



## SHARPE RATIOS OF CANADIAN FARMLAND

### ABSTRACT:

A review of the Canadian farmland investment market reveals that a row-crop farmland holding would have generated Sharpe ratios substantially above the ratio generated by S&P 500 over the same time periods. To maximize Sharpe ratio capture an investor may be best served by targeting AB, SK and MB – a total market representing ~80% of Canada's farmland.

### KEYWORDS:

Canadian farmland, Alberta farmland, Saskatchewan farmland, Sharpe ratio, Veripath Farmland Funds, real rates, row-crop farmland, S&P 500

## INTRODUCTION:

*"The Sharpe ratio was developed by Nobel laureate William F. Sharpe and is used to help investors understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Volatility is a measure of the price fluctuations of an asset or portfolio. Subtracting the risk-free rate from the mean return allows an investor to better isolate the profits associated with risk-taking activities. The risk-free rate of return is the return on an investment with zero risk, meaning it's the return investors could expect for taking no risk (generally government bonds). Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return."*

Some example Sharpe ratios for Canadian farmland:

- Over the past 30 years 0.6 or ~2 times higher than the S&P 500 for the equivalent period
- Over the past 10 years - in SK, AB, and MB (an area representing 80% of Canada's farmland) 1.1 to 1.9 or ~5 times higher than the S&P 500 for the equivalent period

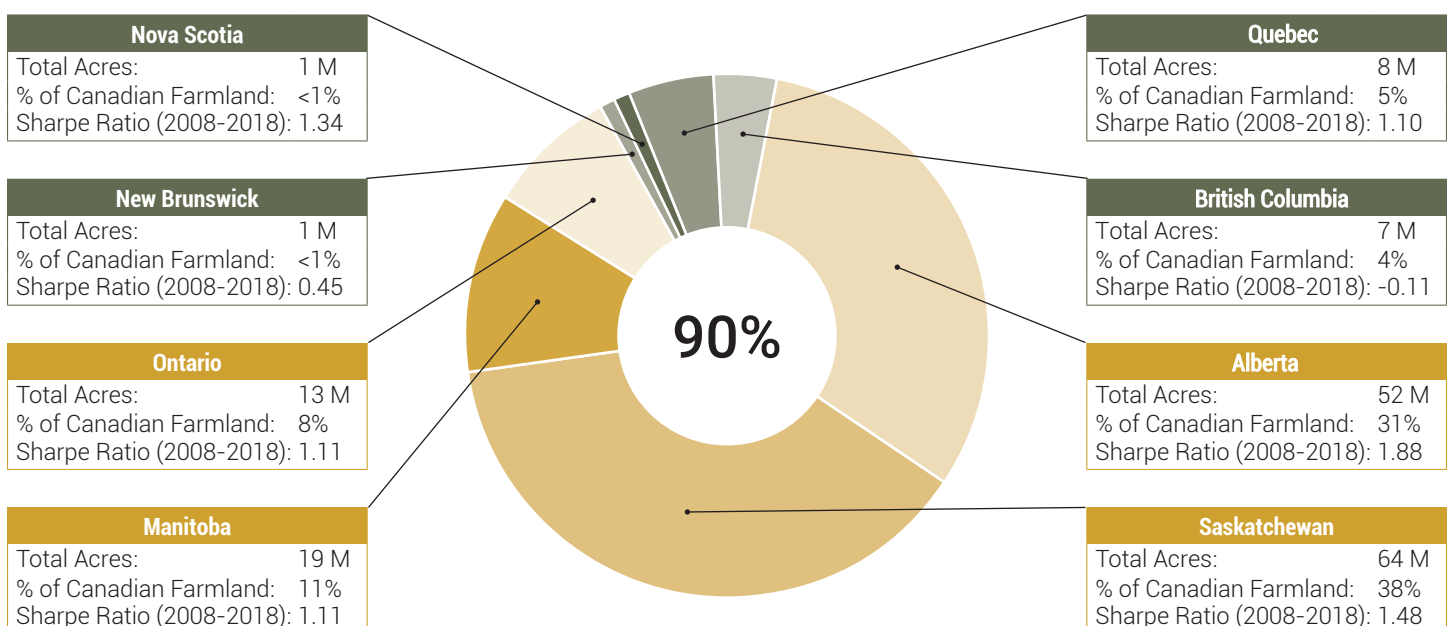
In other words, the biggest Canadian row-crop farmland market (AB, SK and MB) representing 80% of Canada farmland also had the highest Sharpe ratios.

