

CC&L Investment Management
Investment Manager Review
April 4, 2011

EXECUTIVE SUMMARY

- On April 4, 2011 Martin Bélanger met with the following CC&L Investment professionals from 9:00 a.m. to 1:00 p.m. at their Vancouver office:
 - Q-core team: Martin Gerber, Dion Roseman and Steven Huang
 - Client Servicing: Phil Cotterill
 - Compliance: Kathleen Leavens
 - Trading: Nancy Kwok
- Ranked “Hire” by Russell
- CC&L assets under management were at \$21.6 billion March 31, 2011, up from \$20.2 billion one year earlier; CC&L gained 11 clients and lost 4 in 2010
- There have been no changes to CC&L ownership structure, although there’s one new partner; the firm currently has 23 partners
- CC&L outperformed its benchmark by 3.4% in 2010
 - Most of the outperformance was due to stock selection and was concentrated in the Financials, Consumer Discretionary and Energy sectors
 - CC&L momentum factor was by far the largest contributor to performance in 2010, a year highlighted by a shift from value to growth
- There have been no changes in personnel involved with the Q-core strategy since our last review, although Martin Gerber, the team leader, is getting more managerial responsibilities at the firm
- Their investment process has not materially changed in recent years, but they keep improving it and they have an extensive research agenda
- They have adequate risk controls in place as their model features an integrated proprietary risk management system and risk metrics are reviewed on a weekly basis by a Risk Management Committee comprised of senior management
- Their model doesn’t include environmental, social or governance (ESG) factors, as their research suggests that they are not valuable, but they give a lot of attention to governance proxy voting
- No issue with capacity on our strategy at this point; they currently have \$5.8 billion under management in Canadian quantitative strategies
- CC&L doesn’t have any compliance issues; their fund is in compliance with the investment manager mandate, CC&L Statement of Investment Policies and Procedures and the pension and tax legislation; they’re not currently facing any litigation, no material issues were raised as a result of their latest regulatory review, they have an adequate code of ethics and disclosure of conflict of interests policy. One non-advising director of CC&L Investment Management is a director of a publicly traded company.

RECOMMENDATION

- CC&L has outperformed its benchmark by 3.4% in 2010 and by 1.1% annualized over the past four years
- CC&L has significant depth in its quantitative team and their research capability are above average for Canadian quantitative manager
- Given Russell's "Hire" recommendation, the overall quality of the firm, the discipline of their investment process, the quality of their research and relatively good recent investment performance, I don't recommend making any changes to our relationship with CC&L Investment Management.

ORGANIZATION

- The Connor, Clark & Lunn Financial Group has added another portfolio company in 2010: Crestpoint Real Estate Investments Ltd. Crestpoint is a new start-up.
- The Connor, Clark & Lunn Financial Group had \$40 billion in assets under management as of December 31, 2010
- The Connor, Clark & Lunn Financial Group has 91 professionals, involved in the following functions for the benefit of all the portfolio companies: compliance, corporate accounting, information systems, performance reporting, institutional sales and sales & marketing
- CC&L Investment Management had \$21.6 billion in assets under management as of March 31, 2011, including \$3.2 billion in their Canadian Q-Core product (UWO's mandate)
- Assets are still down from December 31, 2007, when they were at \$23.3 billion
- In 2010 CC&L gained 11 new mandates (for \$563 million in new assets) and lost 4 (for \$588 million)
- UWO had \$84.1 million with CC&L as of March 31, 2011 (\$56.3 million as of March 31, 2010)
- No new clients were gained or lost for the Q portfolios in 2010
- Regarding the management of the firm, CC&L recently announced that Martin Gerber had been appointed Managing Partner of CC&L Investment as part of their succession plan. Gary Lunn, the existing Managing Partner, will stay on in a client servicing capacity. Martin Gerber will retain his responsibilities as Leader of the Q-Core team, although Dion Roseman and Steven Huang now have enough experience to handle increased responsibilities
- No changes in the ownership structure although the firm has one new partner: Mark Bridges
- The number of CC&L employees who are shareholders of the firm has increased to 23
- In 2010 CC&L launched a Canadian equity small cap market neutral fund
- Phil Cotterill reviewed the firm's disaster recovery plan. They have duplicated systems located in their Toronto office. Their plan is reviewed and tested on an annual basis. Also, employees work from home once a month in order to test their remote access. The estimated recovery time is 24 hours.
- Overall, CC&L has an adequate disaster recovery plan.

