Empirical Research Partners

Alfredo Pinel 212 803-7965
Yi Liu 212 803-7942

Global Portfolio Strategy January 2018

January 5, 2018

Canadian Stocks: Plays on Anything?

A Story Tied to Commodities and Debt

- Canadian stocks were sought after as safe havens in the aftermath of the Financial Crisis and in that period they led their developed-world peers. Since 2011 though they've lagged by (5) percentage points per annum as the bullish outlook for oil and other commodities was called into question when the production in the U.S. shale patch surged. The commodity stocks have been stuck in purgatory for years and in this research we compare the character of the Canadian ones with that of their U.S. peers, assessing which one is the more-levered vehicle on an improving backdrop. We also looked into the Canadian banks wondering whether they represented plays on U.S. rates (like their U.S. and European peers) or on something else. Consumer debt in Canada has risen to an unprecedented level and the stability of its banks could be challenged in a recession.

Energy, Metals and Mining: Looking for the Right Exposure

- In the last decade the Canadian energy companies have cut their capital spending, measured relative to P,P&E, to less than 10%, a level in-line with that of their U.S. peers and the lowest reading in 30 years. Their free cash flow margins have moved up and now match those of their U.S. cousins. Their betas with oil prices have come to resemble those of their U.S. counterparts too. Using price-to-book multiples they're now valued at a (13)%discount to the U.S. issues, a decade low. For Canadian miners the story is similar and since 2014 the draw their capital spending represents of gross cash flow has fallen, from 180% to 80%, and uncharacteristically their free cash flow margins have turned positive. The betas of the Canadian and U.S. issues to the price changes of industrial metals are similar, but the price-to-book multiple of the Canadian stocks is (30)% lower, a reading in the bottom seventh of the 30-year history.

- The Canadian commodity producers are now more appealing than their U.S. peers in our fundamental model, that weighs valuation, capital deployment and the resulting production of earnings and free cash flow. Today more than 20% of them screen in the best quintile of that framework. It's been helpful in finding winners with attractive commodity stocks leading their peers by +5 percentage points per annum over the last 25 years. Appendix 1 on page 10 presents the list of Canadian commodity issues as judged by this framework.

Banks: Plays on Rates or on Something Else?

- Canadian households have borrowed aggressively in order to afford increasingly expensive homes and as a result the balance sheets of Canadian banks have swelled. With no recession on the horizon that's not been enough to stoke investors' fears and the banks' arbitrage risk (i.e., unexplained volatility) remains low. The debt build-up hasn't been ignored though and Canadian banks sell at an earnings multiple that's (20)% lower than that of their U.S. peers, down from a +20% premium during the European Debt Crisis. Worsening housing affordability and government measures to curtail that market's frothiness are real headwinds. U.S. banks, that represent plays on long rates with a capital allocation kicker, are more attractive despite the differential in multiples. Appendix 2 on page 10 presents a ranking of Canadian financials using our model in North America.

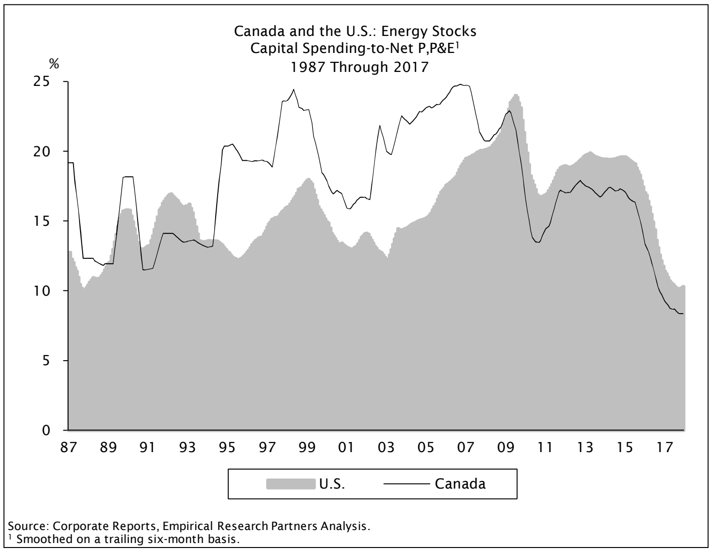
A More Credit-Sensitive Cycle

- Household debt in Canada has risen to record levels, making the consumer more sensitive to changes in interest rates than before. A resolute Bank of Canada could ultimately undermine debt creation, hurting the free cash flow margins of the core of the market (i.e., excluding financials and commodity stocks) that sources 60%of its revenues domestically. In a world that's moved further away from the precipice the stability of the Canadian system is less valuable, and save for the commodity issues we're prone to look elsewhere for ideas.

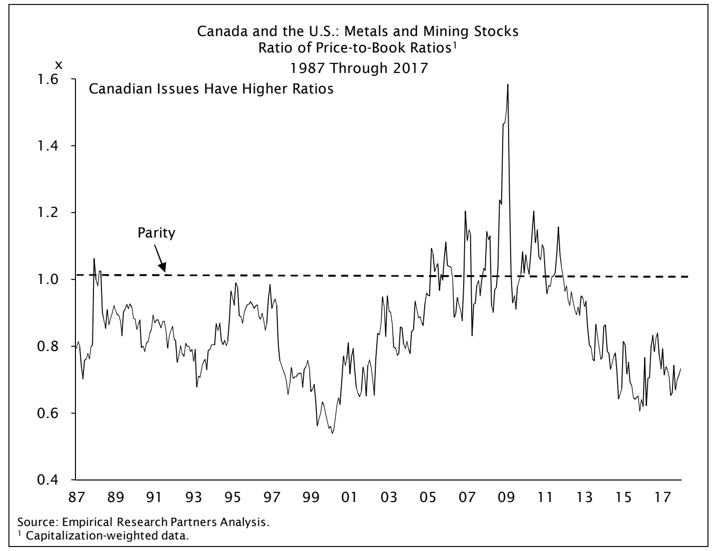
Sungsoo Yang (212) 803-7925 Nicole Price (212) 803-7935 Yu Bai (212) 803-7919 Yuntao Ji (212) 803-7920 Iwona Scanzillo (212) 803-7915

Conclusions in Brief

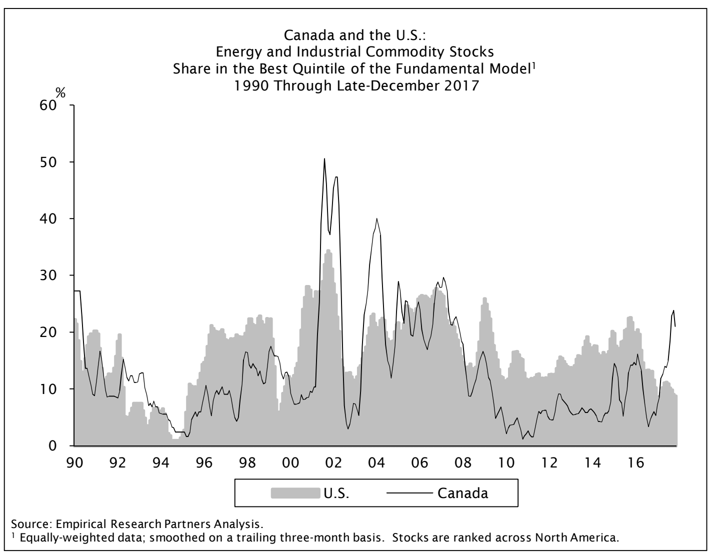
- Canadian energy companies have become less capital intensive…



