

Solid Growth in Global Auto Sales but US Protectionism May Stall Further Gains

STRONG EXPANSION IN GLOBAL SALES

Global auto sales expanded by 4.6% y/y in May, bringing the year-to-date total growth rate to 3.4% y/y, in line with the increase recorded during the same period in the previous two years. The growth in sales thus far in 2018 has, as expected, been led by strong gains in developing economies while a number of advanced economies have reached sales plateaux, albeit near record levels. The global economy remains strong amid a mutually reinforcing expansion brought about by rising trade flows across the world. An escalation of US protectionism, however, threatens to slow the pace of global growth.

NORTH AMERICA: US AND CANADA PLATEAU, MEXICO EXTENDS DECLINE

The Canadian and US auto markets remain slightly below record-high sales levels, amidst slowing, but still solid, household consumption growth. Both countries have reported auto sales figures at the national level for June, which showed a year-on-year decline of 1.7% in Canada and a strong 4.7% y/y expansion in the US, which handily beat analysts' expectations of a 2.4% y/y uptick. In the first half of 2018, vehicle purchases climbed by 0.3% y/y in Canada and 1.1% y/y in the US compared to the same period last year, though sales volumes are still down slightly from late-2017 levels. Sales are forecast to decline for the remainder of the year, but still come in slightly above 2.0 mn and 17.0 mn units sold in Canada and the US, respectively. This would represent a marginal decline from record-high sales of 2.04 mn in 2017 in Canada and 17.5 mn in 2016 in the US. Rising interest rates, in combination with higher gasoline prices, are set to scale back discretionary spending in H2-2018 and 2019.

At the provincial level in Canada, a slight increase in purchases in Central Canada has been offset by sales declines in Western and Atlantic Canada so far in 2018. Based on figures to May, sales have fallen year-to-date (YTD) in each of the Atlantic Provinces for a regional decline of 7.7% y/y. Purchases in Western Canada are down by 1.1% y/y YTD during the same period after four consecutive months of year-on-year declines. Sales in the West have fallen recently due to a retracement of purchases in Alberta—which climbed sharply following the commodities collapse and wildfire-related vehicle replacements—and an easing in BC sales from record-high levels in 2017. In contrast, vehicle sales in Central Canada have risen by 1% in the year-to-May compared to the same period last year, bolstered by solid growth in Quebec and Ontario.

Political uncertainty in Mexico dampened purchases of vehicles in the lead-up to the Presidential election on July 1st, with a year-to-May decrease of 8.8% y/y. Sales in Mexico are expected to bounce back in the second half of 2018, which would bring the annual decline to around 2% y/y in 2018 as a whole.

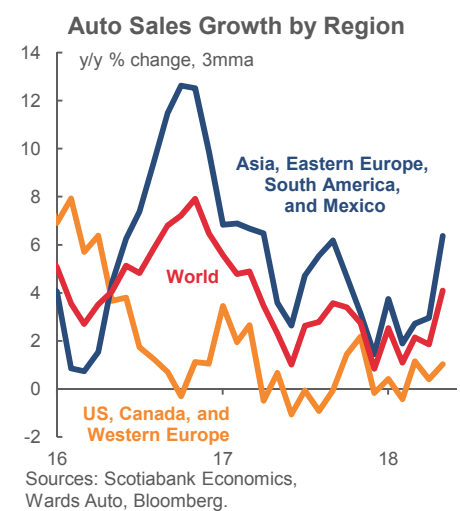
EUROPE: UK DEPRESSES WESTERN EUROPE SALES, RUSSIA LIFTS THE EAST

Sales declines in the United Kingdom have been large enough to drag down the growth rate of vehicle purchases in Western Europe so far in 2018. Auto purchases in the UK have fallen by 6.8% y/y year-to-May amidst dampened economic growth brought on by Brexit uncertainty, and further compounded by adverse weather conditions. In comparison, vehicle purchases in the rest of

CONTACTS

Juan Manuel Herrera
 416.866.6781
 Scotiabank Economics
juanmanuel.herrera@scotiabank.com

Chart 1



Western Europe have advanced by 3.2% y/y year-to-date. Auto sales in the UK may have reached their cyclical trough as year-on-year increases in both April and May put an end to a twelve-month streak of annual declines. Looking ahead, the UK economy is forecast to grow by about 1.7% y/y, around its long-term trend, which implies any further auto sales gains should be moderate. In contrast, we expect Eurozone GDP to grow at a stronger pace of 2.5% in 2018, which should support further sales increases.

In Eastern Europe, a surge in auto sales in Russia has pushed growth in vehicle purchases in the region to 12% y/y in the first five months of 2018 over the same period last year. Auto sales in Russia alone have expanded by 20% y/y YTD after an 18% y/y rise in May which marked eighteen consecutive months of double-digit gains thanks to an economic rebound from the recovery in oil prices. The number of units sold in Russia remains around 40% lower than its 2012 peak, however. Sales in the rest of Eastern Europe have climbed by a strong 6.3% y/y so far in 2018, although they ticked down 1.2% y/y in May.

