The Canadian commercial mortgage market provides a compelling opportunity for institutional investors to increase and diversify sources of fixed income yield. This paper presents an overview of the market, discusses the attractive features and inherent risks associated with commercial mortgages relative to other fixed income investments, examines the role of ESG analysis in mortgage investing.

What is a commercial mortgage?

A commercial mortgage is a loan secured by a direct claim on a commercial real estate asset. The most common asset types include industrial, retail, office, and multi-residential rental properties. The vast majority of these properties are income-producing, in that they generate stable and predictable cash flows due to the tendency of commercial properties to have long-term leases.

It is important to distinguish between the main types of commercial mortgages, which are:

- CMHC-insured;
- Conventional;
- Conventional plus; and
- High yield mortgages

CMHC-insured mortgages are government-guaranteed first mortgages secured by multi-residential properties. Conventional mortgages are conservative first mortgages on income-producing properties, which is usually one of the four main property types mentioned above and are located in core markets. These mortgages have a minimum cash flow coverage ratio of 1.25x and a maximum loan-to-value of 75% at funding. The majority of the mortgage market comprises conventional mortgages and this paper will focus on this mortgage type.

Conventional plus mortgages are typically 1) higher-leverage first mortgages on core property types or; 2) lower-leverage first mortgages on properties that either have greater cash flow uncertainty or are located in non-core markets. High yield mortgages are typically subordinate mortgages on income-producing properties, or first mortgages secured by non-income producing properties. Conventional plus and, to an even greater extent, high yield mortgages, typically carry more credit risk and, therefore, usually offer higher returns than conventional mortgages.
Overview of the Canadian commercial mortgage market

Figure 1 shows the size and market share breakdown of the Canadian commercial mortgage market, which has grown significantly over the past several years. In 2018, approximately $47 billion in new mortgages were issued, and the current market size is estimated to be $271 billion\(^1\). Despite overall growth, an active secondary market does not exist. This is primarily because most Canadian commercial mortgage lenders hold the mortgages they originate on their balance sheet, and therefore tend to employ conservative underwriting standards. That said, new entrants can still gain exposure to commercial mortgages due to the continued growth of the underlying market.

Advantages of commercial mortgages

There are numerous advantages to including commercial mortgages in an investment portfolio, which we will discuss in the sections that follow.

Tangible asset as security

In contrast to most corporate bonds, which are secured by the good faith of the issuer, mortgages enjoy a direct claim on a tangible asset. Often, mortgages carry an additional guarantee from the borrower, meaning that if an investor is not able to recoup their entire investment through the sale of the property, they have the ability to pursue other assets that the borrower owns.

Although being secured by a tangible asset is a benefit, as time goes on, the value of a property can become increasingly uncertain. As a result, an important risk mitigation tool associated with commercial mortgages is that they are often structured on an amortizing basis. Mortgage payments are made on a monthly basis and, if the mortgage is amortizing, each payment includes a portion of principal repayment.

Amortization reduces the exposure to an individual mortgage throughout the loan term, which helps insulate the mortgage investment from potential weakness in the commercial real estate market. All else being equal, amortization increases the credit quality of a mortgage as it approaches maturity.

\(^1\) As of December 31, 2018. Source: CMLS Financial
The case for commercial mortgages

Opportunities are created in inefficient markets

Commercial mortgages differ from traditional stocks and bonds not only because they are secured by tangible assets, but also because the commercial mortgage market is private. An investor’s ability to access information and source investment opportunities is a key determinant of their level of success in this market. A lack of both publicly available information and a secondary market creates numerous inefficiencies that can translate into opportunities for well-placed investors to improve returns.

Given that there is no public exchange for commercial mortgages, and that most investors have a “lend and hold” strategy, the market is broadly illiquid. Investors are compensated with a liquidity premium relative to other public securities with comparable credit risk, as illustrated in Figure 2. This liquidity premium is considered to be a key driver of excess returns relative to corporate bonds of similar credit quality.

High degree of control and customization

Unlike the corporate bond market, lenders in the mortgage market have much more control over the terms of a loan, which can help protect capital. Each property securing a mortgage is unique; therefore, the credit risk each individual mortgage carries is also unique. The key consideration in any mortgage investment is identifying the risks of the transaction and then mitigating those risks via structure. Common credit risk mitigation strategies include reducing proceeds (size of the mortgage); decreasing the amortization; requiring additional guarantees, holdbacks, interest reserves, or even additional property as collateral; and, in some cases, requiring performance covenants. Lenders also have the ability to control whether additional debt can be placed on the property throughout the term of their mortgage.

