Fundamental Research Corp.
Investment Analysis for Intelligent Investors

September 22, 2023

Fisgard Capital Corporation

A Conservative Alternative Lender with a Long Track Record – Initiating Coverage

Expected Yield (2024): 7.4%
Rating*: 2-
Risk*: 2

Sector: Mortgage Investment Corporations

Click here for more research on the company and to share your views

Sid Rajeev, B.Tech, MBA, CFA
Head of Research

Highlights

- Formed in 1994, Fisgard Capital Corporation (FCC) is **one of the larger** Mortgage Investment Corporations (MICs) in Canada, focused on offering short-term residential mortgages. B.C. and ON account for 90%+ of its portfolio.
- At the end of Q2-2023, **the MIC had $289M in mortgages**. The yield on class B shares increased from 5.7% in 2022, to 6.6% in H1-2023, due to higher lending rates.
- We believe FCC **operates a relatively low-risk fund**, with high exposure to first mortgages (93% at the end of Q2-2023), unusually low LTVs (55% at the end of Q2), and a relatively low debt/capital of 8%.
- Unlike most MICs, FCC **offers various classes of shares,** with lock-in periods ranging between one and five years.
- We foresee the Bank of Canada **initiating rate cuts in H1-2024**, which should spur increased real estate transaction activity and lending.
- Housing markets in Toronto and Vancouver are **showing signs of recovery**. As of August 2023, residential real estate prices in Toronto and Vancouver were up 2.5% YoY.
- **We are forecasting a yield of 6.8% in 2023, and 7.4% in 2024.** As we anticipate rates to start declining in H1-2024, **we foresee an increase in demand for high-yielding funds**, such as FCC.

Risks

- Operates in a **highly competitive sector**
- A downturn in the real estate sector may impact the company's deal flow
- Capital preservation is not guaranteed
- **No guaranteed distributions**
- Timely deployment of capital is critical
- **Default rates can rise during recession**

Offering Summary	
Issuer	Fisgard Capital Corporation
Securities Offered	Class B (5-year lock-in period) / Class D (3-year) / Class F (1-year) non-voting shares
Unit Price	$1 per share
Minimum Subscription	N/A
Management + Others Fees	2% p.a. of equity & debt + nil % of mortgage origination fee + 1% of capital raised
Distribtion Frequency	Quarterly
Sales Commissions	1% p.a.
Auditor	KPMG

Key Financials /YE: Dec 31	2020	2021	2022	2023E	2024E
Mortgage Receivables	$162,347,354	$223,391,140	$279,246,976	$300,144,903	$313,344,903
Revenue	$15,294,905	$16,042,204	$22,113,313	$27,793,939	$32,497,095
Net Income	$11,644,869	$14,740,411	$12,491,556	$16,951,252	$20,516,790
Dividend Yield	6.0%	6.5%	5.4%	6.8%	7.4%

The yields presented above reflect the average for all share classes.

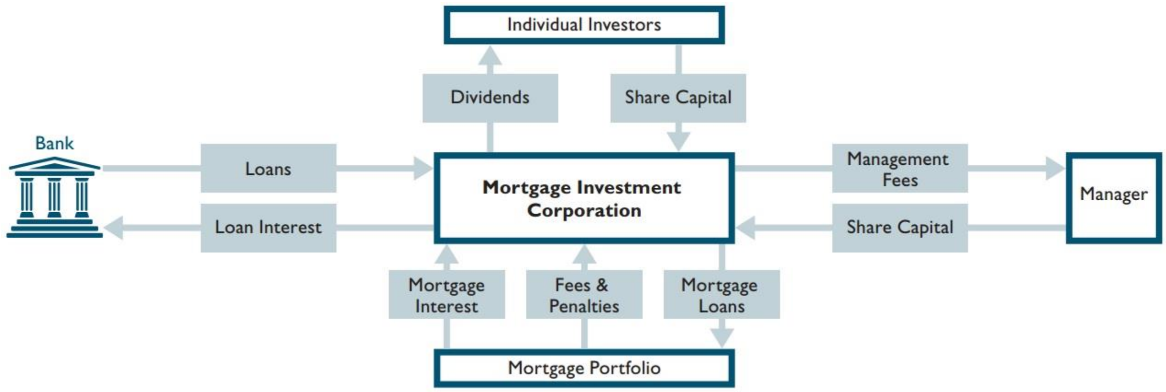
*See last page of this report for important disclosures, rating and risk definitions. All figures in C$ unless otherwise specified

Overview of MICs

MICs provide short-term (typically one year) loans secured by real estate in Canada. They do not have to conform to the lending guidelines of banks, and other traditional lenders. MICs have more flexible lending guidelines, and therefore, can offer individually structured/tailor-made loans to meet borrowers' specific requirements. Also, banks have lengthy due diligence processes, and are typically unable to meet borrowers' quick capital needs. **The above reasons allow MICs to charge higher interest rates compared to banks/traditional lenders.**

Short-term loans secured by real estate

The following chart shows the business model of a typical MIC:



Source: CMHC

- Most MICs are externally managed by their founders through separate management companies. In return, the management company earns management fees, and/or performance fees from the MIC, and a portion of the origination fee received from a borrower.
- MICs generate revenue from interest earned from borrowers
- MICs finance their mortgages through debt (banks/traditional lenders), and equity (investors)

MICs are audited/regulated by their respective provincial securities commissions. However, they are **not subject to federal government mortgage lending rules**, such as reserve requirements and loan to value limits. This is because, unlike banks and the other financial institutions, MICs do not take deposits.

200 MICs managing approximately $17B

In a recent market study conducted for the Canada Mortgage and Housing Corporation ("CMHC"), we estimated that there are approximately **200 MICs in the country managing approximately $17B,** accounting for 0.8% of the total residential mortgage credit in Canada ($2.1T).

