

Rising Gasoline Prices — A Minor Setback For Consumer Spending

GLOBAL PURCHASES ACCELERATE IN APRIL

Global auto sales gained significant momentum in April. Volume growth accelerated in most regions and sales rose 6.5% y/y, up from a 2.3% y/y increase during the first quarter. South America led the advance, with sales surging 27% y/y, but Asia and Eastern Europe also reported 11% y/y gains. The latest advance leaves year-to-date global volumes up 3.3% through April, in line with our 2018 calendar year forecast.

Canada was a notable exception, with purchases edging down year-over-year for the second consecutive month, and falling below an annualized 2 mn units for the first time since December. The fall-off was broadly-based, with volumes declining below a year earlier in most provinces. Manitoba was the exception, with sales rising 19% above a year earlier in April, bolstered by sharp gains in business purchases.

Sales moved higher in all other major markets, with US purchases remaining above an annualized 17 mn units in April for the eighth consecutive month, supported by a 9% y/y jump in commercial volumes due to an improving economic outlook and strengthening business confidence. During 2017, business purchases edged up only 1.4% y/y and rental volumes slumped 12%, the largest fall-off since 2009.

Auto sales in China, the world's largest vehicle market, revved up to 12.6% y/y last month, the largest advance since February 2017. The acceleration is being buoyed by strengthening household wealth, near-record consumer confidence and stronger-than-expected industrial activity and house prices. In April, house-price gains broadened out to 58 large cities in China, up from an average of 50 cities during the first quarter. This represents the most broadly-based house price appreciation since last June.

Activity also gained momentum across Western Europe last month, with half of the countries reporting double-digit year-over-year sales gains. This represents the best performance of the past year, and confirms that the weakness reported in March was a temporary aberration. Income gains continue to accelerate across Europe, and are now rising at the fastest pace of the past decade.

SOLID INCOME GAINS OVERWHELM RISING GASOLINE COSTS

US gasoline prices are approaching USD 3/gallon, a level similar to prices that prevailed in the final months of 2007, as the previous global economic expansion was coming to an end. The recent surge in gasoline prices has led some commentators to suggest that auto purchases and overall consumer spending could be dampened in coming months, potentially leading to an economic slowdown. We highlight that rising gasoline prices are likely to have limited impact on consumer spending both in the United States and around the world, as household incomes are accelerating in most regions and balance sheets continue to improve.

The latest surge in gasoline prices has led to roughly an 18% y/y jump in prices in the US and in many other countries. We looked at past periods of similar

CONTACTS

Carlos Gomes
416.866.4735
Scotiabank Economics
carlos.gomes@scotiabank.com

To Clients, Colleagues and Friends:

This will be the last Scotiabank *Global Auto Report* published under my name, as I will be retiring from Scotiabank on June 1st. It has been a privilege to cover the auto sector and write the Scotiabank *Global Auto Report* and its predecessor publication during my tenure at Scotiabank. I trust that you will continue to find the report informative under new authorship.

Chart 1

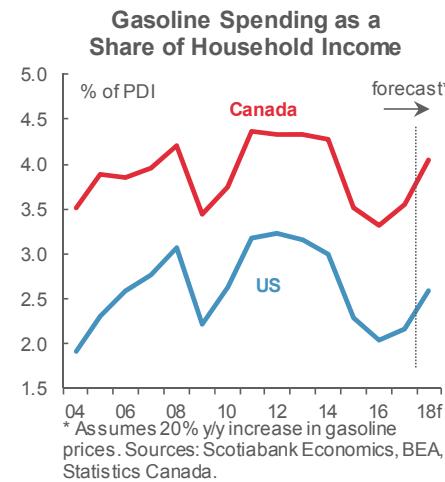
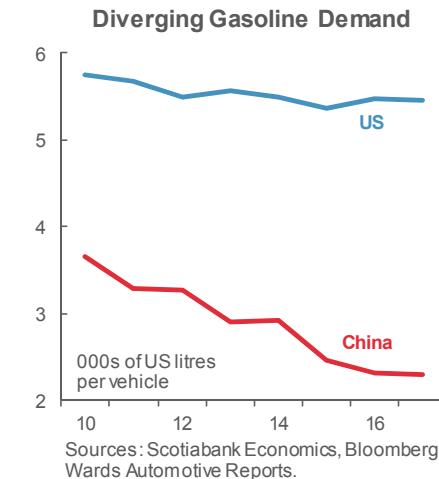