Figure 2: Mortgage and bond yield spreads versus similar-term Canadas

For illustrative purposes only * FTSE Canada Short Term Corporate Bond Index
Source: FTSE Global Debt Capital Markets Inc.
Furthermore, a mortgage investment program can be structured to meet specific duration objectives for a wide range of investors. For example, in today’s low interest rate environment, there is a desire for higher-yielding, shorter-term fixed income instruments. Shorter-term mortgages can provide protection in a rising interest rate environment. Due to the amortizing nature and the demand for shorter-term mortgages from borrowers (e.g., five-year terms), mortgage funds typically have a shorter duration than universe. Conversely, a mortgage portfolio can also be structured with a longer duration profile for those investors looking to match long-term liabilities by including mortgages with longer terms. That said, it must be stressed that risk mitigation should take priority over term or return targets.

Given the degree of customization involved in structuring mortgage loan investments and programs, and the subjectivity involved in determining and mitigating credit risk, commercial mortgage funds can vary greatly in terms of risk, return, and duration profiles.

Yield enhancement, diversification, and low annual downside risk
As previously discussed, the liquidity premium offered by commercial mortgages is a key driver of returns above those provided by corporate bonds of similar credit quality. We believe harvesting this liquidity premium is one of the more attractive risk/return strategies available in the credit markets, assuming credit risk is mitigated appropriately. Within a broader fixed income portfolio, mortgages can improve returns and diversify sources of risk. We have illustrated this concept in Figure 3 by comparing mortgages to other common asset classes over a roughly 17-year period ending December 31, 2018.

Given the lack of publicly available information on the Canadian mortgage market, we have used a representative mortgage portfolio as a proxy for the high-quality conventional mortgage market.

As shown below, mortgages have historically exhibited a strong Sharpe ratio and imperfect correlation with various other fixed income investments. Mortgages have also exhibited less annual downside risk when compared to short and universe fixed income. Annual downside risk is the average loss in the worst 5% of 12-month rolling returns over the sample period. Since short and universe fixed income, as well as mortgages, are credit products priced from yields, losses can occur due to changes in rates (increasing yields decrease the price of bonds, whether driven by risk-free rates or changes in credit appetite) and defaults, which can lead to permanent losses. As shown in the table, mortgages exhibited the lowest downside risk over the sample period, and in fact, this drawdown did not result in losses, but merely a lower-than-expected return (1.3% instead of the annualized return of 5.0%).

Furthermore, accommodative monetary policies of the last decade have continually pushed yields lower, evidenced by the likewise low downside risk of short and universe credit. In an environment less favourable to fixed income – for example, one with monetary policy tightening – we would expect fixed income to carry higher downside risk. Even still, given their lower sensitivity to interest rate movements, we can expect mortgages to have a relatively better downside profile than other credit in a rising rate environment, provided credit risk does not change. Therefore, mortgages tend to offer better absolute risk profiles than bonds and increased diversification from interest rate movements in the fixed income component of a portfolio.
The case for commercial mortgages

The Canadian commercial mortgage market has historically been relatively stable. Substantiating this claim can be challenging given the lack of publicly available information on commercial mortgage investments in Canada, such as broad market default rates. We can, however, look to public data from the Canadian commercial mortgage-backed securities (CMBS) market and compare them to that of the U.S. to arrive at a general indication of the relative stability of the Canadian commercial real estate market over time.

Figure 4 shows the historical delinquency rates of the CMBS markets in Canada and the U.S. The data indicate a low level of delinquency among Canadian CMBS loans – a significant departure from the results experienced in the U.S. market. The relative stability of the Canadian CMBS market is due to several factors:

- The majority of Canadian CMBS loans carry personal or corporate guarantees, whereas most CMBS loans in the U.S. are non-recourse.
- Given that the commercial mortgage market in Canada has significantly fewer lenders, Canadian borrowers have greater incentive to maintain a positive reputation by making timely mortgage payments and complying with mortgage covenants.
- Underwriting by Canadian lenders is generally more conservative and they tend to incorporate shorter amortizations in their loans, which reduces refinance risk at loan maturity.

Furthermore, CMBS loans in Canada have historically represented a significantly smaller share of the commercial mortgage market, ranging from 2–10% of the mortgage market, whereas CMBS loans in the U.S. have consistently accounted for 25–30% of the mortgage market. This means the vast majority of commercial mortgage lenders in Canada hold the mortgages they originate on their balance sheet, instead of securitizing and selling them, which encourages more conservative lending practices and ultimately leads to a more conservative market overall.