The Manager, formed in 1991, has 30 employees

Company Overview and Manager Background

FCC was created in 1994, with Fisgard Asset Management Corporation as the manager. The manager, incorporated in 1991, is 100% owned by Strandlund Investments Limited. Both the MIC and the manager are based out of Victoria, B.C.

The manager sources its mortgages through third-party brokers (>95%), and internally (<5%). The manager receives 2% p.a. of the sum of investors' capital and bank debt in management fees, and 1% of capital raised, but nil for loan origination. **Although the MIC's management fee is higher than comparables, it passes 100% of origination fees to the fund compared to most other MICs which keep part of the origination fees for their managers**. Bottomline, we believe management fees and operating expenses of the MIC are in line with that of comparables.

Brief biographies of the management team follow.

Management and board own 1% of the MIC's outstanding non-voting shares

Management Team	Position	Profile
Charles Rafer Strandlund	CEO and Director	Prior to joining Fisgard, Rafer held positions with a Canadian chartered bank and one of B.C.'s largest credit unions. Rafer is a graduate of the British Columbia Institute of Technology and began his professional career in 1989.
Roberta Dawn Paniz	President, CFO, and Director	Joined Fisgard in 1994 / A founding shareholder of FCC / Served as a Director for NEMA and BCMMA / Licensed mortgage broker / EMD, licensed for compliance
Hali (Strandlund) Noble	Managing Director	Joined Fisgard in 1994 / Served as the Chair of Mortgage Professionals Canada and President of the CMBA-BC/ Currently serving as a Director of the CAMLA (Canadian Alternative Mortgage Lenders Association)
Jennifer Dawn Reade	CCO	Graduated from St. Francis Xavier University, Nova Scotia. She has worked in financial service as an administrator in small business banking and an IIROC investment firm
Aaron Power	Controller	Prior to joining Fisgard in 2021, Aaron (CPA, MBA) spent 10 years working with large public practice accounting firms. Most recently with KPMG focused primarily on financial services.
Nolan Foster	COO	CFA/MBA; joined Fisgard in 2023 with consulting and schedule 1 bank experience managing alternative mortgages, consumer finance, and strategic partnerships

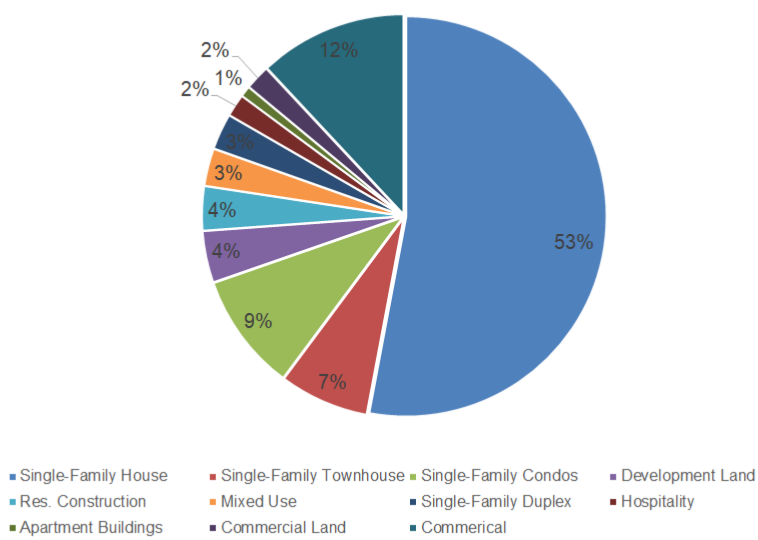
Source: FRC / Company

Investment Strategy

- Primary focus on single family detached houses, townhouses, and condominiums. Secondary focus on residential construction financing, and commercial/industrial/land development mortgages.

At the end of Q2-2023, single-family units accounted for 53% of the portfolio

Mortgages by Property Type (Q2-2023)



Source: Company/FRC

- Predominantly focused on first mortgages in B.C. and ON
- Maximum LTV of 75% at the time of origination
- Like most MICs, FCC tends to renew terms once or twice per borrower
- Does not use leverage to enhance yields
- Partners in syndicated mortgages with other MICs and lenders; currently 20% of its mortgages are syndicated

The following table shows how Figard's portfolio compares to that of other similar MICs (with AUM of $100M+) focused on single-family residential units.

FCC's yield is lower than comparables as it operates a relatively low-risk fund, driven by high exposure to first mortgages, and low LTV and debt/capital

	Fisgard	Average
First Mortgage	93%	81%
B.C.	47%	41%
ON	44%	46%
AB	7%	6%
Others	2%	7%
LTV	55%	59%
Yield (Q1-2023 - p.a.)	6.4%	7.5%
Debt to Capital	8%	24%
Average Loan Size	$468,983	$591,970
Stage Three (impaired) % of Receivables	2.4%	2.0%
Allowance % of Receivables	0.35%	0.42%