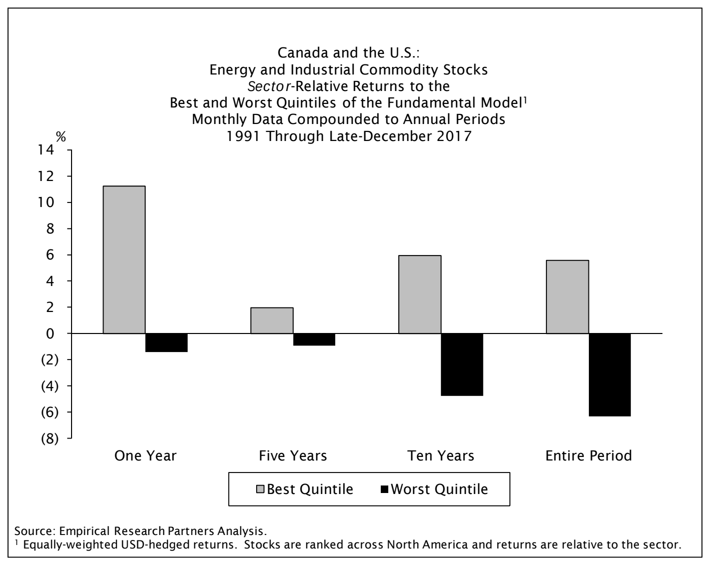
- …And the metal and mining issues are priced at a near-record discount to their U.S. peers:



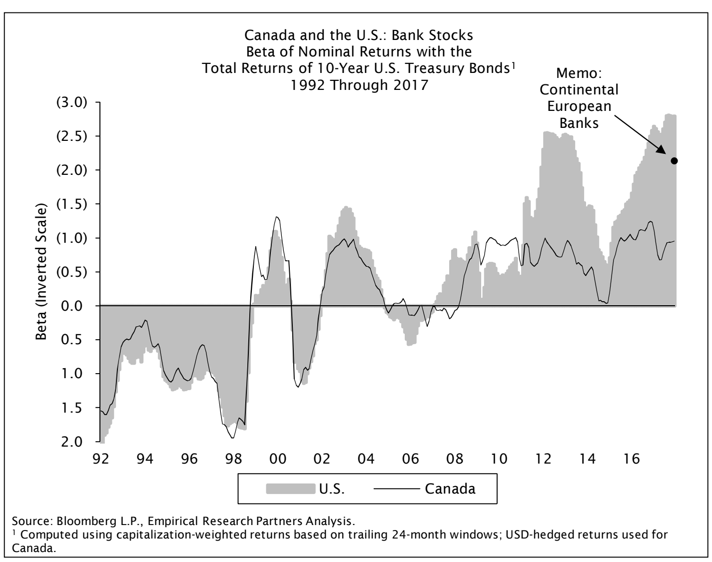
- The outlook for Canadian commodity stocks has improved...



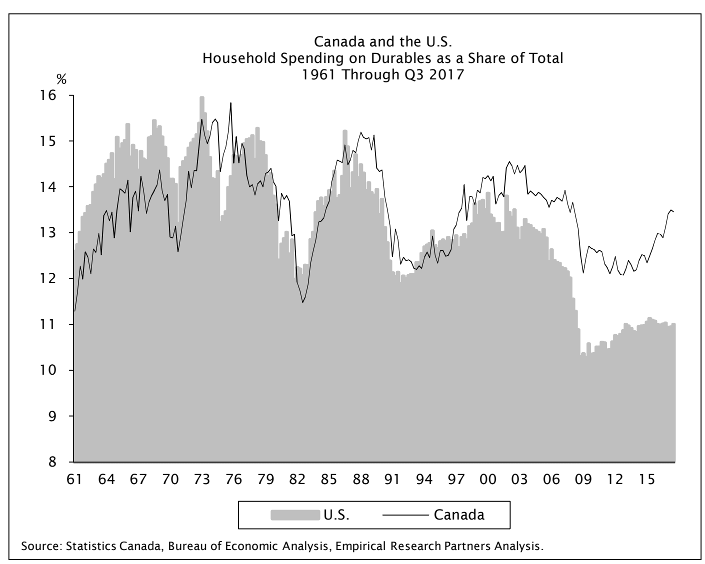
- …And our fundamental model has a good record:



- Canadian banks aren't plays on U.S. rates:



- A more credit-sensitive consumer is a real risk:

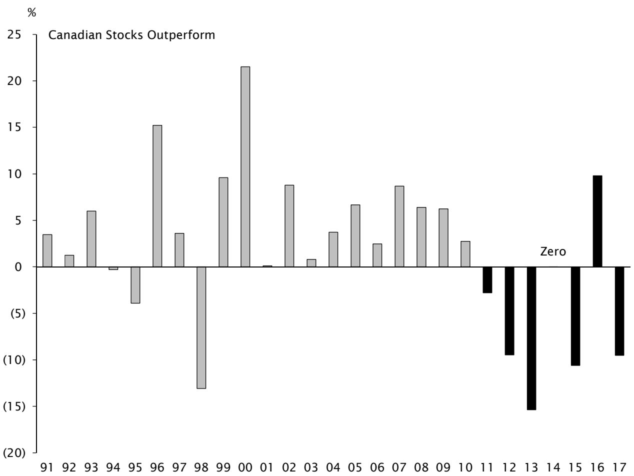


Canadian Stocks: Plays on Anything?

A Story Tied to Commodities and Debt

In the immediate aftermath of the Financial Crisis investors sought out the safety offered by Canadian equities as that economy sidestepped the real estate bust while riding the wave created by the BRIC's demand for commodities. In the years that followed however that market fell out of favor, underperforming the developed world (that includes the U.S.) by more than (5) percentage points per annum since 2011 (see Exhibit 1). As the bullish outlook for oil prices was called into question when U.S. production soared, Canada's commodity producers, that account for a hefty 20% of that market's capitalization, dragged down returns (see Exhibit 2).

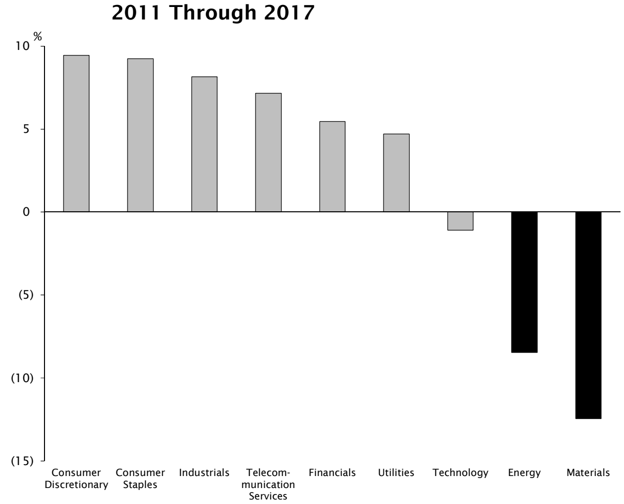
Exhibit 1: Canada
Equity Market Returns
Relative to a Developed Markets Composite[1]
1991 Through 2017



Source: Empirical Research Partners Analysis.

[1] Capitalization-weighted USD-hedged returns.

Exhibit 2: Canada
Relative Returns by Sector[1]
Monthly Data Compounded to Annual Periods
2011 Through 2017

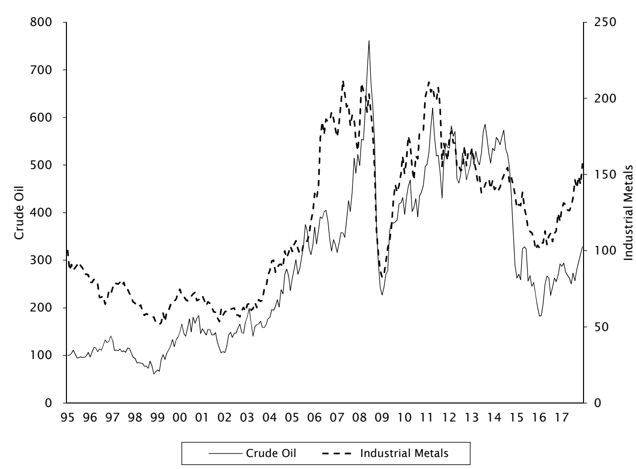


Source: Empirical Research Partners Analysis.

