

Daniel Iwata, BA Research Associate

June 24, 2014

Mortgage Investment Corporations

An Overview



Overview

The Canadian residential mortgage market was estimated to have \$1.19 trillion in principal outstanding, while the commercial market had \$139.5 billion, as of August 2013. The majority of mortgage lending is held by the large banks and credit unions. Alternative sources of mortgage lending open to investors are mortgage investment corporations ("MICs"). A MIC pools investor funds to offer short term financing backed by real estate. The interest and fees paid by borrowers, net of operating costs, are passed on to investors. Due to the currently low interest rate environment, investors seeking yields are drawn to the MIC space. From our research, we feel the majority of MICs currently generate annual yields in the 5-10% p.a. range, depending on portfolio risks.

This report provides an overview of what MICs are, an outlook on the MIC industry, characteristics / parameters to look for when assessing MICs and an overview of various public and private MICs.

What is a MIC?

In 1973, through the Residential Mortgage Financing Act, the Government of Canada introduced MICs to make it easier for small investors to participate in the residential mortgage and real estate markets. A MIC provides short-term (typically 6 months - 36 months) loans secured by real estate properties in Canada.

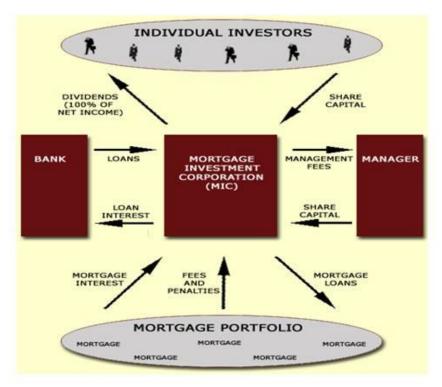
Why do borrowers use MICs over banks?

MICs offer advantages over traditional banks because they do not conform within the strict lending guidelines of banks and other traditional lenders. MICs are more flexible in their lending terms and therefore, can offer individually structured / tailor made loans to meet the specific requirements of a borrower. Also, banks have lengthy due diligence processes (up to 2 months) and are typically not able to meet some borrowers' quick capital needs. Most MICs are typically able to structure, complete due diligence and fund loans within 2 - 4 weeks. The above reasons allow non-bank lenders, including MICs, to charge a higher interest rate on their loans (5% - 15% p.a. in the current environment) compared to banks / traditional lenders.

How a MIC works

The following graph shows how a typical MIC operates:





Source: canadianmortgagetrends.com

MIC regulations

- Almost all MICs are externally managed. The manager originates / arranges mortgages for the MIC. In return, the manager earns an asset management fees from the MIC, and usually receives a portion of the origination fees received from the borrower.
- MICs earn interest and fees (origination, renewal and cancelation) from borrowers.
- MICs finance their mortgage portfolio through debt (banks) and equity (investors).
- After deducting management / origination fees, loan interest and other operational expenses,
 MICs pay out net income as dividends to investors.

MICs are governed by Section 130.1 of the Income Tax Act. In order for an entity to maintain its status as a MIC, it has to comply with several rules; a few of the key rules are listed below. For the full list, refer to the Income Tax Act, Section 130.1.

- Invest at least 50% of its assets in residential mortgage loans,
- Have a minimum of 20 shareholders, and no shareholder can own 25%+ of the total outstanding shares.
- All MIC investments must be in Canada.
- MICs can use leverage of up to 83%, provided at least two-third of its portfolio is represented by residential mortgages and/or cash. The leverage cannot exceed 75% if less than two-thirds of the portfolio is in residential mortgages and/or cash.

MICs pay no corporate tax and act as a flow-through entity. In order to avoid entity level taxation, a MIC has to pay 100% of all of its taxable income as dividends. When received by investors, MIC dividends are treated as interest income for tax purposes. MIC shares are eligible for registered



plans such as RRSPs, RESPs, and TFSAs.

Factors that affect MIC returns

The following are the key parameters to look at when analyzing MICs:

- **Maturity and loan types:** Most MICs provide short-term (typically 6-36 months) loans. Typically, the shorter the term, the lower the risk. This is because short-term loans have less exposure to interest rate and real estate price fluctuations than longer term loans.
- Composition of real estate: MICs are required to hold residential mortgages. As mentioned earlier, at least 50% of a MICs assets must be in residential mortgages and/or cash. The remaining assets can be held in mortgages secured by commercial properties, land, industrial properties, developments, etc. We discuss the various real estate types MICs lend to and their characteristics later.
- **Position of the lender (seniority):** Loans with a first claim on an asset (real estate) are called first mortgages. MICs may also accept lower claim positions on assets (second, third, fourth, etc.). The lender with a first mortgage would have the highest security since in default their claim would be settled before those in a lower position.
- Loan to value (LTV): LTV is basically the borrowed amount as a percentage of the value of the real estate. Although there are no restrictions in maintaining a certain level of LTV, MIC loans typically have LTVs between 50% and 85%. Loans with a lower LTV carry lower risk, as they can sustain a higher drop in real estate prices.
- Geographically diversified portfolio: A geographically well-diversified portfolio (loans secured by properties across various cities and provinces in Canada) mitigates region specific real estate or mortgage lending risks.
- **Dividend yields:** An investment in MICs can be considered an investment in short-term / high-yield bonds. In the current environment, low-risk profile MICs generate about 5% 7% p.a., while medium to high risk profile MICs generate about 7% 10% p.a. for investors in the form of dividends.
- **Deal flow:** This is very crucial for a MIC, as timely deployment of capital is critical. Since MICs generally lend short-term, a manager has to always source new loans or roll-over old loans to ensure cash is deployed. MICs typically source their mortgages directly through their internal managers, and/or indirectly through mortgage brokers.
- **Historic default or loan loss rate:** Historic defaults give an indication towards management's ability to manage the portfolio. From the companies we have reviewed the average default rates for MICs range from 0.5% to 2.5%. Typical residential mortgages have arrears rates of approximately 0.3% (Source: CAAMP).



- Fees: Major fees that MICs incur are management fees and loan origination fees. i) Management fees are generally 1.0% 2.5% p.a. the fee can be tied to Net Asset Value (NAV), investors' capital, or investors' capital plus debt. The best structure, we believe, is to tie fees to NAV as NAV reflects the health / performance of a portfolio. If there are no defaults, the NAV of a MIC should ideally be the same as the original value as all the excess cash flows generated each year are distributed to investors. ii) a loan origination fee of 1% 3% of the loan amount. Managers might either keep this amount for themselves, or pass a portion (all) of it to the fund.
- Operational expenses: If managers keep loan origination fee to themselves, it is reasonable for operating expenses of the fund to be 0.5% 1.5% of the size of the portfolio. If the origination fee is passed on to the fund, operating expenses can be 2.0% 2.5%. When reviewing fees, we recommend reviewing management and operational expenses net of any origination fees.
- **Hurdle rate:** MICs tend to set a hurdle rate all returns up to the hurdle rate will be passed on to investors before management receives a performance fee. Returns over the hurdle rate will usually be shared between investors and managers. Typical hurdle rates are floating (GOC + 4% 7%) or fixed (6% to 8% p.a.). We feel a floating structure is better as it aligns the fund's performance to the market. Most of the low risk profile MICs do not set any hurdle rate to restrict management from taking on higher risks.
- **Performance share** (once hurdle rate is exceeded) is typically 80% to investors: 20% to manager.
- **Redemption options**: Redemption of Public MICs depends on the liquidity of their shares. Most private MICs offer redemption options subject to certain penalties if redeemed prior to a lock-in period.
- **Track record**: Before investing in a MIC, investors should evaluate the MIC's management team, and their operating history. Analyzing the manager's performance for the past 10 years (or over an economic cycle0 is recommended. This analysis will provides a good understanding on their ability to perform in good and bad times.
- **Reliance on the housing market** As at least 50% of the portfolio should be invested in residential mortgages, the performance of MICs is closely linked to the health of the Canadian housing market.
- Sensitivity to changes in interest rates and real estate prices: The structure of the majority of MICs makes them so they are minimally affected by home prices and interest rates in the short term. Since a majority of MIC loan terms range from 6-36 months, they can re-price interest rates almost annually. Over the long-term, we feel that MICs will be able to maintain their spread over bank rates due to the additional risks. The short terms also allow MICs to reassess LTVs if there is a significant fluctuation in real estate prices.