Chart 2



increases to gauge the historical impact on auto sales and overall consumer spending. We found that gasoline price increases of at least 20% y/y occurred six times during the past twenty years. During most periods, the impact on consumer spending was limited due to ongoing income gains. Sharp run-ups in gasoline prices only provided a significant drag on household activity during 2000 and 2008, when households were also facing slowing income growth, which dampened their ability to make discretionary purchases. In contrast, **wage and income gains in the United States are currently advancing at the fastest pace in three years, while strengthening global economic growth is lifting incomes and reducing unemployment around the world.**

Though gasoline prices are rising faster than incomes, the added gasoline costs represent a small share of the overall increase in earnings. For example, a 20% jump in gasoline prices translates to an additional annual spending of USD 424 per US household. This represents only about 9% of the projected increase in US household incomes this year. In contrast, prior to the 2001 recession, the added cost of filling up a gas tank absorbed 36% of the increase in household incomes. Furthermore, even with the latest jump in energy costs, spending on gasoline only accounts for 2% of overall disposable income in the United States, well below the 3% required from 2008 through 2013, prior to the collapse in global oil prices in mid-2014 (chart 1).

The impact of rising gasoline prices will be proportionately larger on Canadian households, as prices are higher north of the 49th parallel and gasoline absorbs a higher share of household income (chart 1). We estimate that on average, the 20% y/y increase in gasoline prices translates into an additional expenditure of CAD 560 per Canadian household this year. This represents roughly 18% of the projected increase in Canadian household incomes, roughly double the burden of US households. However, Canadians typically drive less than Americans. Data from Bloomberg implies that Canadian households consume roughly 25% less gasoline per year than their American counterparts.

VEHICLE-OWNERS DRIVING LESS IN CHINA

Households in the rest of the world are less exposed to rising gasoline prices, as vehicle-owners typically drive much less than their North American counterparts, limiting the effect of gasoline prices on household spending. For example, estimates imply that Germans only spend 1% of their annual income on gasoline, only one-third the share of Canadian households and roughly half that of their American counterparts. The number is similar for Brazilians, and is even lower across Asia. According to data from Bloomberg, the nearly 3 mn barrels of gasoline consumed annually in China is less than one-third of the consumption in the United States, and per-vehicle demand has been steadily declining (chart 2). As a result, gasoline absorbs only 0.6% of household income in China, significantly less than in most jurisdictions.

INTERNATIONAL CAR SALES OUTLOOK

(millions of units)

	<u>1990–99</u>	<u>2000–14</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018f</u>
TOTAL SALES	39.20	54.89	72.61	77.25	79.02	81.62
North America*	16.36	17.85	20.64	21.01	20.70	20.93
Canada	1.27	1.62	1.90	1.95	2.04	2.00
United States	14.55	15.24	17.39	17.46	17.13	17.40
Mexico	0.54	0.99	1.35	1.60	1.53	1.53
Western Europe	13.11	13.67	13.20	13.97	14.32	14.54
Germany	3.57	3.23	3.21	3.35	3.44	3.49
Eastern Europe	1.18	3.08	3.15	3.14	3.41	3.59
Russia	0.78	1.87	1.60	1.43	1.60	1.72
Asia	6.91	17.12	32.29	36.06	37.10	38.79
China**	0.43	7.31	20.01	23.57	24.20	24.92
India	0.31	1.23	2.06	2.09	2.19	2.33
South America	1.64	3.17	3.33	3.07	3.49	3.77
Brazil	0.94	1.94	1.82	1.39	1.50	1.61

*Includes light trucks. **Includes crossover utility vehicles from 2005. Sources: Scotiabank Economics, Ward's Automotive Reports, Bloomberg.