[1] Capitalization-weighted USD-hedged returns.

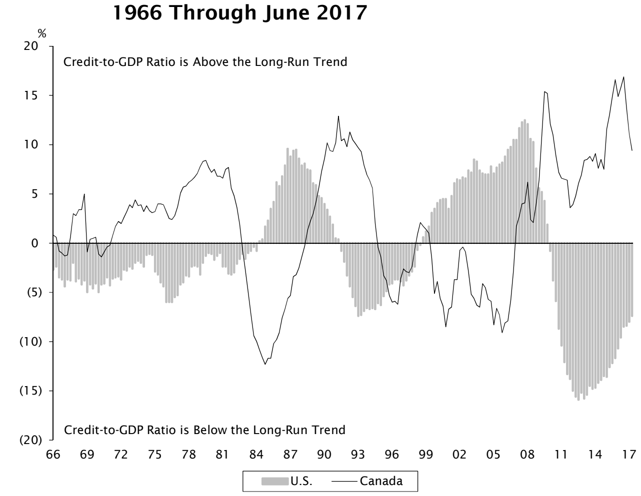
In the first part of this research we examine the quantitative appeal of Canadian energy and metals and mining stocks, using their U.S. counterparts as a comparator. As the backdrop for commodity prices has improved we were interested in assessing which one is the more levered vehicle on an improving backdrop (see Exhibit 3).

Exhibit 3: Crude Oil and Industrial Metal Spot Price Indices
(January 1995=100)
1995 Through 2017



Source: Bloomberg L.P., Empirical Research Partners Analysis.

Exhibit 4: Canada and the U.S.
Credit-to-GDP Gaps[1]
1966 Through June 2017



Source: Bank for International Settlements, Empirical Research Partners Analysis.

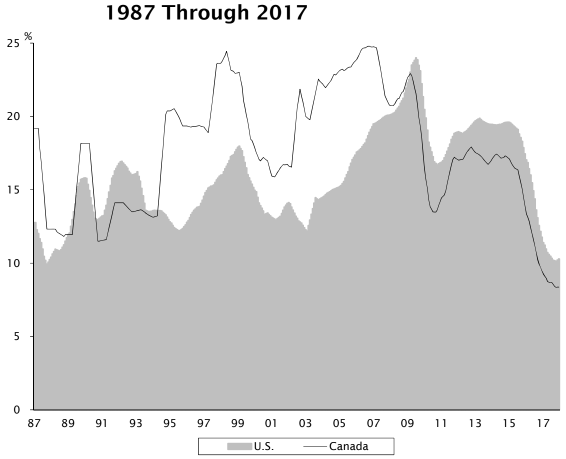
[1] The credit-to-GDP gap is the difference between the credit-to-GDP ratio and its long-run trend, based on total credit to the non-financial private sector.

In the second part of this research we look at the Canadian banks, another sizable part of that country's equity market, accounting for about a quarter of its capitalization. We wondered whether they represented plays on U.S. rates (like their U.S. and European peers) or whether their performance was dependent on something else. Canada's credit-to-GDP gap (i.e., the difference between the credit-to-GDP ratio and its long-run trend) remains wide at 10%, a cause for concern (see Exhibit 4 Overleaf). Work by the BIS found that, since 1970, in two-thirds of episodes when a 10% threshold was breached a financial crisis erupted some time in the subsequent three years.[1] Given the high levels of debt in Canada there's reason to worry that a recession or interest rate shock would put at risk what's up to now been a resilient banking system.

Energy, Metals and Mining: Looking for the Right Exposure

Canadian energy companies have long been more capital intensive businesses than their U.S. counterparts, a reflection of the higher costs involved in extracting Canadian crude. However over the last decade their capital spending-to-net P,P&E ratio has come down and now resembles that of their U.S. peers. At around 10% it now sits at a 30-year low (see Exhibit 5). The draw from capital spending on gross cash flows has fallen too and their pre-dividend free cash flow margins have moved up, matching those of their U.S. peers after lagging throughout most of the prior thirty years (see Exhibit 6).

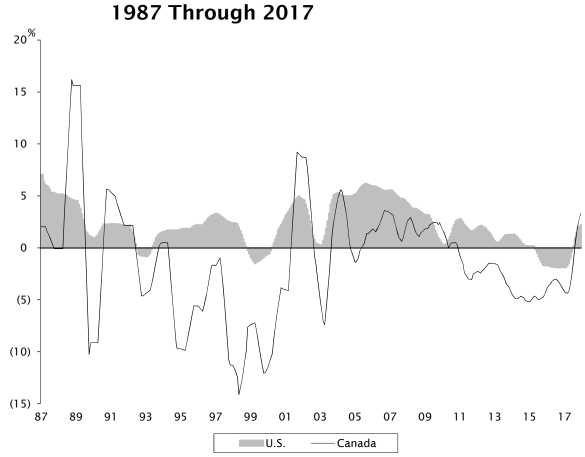
Exhibit 5: Canada and the U.S.: Energy Stocks Capital Spending-to-Net P,P&E[1] 1987 Through 2017



Source: Corporate Reports, Empirical Research Partners Analysis.

[1] Smoothed on a trailing six-month basis.

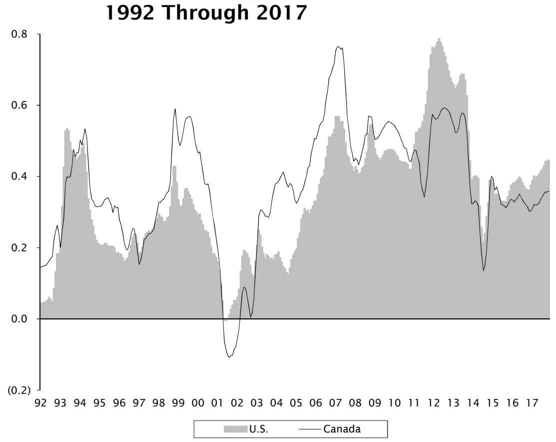
Exhibit 6: Canada and the U.S.: Energy Stocks Free Cash Flow Margins[1] 1987 Through 2017



Source: Corporate Reports, Empirical Research Partners Analysis.

[1] Smoothed on a trailing six-month basis.

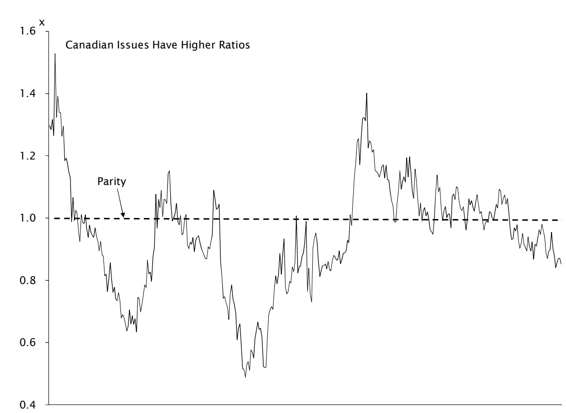
Exhibit 7: Canada and the U.S.: Energy Stocks Beta of Nominal Returns with the Monthly Change in Crude Oil Prices[1] 1992 Through 2017



Source: Bloomberg L.P., Empirical Research Partners Analysis.

[1] Computed using capitalization-weighted returns based on trailing 24-month windows and smoothed on a trailing three-month basis; USD-hedged returns used for Canada. Prices based on West Texas Intermediate crude.

Exhibit 8: Canada and the U.S.: Energy Stocks Ratio of Price-to-Book Ratios[1] 1987 Through 2017



Source: Empirical Research Partners Analysis.

