made clear that the quality of real estate is a predominant investment decision criterion as some representatives of Group 1 specified.

The pandemic has raised renegotiations between landlords and tenants according to a respondent. Due to the uncertainty in some business sectors, lease-terms continue to diminish and the portion of turnover rent in comparison to basic rent has increased. Landlords and tenants negotiate step rents and enhancing rent incentives like extended rent-free periods. This has an impact on future property cash flows according to a participant of Group 1. The CREL strategy should require adequate financial covenants. A sufficient DSCR is essential to mitigate the *risk of rent reductions* during long-term CRE lending as an interviewee suggested.

Basically, the perception of representatives of Group 2 corresponded with the statements of Group 1. Several members were of the opinion that the Covid-19 pandemic is considered by insurers as a temporary phenomenon without deep consequences for their general long-term CREL engagement. Some participants of Group 2 observed that insurers are selective in terms of the underlying properties and evaluate transactions deal by deal. Some insurers postponed scheduled enhancements of their lending policies until the effects of the coronavirus pandemic are more evident as a respondent denoted. Another interviewee observed that insurers' investments shift within the risk curve from high yielding CREL to senior secured loan products. A participant reported that some insurance companies insist on excellent micro-locations. According to one interviewee, however, the financial strength of tenants and long-term leases might justify investments in CREL with properties in B-locations.

3.2. Internal Determinants

Key Economic Investment Criteria

An interviewee of Group 1 highlighted the return-risk-ratio as an "essential cornerstone" in the decision-making process. CREL have become a relevant asset class throughout the perpetual low yield environment because they provide for higher returns compared to further fixed income investments with equivalent risk profiles as a further interviewee of Group 1 explained. Insurers' traditional investments like government bonds or covered bonds lag behind the sought-after profitability profile. Another interviewee illustrated the advantages of junior ranking CREL and denoted that their returns are almost similar to CRE equity investments. In addition, they require fewer capital charges and minor administrative efforts. CREL investors demand a "complexity premium" for the multifaceted analysis according to an interviewee. Some insurers emphasized the attractiveness of illiquidity premiums that CREL offer in comparison to liquid covered bonds. Several participants of Group 1 hinted at *internal and external benchmarks*. Benchmarking might be implemented with the aim to increase return inter alia (Vujovic et al., 2013). Following Blanc-Brude (2014), performance benchmarking should be based on indices with equivalent risk-return-patterns and similar underlying assets. Some respondents referred to their ALM as internal benchmark. An interviewee deemed senior secured CREL as fixed income products and referred to the external benchmark "A-rated non-financial corporate euro loans". Another expert touched on bonds with a BB to BB+ credit rating as benchmarks for junior loans. Several

interviewees related to the iBoxx non-financial index with a duration grid of seven to 10 years. An interviewee benchmarked the return of loan with an underlying single tenant premises with the return of this tenant's corporate bond. Some participants deemed covered bonds as benchmarks because they obtain similar underlying assets. In comparison to CREL, they provide lower returns due their fungibility. Some interviewees referred to CREL investments as substitutes for government bonds.

Safety is an elementary target for insurers that relates to their obligation to cover policyholders' claims according to an interviewee of Group 1. A further representative of Group 1 stated that safety is the "nature of an insurer's business" and the insurer's "core mandate". For another expert CREL provide safety in the form of physical collateral which is a distinct CREL characteristic and a contrast to unsecured corporate bonds. Several participants of Group 1 appreciated the *diversification* effects of CREL investments for insurers' entire investment portfolio. One panelist of Group 1 referred to diversification as part of insurers' "genetics". The risk-return-structures of CREL affect the portfolio diversification according to another interviewee. In the context of *asset-liability-matching*, one representative of Group 1 touched on the importance to comply with defined limits for SCR, risk, and profitability. Especially long-term CREL match with the liability structure of life insurers as several interviewees of Group 1 pointed out.