CANADA/US MOTOR VEHICLE SALES OUTLOOK

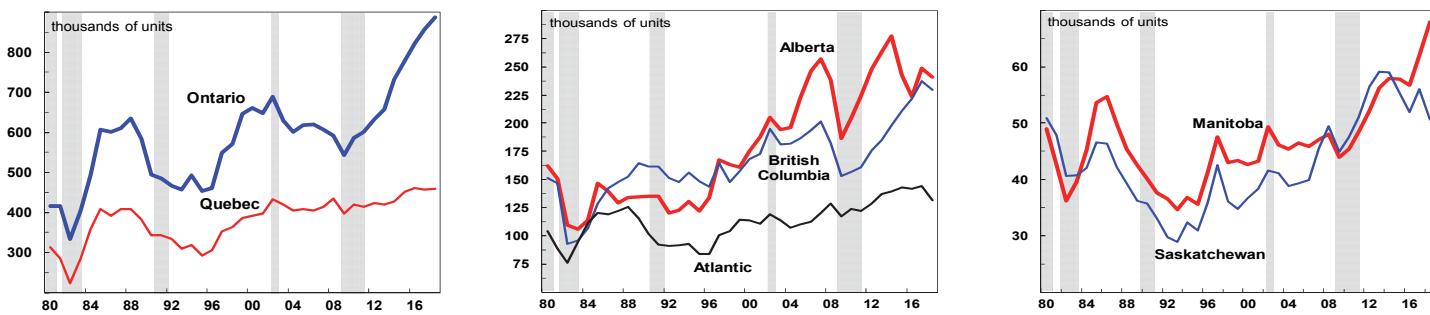
	<u>1991–05</u> Average	<u>2006–15</u>	<u>2016</u>	<u>2017</u>	<u>2018</u> Jan-Mar**	<u>2018</u> Annual f
(thousands of units, annualized)						
CANADA	1,398	1,668	1,949	2,041	2,052	2,000
Cars	797	776	662	644	602	610
Domestic	583	490	439	438	399	415
Imports	214	286	223	206	203	195
Light Trucks	601	892	1,287	1,397	1,450	1,390
(millions of units, annualized)						
UNITED STATES	15.5	14.4	17.5	17.1	17.1	17.4
Cars	8.3	6.9	6.9	6.1	5.4	6.0
Light Trucks	7.2	7.5	10.6	11.0	11.7	11.4
(millions of units, annualized)						
NORTH AMERICAN PRODUCTION*	15.58	14.63	18.15	17.48	17.34	17.76
CANADA	2.50	2.24	2.37	2.19	2.13	2.10
UNITED STATES	11.67	9.80	12.18	11.23	11.42	11.45
MEXICO	1.41	2.59	3.60	4.06	3.79	4.21

*Includes light, medium and heavy trucks. **Canadian sales are Scotiabank estimates. Sources: Ward's Automotive Reports, Statistics Canada.

VEHICLE SALES OUTLOOK BY PROVINCE*

	<u>1994–05</u> Average	<u>2006–15</u>	<u>2016</u>	<u>2017</u>	<u>2018</u> Jan-Mar**	<u>2018</u> Annual f
(thousands of units, annual rates)						
CANADA	1,446	1,668	1,949	2,041	2,053	2,000
ATLANTIC	102	125	140	143	131	138
CENTRAL	936	1,034	1,265	1,300	1,337	1,266
Quebec	366	411	458	453	459	445
Ontario	570	623	807	847	878	821
WEST	408	509	544	598	585	596
Manitoba	42	49	55	62	65	61
Saskatchewan	36	49	51	56	50	56
Alberta	166	232	220	245	241	248
British Columbia	164	179	218	235	229	231

*Includes cars and light trucks. **Scotiabank estimates. Sources: Statistics Canada, Canadian Vehicle Manufacturers' Association.

VEHICLE SALES BY PROVINCE


Includes cars and trucks (light, medium and heavy).

Shaded bars indicate U.S. recession periods. Source: Statistics Canada.