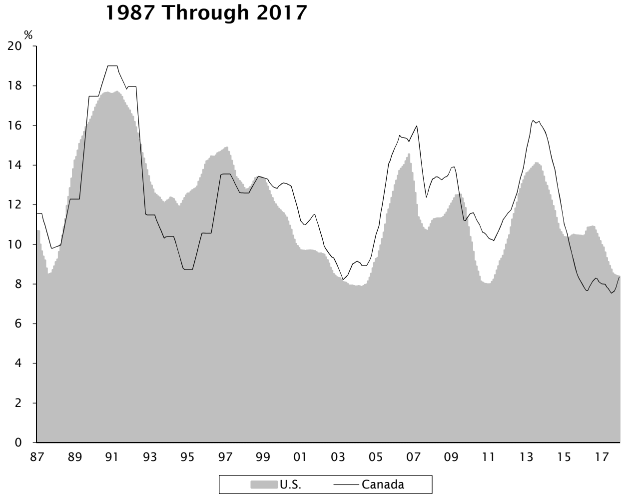
[1] Capitalization-weighted data.

[1] Mathias Drehmann, June 2013. "Total Credit as an Early Warning Indicator for Systemic Banking Crises," BIS Quarterly Review.

As the Canadian producers have become leaner their betas with oil prices have come to resemble those of their U.S. counterparts (see Exhibit 7 Overleaf). That exposure comes at a lower price with the Canadian energy issues valued at a (13)% discount on book multiple to their U.S. peers, the largest one since the boom years of the 2000s (see Exhibit 8 Overleaf).

We then turned to the Canadian metal and mining issues having noticed that their capital spending as a share of net P,P&E has also come down and is now at a level almost identical to that of their U.S. peers (see Exhibit 9). Similarly the draw of capital spending on gross cash flows is down from a peak of 180% in the summer of 2014 to 80% more recently. After bottoming at (20)% in that year their pre-dividend free cash flow margins have rebounded to 5%, moving back in-line with those of their U.S. cousins (see Exhibit 10).

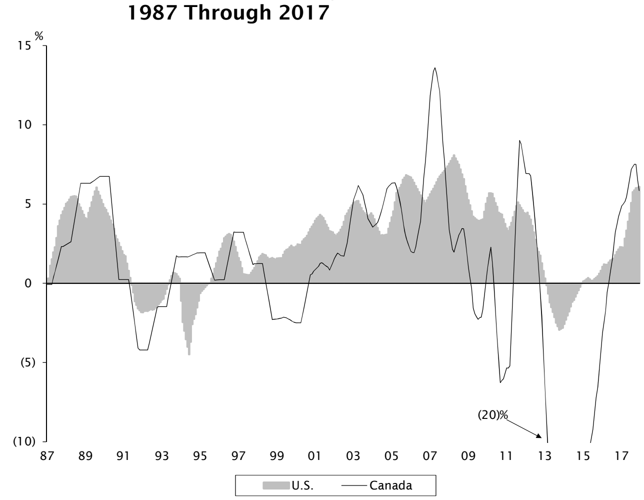
Exhibit 9: Canada and the U.S.: Metals and Mining Stocks Capital Spending-to-Net P,P&E[1] 1987 Through 2017



Source: Corporate Reports, Empirical Research Partners Analysis.

[1] Smoothed on a trailing six-month basis.

Exhibit 10: Canada and the U.S.: Metals and Mining Stocks Free Cash Flow Margins[1] 1987 Through 2017

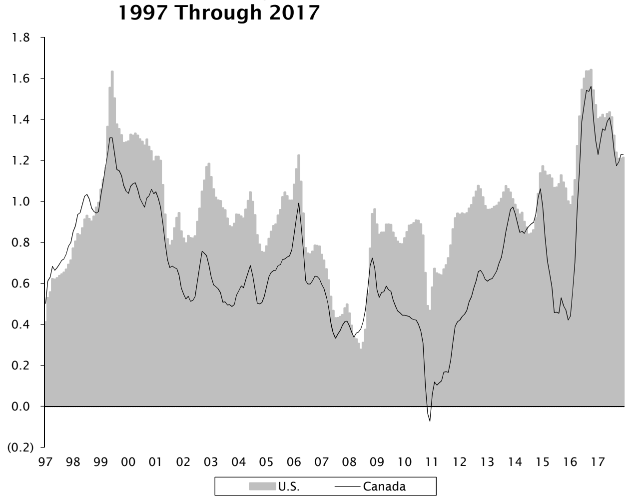


Source: Corporate Reports, Empirical Research Partners Analysis.

[1] Smoothed on a trailing six-month basis.

The Canadian metal and mining stocks' sensitivity to the prices of industrial metals is similar to that of their U.S. peers and in both regions it's at one of the highest levels of the last 20 years (see Exhibit 11). The Canadian issues though are priced at a (30)% discount on book to their U.S. equivalents, a reading in the bottom 15% of the distribution of the last 30 years and down from the +20% premium seen in 2011 (see Exhibit 12).

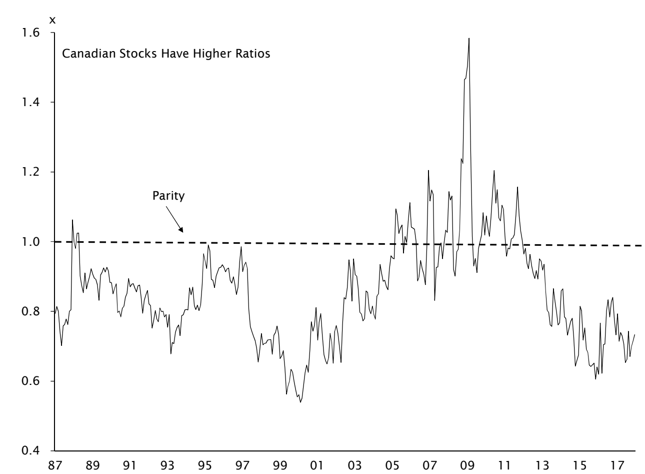
Exhibit 11: Canada and the U.S.: Metals and Mining Stocks Beta of Nominal Returns with the Monthly Change in Industrial Metal Prices[1] 1997 Through 2017



Source: Bloomberg L.P., Empirical Research Partners Analysis.

[1] Computed using capitalization-weighted returns based on trailing 24-month windows and smoothed on a trailing three-month basis; USD-hedged returns used for Canada.

Exhibit 12: Canada and the U.S.: Metals and Mining Stocks Ratio of Price-to-Book Ratios[1] 1987 Through 2017

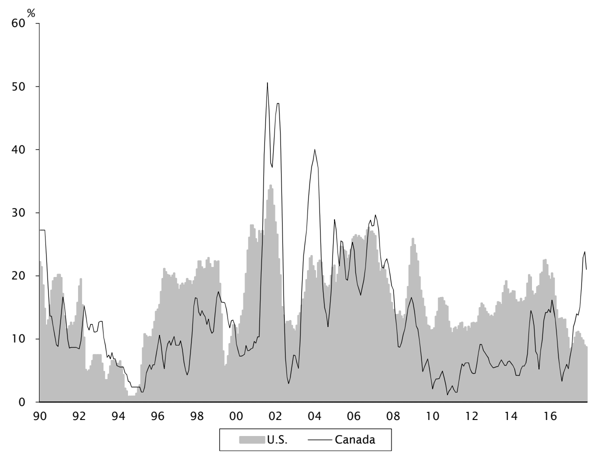


Source: Empirical Research Partners Analysis.

[1] Capitalization-weighted data.

Commodity prices are hard to forecast and our view is that almost nobody knows nuttin' about where they're headed. That said, the high-cost Canadian commodity producers have cut capital spending, improved free cash flow production and look cheaper than their U.S. counterparts, representing more levered plays on an improving backdrop than their U.S. counterparts. Moreover, we ran the Canadian and U.S. stocks through our fundamental model that weighs valuation, capital deployment and the resulting production of earnings and free cash flow. Today more than 20% of the Canadian commodity-related issues screen favorably, more than twice the level of their U.S. counterparts (see Exhibit 13). That model has helped us find winners in this space, with stocks in the best quintile leading the sector by more than +5 percentage points over the last 25 years or so, with better results lately as commodity prices have recovered (see Exhibit 14). Appendix 1 on page 10 presents the list of Canadian energy and industrial commodity stocks sorted by their fundamental model rank.