CANADIAN EQUITY MANDATE

	Periods Ending December 31, 2010						
	Q4 2010	1-Yr	2-Yr	3-Yr	4-Yr	5-Yr	Since Inception (July 9, 2004)
CC&L Q-Core	10.8%	21.0%	27.5%	3.6%	5.1%	7.1%	8.6%
S&P/TSX	9.4%	17.6%	26.0%	2.1%	4.0%	6.5%	6.6%
Value Added	1.4%	3.4%	1.5%	1.5%	1.1%	0.6%	2.0%

	Annual Returns to December 31					
	2010	2009	2008	2007	2006	2005
CC&L Q-Core	21.0%	34.3%	-31.6%	9.7%	15.6%	24.1%
S&P/TSX	17.6%	35.1%	-33.0%	9.8%	17.3%	24.1%
Value Added	3.4%	-0.8%	1.4%	-0.1%	-1.7%	0.0%

- The fund has 163 names (as of December 31, 2010)
- Their investable universe is comprised of any Canadian company with a market capitalization greater than \$150 million and a minimum daily traded value of \$200,000. They define Canadian companies as those listed on the Toronto Stock Exchange, but they also look at the company's primary exchange, where it has been incorporated and where its head office is. Stocks must also satisfy certain minimum requirements in terms of daily volume traded, length of trading on the TSX index, and earnings reporting history.
- The fund outperformed by 3.4% in 2010
 - Most of the outperformance was due to stock selection (3.1%), while industry selection contributed 0.3%
 - The outperformance was evenly distributed throughout the year, with quarterly value added ranging from 0.4% to 0.7%
 - Good stock selection in the financial, consumer discretionary and energy sectors contributed to most of the outperformance
 - The main theme in the Canadian equity market in 2010 was a shift from value to growth
 - CC&L momentum factor was by far the largest contributor to performance in 2010
- Positive contributors to the performance of the portfolio in 2010 include:
 - First Majestic Silver Corp.
 - Western Canadian Coal Corp.
 - Manulife Financial Corp. (overweight)
- Negative contributors to the performance of the portfolio in 2010 include:
 - First Quantum Minerals
 - Cascades Inc.
 - Barrick Gold

- The size of an active position is a tradeoff between the following considerations:
 - Expected return (security specific plus industry return forecast)
 - Risk (proprietary risk forecasts and daily estimates)
 - Transactions costs (commissions and fixed charges; proprietary market impact model)
- Portfolio turnover was about 100% in 2010
- Additions to the portfolio in 2010 include Husky Energy, Agrium and Great-West Lifeco
- Stocks that were removed from the portfolio in 2010 include TMX Group, Loblaw, Canadian Tire and Rona
- As of December 31, 2010 the largest overweights were Barrick Gold, CIBC and Canadian Natural Resources and the largest underweights were Royal Bank of Canada, Manulife Financial and TransCanada Corporation
- From a sector point of view, at the end of 2010 the portfolio was underweight in Utilities, Insurance and Banks and was overweight in Precious Metals, Telecom Services and Autos
- At the end of 2010 the portfolio largest exposures were to the momentum and value factors

Investment Personnel

- There have been no changes in personnel involved with the Q-Core strategy since our last review
- The current personnel for the strategy includes five partners:
 - Martin Gerber is the team leader
 - Dion Roseman and Chris Archbold are the portfolio managers
 - Steven Huang and Tate Higgins are in charge of research
 - The team is supported by 2 traders, 4 systems analysts, 5 research analysts and 4 data analysts
- The only area of concern in terms of personnel is the promotion of Martin Gerber, team leader, to Managing Partner of the firm. Although they initially mentioned that his involvement with the strategy wouldn't change, they also mentioned that Dion Roseman and Steven Huang are in a position to accept more responsibilities, which allows him to take on the added responsibilities of Managing Partner

Investment Process

- Process hasn't changed: bottom-up core
- The firm's long-term process ensures that the portfolio has better-than-market value, momentum and quality characteristics, while constraining the portfolio to have market-like risk characteristics (profitability, financial strength and stability)
- The Q-Core investment process includes the following steps:
 - Gathering fundamental data (data comes from a dozen data providers and is paid for through soft dollars)
 - Analysis (the impact of new data on indicators is measured there)
 - Return and risk forecasts
 - Portfolio construction (portfolio changes are reviewed)
 - Implementation / Trading (more trading is done around earnings season)