AUTO MARKET SHARE BY MANUFACTURER — CANADA*

(thousands of units, not seasonally adjusted)

	2017 Jan to Apr		2018 Jan to Apr		2017 Apr		2018 Apr	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	197.6	100.0	178.4	100.0	66.0	100.0	58.0	100.0
Big Three	41.1	20.8	35.6	20.0	15.0	22.7	12.3	21.2
General Motors	21.6	10.9	20.0	11.3	8.1	12.3	6.2	10.6
Ford	10.8	5.5	10.7	6.0	3.7	5.6	3.9	6.8
Chrysler	8.7	4.4	4.9	2.7	3.2	4.8	2.2	3.8
Japanese	90.7	45.9	82.6	46.3	28.6	43.2	25.8	44.5
Honda	29.0	14.7	27.8	15.6	9.0	13.6	8.0	13.9
Toyota	26.8	13.6	24.9	14.0	9.6	14.5	8.5	14.7
Nissan	15.7	7.9	13.9	7.8	3.9	6.0	3.8	6.5
Mazda	10.7	5.4	9.4	5.3	2.9	4.5	3.1	5.4
Mitsubishi	2.7	1.3	1.7	1.0	1.0	1.4	0.5	0.9
Subaru	5.8	3.0	4.9	2.7	2.2	3.4	1.8	3.1
Hyundai	20.8	10.5	17.7	9.9	7.6	11.5	6.4	11.0
Volkswagen	12.9	6.5	11.3	6.3	4.6	7.0	3.2	5.6
Kia	11.2	5.7	11.0	6.2	3.9	5.9	3.9	6.7
BMW	6.4	3.2	6.3	3.5	2.1	3.2	2.1	3.6
Mercedes-Benz	8.0	4.1	6.8	3.8	2.2	3.4	1.8	3.1
Other	6.5	3.3	7.1	4.0	2.0	3.1	2.5	4.3

*Source: Dealer sales from the Global Automakers of Canada.

TRUCK MARKET SHARE BY MANUFACTURER — CANADA*

(thousands of units, not seasonally adjusted)

	2017 Jan to Apr		2018 Jan to Apr		2017 Apr		2018 Apr	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	430.5	100.0	454.9	100.0	134.4	100.0	136.4	100.0
Big Three	235.7	54.7	234.1	51.5	73.7	54.8	70.7	51.9
General Motors	70.6	16.4	74.4	16.4	22.8	17.0	24.3	17.8
Ford	82.4	19.1	80.4	17.7	26.7	19.8	23.0	16.9
Chrysler	82.7	19.2	79.3	17.4	24.2	18.0	23.4	17.2
Other Domestic	13.8	3.2	16.9	3.7	4.2	3.1	5.5	4.0
Japanese	121.4	28.2	134.2	29.5	36.3	27.0	40.6	29.8
Honda	30.3	7.0	32.2	7.1	9.3	6.9	9.1	6.6
Toyota	40.2	9.3	43.8	9.6	12.4	9.2	13.4	9.8
Nissan	29.3	6.8	32.2	7.1	7.4	5.5	10.5	7.7
Mazda	11.6	2.7	13.9	3.1	3.8	2.9	4.2	3.1
Mitsubishi	4.3	1.0	6.4	1.4	1.6	1.2	2.1	1.5
Subaru	10.1	2.3	12.1	2.7	3.3	2.5	3.5	2.6
Hyundai	18.0	4.2	16.3	3.6	7.0	5.2	4.6	3.3
Kia	9.8	2.3	10.2	2.2	3.3	2.5	3.2	2.3
Other Imports	31.8	7.4	43.2	9.5	9.9	7.4	11.8	8.7
LIGHT TRUCKS	420.6	97.7	442.4	97.2	131.0	97.5	132.7	97.3

*Source: Dealer sales from the Global Automakers of Canada.

AUTO SALES BY PROVINCE

(thousands of units, not seasonally adjusted)

	<u>2017</u> Jan to Mar	<u>2018</u> Jan to Mar	<u>2017</u> Mar	<u>2018</u> Mar
CANADA	131.3	123.4	61.2	53.6
ATLANTIC	7.9	7.3	3.8	3.1
Newfoundland	1.6	1.5	0.8	0.6
Nova Scotia	3.3	3.5	1.6	1.5
New Brunswick	2.5	1.9	1.1	0.8
Prince Edward Island	0.5	0.4	0.3	0.2
CENTRAL	92.6	87.0	44.2	39.2
Quebec	36.9	33.9	18.5	15.5
Ontario	55.7	53.1	25.7	23.7
WEST	30.8	29.1	13.2	11.3
Manitoba	2.8	3.3	1.3	1.1
Saskatchewan	1.9	1.7	0.9	0.6
Alberta	10.4	9.0	4.4	3.5
British Columbia	15.7	15.1	6.6	6.1

Source: Statistics Canada.