Source: FRC / Various

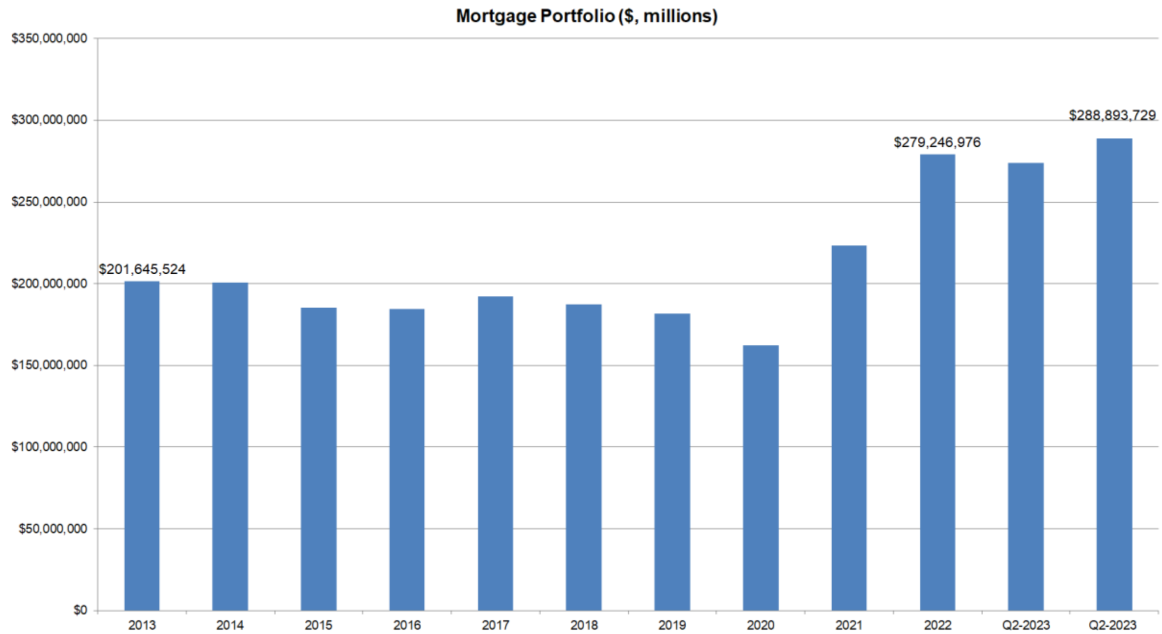
Portfolio Details (YE: December 31st)

At the end of Q2-2023, FCC had mortgage receivables totaling $289M

NAV remained flat at $1/share

FCC's debt to capital of 8% is significantly lower than that of comparables (15%-30%)

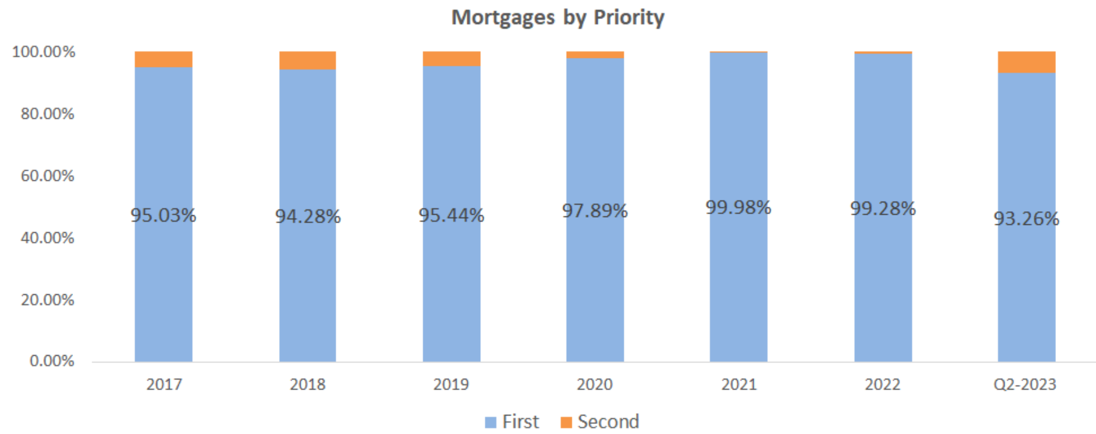
As a result, the interest coverage ratio of FCC is also significantly higher (9x vs 3-5x)