- Portfolio monitoring
- The analysis and forecast components of the process involves reviewing growth, value, quality, short-term insights and volatility
- The valuation component of the model involves screening stocks on specific value (10 measures of value that are earnings and asset based), factor value (i.e. factors that are common to many stocks, such as large cap vs small cap), industry value (using their proprietary breakdown, relative to industry and also in relation to U.S. data) and value opportunity (industry and stock analysis)
- The growth component of the model involves screening on specific momentum (such as trends unique to each stock), stock fundamental trends (such as EPS growth), factor momentum (such as large cap vs small cap) and industry momentum (makes use of their U.S. data set)
- Quality characteristics can be broken down into earnings quality (stock specific measures of earnings sustainability) and capital efficiency (which measures how efficiently the management is using capital)
- The model also includes short-term signals, which focus on revisions (EPS revisions and recommendation changes) and market imbalances (how likely is a stock to move up in the coming weeks based on trading imbalances)
- Value characteristics include price-to-earnings and price-to-cash flow ratios; Momentum characteristics include earnings and revenue growth, relative strength, investor sentiment changes; Quality characteristics assess how conservatively a company reports its earnings; Profitability characteristics include return on equity and return on assets; Financial Strength characteristics include debt/cash flow ratio; Stability characteristics include EPS and price volatility
- Since our last review, CC&L expanded the number of industries it breaks the Canadian market into and removed the income trust classification; their model now has a total of 33 industries
- Portfolio construction involves building a portfolio that optimize forecast risk and return, while minimizing transactions costs and subject to portfolio constraints.
- Environmental, Social and Governance Factors:
 - Their model doesn't include any specific environmental, social, and governance factors
 - Their research suggests that ESG factors have not been valuable
 - However they give a lot of attention to governance and proxy voting
 - They favour engaging the companies in general about their governance practices, but not specifically related to the stock selection decision
 - They feel that their model assesses the economic benefits of socially responsible investing

Risk Controls

- They have a proprietary risk management system that is integrated into their model
- Their risk model focuses on market risk, industry risk and stock risk
- Portfolio risk is reviewed by the Risk Management Committee; the Committee is comprised of Gary Baker (Head of Fundamental Equities), Martin Gerber (Head of Quantitative Equities), Brian Eby (Head of Fixed Income), Kathy Leavens

(Compliance Officer) and Larry Lunn (Chief Investment Officer); Larry Lunn is the Chair of the Committee

- Sector weights are allowed to deviate from the benchmark weights by up to 5%
- No securities lending
- Derivative instruments can only be used in ways that are consistent with the fund's and the investor's investment objectives. Derivatives cannot be used to create leverage.

Research Agenda

- Steven Huang reviewed the recent enhancement to the portfolio and the research agenda
- Research initiatives can be classified into 3 categories: forecast improvements, portfolio construction and trading strategies
- Recent forecast improvements initiatives focused on:
 - Model structure
 - Introduction of proprietary industry classification with 33 industry groups. They have measured the effectiveness of the model under the new classification. They have noticed an increase in the explanatory power of the model as the value indicators have gone up in value.
 - Short-term alpha
 - Enhanced the accuracy of their short term estimate revisions insights by distinguishing the value of each signal based on the reason for the revision and the materiality of the revisions across time and industry.
 - Enhanced their short term signals for market imbalance reversals by improving their differentiation between stock price moves due to imbalances versus those due to earnings release flows.
 - Long-term alpha:
 - Split between common and stock specific characteristics for momentum and value factors
 - Stress test of quality factors
 - Risk modeling:
 - Enhancement of market risk forecast (beta) by applying a proprietary noise reduction technique and increasing the frequency of the data used in the estimation process
- Recent portfolio construction initiatives focused on:
 - Life expectancy of investment insights. Some investment changes are instantaneous while others will play out over time. The implementation of this signal allows them to determine the best timing for each trade.
 - Dynamic risk budgeting
- Implementation:
 - Increased focus on trading costs
- For 2011, forecast improvements initiatives they are working on include:
 - Momentum signals: links momentum characteristics to different volatility regimes
 - Short term signals: instances where stock prices move up as a result of trading imbalances

- Detailed level estimate revisions: develop better analyst forecast data by using proprietary aggregation and trading schemes
- Capital efficiency rewards: opportunities vary depending on the business cycle
- Volatility and beta risk factors: introduction of beta forecast for each of the factors they use
- North American cross border insights: combining U.S. stock universe with Canadian stock universe to make better company specific forecasts
- For 2011, portfolio construction initiatives they are working on include:
 - Direct sourced analyst revisions: evaluates benefits of receiving direct brokers real time analyst revisions in advance of notification from IBES

Capacity

- Capacity is not an issue now; they currently have about \$3.2 billion in their Canadian Q-Core strategy and about \$5.8 billion in all their Canadian quantitative strategies. They believe that they can manage up to 1% of the Canadian market value, which is about \$10 billion. They base their estimate on the liquidity, the size, the breadth and the depth of the market place.