CREL might be assigned to the investment segment private debt which is a rather *illiquid* asset class as a representative of Group 1 raised. The maturity structure of insurers' entire investment portfolio might be relevant for the CREL investment decision because CREL are rather illiquid. Several interviewees of Group 1 mentioned that the illiquidity premium shall compensate for the lack of fungibility and separates CREL from liquid debt products of the capital markets. Insurance companies are usually pursuing larger *CREL investment volumes* an interviewee of Group 1 explained. The efficient utilization of administrative expenses is important according to a respondent of Group 1 who would rather invest in large CREL transactions. This interviewee highlighted that smaller insurance undertakings might be challenged to originate bilateral loans or to participate in syndicated loans because CREL are usually excessive volume intensive investments. One interviewee pointed out that the size of the company might be a relevant aspect for borrowers' perception of the insurer's market standing and consequently impact the insurer's ability to access the bilateral CREL market. Large insurance companies benefit of economies of scale as a respondent denoted.

Guarantee Assets Pool

Investments that apply to the Guarantee Assets are specified in the insurer's general investment policy as an interviewee reported. The volume of Guarantee Assets varies depending on the insurance carriers of an insurance group. The interviewees responded quiet disproportionately regarding the necessity to invest in CREL that comply with the requirements for the Guarantee Assets Pool. A participant explained that non-eligibility is feasible but should be an exception. Another interviewee pointed out that the Guarantee Assets Pool eligibility is extremely important and "non-compliance translates to non-lending". One expert of Group 1 explained that investments that are not eligible have to face high capital charges. Non-compliant CREL would only be approved if their return justifies the acceptance and in the event of short-term tenure another interviewee added. Two participants of Group 1 responded that they are rarely or never confronted with this topic. Four of 10 representatives of Group 2 reported that they were not confronted with the Guarantee Assets Pool eligibility at all. Two of the experts observed that the

Guarantee Assets Pool eligibility is predominantly of relevance for German insurers. According to another expert's perception the insurers' requirements for the Guarantee Assets Pool seem to be comparable to the requirements of mortgage banks for the Covered Bonds Pool. Several interviewees of Group 2 mentioned that non-eligibility seems to impact the pricing of CREL. A respondent observed that some insurers rejected CREL investments due to an elevated LTV or as a result of non-complying loan structures.

Firm-Specific Factors

A representative of Group 1 touched on the *size of insurer* as a determinant for the possible investment volume. Direct CREL investment volumes below €500 million per annum are questionable due to cost efficiency according to another interviewee. "The larger the company, the higher the probability that an insurer is engaging in CREL" a respondent of Group 2 pointed out. According to a further expert of Group 2, large insurers are not interested in CREL participations less than €100 million. A participant of Group 1 referred to the *type of insurer* and reported that life insurers prefer to originate CREL with loan terms up to 20 years whereas development loans with maturities between two and four years harmonize with non-life insurers. Life insurers may invest in illiquid products, whereas casualty insurers pursue short-term liquid investments. The assignment of CREL to the insurance undertakings' carriers is determined by the loan term and the required returns. Group 2's perception complemented the statements of the panelists of Group 1.

Mainly interviewees of Group 2 deemed the *ownership structures* as essential for insurers' CREL investment decisions. An insurer that is embedded in a banking group might benefit of the digital infrastructure and the CREL expertise of the parent company according to a representative of Group 2. Another respondent was of the opinion that the ownership structure influences the insurer's strategy and might increase the complexity of the investment process. *Company age* goes along with the experience of the insurer in the investment market an interviewee of Group 2 pointed out. Several respondents of Group 1 hinted at the experience and track record of the insurer's investment team as an essential *further firm-specific factor*. In addition, the technical infrastructure is essential for the ability to invest in CREL an interviewee of Group 1 explained. The location of headquarters of an insurance carrier is an essential factor according to a different participant. A further respondent pointed out that it is beneficial if the insurer's asset management company holds a banking license. The responses of Group 2 members resembled the responses of Group 1. The utilization of internal and external international networks is important as a respondent of Group 2 added. A further respondent of Group 2 considered CREL as an individual investment class within the private debt universe that should be administered by a distinct organizational unit.

Managerial Attributes

In the context of the *management board composition*, one participant of Group 1 highlighted that the board's statutory should include the positions of chief executive officer (CEO), chief investment officer (CIO), and chief risk officer (CRO). The CREL investment decision should consider the expertise of the insurer's CRE equity investment team due to the underlying assets. A further respondent remarked that a sponsor for the CREL investments on the management board is crucial. A member of Group 2 deemed the responsible board member's proximity to the capital markets as important. Tenure diversification on board level is beneficial according to a further interviewee. A participant of Group 1 pointed out that the position of the *chief risk officer (CRO)* on the management board should possess veto-rights. According to a

participant of Group 2, the CRO's perception of risk impacts the CREL investment strategy and is influential to the insurer's overall attitude to assume risk. The CRO's autonomy is an essential factor another interviewee pointed out. The *board risk committee* shapes the holistic risk policy of the insurer group an interviewee of Group 1 denoted.