TRUCK SALES BY PROVINCE*

(thousands of units, not seasonally adjusted)

	<u>2017</u> Jan to Mar	<u>2018</u> Jan to Mar	<u>2017</u> Mar	<u>2018</u> Mar
CANADA	294.8	311.5	128.2	134.3
ATLANTIC	19.1	17.8	9.0	7.7
Newfoundland	4.7	4.4	2.2	1.9
Nova Scotia	7.4	6.8	3.4	3.0
New Brunswick	6.0	5.7	2.9	2.4
Prince Edward Island	1.0	0.9	0.5	0.4
CENTRAL	175.6	191.6	77.5	85.0
Quebec	55.2	59.3	25.6	27.4
Ontario	120.4	132.3	51.9	57.6
WEST	100.1	102.1	41.7	41.6
Manitoba	10.2	13.4	4.2	5.1
Saskatchewan	11.0	9.0	4.8	3.7
Alberta	43.7	43.5	18.1	17.7
British Columbia	35.2	36.2	14.6	15.1

*Light, medium and heavy trucks. Source: Statistics Canada.

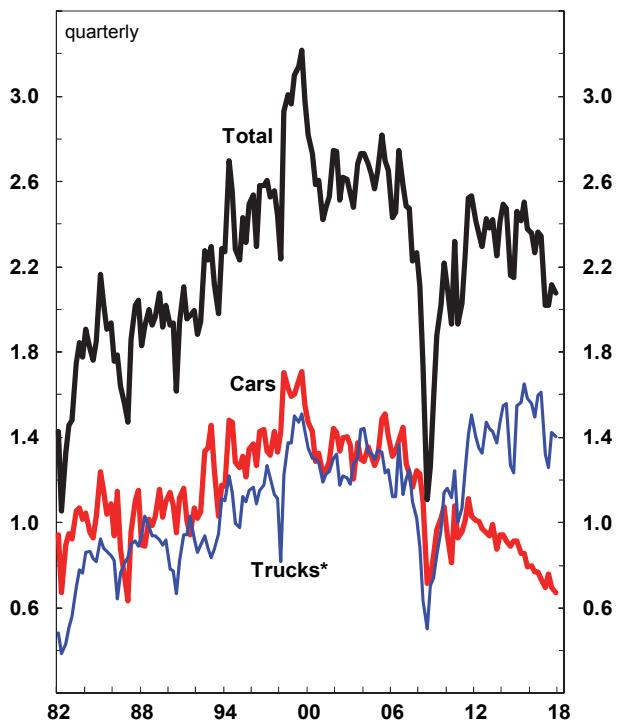
CANADIAN MOTOR VEHICLE PRODUCTION

(thousands of units, not seasonally adjusted)

	<u>2017</u> Jan to Apr	<u>2018</u> Jan to Apr	<u>2017</u> Apr	<u>2018</u> Apr
TOTAL	777.4	713.8	177.7	179.5
CAR	255.6	232.5	56.4	58.5
Chrysler	68.9	72.4	13.2	17.9
GM	32.5	19.1	8.6	5.7
Honda	72.0	72.6	16.2	17.5
Toyota	82.2	68.4	18.4	17.4
TRUCKS*	521.8	481.3	121.3	121.0
Chrysler	100.1	113.6	23.3	28.5
Ford	86.7	92.0	20.3	22.2
GM	127.2	83.0	30.3	21.2
Honda	78.1	76.6	17.7	18.6
Toyota	124.4	109.6	28.2	28.7
Others	5.3	6.5	1.5	1.8

*Light, medium and heavy trucks. Source: Ward's Automotive Reports.