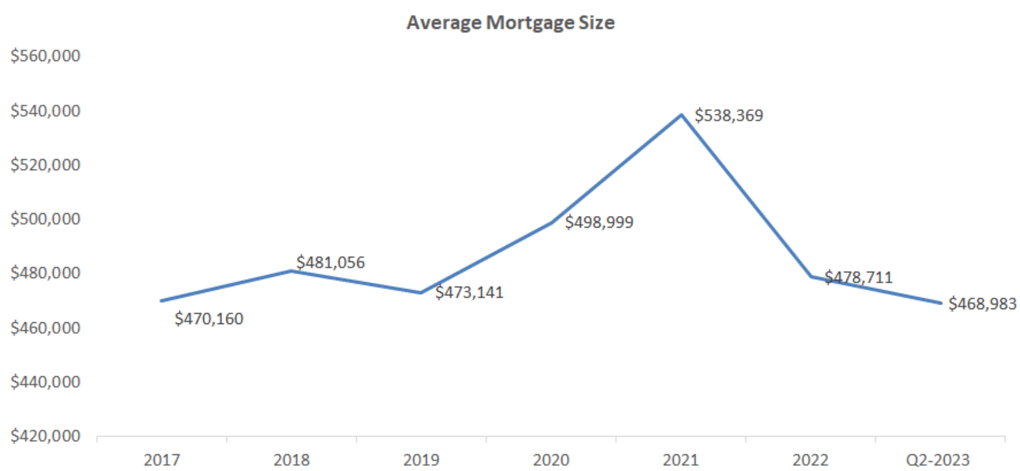
Balance Sheet (YE - Dec 31st)	2017	2018	2019	2020	2021	2022	Q2-2023
Assets							
Cash & cash equivalents	$3,486,557	$2,524,979	$706,075	$19,167,763	$3,357,333	$4,502,509	$4,685,552
Other current assets	$52,597	$56,235	$44,740	$35,271	$215,138	$25,700	$22,378
Mortgages loans - current	$177,078,776	$178,873,412	$148,505,163	$143,492,197	$203,360,691	$243,102,073	$245,643,688
Mortgage loans - LT	$15,185,816	$8,634,545	$33,140,438	$18,855,157	$20,030,449	$36,144,903	$28,076,732
Assets held for sale	$13,897,849	$13,055,893					
Investments in associates	$13,063,448	$6,369,540	$20,662,756	$17,934,237	$100		
Total Assets	**$222,765,043**	**$209,514,604**	**$203,059,172**	**$199,484,625**	**$226,963,711**	**$283,775,185**	**$278,428,350**
Liabilities							
Short-term loans	$27,733,841	$18,895,159	$12,842,093		$2,410,666	$46,069,316	$21,889,231
Term investment contract							
Accounts payable and accruals	$168,063	$205,898	$562,265	$40,001	$35,770	$441,698	$91,908
Other current liabilities							$0
Interest reserve	$726,818	$185,133	$34,592	$468,365	$92,791	$405,600	$251,136
Redeemable shares - current	$58,089,501	$48,022,178	$42,999,785	$43,006,946	$61,664,411	$57,748,256	$44,491,086
							$0
Redeemable shares - LT	$135,983,721	$142,275,615	$146,620,172	$155,980,027	$161,862,024	$178,228,802	$211,029,405
Total Liabilities	**222,701,944**	**209,583,983**	**203,058,907**	**199,495,339**	**226,065,662**	**282,893,672**	**277,752,766**
Shareholders' Equity							
Share capital	$480	$480	$480	$480	$480	$480	$480
Retained earnings	$62,619	-$69,859	-$215	-$11,194	$897,569	$881,033	$675,104
Total Shareholders' Equity	**$63,099**	**-$69,379**	**$265**	**-$10,714**	**$898,049**	**$881,513**	**$675,584**
Total Liabilities and SE	**$222,765,043**	**$209,514,604**	**$203,059,172**	**$199,484,625**	**$226,963,711**	**$283,775,185**	**$278,428,350**
	-	-	-	-	-	-	-
Mortgages Invested	$192,264,592	$187,507,957	$181,645,601	$162,347,354	$223,391,140	$279,246,976	$273,720,420
Investors' Capital + Debt	$221,807,063	$209,192,952	$202,462,050	$198,986,973	$225,937,101	$282,046,374	$277,409,722
Investors' Capital	$194,073,222	$190,297,793	$189,619,957	$198,986,973	$223,526,435	$235,977,058	$255,520,491
NAV per share	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00
Debt	$27,733,841	$18,895,159	$12,842,093	$0	$2,410,666	$46,069,316	$21,889,231
Debt to Capital	13%	9%	6%	0%	1%	16%	8%
Interest Coverage	15	12	16	42	32	10	9

Source: Company / FRC

At the end of Q2-2023, first mortgages accounted for 93% of outstanding mortgages