Trading

- CC&L has three full time dedicated traders
- They have increased the amount of trading they do in dark pools and the amount of trading they do without using an investment dealer
- I met with one trader (Nancy Kwok) and we reviewed their trading systems and methodology, how they handle trade requests from the portfolio managers, how they measure the quality of execution, how they measure trading costs, how they select and evaluate brokers/dealers to implement trades and how they select venues to trade
- They developed a proprietary system to measure execution
- They look at four benchmarks to measure transactions costs: last day close, market open, next day open and volume weighted average price
- Broker selection has two steps: the broker must be on an approved list and budget is allocated based on research
- Regarding dark pools, they do business on Liquidnet in Canada, but they are sensitive of dark pools that divulge market information
- Regarding soft dollar allocation, there's a committee that decides which services will be funded with soft dollars
- Overall they have adequate trading systems and people in place to provide efficient trading

COMPLIANCE

- Kathleen Leavens, Compliance Officer, answered questions about compliance. She reports to the CEO (Gary Lunn).
- The Board of CC&L is currently reviewing proxy voting procedures
- CC&L is in compliance with:
 - Investment manager mandate
 - CC&L Statement of Investment Policies and Procedures
 - Pension Benefits Act

- Income Tax Act and qualified investments
 - Suppression of Terrorism
- The firm, key personnel or fund have not faced any major litigation in the past year
- Their last regulatory review was done by the British Columbia Securities Commission in 2007; only minor issues, related to marketing material, were raised
- Regarding conflicts of interest, Gord MacDougall, a non-advising director of Connor, Clark & Lunn Investment Management Ltd., is a director of International Forest Products Limited. There are no other conflicts of interest.
- PricewaterhouseCoopers is their auditor
- Employees have to comply annually with a Code of Ethics
- Personal trading rules apply to all employees and pre-trade clearance is required
- They use soft dollars; their policy is compliant with CFA guidelines and securities regulations
- They conduct a Section 5970 operations and controls audit every two years
 - The audit reviews all controls in place
 - The audit is conducted by PWC
- Overall CC&L has adequate compliance procedures in place

THE UNIVERSITY OF WESTERN ONTARIO RETIREMENT PLANS
CC&L Investment Management
Meeting Agenda

Date: April 4, 2011

Meeting time: 9:00 AM to 1:00 PM

Location: 2200 – 1111 West Georgia Street, Vancouver, BC

UWO Attendees:

Martin Bélanger, Director, Investments

ORGANIZATION:

- Introduction – relationship review
- Discuss any meaningful change to your corporate structure since the last review
- Review changes in assets under management
- Discuss clients gained and lost
- Overview of new products
- Briefly discuss your business continuity plan

INVESTMENT PERSONNEL:

- Introduction to key personnel on our mandate
- Discuss personnel turnover for our mandate

REVIEW OF UWO PORTFOLIOS:

- Performance overview
- Attribution analysis
- Detractors/contributors to performance
- Portfolio characteristics
- Overview of investment process and changes to investment policy, if any
- Provide an overview of the investment guidelines for this mandate
- Discuss changes made to the portfolio
- Top 10 holdings
- Describe how you measure and control portfolio investment risk
- Discuss capacity issues
- Report how you integrate environmental, social and governance factors in your investment process and the impact on your portfolio and investment strategy
- Discuss current portfolio positioning

RESEARCH:

- Review of models and systems
- Portfolio construction
- Overview of research agenda
- Provide overview of past changes to the model

TRADING:

- Overview of trading systems and methodology
- Discuss execution analysis
- Discuss total trading costs
- Discuss soft dollar allocation
- Discuss broker/dealer selection
- Discuss stock exchange selection

COMPLIANCE:

- Confirm that all investments managed by CC&L Investment Management on behalf of UWO are in compliance with the terms and conditions of the Investment Manager Mandate, the Managed Account Agreement and in compliance with all applicable laws
- Describe any material litigation to which your firm, key personnel or the funds have been party over the past year
- Describe any material issue raised as a result of recent regulatory reviews
- Confirm that any conflict of interest or potential conflict of interest involving CC&L Investment Management or key investment personnel has been disclosed
- Confirm that your key investment personnel complies with an appropriate code of ethics

OTHER:

- Office tour