Canada — Motor Vehicle Production

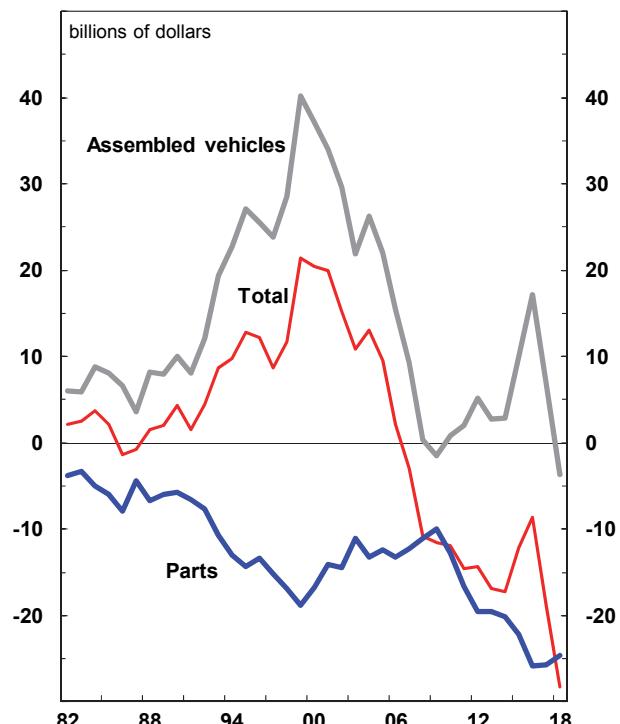


Millions of units, seasonally adjusted annual rates.

*Light, medium and heavy trucks.

Source: Ward's Automotive Reports.

Canada — World Auto Trade Balances

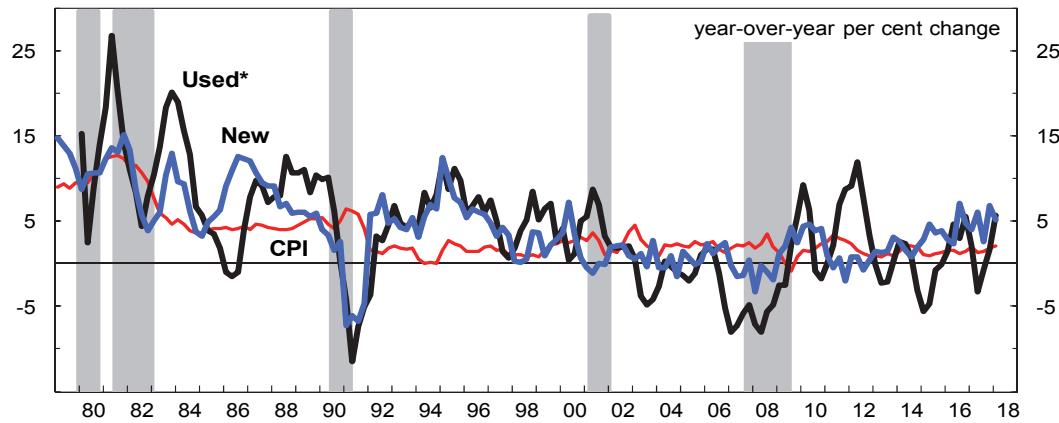


2018 data are January-March annualized.

Source: Statistics Canada.

New & Used Car Prices

Scotiabank Car Price Indicators — Canada



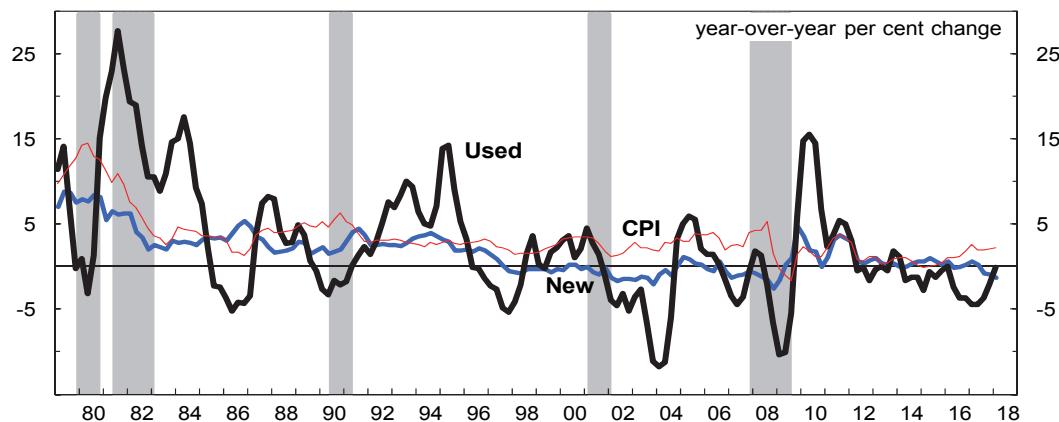
*Scotiabank estimate from Canadian Black Book data.
 Sources: Canadian Black Book, Statistics Canada.