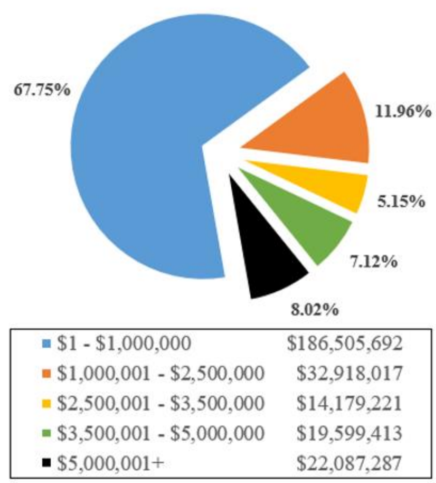


The average mortgage size was $469k, down 13% from 2020, implying lower risk



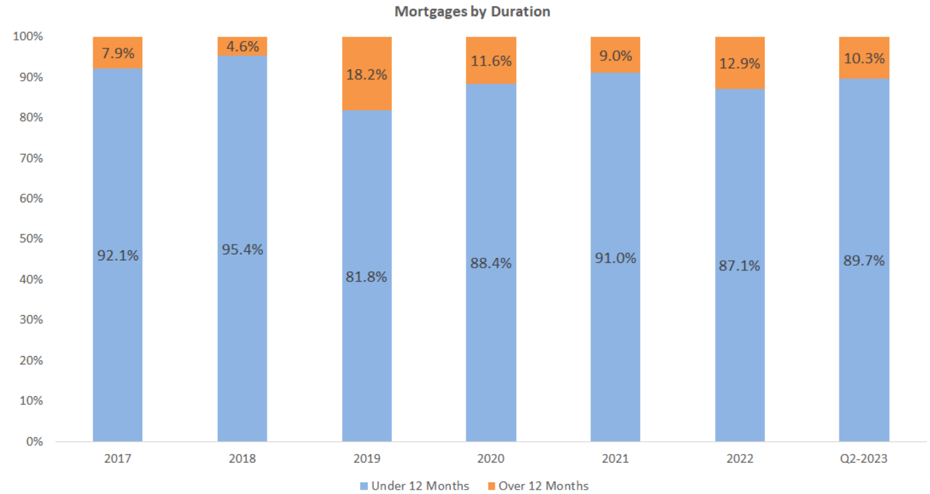
68% of mortgages are <$1M

15% of mortgages are >$3.5M

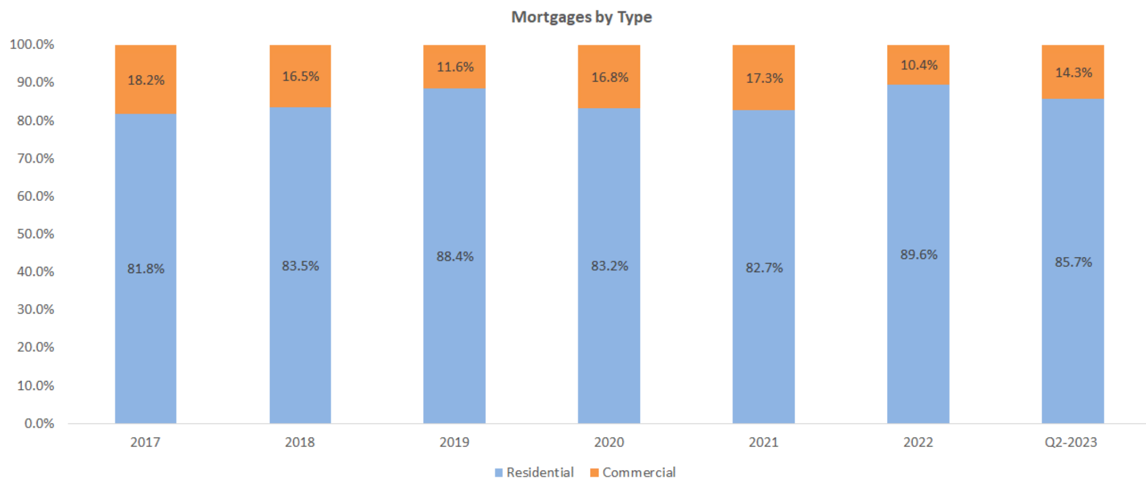


Source: Company / FRC

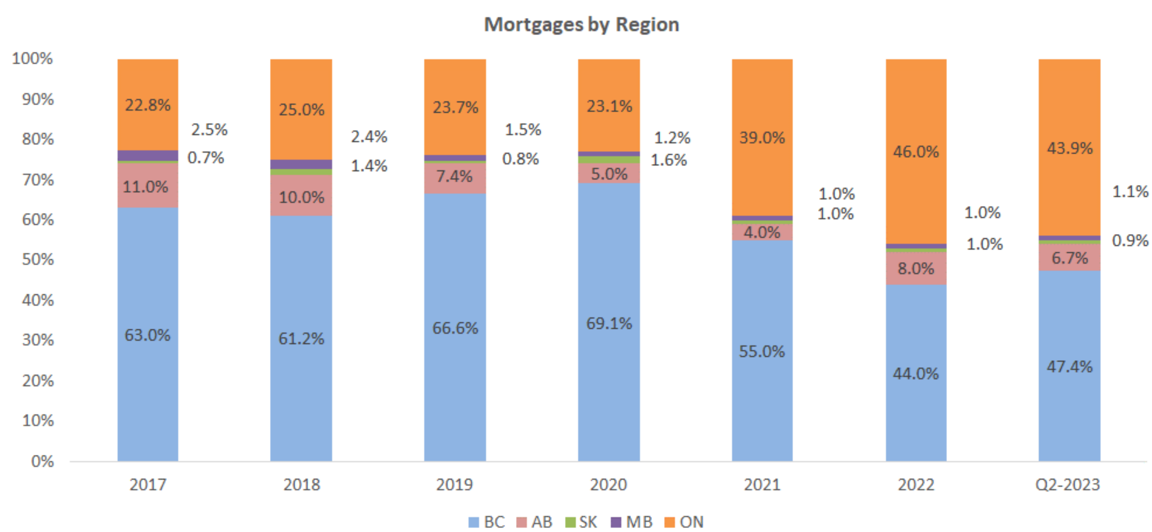
90% of mortgages had terms of <=12 months; we note that low duration funds can adjust to rising rates quickly



At the end of Q2-2023, residential properties accounted for 86% of the portfolio

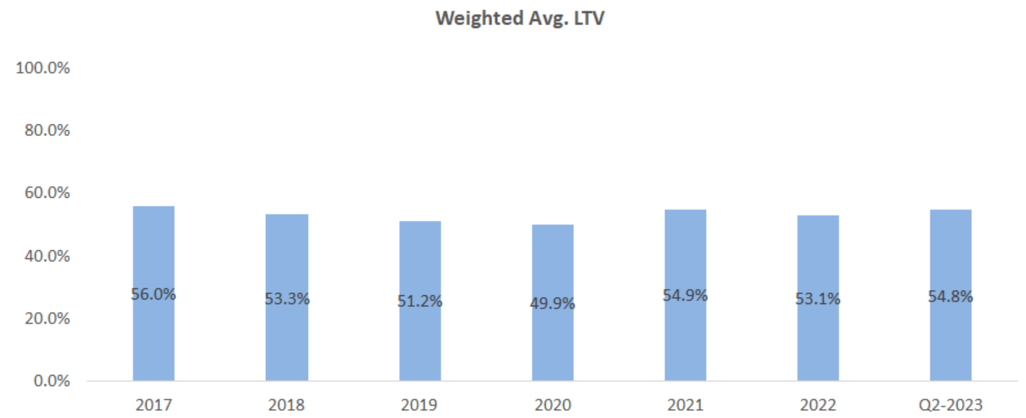


B.C. accounted for 47% of mortgages, followed by ON (44%), and AB (7%)