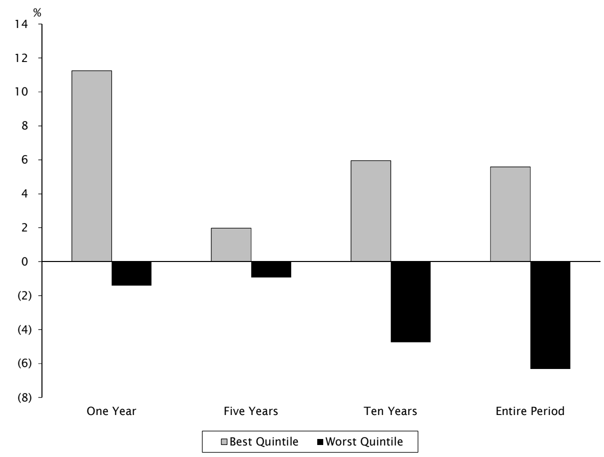
Exhibit 13: Canada and the U.S.:
Energy and Industrial Commodity Stocks
Share in the Best Quintile of the Fundamental Model[1]
1990 Through Late- December 2017



Source: Empirical Research Partners Analysis.

[1] Equally-weighted data; smoothed on a trailing three-month basis. Stocks are ranked across North America.

Exhibit 14: Canada and the U.S.:
Energy and Industrial Commodity Stocks
***Sector*-Relative Returns to the**
Best and Worst Quintiles of the Fundamental Model[1]
Monthly Data Compounded to Annual Periods
1991 Through Late-December 2017



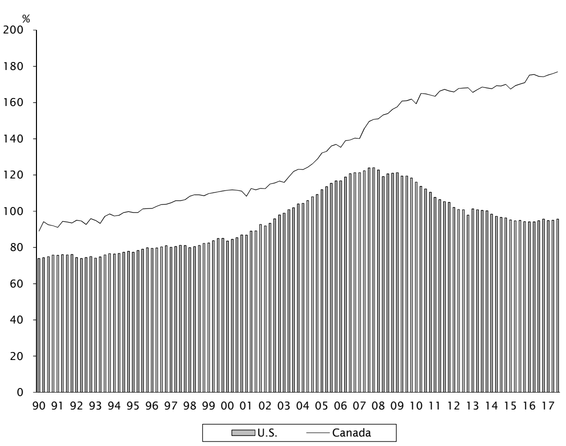
Source: Empirical Research Partners Analysis.

[1] Equally-weighted USD-hedged returns. Stocks are ranked across North America and returns are relative to the sector.

Banks: Plays on Rates or on Something Else?

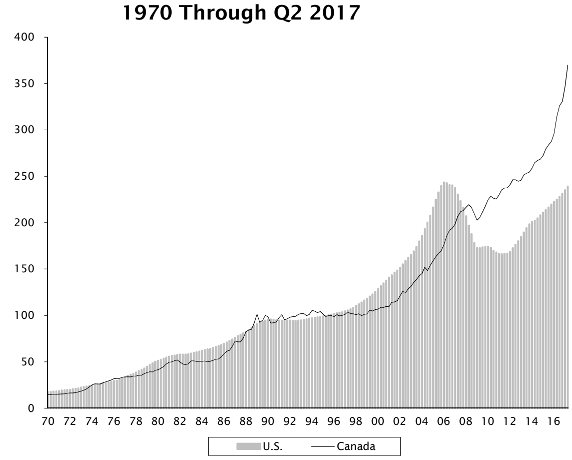
Over the last two decades household debt in Canada has grown faster than incomes and today that ratio stands at around 1.8-to-one, considerably above the peak witnessed in the U.S. a decade ago (see Exhibit 15). What's happened is that Canadian households have gone on a borrowing spree in order to afford increasingly expensive homes, with prices rising by +7% per year in the post-Crisis era (see Exhibit 16).

Exhibit 15: Canada and the U.S.
Household Debt as a Share of Disposable Income
1990 Through Q3 2017



Source: Statistics Canada, Federal Reserve Board, U.S. Department of Commerce, Empirical Research Partners Analysis.

Exhibit 16: Canada and the U.S.
Residential Property Price Indices[1]
(1995=100)
1970 Through Q2 2017

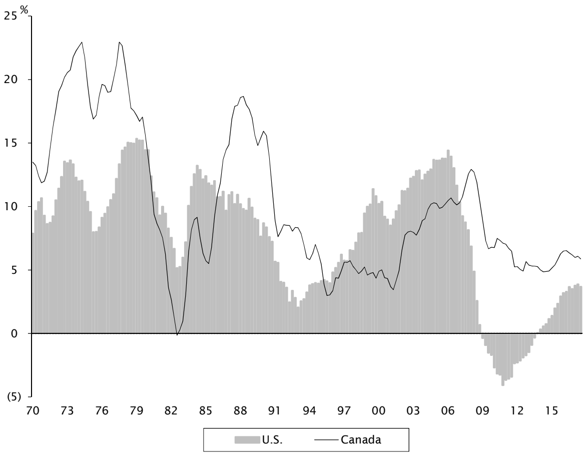


Source: Bank for International Settlements.

[1] Property price methodology varies by country.

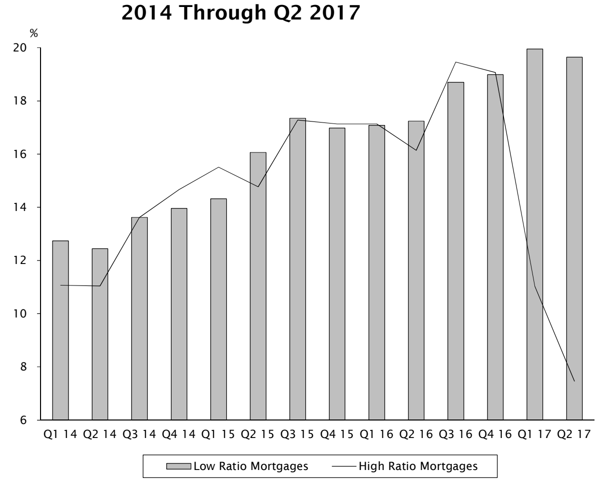
In the years following the real estate bust write-offs and tighter standards caused the stock of mortgages in the U.S. to slump, while in Canada the stock has grown at a +7% clip (see Exhibit 17). Canada's housing market has been running hot and the government has put in place policies to cool it down. That's helped reduce the riskiness of originations where *less* than 20% downpayments are made and that account for about 30% of the originations (see Exhibit 18**)**. However that's not been true for the remaining 70% of borrowers that are more likely to have extreme loan-to-income ratios. Delinquency rates on credit cards are running similar to those in the U.S. (**see** Exhibit 19). Not much controversy surrounds the banks and their arbitrage risk (i.e., stock price volatility not captured by beta) sits at a historical low (see Exhibit 20).

Exhibit 17: Canada and the U.S.
Year-over-Year Changes in Mortgages Outstanding
1970 Through Q3 2017



Source: Statistics Canada, Federal Reserve Board, Empirical Research Partners Analysis.

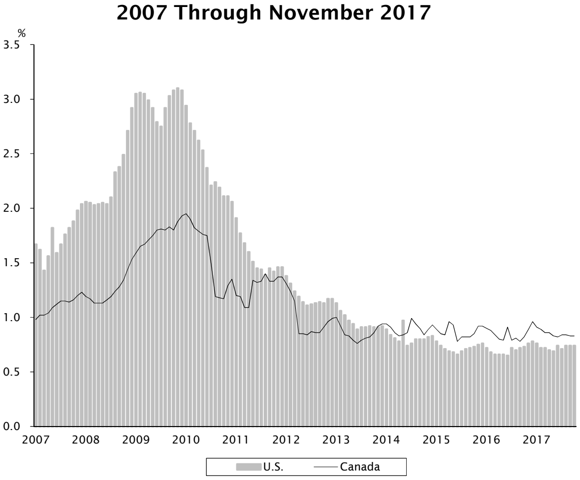
Exhibit 18: Canada
Share of New Mortgage Origination
With Loan-to-Income Ratios Above 450%
by Type of Mortgage[1]
2014 Through Q2 2017



Source: Bank of Canada Financial System Review, November 2017.