Scotiabank Car Price Indicators — Canada



Scotiabank estimate from Canadian Black Book data.

Scotiabank Car Price Indicators — United States



Consumer price indices for new and used cars.
 Shaded areas indicate recession periods. Source: U.S Bureau of Labor Statistics.

CANADIAN CORPORATE FINANCIAL PERFORMANCE
MOTOR VEHICLE DEALERS AND REPAIR SHOPS

		Net Income After Tax (\$ mil)	Pre-Tax Profit Margin (%)	Inventory Turnover Ratio	Interest Coverage Ratio	Debt/ Equity Ratio	Return on Shareholders Equity (%)
Annual	2005	799	0.93	5.35	2.55	2.74	12.90
	2006	942	1.20	5.16	2.64	2.75	14.37
	2007	1089	1.41	5.05	3.36	2.56	15.13
	2008	1142	1.43	5.04	3.51	2.44	14.66
	2009	1392	1.84	5.34	4.85	2.07	16.99
	2010	1649	2.06	4.91	5.34	2.11	18.09
	2011	1664	1.99	5.17	5.19	2.02	17.44
	2012	1748	1.97	4.86	5.32	2.03	16.71
	2013	2215	2.32	5.08	6.64	2.02	20.08
	2014	2714	2.60	5.09	7.41	1.90	21.03
	2015	2930	2.65	5.19	7.47	1.94	21.06
	2016	2940	2.46	5.06	7.54	1.87	18.84
	2017	3660	2.73	4.89	8.02	1.89	21.39
Quarterly at annual rates							
	2017Q1	2360	2.65	4.32	6.43	1.98	14.67
	Q2	4232	2.43	5.33	9.43	1.95	25.66
	Q3	4204	2.43	5.13	8.54	1.85	23.88
	Q4	3844	2.65	4.78	7.53	1.79	21.02
	2018Q1	2444	3.65	4.31	6.11	1.87	13.39
Average (89–17)		1094	1.40	5.96	3.68	2.30	12.63
Low (89–17)		-68	0.10	4.32	1.10	3.57	-1.20

Definition of Ratios:

Pre-tax Profit Margin: pre-tax income/sales

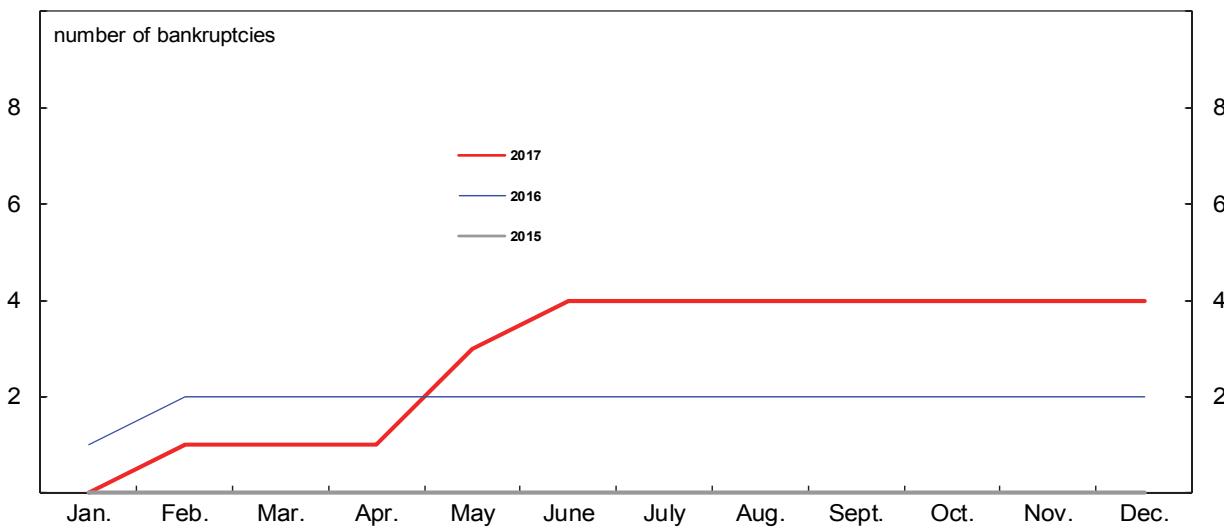
Inventory Turnover Ratio: sales/inventory

Source: Statistics Canada.