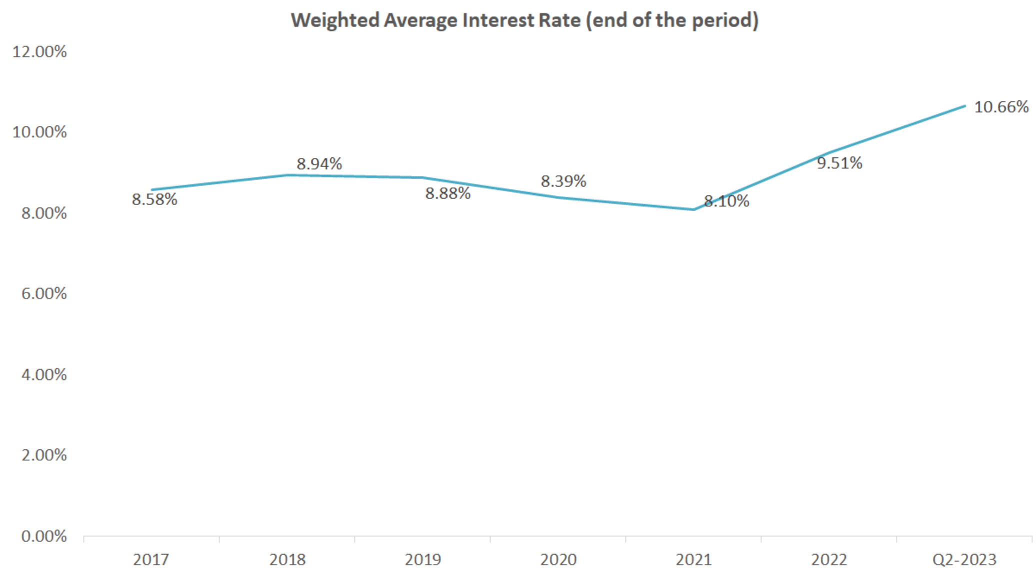


Source: Company / FRC

LTV has been relatively flat



Lending rates increased amid higher market rates



75% of dividends are typically reinvested, reflecting investors' conviction in the fund

Nil realized losses

	2018	2019	2020	2021	2022	Q2-2023
Loan Loss Provisions	$99,633	$373,105	-$119,418	$606,276	-$54,729	$71,762
Past Due (>90 days)						$6,181,314
% of Mortgage Receivables						2.2%
Loan Loss Allowances (at the end of the period)	$386,619	$487,603	$350,488	$933,941	$879,212	$950,974
% of Mortgages	0.21%	0.27%	0.22%	0.42%	0.31%	0.35%
Actual losses (FRC est.)	$948,404	$272,121	$17,697	$22,823	$0	$0
% of Mortgages	0.50%	0.15%	0.01%	0.01%	0.00%	0.00%
Reinvested	$7,553,908	$7,922,219	$8,882,678	$10,234,892	$9,344,908	$5,822,592
Reinvested (as a % of Distributions)	72.9%	72.4%	76.2%	74.0%	74.7%	75.4%
Redemptions:	$19,502,205	$19,571,600	$14,231,422	$13,530,956	$19,396,288	$11,027,150
Redemption (% of invested capital)	10.1%	10.3%	7.3%	6.4%	8.4%	4.5%

Source: Company / FRC

At the end of Q2-2023, 2.2% of mortgages were past due (90+ days) vs 2% for comparables

7	1st 6	2nd 1	1.20% of 581 mortgages	6,823,625	2.48% of total portfolio current balance 275,225,889

Rec.	Status	City	Prov	Rank	Original Principal Amount	Balance Owing	Original LTV	Revised Valuation Date	Prior Charges	Revised Value	Revised LTV
Residential											
Residential Construction Multi Fan											
1	F	Victoria	BC	1st	4,000,000	1,187,279	54.95%	3-Feb-21		7,279,295	16.31%
Single-Family Condominium											
2	F	Vancouver	BC	1st	2,636,250	2,818,609	54.64%	8-Feb-23		4,150,000	67.92%
Single-Family House											
3	F	Victoria	BC	1st	498,000	542,316	72.70%	23-Jul-21		820,000	66.14%
4	F	Chemainus	BC	1st	525,000	535,043	64.42%	14-Feb-22		815,000	65.65%
5	F	St. Catharines	ON	1st	564,000	639,653	56.59%	18-Nov-22	406,000	1,714,000	61.01%
6	F	Whitby	ON	2nd	500,000	533,040	65.00%	10-Jun-22	218,804	1,100,000	68.35%
Single-Family Townhouse											
7	F	Waterloo	ON	1st	562,500	567,684	75.00%	17-May-23		640,000	88.70%
SUMMARY											
7					**9,285,750**	**6,823,625**			**624,804**	**16,518,295**	

Source: Company / FRC

Financials

H1-2023 revenue was up 34% YoY

Distributions were up 37% YoY

Income Statement	2018	2019	2020	2021	2022	H1-2022	H1-2023	YoY
Interest	$16,019,909	$15,406,967	$14,067,436	$14,676,520	$20,093,856	$8,759,254	$12,074,920	38%
Other	$1,701,389	$1,400,546	$1,227,469	$1,365,684	$2,019,457	$849,470	$821,400	-3%
Total Revenue	**$17,721,298**	**$16,807,513**	**$15,294,905**	**$16,042,204**	**$22,113,313**	**$9,608,724**	**$12,896,320**	**34%**
Expenses								
Financing costs	$964,473	$647,742	$217,651	$285,040	$1,445,263	$196,230	$896,917	357%
Management fees	$4,314,684	$4,093,757	$3,942,456	$4,504,152	$5,334,427	$2,493,965	$2,787,891	12%
General & Administrative	$2,245,725	$2,038,593	$2,110,019	$2,354,994	$2,697,495	$1,359,555	$1,619,988	19%
Interest								
Impairment Loss								
Provision for loss	$99,633	$373,105	-$119,418	$606,276	-$54,729	-$20,570	$71,762	
Total Expenses	**$7,624,515**	**$7,153,197**	**$6,150,708**	**$7,750,462**	**$9,422,456**	**$4,029,180**	**$5,376,558**	**33%**
Unusual Non-Recurring Items	-$131,492	-$1,357,323	-$2,500,672	-$6,448,669	$199,301			
Net Income	**$10,228,275**	**$11,011,639**	**$11,644,869**	**$14,740,411**	**$12,491,556**	**$5,579,544**	**$7,519,762**	**35%**
Dividends	$10,360,753	$10,941,995	$11,655,848	$13,831,648	$12,508,092	$5,630,348	$7,725,691	37%
Net Income, after Dividends	**-$132,478**	**$69,644**	**-$10,979**	**$908,763**	**-$16,536**	**-$50,804**	**-$205,929**	