[1] High ratio mortgages are those with loan-to-value ratios above 80%. Low ratio mortgages are those with loan-to-value ratios at or below 80%.

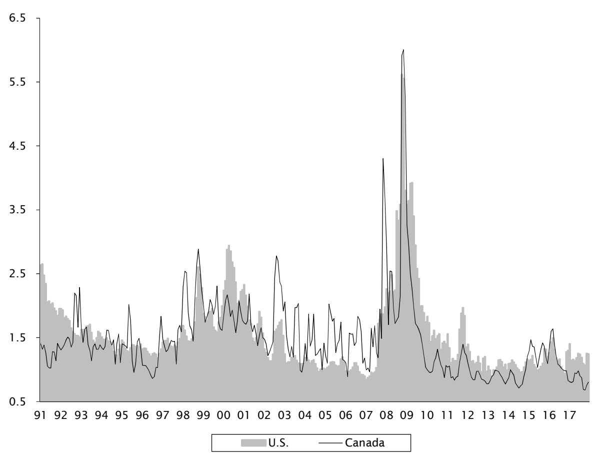
Exhibit 19: Canada and the U.S.
Credit Card Delinquencies[1]
2007 Through November 2017



Source: Bloomberg L.P., Empirical Research Partners Analysis.

[1] 90+ days delinquencies.

Exhibit 20: Canada and the U.S.: Bank Stocks
Average Arbitrage Risk[1]
1991 Through 2017

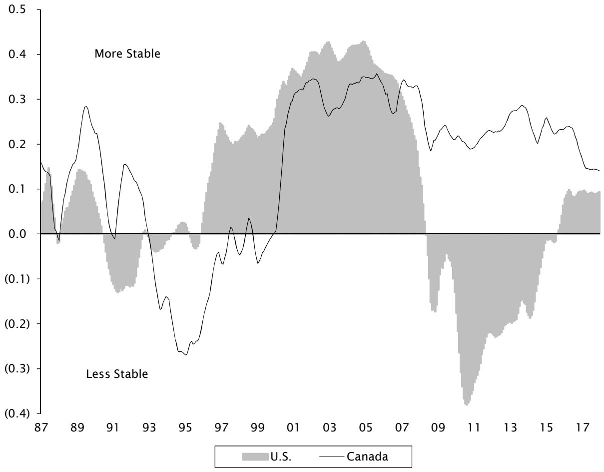


Source: Empirical Research Partners Analysis.

[1] Equally-weighted data.

While the fundamental stability of the Canadian banks has waned, their U.S. counterparts have spent the last decade moving in the opposite direction (see Exhibit 21). The market has noticed and the P/E multiples of the Canadian banks have come down relative to those of their U.S. counterparts over the years, from a premium of +20% at the height of the European Debt Crisis to a discount of (20)% today (see Exhibit 22). Part of that has to do with doubts regarding the ability of the Canadian banks to continue to grow the loan base in what has become an increasingly difficult origination environment, with housing affordability worsening and macroprudential levers being pulled to curtail the housing market's frothiness.

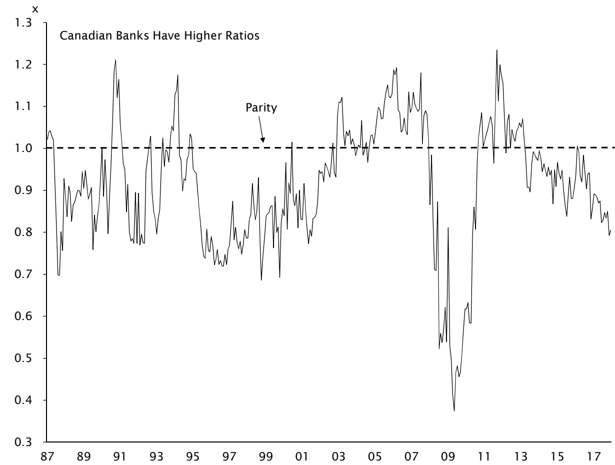
Exhibit 21: Canada and the U.S.: Bank Stocks
Average Fundamental Stability Scores[1]
1987 Through 2017



Source: Empirical Research Partners Analysis.

[1] Fundamental stability computed within each region and smoothed on a trailing six-month basis.

Exhibit 22: Canada and the U.S.: Bank Stocks
Ratio of Forward-P/E Ratios[1]
1987 Through 2017



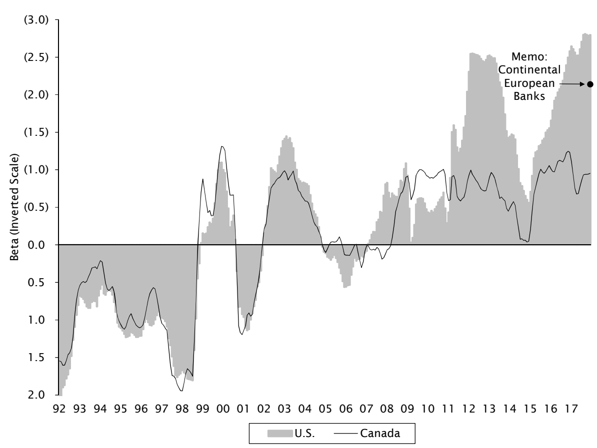
Source: Empirical Research Partners Analysis.

[1] Capitalization-weighted data.

For the Canadian banks to outperform their U.S. peers we'd need to see a well-executed soft-landing in what appear to be deteriorating weather conditions. On the other hand the U.S. banks represent plays on long-rates and the cycle, wrapped with a capital allocation kicker and payout ratios that are (10) percentage points below those of their Canadian peers (see Exhibits 23 and 24). Importantly, the U.S. banks offer total yields above +4% (i.e., dividends plus net share buybacks as share of capitalization), a point higher than the Canadian ones.

Appendix 2 on page 10 presents the list of Canadian financials sorted by our core model ranks, along with valuation and capital deployment metrics.

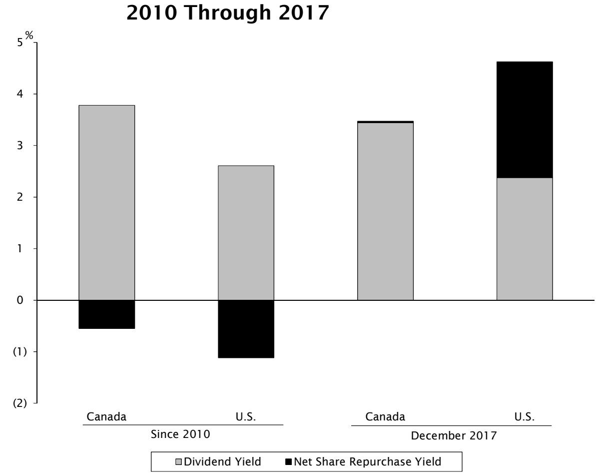
Exhibit 23: Canada and the U.S.: Bank Stocks
Beta of Nominal Returns with the
Total Returns of 10-Year U.S. Treasury Bonds[1]
1992 Through 2017



Source: Bloomberg L.P., Empirical Research Partners Analysis.

[1] Computed using capitalization-weighted returns based on trailing 24-month windows; USD-hedged returns used for Canada.