The weighted average LTV is typically 50% - 75%, indicating there would need to be a significant one year drop in property prices to cause the underlying property to be valued at less than the mortgage. However, long term, real estate prices will have an impact on the deal flow to MICs due to the following:

- o If prices decrease, there will be less activity because people hold off purchasing and selling until the market stabilizes.
- o Borrowers will have less collateral to borrow with.
- o Developers and builders will limit construction / development until demand growth returns.
- o A decrease in market activity will reduce mortgage volume, which will impact lenders' deal flow.

Loan Types The properties MICs secure their loans to are not restricted to just residential properties, but also include other property types. The various property types, loan types, and characteristics of each are discussed below.

- Loans secured on existing residential houses / apartments. This category typically has the lowest risk profile. Funds are provided to individuals and landlords mostly to acquire houses and apartments. This sector is a highly competitive due to the active presence of banks and other private lenders. MICs provide loans to borrowers who require financing but are unable to obtain it from large financial institutions.
- Loans secured on low, mid and high-rise residential development land: Loans are provided to developers to acquire pre-developed / developed land for building low-rise buildings, homes and town houses. Mid / high rise loans are provided to developers to acquire land, mainly in urban areas, in order to build mid-high rise residential (5+ story) buildings. Typically, loans secured by low rise developments carry less risk, mainly because these developments can be constructed in stages; if market conditions are unfavorable, these projects can be partially sold and stopped. High-rise loans have a higher risk profile, primarily due to the higher capital requirements (for development and construction), longer construction timeline, possibility of delays, and the presale process.
- Construction loans: These loans are granted to developers of residential, mixed-use and commercial buildings to use the funds for construction purposes. For construction loans, since they are secured by non-income producing properties, a MIC typically tries to mitigate risks by i) using third parties to monitor / assess the construction process, ii) provide the loan in stages based on the progress of construction, iii) require borrowers to assign an interest reserve (from the loan provided) to make interest payments on the loan.
- **Renovation** / **re-developments:** These loans are provided to landlords and developers seeking to renovate or re-develop existing buildings. Borrowers typically borrow in the short term from a MIC to complete improvements, and when finished, refinance with traditional financial institutions (possibly at a longer-term, and at lower interest rates) or sell the property.
- Mezzanine and subordinated financing: For these types of debt financing, MICs will have a lower claim on the asset. These types of financing are inherently riskier than first



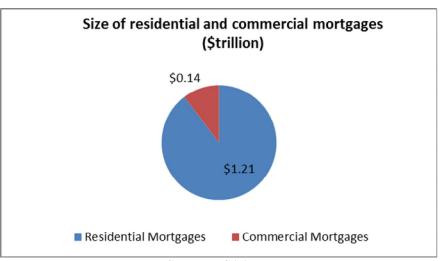
mortgages. There are no institutional providers of this financing, and those that do finance are typically small private entities.

- **Discounted or distressed debt:** These mortgages consist of existing mortgages acquired from larger institutions. These loans are generally bought at a discount to the repayment value. Returns are generated from the interest earned on the mortgage, as well as potential gain from buying at a discount to face value.
- Commercial properties: MICs also extend financing for commercial properties, which is
 generally seen as riskier than residential property because performance is tied to the success
 of the businesses that occupies the building. Commercial properties are also exposed to
 higher concentration risks due to the fewer number of tenants compared to residential
 buildings.

Canadian Mortgage Industry

The mortgage sector can be broadly divided between residential and commercial sub-sectors.

The Canadian residential mortgage market is much larger than the commercial mortgage market. As the following figure shows, as of August 2013, about 90% of the total outstanding mortgages were residential mortgages.

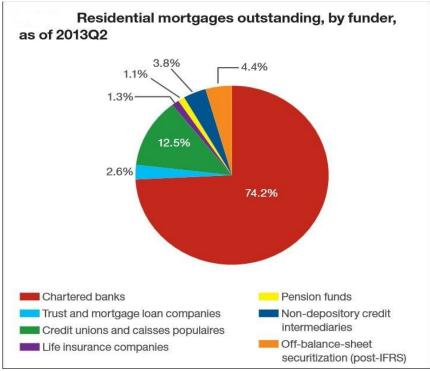


Source: CAAMP

Market Size: According to the Canadian Association of Mortgage Professionals (CAAMP), in 2013, there were about 13.8 million households in Canada, with approximately 9.52 million being homeowners, and 5.6 million carrying a mortgage. By the end of 2013, the Canadian mortgage market was expected to have reached \$1.35 trillion.

Residential mortgage providers: The breakdown of residential mortgage providers, as of Q2-2013, is shown in the following chart.

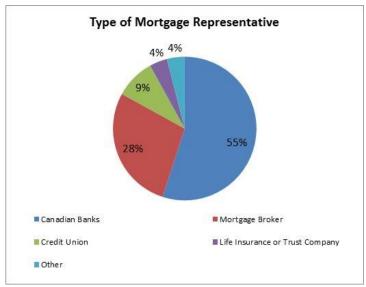




Source: CAAMP

The majority of the outstanding mortgages are through chartered banks. Trust and mortgage loan companies accounted for 2.6% of the total outstanding mortgages.

Deal Flow - The chart below shows who typically originates loans. Chartered banks issue approximately 55% of mortgages, followed by mortgage brokers at 28%. MICs generally receive a majority of their deal flow from mortgage brokers.

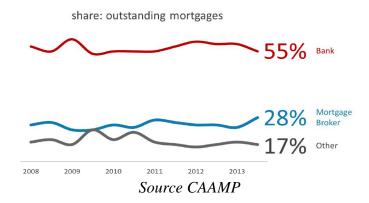


Source CAAMP



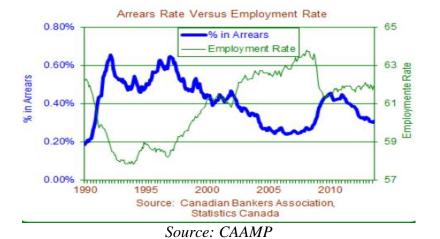
The share of mortgages represented by mortgage brokers is, as of 2013, the highest since 2008 (graph below). We feel that the increasing use of mortgage brokers will benefit the MIC industry since brokers originate a large portion of MIC loans.

Broker share at its highest in five years



Amortization: 84% of mortgages on homes purchased in 2013 had an original amortization of 25 years or less, up from 78% in 2011/2012. The rest of the mortgages (16%) had more than 25 years amortization.

Mortgage arrears: Data from the 7 major banks shows that there was a rise in mortgage arrears during the recession (mid-1990s and 2008-2009). The rate has been dropping since 2010, and is currently at just over 0.3% - which is a positive sign for lenders. It should be noted that CMHC has provided insurance to approximately \$550 billion, or about half of the outstanding residential mortgages.

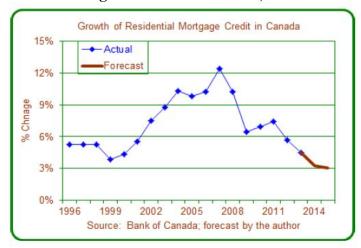


Residential mortgages outlook: According to the Canadian Real Estate Association (CREA), resale activity was estimated at 449,900 units in 2013, a 1.2% drop from 454,463 units in 2012. For 2014, the forecast is a rise of 3.5% to 465,600 units. Also, with regard to the average resale price, CREA forecasts an increase of 1.7% in 2014.

During the past decade, residential mortgage credit in Canada has expanded at an average rate of



8.6% per year. The growth rate of outstanding mortgage credit was about 4%-5% in 2013. For 2014 and 2015, the forecasted growth rates are 3.25%, and 3.00% respectively.



Source: CAAMP

Overall, the growth in mortgages, although slower than historical levels, is positive for MICs.

Commercial Mortgages

Canadian commercial mortgages include non-residential mortgages such as hotels, stores, office buildings, garages, theatres, warehouses, industrial plants, institutional properties, farms, vacant land, etc.