Interest Coverage Ratio: (pre-tax income and interest payments)/(interest payments)

Debt/Equity Ratio: (short-term and long-term debt)/total equity

Return of Shareholders' Equity: after-tax income/total equity

Retail Auto Dealer Bankruptcies

 New car dealers only; cumulative total during the year.
 Source: Office of the Superintendent of Bankruptcy.

This report has been prepared by Scotiabank Economics as a resource for the clients of Scotiabank. Opinions, estimates and projections contained herein are our own as of the date hereof and are subject to change without notice. The information and opinions contained herein have been compiled or arrived at from sources believed reliable but no representation or warranty, express or implied, is made as to their accuracy or completeness. Neither Scotiabank nor any of its officers, directors, partners, employees or affiliates accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

These reports are provided to you for informational purposes only. This report is not, and is not construed as, an offer to sell or solicitation of any offer to buy any financial instrument, nor shall this report be construed as an opinion as to whether you should enter into any swap or trading strategy involving a swap or any other transaction. The information contained in this report is not intended to be, and does not constitute, a recommendation of a swap or trading strategy involving a swap within the meaning of U.S. Commodity Futures Trading Commission Regulation 23.434 and Appendix A thereto. This material is not intended to be individually tailored to your needs or characteristics and should not be viewed as a "call to action" or suggestion that you enter into a swap or trading strategy involving a swap or any other transaction. Scotiabank may engage in transactions in a manner inconsistent with the views discussed this report and may have positions, or be in the process of acquiring or disposing of positions, referred to in this report.

Scotiabank, its affiliates and any of their respective officers, directors and employees may from time to time take positions in currencies, act as managers, co-managers or underwriters of a public offering or act as principals or agents, deal in, own or act as market makers or advisors, brokers or commercial and/or investment bankers in relation to securities or related derivatives. As a result of these actions, Scotiabank may receive remuneration. All Scotiabank products and services are subject to the terms of applicable agreements and local regulations. Officers, directors and employees of Scotiabank and its affiliates may serve as directors of corporations.

Any securities discussed in this report may not be suitable for all investors. Scotiabank recommends that investors independently evaluate any issuer and security discussed in this report, and consult with any advisors they deem necessary prior to making any investment.

This report and all information, opinions and conclusions contained in it are protected by copyright. This information may not be reproduced without the prior express written consent of Scotiabank.

™ Trademark of The Bank of Nova Scotia. Used under license, where applicable.

Scotiabank, together with "Global Banking and Markets", is a marketing name for the global corporate and investment banking and capital markets businesses of The Bank of Nova Scotia and certain of its affiliates in the countries where they operate, including, Scotiabanc Inc.; Citadel Hill Advisors L.L.C.; The Bank of Nova Scotia Trust Company of New York; Scotiabank Europe plc; Scotiabank (Ireland) Limited; Scotiabank Inverlat S.A., Institución de Banca Múltiple, Scotia Inverlat Casa de Bolsa S.A. de C.V., Scotia Inverlat Derivados S.A. de C.V. – all members of the Scotiabank group and authorized users of the Scotiabank mark. The Bank of Nova Scotia is incorporated in Canada with limited liability and is authorised and regulated by the Office of the Superintendent of Financial Institutions Canada. The Bank of Nova Scotia is authorised by the UK Prudential Regulation Authority and is subject to regulation by the UK Financial Conduct Authority and limited regulation by the UK Prudential Regulation Authority. Details about the extent of The Bank of Nova Scotia's regulation by the UK Prudential Regulation Authority are available from us on request. Scotiabank Europe plc is authorised by the UK Prudential Regulation Authority and regulated by the UK Financial Conduct Authority and the UK Prudential Regulation Authority.

Scotiabank Inverlat, S.A., Scotia Inverlat Casa de Bolsa, S.A. de C.V., and Scotia Derivados, S.A. de C.V., are each authorized and regulated by the Mexican financial authorities.

Not all products and services are offered in all jurisdictions. Services described are available in jurisdictions where permitted by law.