Exhibit 24: Canada and the U.S: Bank Stocks
Total Yield: Dividends Plus Net Share Repurchases
as a Share of Capitalization
2010 Through 2017



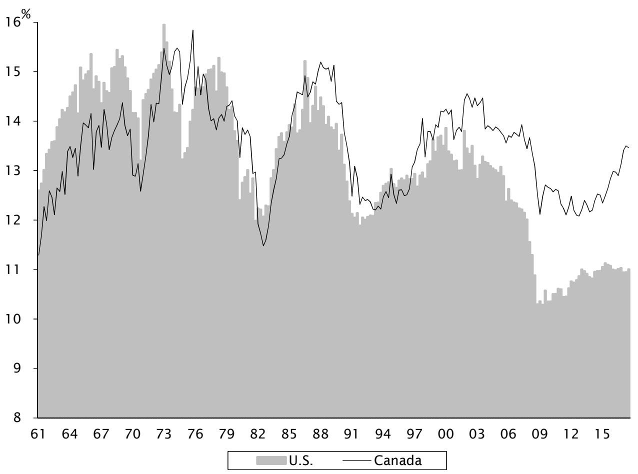
Source: Corporate Reports, Empirical Research Partners Analysis

Conclusion: A More Credit-Sensitive Cycle

The high level of household debt has made the Canadian consumer more sensitive to changes in interest rates than in previous cycles.[2] The concern is that a resolute Bank of Canada may undermine their appetite for spending, that's so far been healthy (see Exhibit 25). The low rate environment has kept a lid on household debt service ratios, keeping the purse strings loose (see Exhibit 26).

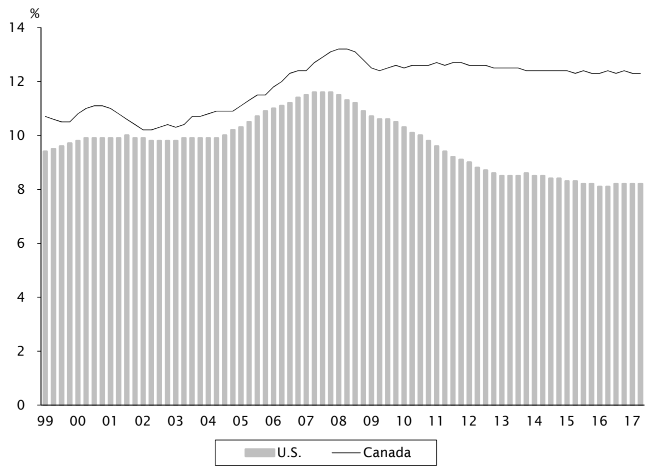
[2] Bank of Canada Monetary Policy Report, October 2017.

Exhibit 25: Canada and the U.S.
Household Spending on Durables as a Share of Total[1]
1961 Through Q3 2017



Source: Statistics Canada, Bureau of Economic Analysis, Empirical Research Partners Analysis.

Exhibit 26: Canada and the U.S.
Household Debt Service Ratios[1]
1999 Through Q2 2017



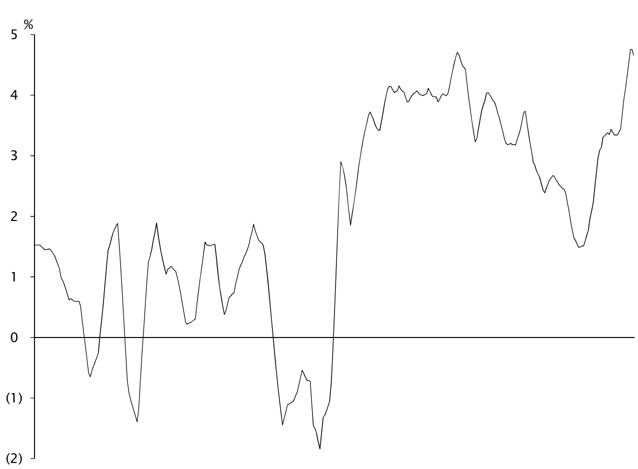
Source: Bank for International Settlements, Empirical Research Partners Analysis.

[1] Interest payments plus amortizations divided by income.

That may threaten the viability of the free cash flow margins for the core of the Canadian equity market, that excludes the financial and commodity-related public companies and accounts for about 40% of the capitalization (see Exhibit 27). That's because those businesses are exposed to the domestic economy in a big way, sourcing close to 60% of their revenues from it, while the U.S. market accounts for an additional 25%. With little revenue exposure coming from elsewhere the stocks represent close to a pure-play on the Canadian cycle, and for the most part that's been a virtue when fear has gripped the global economy.

The Canadian stocks' free cash flows have historically been priced at a discount to their developed world counterparts and today that gap is about (100) basis points, nearly (170) basis points less than the extremes seen right before the Financial Crisis (see Exhibit 28). In the last few years the virtues of Canadian stocks have become less valuable in a world that's stepped further away from the precipice. Given the state of global monetary policy and the more credit-sensitive cycle in Canada we're prone to look elsewhere for opportunities, with the commodities sectors exceptions.

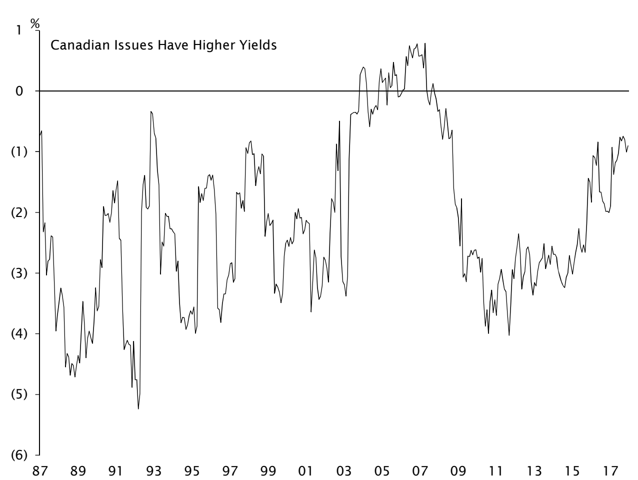
Exhibit 27: Canada
The Core of the Market
Free Cash Flow Margins[1]
1987 Through 2017



Source: Corporate Reports, Empirical Research Partners Analysis.

[1] Core of the market excludes energy, industrial commodities and cials; smoothed on a trailing six-month basis.

Exhibit 28: Canada
The Core of the Market
Relative Free Cash Flow Yields[1]
1987 Through 2017



Source: Empirical Research Partners Analysis.

[1] Core of the market excludes energy, industrial commodities and finan-financials. Relative to the developed markets.

Appendix 1: Canada: Energy and Industrial Commodity Stocks
Fundamental Model Ranking
Sorted by Fundamental Model Rank and Market Capitalization in USD[1]
As of End-December 2017