A participant of Group 2 experienced that large insurance companies with *large sized management boards* establish task forces that contribute to the board meetings. This interviewee remarked that large sized management boards enhance the complexity of the decision-making process and therefore could negatively impact decisions on new investment opportunities. A participant of Group 1 deemed the *number of board meetings* and periodic conferences as essential. Due to the velocity of the CREL business, board meetings on a weekly basis are favorable. A member of Group 2 pointed out that frequent presentations of CREL investments might increase the management board's acceptance and understanding of this assets class. Duality up to the board level evidenced by the equal representation of the risk management unit and the investment management team is essential for the decision-making process and a *further managerial attribute* for an interviewee of Group 1. One respondent of Group 2 was of the opinion that fast interactions between the CREL investment manager and the responsible board member at an early stage of the investment decision process are beneficial. A different specialist of Group 2 hinted at the necessity of transparency in the decision-making process. A reliable investment decision was essential for this participant. The management's general attitude – conservative or progressive – might influence the CREL investment decision and the overall business strategy. It might be an advantageous aspect for the CREL investment decision, if the responsible investment manager is presenting the CREL investment at the board meeting in person.

3.3. Further Findings

Three representatives of Group 1 and four interviewees of Group 2 mentioned the *overall interest rate environment* as a critical determinant for the CREL investment decision of insurance companies. The current relatively large gap between the returns of fixed income investments and the returns of senior secured CREL is an investment promoter for CREL as a representative of Group 2 pointed out. A change of capital flow might be triggered by increasing interest rates of competing investments like corporate bonds or government bonds. The competition could be intensified attributable to lower capital charges of rival investments. For the upcoming years, however, increasing interest rates are unlikely according to a participant of Group 2.

Some representatives of Panels 1 and 2 considered the degree of *inflation* and the *monetary policy of the ECB* as further CREL investment determining factors. An interviewee of Group 1 emphasized that the ECB's quantitative easing policy has flooded the market with liquidity with the effect of low interest rates. Policy changes of the ECB might influence the yield environment with the consequence of increasing yields. This could trigger a cool down of the CREL market due to vanishing demand from borrowers.

An interviewee of Group 1 contemplated that *alternations of laws* might influence insurers' investments in CREL. This might relate to tax laws for instance. It might as well relate to changes in the regulation regime of competitors. An interviewee of Group 2 was of the opinion that the banking regulation will prevent financial institutions from long-term CRE lending. Following this path could offer opportunities for insurers and fuel their participation in CREL.

Accounting was a relevant further determinant for two representatives of Group 1 and one interviewee of Group 2. The structure of the CREL investment impacts the bookkeeping. A representative of Group 2 mentioned that the at-cost approach supports stable accounting of CREL. In contrast, the mark-to-market approach is volatile.

3.4. Interrelations of CREL Determinants

The interviewees confirmed the relevance of eight preselected determinants (CRE markets, Solvency II, ESG, Covid-19, key economic investment criteria, Guarantee Assets Pool, firm-specific factors, managerial attributes) that have been identified in the literature review. Four further external factors (overall interest rate environment, inflation / monetary policy of the ECB, alternations of laws, accounting) were added by the respondents.

The identified determinants may be assigned to four basic dimensions for the analysis of their interrelations. Insurer's impedimenta (1) and the focal point of the executive management (2) are allotted to the internal sphere of insurers' investment environment; opportunities and threats of CREL investments (3) and further exterior influences (4) belong to insurers' external sphere. This pattern is grounded on Porter's (1998) classical model. The four sectors might be considered as core borders of insurers' CREL investment decisions and ultimately of their CREL investment strategies as outlined in Figure 1.