Market Size: The commercial mortgage market in Canada has shown tremendous growth, from about \$50 billion in 2000, to \$139 billion by May 2013. This value is up from \$126.7 billion in 2011, representing a growth of 10% over the two years, or 4.9% annually.

Mortgage Providers: Market players are chartered banks, trust and mortgage loan companies, credit unions, life insurance companies, etc. The share of each lender type is shown in the charts below:



Source: REALpac

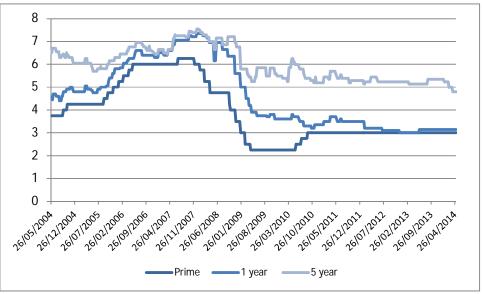


Life insurance companies used to have the largest market share in 2011 (28.7%); however, there was a decline in their holdings over the past few years-as their market share reduced to 19% by 2013.

The institutions that have increased their holdings are chartered banks and credit unions, both of which have recently surpassed life insurance companies with 26%, and 21% market share, respectively.

Interest Rates Mortgages can have either fixed rates or variable rates. Fixed mortgage rates are influenced by Canadian government bond yields (GoC) of similar maturities. Variable mortgage rates vary with the prime Rate, which in turn, is determined by the overnight rate. Variable mortgage rates are often quoted as prime + a spread. As of 2013, about 66% of mortgages were fixed rate mortgages, 26% were variable rate, and 8% had hybrid rates.

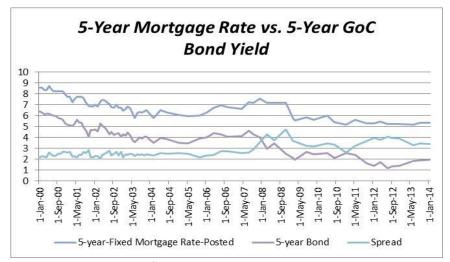
The following chart show the 1-year conventional mortgage, 5-year conventional mortgage and the prime rate trends since 2004.



Source: Bank of Canada

The 5-year mortgage rate vs. 5-year GoC bond rate since 2000 is shown in the graph below:





Source: Various sources

As shown in the figure above, the spread between the 5-year fixed residential mortgage rate and the 5-year GoC bond yield has averaged around 270 bps since 2000. The spread widened during the 2008-09 credit crisis (to about 390 bps) due to a significant decline in GoC bond yields. The current spread is approximately 340 bps.

The weighted average interest rate charged by public MICs is approximately 9.2% per annum. Rates charged by private MICs are very similar to public MICs. From our research, we estimate that the average rate for private MICs is in the 8% - 10% range.

Public and Private MICs

According to our research, there are over 300 MICs in Canada; however, only eight of them are publicly traded.

We have separated the publicly traded groups into three categories - public MICs, senior public MICs, and public investment funds. The main advantage of public MICs is liquidity for investors. However, publicly traded companies are subject to share price volatility, and regulations associated with being listed companies.

The following table shows public MICs:



Public MICs

MICs	Inception date	Size of mortgage portfolio (gross) (million)
Atrium Mortgage Investment Corp. (TSX: AI)	2001	\$282.4
Firm Capital Mortgage Investment Corp. (TSX: FC)	1999	\$317.7
Timbercreek Mortgage Investment Corp. (TSX: TMC)	2005	\$472.7
TREZ Capital Mortgage Investment Corp. (TSX: TZZ)	2012	\$235.5

Senior Public MICs There are currently two publicly traded senior MICs, which are listed in the table below. Since these MICs invest 100% in first mortgages, they tend to - i) charge a lower interest rate on their loans, and ii) have lower LTVs. Given the lower risk profiles of these MICs, returns are lower compared to the other publicly traded MICs.

Senior MICs	Inception date	Size of mortgage portfolio (gross) (million)
Timbercreek Senior Mortgage Investment Corp.(TSX: MTG)	2012	\$500.1
TREZ Capital Senior Mortgage Investment Corp.(TSX: TZS)	2012	\$113.7

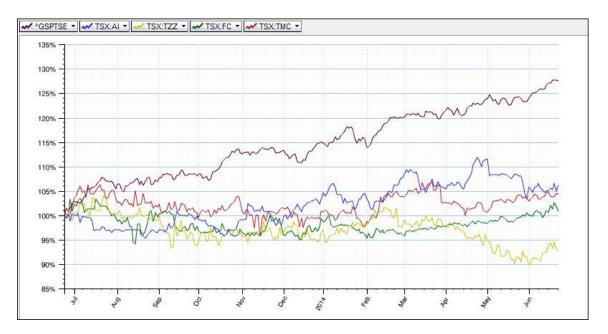
Public Investment Funds Public Investment Funds are funds structured as closed-end investment funds; this means their units trade on the TSX. Two of these publicly traded funds are listed below.

Funds	Inception date	Size of mortgage portfolio (gross) (million)
Brompton Group- Eclipse Residential Mortgage Investment Corporation. (Pubic Fund-TSX: ERM)	2013	\$38
First National Mortgage Investment Fund (TSX: FNM.UN)	1988	\$62



It should be noted that ROI Capital (with three publicly listed funds - RIH.UN, RIR.UN, RIL.UN) and MCAN Mortgage Corporation (TSX: MKP) are two other publicly traded private lenders which are not listed in the tables above. ROI is not comparable to MICs as they hold real estate assets in their portfolio. In the case of MCAN, they are involved in the securitization of insured mortgages, which is not a typical business practice of MICs.

The chart below shows the 1 year returns of publicly traded MICs (not including senior MICS and public investment funds) relative to the TSX Composite Index. Keep in mind that the chart below shows the returns (from share price appreciation / depreciation) excluding annual dividends received by investors.



Source: FRC / Capital IQ

Over the last year, the TSX Composite Index rose 27.61% (period ended June 24, 2014). When annual dividends are combined with stock performance, the average total return over the last year, of the publicly traded MICS, was 8.34%, with a range of -0.28% to 13.90%.

Below is a list of 24 private corporation/funds that we randomly selected to evaluate the private MIC space. A majority of these private MICs are based in Western Canada. Note that not all the companies in the table below are structured as MICs, but they all have the same business model.



Private MICs

Name of the fund	Inception date	Size of mortgage portfolio (\$million)
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	2009	\$ 19.30
Fisgard Capital Corporation	1994	\$ 224.00
Antrim Balanced Mortgage Fund	1993	\$ 200+
Great Pacific Mortgage- Accredit Mortgage Ltd.	1994	\$ 50.00
Great Pacific Mortgage-First Accredit Mortgage Corp.	2002	\$ 15.00
Great Pacific Mortgage-GP MIC Fund Ltd.	2006	\$ 1.20
Dundarave Mortgage Investment Corp. Preferred "A"	2009	\$ 7.00
Magenta Mortgage Investment - Magenta II Fund	1994	\$ 2.00
VWR Capital Corp.	1993	\$ 160.00
Terrapin Mortgage Investment Corp.	2007	\$ 134.00
Pacifica Mortgage Investment Corporation	1994	\$ 54.00
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.	Company (2010)- Fund(2012)	\$ 7.90
Westboro Mortgage Investment	2005	\$ 69.70
Mandate Mortgage	1982	\$ 6.70
Frontenac Mortgage Investment Corporation	1983	\$ 109.00
Canacare MIC - Carevest senior MICs	1994	Fund: \$228.60
Canacare MIC - Carevest MIC	1994	\$ 230.32
Harbour Edge Mortgage Investment Fund	2005	\$ 162.00
Caplink (As of June 2013)	2005	\$ 16.29
Premiere Canadian Mortgage Corp.	1996	\$ 62.62
Mission Creek Mortgage Ltd.	1994	\$ 126.50
Tri City Mortgage Investment Fund	2010	\$ 11.30
Capital Direct	2006	\$ 36.00
Rompsen	2006	\$ 1,082.00



Reference Table The following section presents and compares some of the key variables discussed earlier for each of the MICs we selected for our analysis. The highlighted blue represents publicly traded MICs.