This Sharpe ratio advantage over other much smaller provincial markets is another reason to consider an extra weighting to AB, SK and MB in any Canadian row crop portfolio.

## DISCUSSION OF RESULTS:

Canadian row-crop farmland investments have Sharpe ratios that materially outperformed the S&P 500 over a 10- and 30-year measurement period – meaning they produced materially higher average returns over the risk-free rate per unit of volatility or total risk than stocks. To put the volatility/risk concept into more concrete terms, over the last 30 years Canadian farmland witnessed only three down years (of modest magnitude) whereas over the same period S&P 500 had nine down years (of much larger magnitude).

Given the diversifying (low correlation) features of Canadian row crop farmland investments advisors tasked with portfolio construction for clients may want to consider this asset class simply based on its ability to increase aggregate Sharpe ratio numbers – even without considering the other potential real return drivers present in the Canadian row-crop farmland market.



## CONCLUSION:

Investment allocations in Alberta, Saskatchewan, and Manitoba farmland (based on the last 30 and 10 years of data) can be reasonably expected to achieve better risk adjusted returns than public market (as represented by the S&P 500) substitutes.

## NOTES & SOURCES:

Statistics Canada, FCC, Veripath analytics, risk free rate was assumed to be 3%, Investopedia

## WHO IS VERIPATH

Veripath is a Canadian alternative investment firm. Members of Veripath's management team have decades of farmland, private equity, and private credit investment experience. Veripath implements its farmland strategy in a way that seeks to preserve as far as possible farmland's low-volatility return profile – the attribute that generates a material portion of Canadian farmland's superior risk adjusted returns. Veripath does this by seeking to minimize operational, weather, geographic and business-related risks – and capture the pure return from land appreciation. Veripath. Veripath uses a unique split fund, evergreen structure which opens the Canadian farmland thesis to the largest possible universe of investors and for the first time makes compliance with the various provincial farmland ownership regulations simple and straightforward. Canadian farmland allocations have several compelling characteristics that make them a worthwhile portfolio allocation for both institutional and retail investors and Veripath's structures are available to both. For more information on Veripath please feel free to register online at [www.veripathfarmland.com](http://www.veripathfarmland.com) or call 587-390-8267.

## SOURCE DATA AND ANALYSIS:

Year	Canada	SK	AB	S&P
1989	4.9%	0.4%	5.7%	27%
1990	-2.7%	-6.9%	-1.1%	-3%
1991	-5.4%	-9.1%	-4.6%	21%
1992	-2.1%	-3.8%	-3.2%	5%
1993	2.0%	1.6%	1.9%	10%
1994	8.5%	9.5%	10.1%	-2%
1995	10.0%	11.9%	9.6%	35%
1996	11.3%	11.0%	9.5%	24%
1997	8.0%	5.5%	7.8%	25%
1998	2.7%	0.5%	5.1%	31%
1999	0.2%	-4.8%	5.7%	9%
2000	1.5%	-2.2%	4.3%	-2%
2001	1.4%	-1.5%	4.2%	-17%
2002	5.3%	3.9%	6.4%	-22%
2003	3.8%	3.1%	4.2%	29%
2004	4.6%	1.9%	9.0%	4%
2005	3.1%	1.3%	6.1%	8%
2006	4.7%	2.1%	8.9%	12%
2007	11.6%	11.0%	17.4%	-4%
2008	11.7%	14.9%	9.1%	-40%
2009	6.6%	6.9%	4.8%	30%
2010	5.2%	5.7%	4.4%	20%
2011	14.8%	22.9%	8.7%	2%
2012	19.5%	19.7%	13.3%	14%
2013	22.1%	28.5%	12.9%	23%
2014	14.3%	18.7%	8.8%	11%
2015	10.1%	9.4%	11.6%	0%
2016	7.9%	7.5%	9.5%	9%
2017	8.4%	10.2%	7.3%	19%
2018	6.6%	7.4%	7.4%	-5%
Mean	6.7%	6.2%	6.8%	9.1%
St. Dev	6.2%	8.8%	4.6%	17.0%
Sharpe	0.60	0.37	0.83	0.36





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