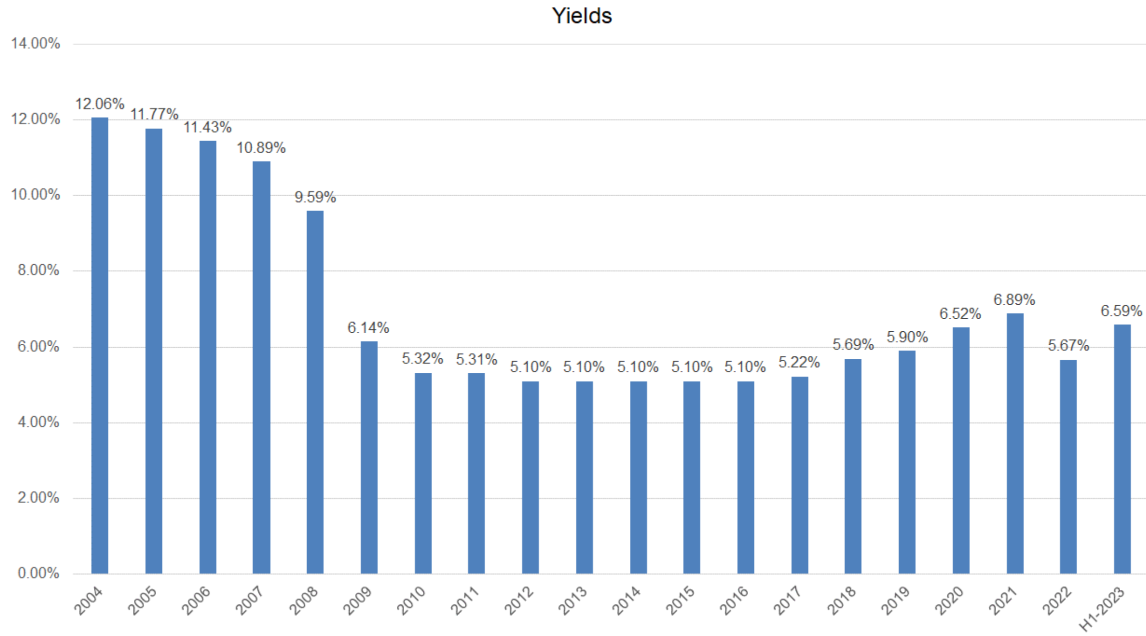
Distributions/Equity increased from 5.4% in 2022 (full-year), to 6.3% in H1-2023

% of Mortgage Receivable	2018	2019	2020	2021	2022	H1-2023
Interest	8.44%	8.35%	8.18%	7.61%	8.00%	8.73%
Other	0.90%	0.76%	0.71%	0.71%	0.80%	0.59%
	9.33%	**9.11%**	**8.89%**	**8.32%**	**8.80%**	**9.33%**
Less:						
Financing costs	-0.51%	-0.35%	-0.13%	-0.15%	-0.58%	-0.65%
Management fees	-2.27%	-2.22%	-2.29%	-2.34%	-2.12%	-2.02%
General & Administrative	-1.18%	-1.10%	-1.23%	-1.22%	-1.07%	-1.17%
Non-Recurring/Unusual	0.07%	0.74%	1.45%	3.34%	-0.08%	0.00%
Provision for loss	-0.05%	-0.20%	0.07%	-0.31%	0.02%	-0.05%
	-3.95%	**-3.14%**	**-2.12%**	**-0.67%**	**-3.83%**	**-3.89%**
Net (excluding dividends)	**5.39%**	**5.97%**	**6.77%**	**7.64%**	**4.97%**	**5.44%**
Investors' Returns as a % of Invested Capital	5.39%	5.76%	6.00%	6.55%	5.44%	6.29%

Note that the above figures may be slightly different from the figures reported by the MIC due to the difference in the method of calculation. We used the average of the opening balance, and year-end balance of the mortgages outstanding, and invested capital, to arrive at the above figures.

Source: Company / FRC

Due to higher lending rates, yields of class B shares increased from 5.7% in 2022 (full-year), to 6.40% in Q1-2023, and 6.81% in Q2-2023



Source: Company / FRC

The following tables show the structure of the fund:

Three options for investors

Shares	Term	Dividend Rate
Class B	5 years	Base Rate
Class D	3 years	Base Rate - 1.00% p.a.
Class F	1 year	Base Rate - 2.00% p.a.

Class B (five-year) dominates the mix

Shares Oustanding	Jun-23	% of Total
Class B	220,091,740	86.1%
Class D	22,921,931	9.0%
Class F	12,506,818	4.9%
Total	**255,520,489**	**100.0%**

Source: Company / FRC

We are projecting a yield of 6.8% in 2023, and 7.4% in 2024

We are assuming loan loss allowances will increase by 100% in the next 12 months; we note that banks and conventional lenders had raised their allowances by 100%-200% during past recessions

Our estimate for the 2024 yield varies between 6.9% and 7.7%, using various assumptions for loan loss allowances

FRC Projections and Rating

Key Financials /YE: Dec 31	2020	2021	2022	2023E	2024E
Mortgage Receivables	$162,347,354	$223,391,140	$279,246,976	$300,144,903	$313,344,903
Revenue	$15,294,905	$16,042,204	$22,113,313	$27,793,939	$32,497,095
Net Income	$11,644,869	$14,740,411	$12,491,556	$16,951,252	$20,516,790
Dividend Yield	6.0%	6.5%	5.4%	6.8%	7.4%

Loan Loss Allowances (% of Mortgages)	2024E Yield
0.0%	7.70%
50.0%	7.56%
100.0%	7.42%
200.0%	7.14%
300.0%	6.86%

The yields presented above reflect the average for all share classes.

Source: FRC

We are initiating coverage with an overall rating of 2-, and a risk rating of 2. We believe a major highlight of Fisgard is its relatively low risk-profile, reflected by a higher percentage of first mortgages, low LTV, and limited use of leverage. As we anticipate rates will start declining in H1-2024, **we foresee an increase in demand for high-yielding funds**, such as FCC. Key risks include a softer mortgage origination market, and higher default rates.