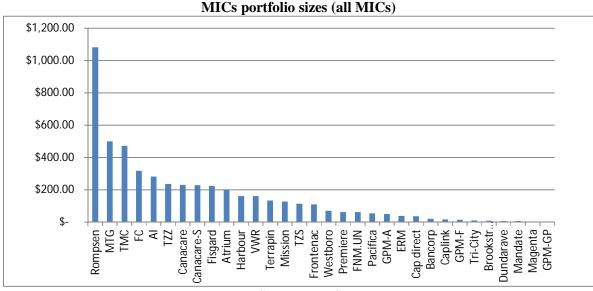
B 410

MIC	Reference
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	Bancorp
Fisgard Capital Corporation	Fisgard
Antrim Balanced Mortgage Fund	Atrium
Great Pacific Mortgage- Accredit Mortgage Ltd.	GPM-A
Great Pacific Mortgage-First Accredit Mortgage Corp.	GPM-F
Great Pacific Mortgage-GP MIC Fund Ltd.	GPM-GP
Dundarave Mortgage Investment Corp. Preferred "A"	Dundarave
Magenta Mortgage Investment - Magenta II Fund	Magenta
VWR Capital Corp.	VWR
Terrapin Mortgage Investment Corp.	Terrapin
Pacifica Mortgage Investment Corporation	Pacifica
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.	Brookstreet
Westboro Mortgage Investment	Westboro
Mandate Mortgage	Mandate
Frontenac Mortgage Investment Corporation	Frontenac
Canacare MIC - Carevest senior MICs	Canacare-S
Canacare MIC - Carevest MIC	Canacare
Harbour Edge Mortgage Investment Fund	Harbour
Caplink (As of June 2013)	Caplink
Premiere Canadian Mortgage Corp.	Premiere
Mission Creek Mortgage Ltd.	Mission
Tri City Mortgage Investment Fund	Tri-City
Capital Direct	Cap direct
Rompsen	Rompsen
Atrium Mortgage Investment Corp. (TSX: AI)	Al
Firm Capital Mortgage Investment Corp. (TSX: FC)	FC
Timbercreek Mortgage Investment Corp. (TSX: TMC)	TMC
TREZ Capital Mortgage Investment Corp. (TSX: TZZ)	TZZ
Timbercreek Senior Mortgage Investment Corp.(TSX: MTG)	MTG
TREZ Capital Senior Mortgage Investment Corp.(TSX: TZS)	TZS
Brompton Group- Eclipse Residential Mortgage Investment Corporation. (Pubic Fund-TSX: ERM)	ERM
First National Mortgage Investment Fund (TSX: FNM.UN)	FNM.UN

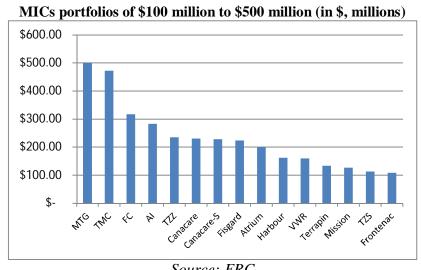
Portfolio Size

The following chart shows the portfolio size of the listed companies in order of largest to smallest. Rompsen had the largest portfolio with over a billion dollars. Public companies had portfolio size averages much higher than private MICs. Aside from the senior MICs and closed investment funds, the public MIC portfolios were north of \$200 million. The larger private MICs are nearing the size of the public companies at around \$200 million. We feel that assets in excess of \$200 million are where private MICs have the resources to go public.





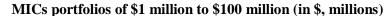
The below chart displays MICs with portfolios ranging from \$100 million to \$500 million. As shown, the largest funds were publicly traded.

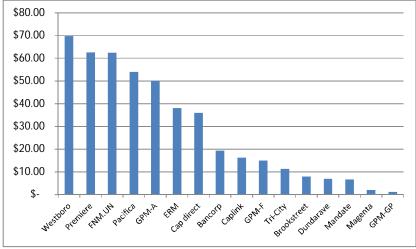


Source: FRC

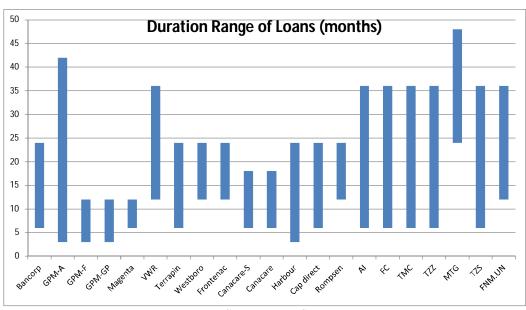
MICs with portfolio sizes of \$1 million to \$100 million are shown below. In this group, the portfolios are typically concentrated in 1 or 2 geographic locations.







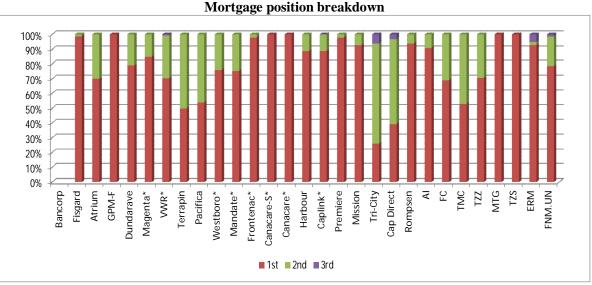
The minimum and maximum loan duration by months for various MICs are shown below. As discussed earlier, the loans are primarily short term, with most maximums being 24 to 36 months. We found that private MICs generally have lower durations than the public MICs.



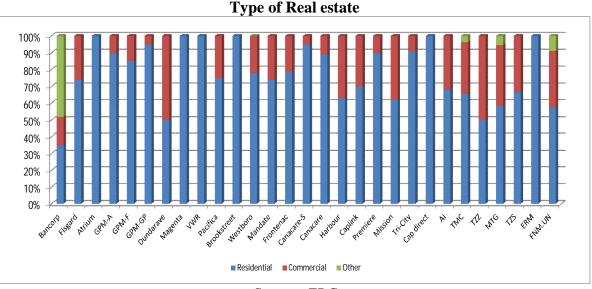
Source: FRC

The breakdown of loans by position (security) is shown below. Most funds have a mix of primarily first with some second mortgages.





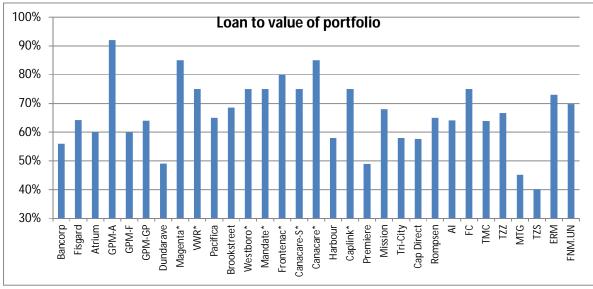
The portfolio breakdown by type of real estate loans are secured to is shown below. Residential real estate makes up the majority of most funds with some also lending to commercial properties. Other real estate includes industrial and raw land.



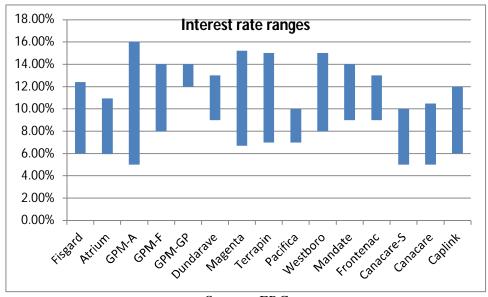
Source: FRC

The average LTV of loan portfolios are displayed below. The average for public MICs is around 69%, with senior publicly traded MICs in the low 40%s. The average LTV of privately traded MICs is very close to the public at 68%





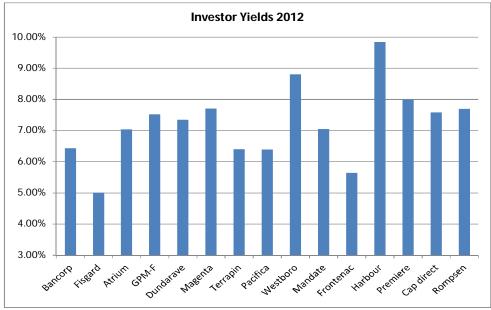
There is minimal data available in the public domain on the interest rates charged by private MICs. The chart below shows interest rates charged by MICs we have attained data for. Rates for the larger public MICs average between 8%-10%, with the senior MICs charging much lower at around 5% - 6%.