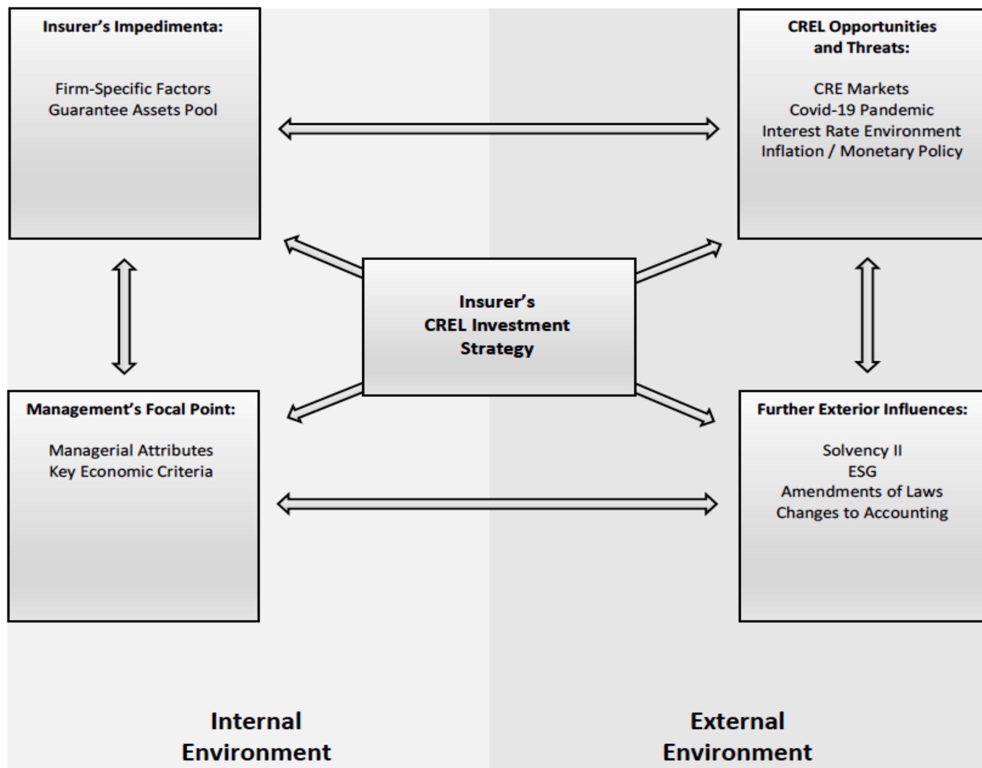

Figure 1. Interrelated Framework of Insurers' CREL Investment Determinants as Boundaries of Insurers' CREL Investment Strategies. Source: Own Contribution based on Porter (1998).

The following elaboration touches on a number of interrelations as raised in the interviews. The commercial premises within its CRE market may be deemed as a pivotal point for CRE lending. Typically, CREL are non-recourse debts without any liabilities of the parent companies (sponsors) of the borrowing entity. The commercial asset provides for the collateral based on its market value and for debt service coverage due to its generation of rents. The interviews revealed, that the CRE market indicators "real estate market cycle", the "cash flow of the commercial premises", and "micro- and macro-location parameters" were in special focus of the panelists for their evaluation of the CRE markets. The phase of the CRE rental and investment market cycles might impact the management board's evaluation of the inherent risk of the CREL transaction. Combined with the management board's general attitude towards the conflicting factors profitability and safety, the condition of the CREL market may consequently impact the investment decision. The interviewees observed decreasing lease terms which are diametrical to life insurers' pursuits of long-term stable cash flows. The risk-return-ESG grid of competing investments mingled with the board's general view of key economic investment criteria might be essential for the decision-making as well. Large volume loans seem to be cost efficient but they require a certain size of the insurance carrier. Some interviewees reported that Pillar 1 of Solvency II impacts the CREL investment's profitability. Some respondents observed a shift down the risk curve which goes along with lower return. The environmental facet of the topic ESG catches special attention of the participants due to its impact on future market values of the CRE that defines the loan collateral. Covid-19 was perceived by the majority of panelists as a vanishing external thread. Some participants, however, focused on investment opportunities triggered by the pandemic that may provide for higher returns. Nonetheless, the panelists realized an acceleration of changes in the stationary retail sector and in the office segment that started prior to the coronavirus pandemic. Due to the economic impact of the Covid-19 pandemic, the ECB enhanced its policy of quantitative easing which deepened the return gap between bonds and real estate investments. ESG was not perceived as a main determinant at the time the interviews were conducted. Some respondents, however, considered ESG as a future trigger event for a structural change in the CREL industry. The current interest rate environment reflected by the outlined benchmarks combined with sponsors for CREL investments on the management board are further examples for interrelations of determinants. The ALM is perceived by some panelists as an internal investment benchmark. Senior secured CREL were deemed as substitutes for liquid fixed-income products like covered bonds or government bonds. For this reason, both products were perceived as external benchmarks. In comparison to these investment options, CREL provide for illiquidity and complexity premiums, advantages that are especially appreciated by life insurance companies that focus on long-term investments with predictable cash flows. Solvency II borders the insurers' risk patterns and might challenge their ALM due to occasional diametrical investment targets. Regulatory requirements impact the insurance undertakings' technical and personnel infrastructure. The size of the Guarantee Assets Pool determines an insurer's impedimenta. The volume of Guarantee Assets might be deemed as a quality feature by policyholders and regulators. This determinant in turn is related to regulation. The separation of duties up to the top management might be regarded as a safety feature and comfort the CREL investment decision. An insurance company should identify its strengths and weaknesses, threats and opportunities within its internal and external environment, in order to establish an individual profitable CREL investment strategy.