### Figure 3: Historical capital market data

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Representative data series</th>
<th>Annualized return</th>
<th>Annual volatility</th>
<th>Annual downside risk</th>
<th>Sharpe ratio</th>
<th>Correlation with mortgages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>FTSE Canada 30 Day Treasury Bill Index</td>
<td>1.7%</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Short Term Bonds</td>
<td>FTSE Canada Short Term Overall Bond Index</td>
<td>3.5%</td>
<td>1.9%</td>
<td>-0.4%</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Universe Bonds</td>
<td>FTSE Canada Universe Bond Index</td>
<td>4.9%</td>
<td>3.7%</td>
<td>-1.4%</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>FTSE Canada All Corporate Bond Index</td>
<td>5.4%</td>
<td>3.3%</td>
<td>-0.4%</td>
<td>1.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Mortgages</td>
<td>Representative Mortgage Portfolio*</td>
<td>4.4%</td>
<td>2.3%</td>
<td>1.3%</td>
<td>1.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Canadian Equities</td>
<td>S&amp;P/TSX Composite Index</td>
<td>6.7%</td>
<td>13.2%</td>
<td>-31.0%</td>
<td>0.3</td>
<td>-0.2</td>
</tr>
<tr>
<td>Global Equities</td>
<td>MSCI World Index (CAD)</td>
<td>7.6%</td>
<td>12.9%</td>
<td>-27.4%</td>
<td>0.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

For illustrative purposes only.
*There is no index or widely accepted commercial mortgage market benchmark. We have therefore used the PH&N Mortgage Pension Trust as representative of the high quality segment of the commercial mortgage market. Series O returns. Total returns are gross-of-fees.
Data represents 10-year period ending December 31, 2018.
Source: PC-Bond Analytics, Bloomberg.
Although CMBS data are not perfect representations of direct commercial mortgage investing, they illustrate how a potentially riskier subset within the commercial mortgage market has performed over time. We believe the stability of the Canadian CMBS market is a compelling validation that commercial mortgages can be successful investments through market cycles.

**Disadvantages of commercial mortgages**

The main disadvantages of investing in mortgages are related to the associated risks and idiosyncratic nature of the mortgage market.

**Liquidity risk**

Not all investors have long investment horizons and can bear the liquidity risk associated with mortgage investments. Pooled mortgage funds can help improve investor flexibility and accommodate ad hoc redemptions. Monthly principal and interest payments, as well as refusing to renew maturing mortgages, also provide sources of liquidity. That said, because there is no active secondary market, if an investor chooses to sell their mortgages rather than hold them until maturity, finding a buyer can be a lengthy process and the mortgages are likely to be sold at a loss. In the event of a broad market correction, it will be even more difficult and unlikely that the mortgages could be sold.

**Delays in deploying investment capital**

It can take weeks or even months to arrange a new mortgage given the due diligence, reporting, and legal work required. Depending on the size of the investment and the vehicle used, investors may experience a lag between when they make their investment decision and when their allocated capital is fully invested in mortgages.
Delays due to default
When borrowers default, it is not always possible for the lender to recoup their invested capital in a timely manner. Thus, another disadvantage to mortgage investing is the time it may take to address a default situation and to redeploy the capital. Default risk can be mitigated, though not eliminated, through the consistent application of disciplined origination and investment processes, and by extension, the experience and expertise of the mortgage professionals and portfolio managers involved.

Challenges in comparing mortgage metrics
Calculating mortgage metrics can be a challenging proposition due to the degree of subjectivity involved in determining mortgage quality, inconsistency in pricing and valuation methodologies, as well as differences in underlying mortgage terms. There is no centralized exchange where you can verify values and performance, and no commercial mortgage index against which to measure performance, thus making it difficult to produce a consistent assessment across portfolios and portfolio managers.

ESG analysis an inherent part of mortgage investing
Given the illiquid nature of the commercial mortgage market, the analysis of environmental, social, and governance (ESG) factors is a critical component of risk management. ESG risks in the real estate sector encompass a wide range of property-specific and borrower-specific risks. Property-specific ESG risks include building condition, building use, and environmental risks. Money laundering, bankruptcy, and criminal and integrity issues are some examples of borrower-specific ESG risks. Therefore, many mortgage lenders require environmental and building condition reports for each property, and will conduct extensive due diligence on their borrowers prior to funding a mortgage. Positive ESG metrics are more likely to yield long-term, stable cash flows; therefore, ESG analysis is an inherent part of a successful portfolio manager’s mortgage investment process.

Conclusion
For investors that can bear the associated risks, mortgages are a compelling investment for reasons discussed in this paper and summarized below:

- They are secured by a direct claim on tangible assets.
- The market is private and fragmented, which creates inefficiencies and opportunities that can potentially be capitalized on.
- Portfolio managers can exert a high degree of control over the structure and credit risk of their mortgage investments to meet a wide range of investor needs.
- Commercial mortgages can provide yield enhancement and diversification to fixed income portfolios.
- Conventional commercial mortgages tend to exhibit low annual downside risk.
- ESG analysis is an inherent contributor to successful mortgage investing.

Given the degree of subjectivity and significant disparities in skill involved in assessing mortgage investments, we feel it is imperative that investors seek portfolio managers who offer mortgage funds with proven long-term track records. Successful portfolio managers will have both fixed income and real estate expertise, a thorough understanding of real estate cycles, and will manage their mortgage portfolios using a strong risk management framework and underwriting criteria.
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