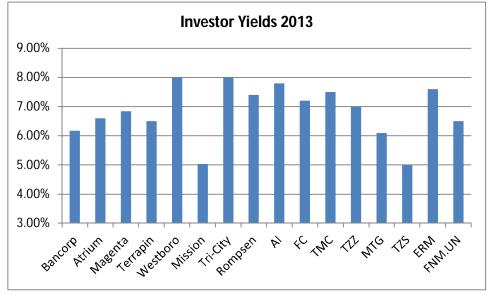


Source: FRC

Investor yields for 2012 and 2013 are shown below. Note that the yields are not directly comparable as yields vary with portfolio risk profiles.







Source: FRC

Conclusion

Overall, we feel that the MIC industry offers an attractive alternative investment opportunity for investors seeking yield. As discussed throughout this report, there are various characteristics of each MIC that investors can target to adjust the risk profile of the investment. We feel that this industry will continue to grow with the expanding economy and growth in real estate.



Appendix

The following tables contain the key parameters of the private and public MICs used in our analysis. Private company data was attained through company websites, investor presentations, public filings and company submitted data. For public companies, data was attained through company websites, investor presentations and public filings.

Private MICs

Name of the fund	Inception date	Size of mortgage portfolio (\$million)	Diversity (%, residential, commercial, etc.)	Regional diversification (please name provinces)
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	2009	\$ 19.30	Multifamily: 38%, residential land:30.2%, single family: 4.8%, commercial: 17.3%, industrial 9.1%	BC and AB
Fisgard Capital Corporation	1994	\$ 224.00	Residential: 74%, Commercial: 26%	BC & AB
Antrim Balanced Mortgage Fund	1993	\$ 200+	Residential	BC and Alberta
Great Pacific Mortgage- Accredit Mortgage Ltd.	1994	\$ 50.00	Residential: 90% Commercial: 10%	BC. Mainly Vancouver Island
Great Pacific Mortgage-First Accredit Mortgage Corp.	2002	\$ 15.00	Residential: 85%, Commercial: 15%	BC. Mainly Vancouver Island
Great Pacific Mortgage-GP MIC Fund Ltd.	2006	\$ 1.20	Residential:95% Commercial: 5%	BC. Mainly Vancouver Island
Dundarave Mortgage Investment Corp. Preferred "A"	2009	\$ 7.00	Residential: 50% Commercial:50%	BC & Alberta
Magenta Mortgage Investment - Magenta II Fund	1994	\$ 2.00	100% residential	Ontario
VWR Capital Corp.	1993	\$ 160.00	Almost 100% residential	BC, Alberta, Manitoba, and Ontario.
Terrapin Mortgage Investment Corp.	2007	\$ 134.00	residential and commercial	BC, Alberta and Manitoba,
Pacifica Mortgage Investment Corporation	1994	\$ 54.00	Policy: Residential 75% and Commercial to max of 25%	Greater Vancouver and major urban centers in BC and Alberta
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.	Company (2010)- Fund(2012)	\$ 7.90	100% residential	Ontario
Westboro Mortgage Investment	2005	\$ 69.70	residential: 78% and commercial 22%	Ontario and QC
Mandate Mortgage	1982	\$ 6.70	Residential:74%, commercial: 26%	BC
Frontenac Mortgage Investment Corporation	1983	\$ 109.00	Residential (79%), Commercial and vacant land (21%)	Ontario and Nova scotia
Canacare MIC - Carevest senior MICs	1994	Fund: \$228.60	residential (95%) and commercial (5%)	AL and BC and ON
Canacare MIC - Carevest MIC	1994	\$ 230.32	Residential 89% and Commercial 11%	AL and BC and ON
Harbour Edge Mortgage Investment Fund	2005	\$ 162.00	Residential: 63%, Commercial: 37%	Ontario: 62.24%, NB: 25.62%, NS: 10.56%, PEI: 1.58%
Caplink (As of June 2013)	2005	\$ 16.29	Residential:70%, Commercial:30%	AB: 98%, BC: 2%
Premiere Canadian Mortgage Corp.	1996	\$ 62.62	Residential:90+%, Commercial:10%	BC, Alberta, Manitoba, and Ontario
Mission Creek Mortgage Ltd.	1994	\$ 126.50	Residential:62%, Commercial: 38%	
Tri City Mortgage Investment Fund	2010	\$ 11.30	Residential: 91%, Commercial: 9%	AL: 12%, BC: 88%
Capital Direct	2006	\$ 36.00	100% Residential	2012: AB: 18.28%, BC: 49.70%, ON: 31.41%, Atlantic: 0.6%
Rompsen	2006	\$ 1,082.00	Residential and Commercial	US: 12%, BC: 16%, AB: 16%, ON: 47% , Other: 9%



Name of the fund	Type of mortgages (%, first, second, etc.)	Interest (lending) rate (range)	Loan duration (range)	Average Loan to Value (LTV)
Bancorp-Bancorp Balanced Mortgage Fund II Ltd		8.80%	6 to 24 month	not more than 75%- current is 56%
Fisgard Capital Corporation	98.78% 1st, 1.22% 2nd	6% - 12.4%	13 months average term	64.14%
Antrim Balanced Mortgage Fund	70% 1st, 30% 2nd	5.95-10.95%	12 months	60.00%
Great Pacific Mortgage- Accredit Mortgage Ltd.	Primarily 1st, some 2nd +	Presently 5% -16%, historical of 12% +/-	3-42 months	currently: 92% due to foreclosures
Great Pacific Mortgage-First Accredit Mortgage Corp.	1st mortgages only	8% - 14%	3-12 months	60%
Great Pacific Mortgage-GP MIC Fund Ltd.	2nd & 3rd mortgages.	12% - 14%	3-12 months	64%
Dundarave Mortgage Investment Corp. Preferred "A"	79%: 1st, 21%: 2nd	9-13%	13 months	49.1% (as of 12/12/2013)
Magenta Mortgage Investment - Magenta II Fund	first mortgage: 80%-90%, Second Mortgage:10-20%	6.7%-15.2%	6-12 months	50-85%
VWR Capital Corp.	Average of last three years (1st:70.54%, 2nd:28.76%, 3rd:0.69%)	9.97 % (Weighted Average of last 3 years)	1-3 years (but generally 1 year)	Max 75%
Terrapin Mortgage Investment Corp.	first and second mortgages 7%-15% 6-24 month terms (2012 -1 months)		6-24 month terms (2012 -12 months)	
Pacifica Mortgage Investment Corporation	1st and 2nd mortgages (2012: 48%/52%- 2011: 58%/ 42% average: 53%/52%)	6.99%-9.99%(actual average 7.25%) or prime plus 4%		Max 75%(Average 65%)
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.	1st and 2nd mortgages			company: 82%, fund : 68.5%
Westboro Mortgage Investment	First:76% and Second mortgages: 24%	1st: 7.99% – 12.95% 2nd: 11.00% – 15.00%	12-24 months	65-75%
Mandate Mortgage	First:75.4%, Second: 24.6%	9-14%		Max 75% (between 60%- 100%)
Frontenac Mortgage Investment Corporation	Target: 98 % First and 2% second	9-13%	Average 26 months (1-2 years)	75%-80%
Canacare MIC - Carevest senior MICs	100% first	5-10%	6-18 months	Max 75%
Canacare MIC - Carevest MIC	100% first	5-10.5%	6-18 months	Max 85%
Harbour Edge Mortgage Investment Fund	First: 89%, Second: 11%		Less than 24 Months, average 8.1 months	58%
Caplink (As of June 2013)	First: 89%, Second: 11%	6%-12%, average: 8.2%	On average 12 Months	Policy: Max 75% (Residential and Commercial) 50%-55% land
Premiere Canadian Mortgage Corp.	First: 98%			49%
Mission Creek Mortgage Ltd.	First: 93%,			68%
Tri City Mortgage Investment Fund		10%	13 months	58%
Capital Direct	First: 39% Second: 58% Third: 3%		6-24 months	57.60%
Rompsen	94% First, 6% second and third	10.50%	12-24 months	65%