FRC Rating	
Expected Yield (2024E)	7.4%
Rating	2-
Risk	2

Risks

We believe the fund is exposed to the following key risks (not exhaustive):

- **Operates in a highly competitive sector**
- Investments in mortgages are typically affected by macroeconomic conditions, and local real estate markets
- **A downturn in the real estate sector** may impact the company's deal flow
- Capital preservation is not guaranteed
- No guaranteed distributions
- Timely deployment of capital is critical
- **Default rates can rise during recession**

APPENDIX

Income Statement	2020	2021	2022	2023E	2024E
Interest	$14,067,436	$14,676,520	$20,093,856	$26,072,635	$30,674,490
Other	$1,227,469	$1,365,684	$2,019,457	$1,721,304	$1,822,605
Total Revenue	**$15,294,905**	**$16,042,204**	**$22,113,313**	**$27,793,939**	**$32,497,095**
Expenses					
Financing costs	$217,651	$285,040	$1,445,263	$1,422,800	$1,500,000
Management fees	$3,942,456	$4,504,152	$5,334,427	$5,793,919	$6,134,898
General & Administrative	$2,110,019	$2,354,994	$2,697,495	$3,365,272	$3,563,323
Interest					
Impairment Loss					
Provision for loss	-$119,418	$606,276	-$54,729	$260,695	$782,085
Total Expenses	**$6,150,708**	**$7,750,462**	**$9,422,456**	**$10,842,686**	**$11,980,305**
Unusual Non-Recurring Items	-$2,500,672	-$6,448,669	$199,301		
Net Income	**$11,644,869**	**$14,740,411**	**$12,491,556**	**$16,951,252**	**$20,516,790**
Dividends	$11,655,848	$13,831,648	$12,508,092	$17,351,252	$20,916,790
Net Income, after Dividends	**-$10,979**	**$908,763**	**-$16,536**	**-$400,000**	**-$400,000**

Balance Sheet (YE - Dec 31st)	2020	2021	2022	2023E	2024E
Assets					
Cash & cash equivalents	$19,167,763	$3,357,333	$4,502,509	$2,217,426	$707,802
Other current assets	$35,271	$215,138	$25,700	$28,270	$31,097
Mortgages loans - current	$143,492,197	$203,360,691	$243,102,073	$264,000,000	$277,200,000
Mortgage loans - LT	$18,855,157	$20,030,449	$36,144,903	$36,144,903	$36,144,903
Investments in associates	$17,934,237	$100			
Total Assets	**$199,484,625**	**$226,963,711**	**$283,775,185**	**$302,390,599**	**$314,083,802**
Liabilities					
Short-term loans		$2,410,666	$46,069,316	$25,000,000	$25,000,000
Accounts payable and accruals	$40,001	$35,770	$441,698	$485,868	$534,455
Interest reserve	$468,365	$92,791	$405,600	$446,160	$490,776
Redeemable shares - current	$43,006,946	$61,664,411	$57,748,256	$57,748,256	$57,748,256
Redeemable shares - LT	$155,980,027	$161,862,024	$178,228,802	$218,228,802	$230,228,802
Total Liabilities	**199,495,339**	**226,065,662**	**282,893,672**	**301,909,086**	**314,002,289**
Shareholders' Equity					
Share capital	$480	$480	$480	$480	$480
Retained earnings	-$11,194	$897,569	$881,033	$481,033	$81,033
Total Shareholders' Equity	**-$10,714**	**$898,049**	**$881,513**	**$481,513**	**$81,513**
Total Liabilities and SE	**$199,484,625**	**$226,963,711**	**$283,775,185**	**$302,390,599**	**$314,083,802**

Cash Flow Statement	2023E	2024E
Operating Activities		
Net Income	$16,951,252	$20,516,790
Net change in non-cash working capital:		
Other current assets	$82,160	$90,376
Cash Flow from Operating Activities	**$17,033,412**	**$20,607,165**
Investing Activities		
Assets held for sale		
Decrease (increase) in mortgage loans receivable	-$20,897,927	-$13,200,000
Cash Flow from Investing Activities	**-$20,897,927**	**-$13,200,000**
Financing Activities		
Decrease in loans payable	-$21,069,316	$0
Redeemable shares subscripton	$40,000,000	$12,000,000
Cash dividends	-$17,351,252	-$20,916,790
Cash Flow from Financing Activities	**$1,579,432**	**-$8,916,790**

Fundamental Research Corp. Rating Scale:

Rating – 1: Excellent Return to Risk Ratio
Rating – 2: Very Good Return to Risk Ratio
Rating – 3: Good Return to Risk Ratio
Rating – 4: Average Return to Risk Ratio
Rating – 5: Weak Return to Risk Ratio
Rating – 6: Very Weak Return to Risk Ratio
Rating – 7: Poor Return to Risk Ratio
A "+" indicates the rating is in the top third of the category, A "-" indicates the lower third and no "+" or "-" indicates the middle third of the category.

Fundamental Research Corp. Risk Rating Scale:
1 (Low Risk)
2 (Below Average Risk)
3 (Average Risk)
4 (Speculative)
5 (Highly Speculative)

FRC Distribution of Ratings			
Rating - 1	0%	Risk - 1	0%
Rating - 2	33%	Risk - 2	10%
Rating - 3	45%	Risk - 3	41%
Rating - 4	8%	Risk - 4	32%
Rating - 5	4%	Risk - 5	8%
Rating - 6	1%	Suspended	10%
Rating - 7	0%		
Suspended	9%		

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 was provided 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 have been paid by the issuer to FRC to issue this report. 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. 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.

To subscribe for real-time access to research, visit https://www.researchfrc.com/website/subscribe/ 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 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