ETF Sector Rotation Model

	Model	MSCI CA Index
Sharpe	1.04	0.38
Skew	-0.03	-0.97
Kurtosis	2.21	4.62
Max drawdown	-13.39	-56.88
Ulcer Index	4.26	15.18
Up Capture	0.50	
Down Capture	0.18	
Alpha	8.91	
Beta	0.30	
Up Beta	0.25	
Down Beta	0.26	
Correlation	0.57	
Up Correlation	0.31	
Down Correlation	0.42	
Positive months	176	159
Negative months	97	112
Win rate	64.47	58.24
Positive quarters	64	65
Negative quarters	27	26
Win rate	70.33	71.43
Positive years	19	17
Negative years	3	5
Win Rate	86.36	77.27
Positive positions	216	
Average gain	7.53	
Negative positions	98	
Average loss	-5.21	
Trades	214	
... per month	0.80	

Range of Historical Rolling CAGRs:

Best 1-year	53.23	74.00
Worst 1-year	-8.66	-51.97
Best 3-year	22.38	31.14
Worst 3-year	0.80	-12.64
Best 5-year	16.96	16.35
Worst 5-year	3.11	-6.48
Best 10-year	13.51	12.71
Worst 10-year	6.18	-0.42

Annual Returns

	Model	MSCI CA Index
2004	20.64	22.73
2005	20.83	27.52
2006	22.14	15.62
2007	12.83	28.39
2008	-4.57	-44.72
2009	35.33	53.08
2010	3.38	18.94
2011	1.66	-12.49
2012	1.87	9.09
2013	17.10	5.25
2014	20.94	1.02
2015	1.82	-23.90
2016	0.38	23.83
2017	6.04	15.70
2018	-3.76	-17.15
2019	26.88	27.51
2020	13.15	5.51
2021	27.69	26.95
2022	1.67	-12.84
2023	-4.07	14.68
2024	7.77	12.42
2025	39.06	35.89
2026-09	9.30	8.77

Compound Annual Growth

	Model	MSCI CA Index
Inception	11.55	8.26
20 Year	10.92	6.53
15 Year	10.57	7.93
10 Year	11.48	10.83
5 Year	11.16	12.22
3 Year	16.06	22.66

Standard Deviation History

Inception	11.11	21.79
20 Year	10.90	22.38
15 Year	10.77	18.09
10 Year	12.17	19.06
5 Year	12.47	18.15
3 Year	11.60	14.49

Average Monthly Returns

January	1.22	0.21
February	1.56	1.08
March	-0.02	0.23
April	0.70	2.28
May	1.08	0.94
June	0.14	-0.23
July	1.94	2.15
August	0.38	0.31
September	0.76	-0.58
October	0.23	-0.64
November	1.29	1.48
December	1.67	0.69
May-Oct	4.30	2.59
Nov-Apr	6.65	5.32

iQUANT.ca
Investment Models

ETF Sector Rotation Model

iQUANT (and all of its content) is for **INVESTMENT PROFESSIONAL USE ONLY** and is not intended for the retail investment public.

HISTORICAL MODEL PERFORMANCE DOES NOT GUARANTEE FUTURE RESULTS. THE RETURNS PRESENTED REPRESENT SIMULATED MODEL RETURNS WHICH ARE HYPOTHETICAL, MEANING THEY DO NOT REPRESENT ACTUAL TRADING, AND, THUS, MAY NOT REFLECT MATERIAL ECONOMIC AND MARKET FACTORS, SUCH AS LIQUIDITY CONSTRAINTS, THAT MAY HAVE HAD AN IMPACT ON ACTUAL DECISION MAKING. THE HYPOTHETICAL PERFORMANCE REFLECTS THE RETROACTIVE APPLICATION OF THE MODEL WITH THE FULL BENEFIT OF HINDSIGHT. Actual performance may result in lower or higher returns than the hypothetical Model performance presented. If actual portfolios had been managed, there can be no guarantee such portfolios would have achieved results similar to those portrayed.

Model returns reflect a 0.50% annual trading expense on total portfolio value – which may be higher or lower than actual trading costs. Actual performance will vary from that of investing in the Model because it may not be fully invested at all times. Hypothetical model returns in certain years were significantly higher than the returns of the S&P TSX Index. It is important to note that models may underperform in certain years and may produce negative results. Investments in models should be made with an understanding of the risks involved with owning common stocks, such as an economic recession and the possible deterioration of either the financial condition of the issuers of the equity securities or the general condition of the stock market. The value of the securities selected by the Model may be subject to steep declines or increased volatility or perception of the issuers.

Sharpe ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. M**aximum drawdown** (MDD) is the **maximum** loss from a peak to a trough of a portfolio, before a new peak is attained and is an indicator of downside risk over a specified time period. **Upside and downside capture ratios** measure whether a given fund has outperformed--gained more or lost less than--a broad market benchmark during periods of market strength and weakness, and if so, by how much. **Alpha** gauges the performance of an investment against a market index used as a benchmark. **Beta** measures the volatility of an investment compared to the market as a whole. **Correlation**, measures the degree to which two securities move in relation to each other. In order to make Beta and Correlation more relevant factors, we've split each between up markets and down markets.

iQUANT.ca is an Internet based publication (the "Site") and is not affiliated with an investment advisor or Broker/Dealer. Neither iQUANT nor the Site is registered as an investment adviser with any federal or state regulatory agency, or in any other regulatory capacity. The Site is limited to the dissemination of impersonal and objective investment-related information. The publication of the Site on the Internet and the publication of any content should not be construed by any user and/or prospective user as iQUANT's (i) solicitation to effect, or attempt to effect transactions in securities over the Internet, or (ii) provision of any investment related advice or services tailored to any particular individual's financial situation or investment objective(s).

Users do not receive investment advisory, investment supervisory or investment management services, nor the initial or ongoing review or monitoring of the user's individual investment portfolio or individual needs. Therefore, no user should assume that his/her/its use serves as a substitute for individual personalized advice from an investment professional of the user's choosing. Rather, the Site is designed solely to provide impersonal investment models and systems. The user maintains absolute discretion as to whether to follow any portion of the Site content. iQUANT does not offer or provide investment implementation services, nor does it offer or provide initial or ongoing individual personalized advice (neither in person nor via the Internet). It remains the user's exclusive responsibility to review and evaluate the content and to determine whether to accept or reject any Site content. iQUANT expresses no opinion as to whether any of the Site content is appropriate for a user's investment portfolio, strategy, financial situation, or investment objective(s). It is the user's exclusive responsibility to determine if any portion of the investment-related information and trading methodologies/systems. on the Site, if any, is suitable or appropriate for his/her financial situation and/or investment objectives, both initially and on an ongoing basis. No current or prospective user should assume that the future performance of any specific investment, investment strategy (including the investments trading methodologies/systems discussed on the Site) or any other Site content will be suitable or profitable for a user's portfolio, equal historical or anticipate or prove to be correct.

iQUANT.ca
Investment Models