Name of the fund	Last 5 year default rate	Distribution (monthly, quarterly, etc.)	Hurdle rate	Annual yields for investors in the past five years. (Please state yield for every year starting 2008)
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	no default	quarterly	2 year GOC bond yield%	Q2-2013: 6.17, 2012:6.43, 2011:6.59, 2010:6.50, 2009: 5.5%
Fisgard Capital Corporation	1.75% (average)	quarterly	Nii	2012 - 5.003%, 2011 - 5.203%, 2010 - 5.212%, 2009 - 6.000%, 2008 - 9.262%
Antrim Balanced Mortgage Fund	1/2%	quarter	6.50%	2013-6.6%, 2012 - 7.04%, 2011 - 7.86%, 2010 - 8.45%, 2009 - 9.59%, 2008 - 10.12%
Great Pacific Mortgage- Accredit Mortgage Ltd.	est. @ 50%	Otrly	N/A	2008 - 11.67%, 2009 @ 7.29%, 2010 @ 6.12%, 2011 @5.14% 2012 - 0% (distributions of appx. 3.2% declared as ROC - return of capital)
Great Pacific Mortgage-First Accredit Mortgage Corp.	est. @ 15%	Qtrly	N/A	2008 @ 7.95%, 2009 @ 9.17%, 2010 @ 7.72%, 2011 @ 7.52%, 2012 @ 7.52%
Great Pacific Mortgage-GP MIC Fund Ltd.	est. @ 30%	Quarterly	N/A	2008 @ 13.79%, 2009 @ 10.92%, 2010 @ 9.44%, 2011 @ 8.20%, 2012 - 0% (distributions of appx. 4.5% declared as ROC - return of capital)
Dundarave Mortgage Investment Corp. Preferred "A"	0%	Quarterly	Nil	09 - 8.69%,10-8.19%,11-6.95,12-7.35%
Magenta Mortgage Investment - Magenta II Fund		Monthly		2013-6.84%, 2012-7.71%, 2011-8.44%, 2010-9.05%, 2009-8.40%, 2008-10.10%
VWR Capital Corp.	2012 (2.55%)	Quarterly	Nil	Average of the last 10 years, 10.96%
Terrapin Mortgage Investment Corp.	Reserve for loss is 2.5% of loan receivable	Annually or quarterly	8%	2013-6.5%, 2012 - 6.4%, 2011 - 6.2%, 2010 - 7.1%, 2009 - 9.2%, 2008 - 11.2%
Pacifica Mortgage Investment Corporation		Quarterly	Nil	2012 - 6.39%, 2011 - 7.29%.
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.		Quarterly	6% for the fund	8% corporation and 6% for the fund on average
Westboro Mortgage Investment		Monthly	the Bank of Montreal 5 year GC rate, plus 4%-8%	2013-8%, 2012 - 8.8%, 2011 - 9.1%, 2010 - 9.3%, 2009 - 9.9%, 2008 - 9.7%
Mandate Mortgage	provision for bad debt about 1.4%, average 1% since inception	Quarterly	Royal Bank of Canada prime lending rate plus 2% per annum	9.92% since inception ,2012 - 7.05%, 2011 - 5.71%, 2010 -6.95%
Frontenac Mortgage Investment Corporation	Average of the last five years (0.58%)	Monthly		2012 -5.64%, 2011 -6.67%, 2010 -5.01%, 2009 - 5.88%, 2008 -6.24%
Canacare MIC - Carevest senior MICs		Monthly	(b) the average of the two-year Government of Canada bond yield on the last day of each calendar month during the year plus 400 basis points.	
Canacare MIC - Carevest MIC		Monthly	(b) the average of the two-year Government of Canada bond yield on the last day of each calendar month during the year plus 400 basis points.	
Harbour Edge Mortgage Investment Fund		Monthly		2012 - 9.84%, 2011 - 10.00%, 2010 - 10.09%, 2009 - 10.11%, 2008 - 10.05%
Caplink (As of June 2013)	last four years:2.22%	Monthly	Nil	past three years: 5-6%
Premiere Canadian Mortgage Corp.	over the last 17 years being under \$900,000.			2012 - 8%, 2011 - 8.3%, 2010 - 9.9%, 2009 - 9.7%, 2008 - 12.5%
Mission Creek Mortgage Ltd.				Current:5.03%, Since Inception 8%
Tri City Mortgage Investment Fund	2011 and 2012 no default	Quarterly	8%	8%
Capital Direct		Quarterly	80% of the net income	7.58% in 2012
Rompsen		Quarterly		2013:7.4% 2012:7.7% 2011: 8.2% 2010: 8.7% 2009: 8.7% 2009: 9.9%



Name of the fund	Management fee (please also state if it is tied to NAV or AUM, etc.)	Performance fee	Loan origination fee (range)	Number of funds under management
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	1.5% of investors capital	Net profits remaining after the priority dividends are paid will be divided 75% investors: 25% to management.	nil	5
Fisgard Capital Corporation	1.95% Tied to AUM	Nil 0.12% - 2.35%(this w MICs to benefit shar		1
Antrim Balanced Mortgage Fund	1.5% of AUM	Nil	N/A	4
Great Pacific Mortgage- Accredit Mortgage Ltd.	Annual Fee is 2% of AUM (paid monthly)	Nil	N/A	3 MIC funds
Great Pacific Mortgage-First Accredit Mortgage Corp.	Annual Fee is 2% of AUM (paid monthly)	Nil	N/A	3 MIC funds
Great Pacific Mortgage-GP MIC Fund Ltd.	Annual Fee is 2.5% of AUM (paid monthly)	Nil	N/A	3 MIC funds
Dundarave Mortgage Investment Corp. Preferred "A"	2% of invested funds	<u>n/a</u>	1-2%	one
Magenta Mortgage Investment - Magenta II Fund			0.4% -5.1% retained fee	1
VWR Capital Corp.	1.3% of the total mortgage portfolio	n/a	N/A	1
Terrapin Mortgage Investment Corp.	10% of earning in excess of greater of 8% or the two-year Government of Canada Benchmark Bond rate plus 4%	12.5 % of earning in excess of greater of 10 % or the two year Government of Canada Benchmark Bond rate plus 6%	N/A	1
Pacifica Mortgage Investment Corporation	2% of outstanding balance of the mortgage assets under management and 25% of all fee income (origination fee)	Nil	1%	1
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.				1
Westboro Mortgage Investment	2% on the balance of the asset of the portfolio	A 1.0% bonus if the higher than the Bank of Montreal 5 year GC rate, plus 4%	2%	1
Mandate Mortgage	2% of mortgages receivable and cash, at each fiscal year end of up to \$25 million and 1.5% on the balance with respect to that fiscal year	n/a		1
Frontenac Mortgage Investment Corporation	1% of the fund's asset	n/a		1
Canacare MIC - Carevest senior MICs	1.35% per annum of the gross assets of the MIC attributable to the Class A Shares	20% of the amount by which the Net Return of the Class A Shares exceeds the product of (a) the average month-end NAVs during such year, and (b) the average of the two-year Government of Canada bond yield on the last day of each calendar month during the year plus 400 basis points.	0.15% of the outstanding aggregate principal balance of all mortgage loans	6
Canacare MIC - Carevest MIC	1.35% per annum of the gross assets of the MIC attributable to the Class A Shares	20% of the amount by which the Net Return of the Class A Shares exceeds the product of (a) the average monthend NAVs during such year, and (b) the average of the two-year Government of Canada bond yield on the last day of each calendar month during the year plus 400 basis points.	0.15% of the outstanding aggregate principal balance of all mortgage loans	6
Harbour Edge Mortgage Investment Fund	2% of the Net Asset	Nil		1
Caplink (As of June 2013)	2% of Invested Capital + Line of Credit Drawn	Nil	Nil	1
Premiere Canadian Mortgage Corp.				
Mission Creek Mortgage Ltd.				
Tri City Mortgage Investment Fund	1.25% p.a. of the NAV	50% of income above the 8% p.a. preferred return	1.5-1.7%	2
Capital Direct	2% of the NAV	20% of the net income		1
Rompsen	1% of all mortgages		0.67% p.a. of all mortgages plus 0.67% p.a. of fair market value of any non mortgage partnership investment	1