Symbol	Company	Price (Local)	Local Currency Code	Quintiles (1=Best; 5=Worst) Super Factors: Valuation	Capital Deployment	Earnings Quality and Trend	Fundamental Model	Forward P/E Ratio	2017 Nominal Return (Local)	Market Capitalization (USD Million)
Industrial Commodities										
TECK/B CT	Teck Resources Limited Class B	32.87	CAD	1	1	1	1	10.0 x	24.9 %	$15,146
MX CT	Methanex Corporation	76.16	CAD	2	1	1	1	16.3	32.5	5,153
LUN CT	Lundin Mining Corporation	8.36	CAD	1	2	2	1	21.4	32.7	4,831
WFT CT	West Fraser Timber Co. Ltd.	77.57	CAD	2	4	1	1	12.9	62.4	4,787
OSB CT	Norbord Inc.	42.55	CAD	1	3	1	1	8.8	30.0	2,920
CFP CT	Canfor Corporation	24.78	CAD	1	1	1	1	14.3	62.3	2,560
POT CT	Potash Corporation of Saskatchewan Inc.	25.78	CAD	5	1	3	4	31.4	9.1	17,376
AGU CT	Agrium Inc.	144.58	CAD	3	2	4	4	20.1	10.9	16,027
CCL/B CT	CCL Industries Inc. Class B	58.08	CAD	4	4	3	4	21.3	10.9	8,125
SJ CT	Stella-Jones Inc.	50.50	CAD	4	3	2	4	21.6	17.0	2,807
FM CT	First Quantum Minerals Ltd.	17.61	CAD	5	5	5	5	20.8	32.0	9,581
TRQ CT	Turquoise Hill Resources Ltd.	4.29	CAD	5	5	5	5	119.7	(0.5)	7,148
IVN CT	Ivanhoe Mines Ltd. Class A	4.24	CAD	5	5	5	5	NM	66.9	2,668
WPK CT	Winpak Ltd.	46.80	CAD	5	5	3	5	23.1	3.3	2,431
Energy:										
Integrateds, Oil Service, Refiners and Other										
SU CT	Suncor Energy Inc.	46.15	CAD	3	1	1	2	31.9 x	8.4 %	$61,289
IMO CT	Imperial Oil Limited	39.23	CAD	3	1	2	2	23.8	(14.6)	26,651
HSE CT	Husky Energy Inc.	17.75	CAD	2	1	3	2	38.8	9.0	14,374
CVE CT	Cenovus Energy Inc.	11.48	CAD	2	4	2	2	28.3	(42.5)	11,417
IPL CT	Inter Pipeline Ltd.	26.03	CAD	2	4	1	2	17.9	(6.5)	7,550
PKI CT	Parkland Fuel Corporation	26.85	CAD	2	1	5	2	24.1	(0.5)	2,832
SCL CT	ShawCor Ltd.	27.42	CAD	3	3	2	2	NM	(21.9)	1,537
ENF CT	Enbridge Income Fund Holdings Inc.	29.81	CAD	2	3	5	3	13.0	(8.6)	4,008
CCO CT	Cameco Corporation	11.61	CAD	3	2	4	3	50.0	(14.7)	3,629
ALA CT	AltaGas Ltd.	28.62	CAD	3	3	4	4	29.9	(9.4)	5,800
KML CN	Kinder Morgan Canada Ltd.	17.01	CAD	5	4	2	4	30.3	na	4,626
PPL CT	Pembina Pipeline Corporation	45.51	CAD	5	5	4	5	24.2	13.8	18,356
KEY CT	Keyera Corp.	35.42	CAD	5	5	3	5	22.6	(8.6)	5,741
Exploration and Production										
CNQ CT	Canadian Natural Resources Limited	44.92	CAD	2	2	1	1	26.7 x	7.8 %	$43,964
WCP CT	Whitecap Resources Inc.	8.95	CAD	1	1	2	1	34.2	(24.2)	2,997
PEY CT	Peyto Exploration & Development Corp.	15.03	CAD	1	2	2	1	14.6	(51.9)	1,970
VII CT	Seven Generations Energy Ltd. Class A	17.78	CAD	1	3	5	2	16.6	(43.2)	5,026
CPG CT	Crescent Point Energy Corp.	9.58	CAD	1	2	3	2	NM	(45.8)	4,228
ARX CT	ARC Resources Ltd.	14.75	CAD	2	3	3	2	25.8	(33.9)	4,191
TOU CT	Tourmaline Oil Corp.	22.78	CAD	2	5	4	3	27.3	(36.6)	4,974
VET CT	Vermilion Energy Inc.	45.68	CAD	3	2	1	3	77.0	(14.4)	4,455
ECA CT	Encana Corporation	16.77	CAD	3	4	4	4	23.8	7.0	13,050
PSK CT	PrairieSky Royalty Ltd	32.06	CAD	4	5	4	5	102.9	2.8	6,069

Source: Empirical Research Partners Analysis.

[1] Stocks are ranked across North America (i.e., U.S. and Canada).
[2] Fundamental model rank excludes the market reaction super factor in its computation.

Appendix 2: Canada: Financial Stocks
Core Model Ranking[1]
Sorted by Model Rank and Market Capitalization in USD
As of End-December 2017

Symbol	Company	Price (Local)	Local Currency Code	Quintiles (1=Best; 5=Worst) Valuation: Total Yield	Price-to-Book Value	Dividend Yield	Forward P/E Ratio	Valuation	Capital Deployment: Change in Common Shares Outstanding	Dividend Growth	Composite Capital Deployment	Market Reaction	Core Model Rank	Forward P/E-Ratio	2017 Nominal Return (Local)	Market Capitalization (USD Million)
Banks, Consumer Finance and Other																
NA CT	National Bank of Canada	62.72	CAD	3	2	1	1	1	4	3	3	1	1	10.3 x	19.7 %	$16,945
FCR CT	First Capital Realty Inc.	20.72	CAD	2	1	1	3	1	3	5	3	3	1	20.0	4.6	4,011
MIC CT	Genworth MI Canada Inc.	43.50	CAD	2	1	1	1	1	2	3	2	1	1	9.1	35.6	3,171
EFN CT	Element Fleet Management Corporation	9.50	CAD	4	1	1	1	1	2	1	1	5	1	11.2	(21.4)	2,883
RY CT	Royal Bank of Canada	102.65	CAD	1	2	1	1	1	2	2	1	3	2	12.0	17.1	120,113
TD CT	Toronto-Dominion Bank	73.65	CAD	2	2	1	1	1	2	2	2	1	2	11.7	15.2	108,826
BNS CT	Bank of Nova Scotia	81.12	CAD	2	1	1	1	1	2	2	2	3	2	11.0	12.8	77,746
BMO CT	Bank of Montreal	100.59	CAD	3	1	1	1	1	3	3	3	3	2	11.2	8.0	52,261
CM CT	Canadian Imperial Bank of Commerce	122.54	CAD	4	2	1	1	1	5	2	5	2	2	10.3	17.0	43,853
BPY-U CT	Brookfield Property Partners LP	27.85	CAD	5	na	1	1	1	na	5	4	5	2	13.9	(0.0)	15,557
ONEX CT	Onex Corporation	92.19	CAD	4	3	4	5	5	2	2	2	4	5	150.3	1.2	7,486
Capital Markets																
IGM CT	IGM Financial Inc.	44.15	CAD	1	2	1	1	1	3	5	2	2	1	12.8 x	22.0 %	$8,539
CIX CT	CI Financial Corp.	29.77	CAD	1	4	1	1	1	1	3	1	1	1	12.7	8.5	6,560
X CT	TMX Group Ltd.	70.44	CAD	3	1	1	1	1	4	1	1	3	1	13.7	1.3	3,141
TRI CT	Thomson Reuters Corporation	54.79	CAD	1	2	1	2	2	1	5	1	4	3	16.7	(3.8)	31,038
BAM/A CT	Brookfield Asset Management Inc. Class A	54.72	CAD	4	1	3	5	4	3	3	3	3	5	43.1	25.7	42,950
Insurance																
PWF CT	Power Financial Corporation	34.54	CAD	2	1	1	1	1	3	3	2	4	1	10.3 x	8.0 %	$19,775
POW CT	Power Corporation of Canada	32.37	CAD	2	1	1	1	1	3	2	2	3	1	10.4	12.8	12,057
IAG CT	Industrial Alliance Insurance and Financial Services Inc	59.82	CAD	5	1	2	1	2	5	1	4	1	1	11.3	15.0	5,148
MFC CT	Manulife Financial Corporation	26.22	CAD	3	1	1	1	1	3	2	2	2	2	10.6	13.3	41,891
SLF CT	Sun Life Financial Inc.	51.88	CAD	2	1	1	1	1	3	2	2	2	2	12.1	4.4	25,296
GWO CT	Great-West Lifeco Inc.	35.10	CAD	2	1	1	1	1	3	2	3	4	3	11.9	4.1	27,854
ELF CT	E-L Financial Corporation Limited	814.81	CAD	4	1	4	na	1	3	5	3	3	3	NM	11.5	2,614
FFH CT	Fairfax Financial Holdings Limited	669.34	CAD	3	1	2	1	2	5	5	5	3	5	10.7	5.4	15,752
IFC CT	Intact Financial Corporation	104.99	CAD	5	2	2	2	4	5	2	5	3	5	15.5	12.1	11,661

Source: Empirical Research Partners Analysis.

[1] Stocks are ranked across North America (i.e., U.S. and Canada).