3.5. Prioritization of CREL Determinants

The interviewees were asked to choose up to three of eight preselected determinants that they estimate to have the greatest impact on insurers' CREL investment decision. Both panels deemed CRE markets as the most essential determinant (Group 1: 32%; Group 2: 28%). Panel 1 elected key economic criteria on the second rank (29%) and Solvency II on the third place (25%). In comparison, Panel 2 considered Solvency II on the second position (21%) and the Guarantee Assets Pool on the third spot (17%). Pursuant to Group 2, key economic criteria and ESG share the fourth place (14% each). Group 1 did not consider the Covid-19 pandemic and firm-specific factors as crucial (0% each). This differs from Group 2's perception as they assigned 3% of their possible votes to each determinant. Group 1's selections predominately prioritized nearly equally CRE markets, key economic criteria, and Solvency II that account for 86% of their total votes. The graduation between CRE markets and key economic criteria is 3 percentage points, between key economic criteria and Solvency II the difference totals 4 percentage points. The remainder of 14% of possible votes was allotted to Guarantee Assets Pool, managerial attributes, and ESG with a graduation of 3 percentage points. The focus of Group 1 was on external determinants with approximately 60% of their votes in comparison to internal determinants that unify 40% of votes.

Group 2 draws a dissimilar picture. Their votes were spread among seven pre-selected determinants excluding managerial attributes. Group 2 applied 66% of votes to the three options CRE markets, Solvency II, and Guarantee Assets Pool. The graduation between CRE markets and Solvency II amounts to 7 percentage points. The difference between Solvency II and Guarantee Assets Pool totals 4 percentage points. Group 2's remaining votes of 34% are assigned to key economic criteria, ESG, Covid-19 pandemic, and firm-specific factors with a graduation of 11 percentage points. Group 2 concentrated on external determinants as well with 66% of their votes. 34% of their votes were assigned to internal determinants.

The combined survey results of Group 1 and Group 2 reveal that CRE markets are deemed as essential determinant with 60% of total votes followed by Solvency II (46%), key economic criteria (43%), Guarantee Assets Pool (24%), ESG (18%), managerial attributes (4%), and Covid-19 and firm-specific factors with 3% each. The comparison of survey results is depicted in Figure 2.

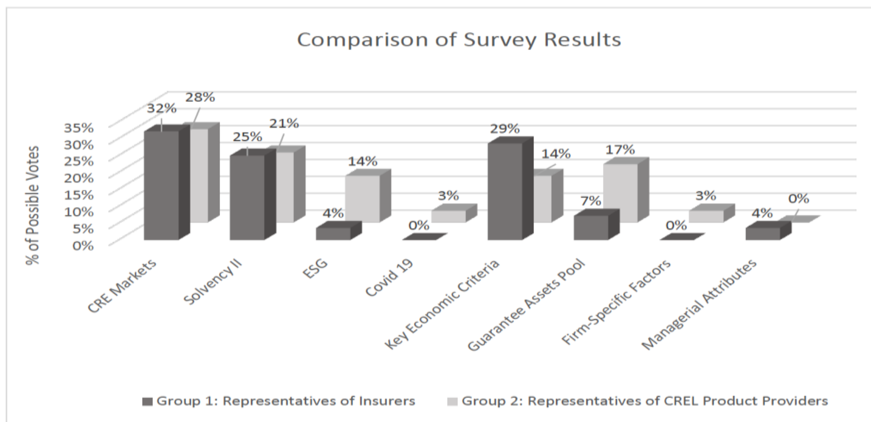

Figure 2. Insurers' CREL Key Investment Determinants - Comparison of Survey Results.
Source: Own Contribution.