Name of the fund	Use debt? (Y/N)	Redemption (Y/N) - please include penalties if applicable
Bancorp-Bancorp Balanced Mortgage Fund II Ltd	No debt but line of credit	yes
Fisgard Capital Corporation	N-LOC for \$25 Million	Fixed Term Investments, 5 year term redemption @ maturity, 3 year term redemption @ maturity, 1 year term redemption @ maturity
Antrim Balanced Mortgage Fund	Yes	no penalty
Great Pacific Mortgage- Accredit Mortgage Ltd.	Yes	No. Please contact for further information.
Great Pacific Mortgage-First Accredit Mortgage Corp.	Yes	Yes - no retraction fees. Please contact for further information.
Great Pacific Mortgage-GP MIC Fund Ltd.		Yes - no retraction fees. Please contact for further information.
Dundarave Mortgage Investment Corp. Preferred "A"	No	Yes, no penalties
Magenta Mortgage Investment - Magenta II Fund	Magenta MICs employ a bank credit facility.	The Retraction Fee (I) first 6 months, 3.75%; (ii) second 6 months, 2.00%. 10% following the first year with no Fee
VWR Capital Corp.	Yes- \$35 million LOC	Yes- no penalties
Terrapin Mortgage Investment Corp.	NO, line of credit	Yes- with 6 months notice, at par
Pacifica Mortgage Investment Corporation	No debt	Issuer redemption not investors
Brookstreet Mortgage Investment Corporation- Brookstreet MIC II Inc.		
Westboro Mortgage Investment		Yes
Mandate Mortgage	No	Yes
Frontenac Mortgage Investment Corporation	No- line of credit	Yes
Canacare MIC - Carevest senior MICs	it does not currently have any long term debt, but has access to a \$\$ million demand facility from a related entity priced at prime + 1% and a \$4 million operating facility from a major Canadian chartered bank.	Yes- no penalty
Canacare MIC - Carevest MIC	does not currently have any long term debt, but has access to a \$5 million demand facility from a related entity priced at prime + 1%.	Yes- no penalty
Harbour Edge Mortgage Investment Fund		Yes
Caplink (As of June 2013)	Yes	Yes
Premiere Canadian Mortgage Corp.		
Mission Creek Mortgage Ltd.		
Tri City Mortgage Investment Fund	Yes	Redemption fee applicable on a declining scale (5% in Year 1 declining to 0% for Year 5+)
Capital Direct	Yes	Yes
Rompsen	Yes	Yes



Public MICs -

MICs	Inception date	Size of mortgage portfolio (gross) (million)	Mortgage types	Regional diversification	Mortgage seniority	Weighted average interest rate	Average duration
Atrium Mortgage Investment Corp. (TSX: AI)	2001	\$282.4	Residential: 68.3%, Commercial:31.7%	ON: 88.9%, BC: 2.3%, AB & SK: 8.8%	First: 90.9%, Others: 9.1%	8.7%	6-36 months
Firm Capital Mortgage Investment Corp. (TSX: FC)	1999	\$317.7	Residential and Commercial	ON: 72.0%, AB: 12.0%, QC: 8.0%, BC: 5.0%, Other: 3.0%	First: 69.0%, Others: 31.0%	8.6%	6-36 months
Timbercreek Mortgage Investment Corp. (TSX: TMC)	2005	\$472.7	Residential: 65.3%, Commercial: 31.0%, Iand: 3.7%	ON: 53.5%, AB: 11.0%, BC: 6.2%, QC:12.3%, Others:17%	First 53.1%, Others: 46.9%	9.6%	6-36 months
TREZ Capital Mortgage Investment Corp. (TSX: TZZ)	2012	\$235.5	Residential: 50.1%, Commercial: 49.9%	AB: 41.0%, ON: 37.7% NB: 9.3%, Others: 12.0%	First 70.8%, Others: 29.2%	9.30%	6-36 months

MICs	LTV	Last 5 year default rate	Distribution (monthly, quarterly,	Hurdle rate	Annual dividend yield (2013)	Management fee	Performance fee
Atrium Mortgage Investment Corp. (TSX: AI)	64.1%	0.024% since inception	Monthly	Nil	7.8%	0.85% of the face value of all mortgages	Ni I
Firm Capital Mortgage Investment Corp. (TSX: FC)	75.0%	provision -1% loss in 2011 and 2012: no default	Monthly	10% ROI on Conventional Investments	7.2%	0.85% of the face value of all mortgages	25% of profit
Timbercreek Mortgage Investment Corp. (TSX: TMC)	63.9%	2013: 0.34% (estimated loss provision) 2012(nil)	Monthly	2 year GoC yield + 450bps	7.5%	1.2% of the gross assets	20% of the net return
TREZ Capital Mortgage Investment Corp. (TSX: TZZ)	66.7%	Nil	Monthly	2 year GoC yield + 450bps	7.0%	1.25% of the gross assets	20% of the net return

MICs	Origination fee	Number of funds under management	Use of debt	Redempti on (Y/N) - please include	De bt to Capital	Annual return to investors (2012)	Annual return to investors (2013)
Atrium Mortgage Investment Corp. (TSX: AI)	1% of each mortgage, and up to 50% of the fees in excess of that amount	1	Yes	yes	24.0%	7.9%	7.80%
Firm Capital Mortgage Investment Corp. (TSX: FC)	75% of commitment and renewal fees	1	Yes	Yes	37.3%	8.0%	7.2%
Timbercreek Mortgage Investment Corp. (TSX: TMC)	Nil (commissions might be paid to outside brokers)	1	Yes		25.4%	8.3%	7.5%
TREZ Capital Mortgage Investment Corp. (TSX: TZZ)	60% of the commitment fee	Historically 5 including this fund	Yes			8.0%	7%



Senior public MICs and Public investment funds

Senior MICs	Inception date	Size of mortgage portfolio (gross) (million)	Mortgage Types	Regional diversification	Mortgages seniority
Timbercreek Senior Mortgage Investment Corp.(TSX: MTG)	2012	\$500.1	Residential: 58.2%, commercial 36.5%, land 5.3%	ON: 59.7%, QC:16.8%, AB: 11.9%, Others: 11.6%	First: 100%
TREZ Capital Senior Mortgage Investment Corp.(TSX: TZS)	2012	\$113.7	Residential: 66.8%, commercial: 33.2%	ON: 65.1%, BC: 15.5%, AB: 14.4%, SK and NS: 5%	First: 100%
Funds	Inception date	Size of mortgage portfolio (gross) (million)	Diversity	Regional diversification	Mortgages seniority
Brompton Group- Eclipse Residential Mortgage Investment Corporation. (Pubic Fund-TSX: ERM)	2013	\$38	Residential: 100%	ON: 60%, BC: 17%, AB: 10%, SK: 2%, QC: 8%, NS: 2%, MB: 1%	First: 93%, second: 2%, others: 5%
First National Mortgage Investment Fund (TSX: FNM.UN)	1988	\$62	Residential: 57.5%, Commercial: 33.8%, Land: 8.7%	ON: 46.90%, AB: 16.3%, Atlantic Canada:13.90%, QC: 8.30%, MB: 7.20%, SK: 3.9%, BC: 3.7%	First: 78.4%, second: 20.3%, third:1.3%

Senior MICs	Weighted average interest rate	Average duration	LTV	Last 5 year default rate	Distribution (monthly, quarterly, etc.)	Hurdle rate	Annual yields for investors(2012)	Management fee
Timbercreek Senior Mortgage Investment Corp.(TSX: MTG)	6.7%	24-48 months	45.1%	2013: Loss Provision(nil) 2012: loss Provision(nil)	Monthly	2 year GoC yield + 450bps	6.1%	1.2% of the gross asset
TREZ Capital Senior Mortgage Investment Corp.(TSX: TZS)	6.20%	6-36 months	40.1%	Nil	Monthly	Nil	5.0%	0.85% of the gross assets
Funds	Weighted average interest rate	Average duration	LTV	Last 5 year default rate	Distribution (monthly, quarterly,	Hurdle rate	Annual yields for investors	Management fee
Brompton Group- Eclipse Residential Mortgage Investment Corporation. (Pubic Fund-TSX: ERM)	4.70%	Up to 36 months	73.0%	No loss in 2012	monthly,	Nil	Current (7.6%)	1.75% of the NAV
First National Mortgage Investment Fund (TSX: FNM.UN)		12-36 months	69.7%	No loss in 2012	monthly	6% monthly distribution	Current (6.5%)	1.35% of the NAV

Senior MICs	Performance fee	Origination fee	Number of funds under management	Use of debt	Redemption (Y/N) - please include penalties if	Debt to Capital (as of Sep. 2013)
Timbercreek Senior Mortgage Investment Corp.(TSX: MTG)	20% of the net return	Nil	1	Yes		31.1%
TREZ Capital Senior Mortgage Investment Corp.(TSX: TZS)	Nil	60% of the commitment fee	Historically 5 including this fund	Yes		
Funds	Performance fe e	Origination fee	Number of funds under management	Use of debt	Redemption (Y/N) - please include	Debt to Capital (as of Sep. 2013)
Brompton Group- Eclipse Residential Mortgage Investment Corporation. (Pubic Fund-TSX: ERM)	Nil	Nil	12 funds by Bompton Group	No	Annual redemptions (commencing December 2014)	
First National Mortgage Investment Fund (TSX: FNM.UN)	0.2% of above average of 2-year GOC yield plus 400 bsp	0.5-1%	MIC -1	Yes	yes	

 $@2014\ Fundamental\ Research\ Corp.$

"10+ Years of Bringing Undiscovered Investment Opportunities to the Forefront"

www.research frc.com



Fundamental Research Corp. Equity Rating Scale:

Buy - Annual expected rate of return exceeds 12% or the expected return is commensurate with risk

Hold – Annual expected rate of return is between 5% and 12%

Sell - Annual expected rate of return is below 5% or the expected return is not commensurate with risk

Suspended or Rating N/A— Coverage and ratings suspended until more information can be obtained from the company regarding recent events.

Fundamental Research Corp. Risk Rating Scale:

1 (Low Risk) - The company operates in an industry where it has a strong position (for example a monopoly, high market share etc.) or operates in a regulated industry. The future outlook is stable or positive for the industry. The company generates positive free cash flow and has a history of profitability. The capital structure is conservative with little or no debt.

- 2 (Below Average Risk) The company operates in an industry where the fundamentals and outlook are positive. The industry and company are relatively less sensitive to systematic risk than companies with a Risk Rating of 3. The company has a history of profitability and has demonstrated its ability to generate positive free cash flows (though current free cash flow may be negative due to capital investment). The company's capital structure is conservative with little to modest use of debt
- 3 (Average Risk) The company operates in an industry that has average sensitivity to systematic risk. The industry may be cyclical. Profits and cash flow are sensitive to economic factors although the company has demonstrated its ability to generate positive earnings and cash flow. Debt use is in line with industry averages, and coverage ratios are sufficient.
- 4 (Speculative) The company has little or no history of generating earnings or cash flow. Debt use is higher. These companies may be in start-up mode or in a turnaround situation. These companies should be considered speculative.
- 5 (Highly Speculative) The company has no history of generating earnings or cash flow. They may operate in a new industry with new, and unproven products. Products may be at the development stage, testing, or seeking regulatory approval. These companies may run into liquidity issues, and may rely on external funding. These stocks are considered highly speculative.

Disclaimers and Disclosure

The opinions expressed in this report are the true opinions of the analyst about this company and industry. Any "forward looking statements" are our best estimates and opinions based upon information that is publicly available and that we believe to be correct, but we have not independently verified with respect to truth or correctness. There is no guarantee that our forecasts will materialize. Actual results will likely vary. The analyst and Fundamental Research Corp. "FRC" does not own any shares of the subject company, does not make a market or offer shares for sale of the subject company, and does not have any investment banking business with the subject company. Fees were paid by few companies, mentioned in this report, to FRC. The purpose of the fee is to subsidize the high costs of research and monitoring. FRC takes steps to ensure independence including setting fees in advance and utilizing analysts who must abide by CFA Institute Code of Ethics and Standards of Professional Conduct. Additionally, analysts may not trade in any security under coverage. Our full editorial control of all research, timing of release of the reports, and release of liability for negative reports are protected contractually. To further ensure independence, MBA has agreed to a minimum coverage term including four updates for public companies under coverage. Coverage cannot be unilaterally terminated. Distribution procedure: our reports are distributed first to our web-based subscribers on the date shown on this report then made available to delayed access users through various other channels for a limited time. The performance of FRC's research is ranked by Investars. Full rankings and are available at.

The distribution of FRC's ratings are as follows: BUY (68%), HOLD (8%), SELL (5%), SUSPEND (19%). To subscribe for real-time access to research, visit http://www.researchfrc.com/subscription.htm for subscription options.

This report contains "forward looking" statements. Forward-looking statements regarding the Company and/or stock's performance inherently involve risks and uncertainties that could cause actual results to differ from such forward-looking statements. Factors that would cause or contribute to such differences include, but are not limited to, continued acceptance of the Company's products/services in the marketplace; acceptance in the marketplace of the Company's new product lines/services; competitive factors; new product/service introductions by others; technological changes; dependence on suppliers; systematic market risks and other risks discussed in the Company's periodic report filings, including interim reports, annual reports, and annual information forms filed with the various securities regulators. By making these forward looking statements, Fundamental Research Corp. and the analyst/author of this report undertakes no obligation to update these statements for revisions or changes after the date of this report. A report initiating coverage will most often be updated quarterly while a report issuing a rating may have no further or less frequent updates because the subject company is likely to be in earlier stages where nothing material may occur quarter to quarter. Fundamental Research Corp DOES NOT MAKE ANY WARRANTIES, EXPRESSED OR IMPLIED, AS TO RESULTS TO BE OBTAINED FROM USING THIS INFORMATION AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OR FITNESS FOR A PARTICULAR USE. ANYONE USING THIS REPORT

INFORMATION AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OR FITNESS FOR A PARTICULAR USE. ANYONE USING THIS REPORT ASSUMES FULL RESPONSIBILITY FOR WHATEVER RESULTS THEY OBTAIN FROM WHATEVER USE THE INFORMATION WAS PUT TO. ALWAYS TALK TO YOUR FINANCIAL ADVISOR BEFORE YOU INVEST. WHETHER A STOCK SHOULD BE INCLUDED IN A PORTFOLIO DEPENDS ON ONE'S RISK TOLERANCE, OBJECTIVES, SITUATION, RETURN ON OTHER ASSETS, ETC. ONLY YOUR INVESTMENT ADVISOR WHO KNOWS YOUR UNIQUE CIRCUMSTANCES CAN MAKE A PROPER RECOMMENDATION AS TO THE MERIT OF ANY PARTICULAR SECURITY FOR INCLUSION IN YOUR PORTFOLIO. This REPORT is solely for informative purposes and is not a solicitation or an offer to buy or sell any security. It is not intended as being a complete description of the company, industry, securities or developments referred to in the material. Any forecasts contained in this report were independently prepared unless otherwise stated, and HAVE NOT BEEN endorsed by the Management of the company which is the subject of this report. Additional information is available upon request. THIS REPORT IS COPYRIGHT. YOU MAY NOT REDISTRIBUTE THIS REPORT WITHOUT OUR PERMISSION. Please give proper credit, including citing Fundamental Research Corp and/or the analyst, when quoting information from this report.

The information contained in this report is intended to be viewed only in jurisdictions where it may be legally viewed and is not intended for use by any person or entity in any jurisdiction where such use would be contrary to local regulations or which would require any registration requirement within such jurisdiction.