4. Conclusion

This elaboration examined essential determinants for insurance undertakings' CREL investment decisions. To this authors knowledge, this topic has not been previously explored in scientific literature. A unique set of semi-structured expert interviews with integral surveys are the basis for this study that contributes to the contemporary subject "institutional investors' investment decisions". The respondents comprised a total of approximately 390 years of work experience in the CREL sector. They were assigned to representatives of insurers (Group 1) and representatives of CREL product providers (Group 2) in order to receive comprehensive results. The respondents' statements illustrate the complexity of interconnections between CREL determinants. The identified 12 essential determinants may be assigned to four core dimensions of insurers' investment environment that ultimately provide the basic structure for insurers' CREL investment strategies. In order to outperform the return on investments, some insurers' employ their ALM as an internal benchmark. Liquid fixed-income products like covered bonds or government bonds might be deemed as external benchmarks for senior secured CREL.

The survey results are evidence that both groups perceived the CRE markets as the predominant determinant for the insurers' CREL investment decisions. Economic and regulatory factors in almost equal measure were prevailing aspects for Group 1 whereas Group 2 perceived insurers to focus on regulation rather than economic aspects. The order of prioritization depicts CRE markets, followed by Solvency II and key economic criteria as main investment determinants based on combined group results.

In addition to the aforementioned, this study might be considered as a snapshot for the assessment of insurers' current CRE finance trends. In this context, the Covid-19 pandemic is regarded as a short-term phenomenon that will disappear simultaneously with its economic effects. ESG, however, might trigger a structural change of the CREL market. Societal megatrends like digitalization and climate change were reflected in the context of ESG's environmental facets. They were not identified as idiosyncratic determinants that impact the insurers' CREL investment decisions. The results of this analysis may be utilized by applied sciences, by insurers' internal or external investment managers, and as well as by CREL product providers.

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Appendix

Commercial Real Estate Market Indicators / Number of Interviewee(s) who raised the Factors.
Source: Own Contribution.

#	Commercial Real Estate Market Indicators	Literature Review (References)	Number of Interviewee(s) of Group 1 who raised the factor	Number of Interviewee(s) of Group 2 who raised the factor	Σ
1	Macroeconomic Parameters	Wang et al. (2020); Davis and Zhu (2004) Ferrari et al. (2015); Dreger (2011); Dick and Westerheide (2010)	4	2	6
2	Real Estate Market Cycle	Davis and Zhu (2004)	9	4	13
3	Development of Rents	Davis and Zhu (2004)	2	1	3
4	Cash Flow of Commercial Premises	Belke and Keil (2018)	4	5	9
5	Monetary Policy	Xu and Chen (2012); Coën et al. (2018)	./.	./.	./.
6	Interest Rate Level	Girouard et al. (2006); Belke and Keil (2018); Helbling (2005); Dreger (2011)	1	./.	1
7	Liquid Real Estate Markets / Investment Volume of CRE Transactions	Devaney et at. (2019); Wang et al. (2020)	2	1	3
8	Location Parameters (Macro-Location and Micro-Location)	Dick and Westerheide (2010)	5	3	8
9	Developed Capital Market	Lieser and Groh (2014); Coën et al (2018)	./.	./.	./.
10	Cap Rates	Dreger (2011); Devaney et al. (2019)	2	./.	2
11	Growth Rate of CRE Prices	Wang et al. (2020); Ferrari et al. (2015) Belke and Keil (2018)	2	2	4
12	Real Estate Market Transparency	Lieser and Groh (2014); Gholipour et al. (2020); JLL (2020)	1	1	2
13	Vacancy Rates	Wang et al. (2020); Dreger (2011); Coën et al. (2018)	1	./.	1
14	New Construction	Wang et al. (2020)	./.	./.	./.
15	Technological Progress	Connor and Liang (2000) as cited in Lieser and Groh (2014)	./.	./.	./.
16	Third-Party Usability	./.	5	1	6
17	Development of Rent Incentives	./.	1	./.	1