SOUTH AMERICA: BRAZIL AND CHILE POST LARGE GAINS

Auto purchases in South America are expanding by double digits in year-on-year terms in the first five months of 2018 led by Brazil and Chile. Sales in Brazil, the largest auto market on the continent, have risen by 16% y/y YTD in 2018 as the country leaves behind the 2015–16 recession and weak economic growth in 2017. However, business uncertainty leading into the October presidential elections and an erosion in disposable income owing to high interest rates and relatively-high inflation are set to tamp down the sales expansion in the second half of 2018; the 2.6% y/y rise in sales in May was the lowest since July 2017. Auto purchases in Chile have spiked by 25% y/y so far in 2018. We forecast the Chilean economy to rebound strongly post-election and grow by 3.7% in 2018, more than double the 1.5% pace set in 2017. Continent-wide vehicle deliveries in South America expanded by 2.2% y/y in May for a year-to-date rise of 14% y/y.

ASIA-PACIFIC: CHINA LEADS THE WAY, JAPANESE SALES REMAIN WEAK

A strong rise in auto purchases in China in recent months has lifted sales across the Asia-Pacific region, which follows a weak performance for the sector in late-2017 and through the Chinese New Year period in February. After averaging only 0.6% y/y growth in the October–February period, vehicle sales in China expanded by an average of 8.3% y/y in the March–May stretch, which is more in line with the ongoing rise in household incomes in the country. On the other hand, sales in Japan, the second largest market in the region, have declined slightly so far in 2018 in year-on-year terms as the pace of economic expansion in the country throttles back closer to its long-run potential. While the latest pick-up in Chinese auto sales—at 9.2% y/y in May—contributed to a region-wide 7.5% y/y increase in May, purchases in Asia Pacific excluding China rose by 4.6% y/y. Year-to-date, total sales in the region have expanded by 4.2% y/y.

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	81.50
North America*	16.36	17.85	20.64	21.01	20.70	20.60
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	17.10
Mexico	0.54	0.99	1.35	1.60	1.53	1.50
Western Europe	13.11	13.67	13.20	13.97	14.32	14.60
Germany	3.57	3.23	3.21	3.35	3.44	3.50
Eastern Europe	1.18	3.08	3.15	3.14	3.41	3.65
Russia	0.78	1.87	1.60	1.43	1.60	1.75
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	3.86
Brazil	0.94	1.94	1.82	1.39	1.50	1.68

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

US AUTO TARIFFS: GERMAN AUTOMAKERS WOULD BE HIT HARDEST, BIG THREE DO NOT ESCAPE UNHARMED

The US Administration has threatened to impose tariffs of up to 25% on US imports of motor vehicles and parts. Following the application of tariffs on steel and aluminum imports, President Trump has requested an investigation into the national security implications of imports of autos and parts. **Global tariffs on US auto imports would likely be the first step in an escalation of tit-for-tat retaliatory measures by affected nations which would lead to a trade war that would push the US economy into recession by 2020—right before the next US presidential elections. As such, our baseline remains that they will not be imposed.**

The US is a net importer of automobiles and would encounter a gap of between 5 and 6mn units even if it stopped exporting vehicles altogether at current demand levels. In 2017, imports into the US amounted to 8.3 mn units compared to only 2.0 mn exported units. Close to half of autos imported into the US come from North America: Mexico and Canada account for roughly a quarter of all vehicles sold in the US annually. Imports from the European Union, whose 10% auto tariffs have been a principal target of the White House, represent 7% of autos sold in the US. Japan and Korea together account for 15%. Only around 1% of autos sold in the US come from other countries.

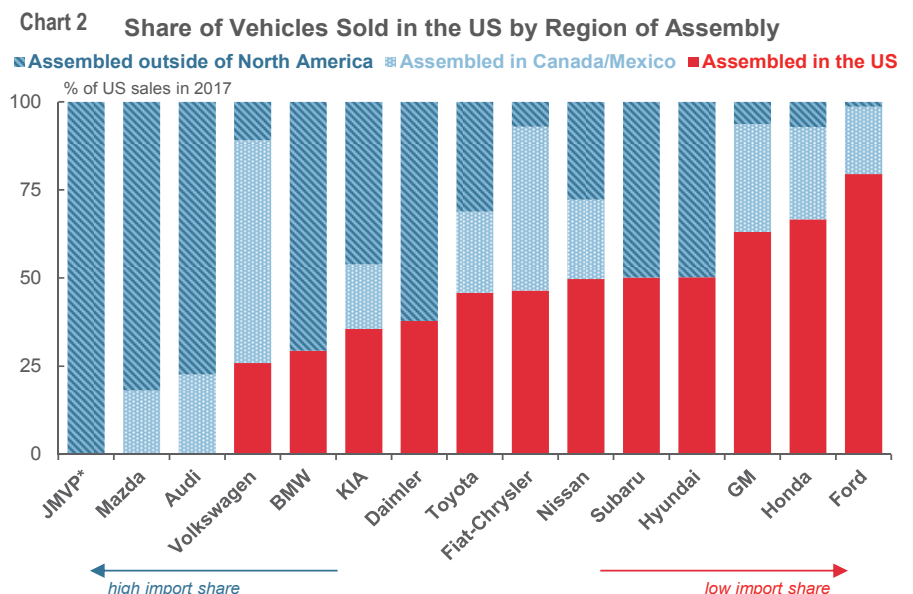
If the US imposes tariffs on all countries, but maintains duty-free trade under NAFTA, the biggest losers among the major automakers would be Mazda, Audi, BMW, and Daimler, whose imports from outside North America account for 82%, 77%, 71%, and 62% of their respective auto sales volumes in the US, in that order. **The impact on the Detroit Three automakers would be relatively subdued since non-NAFTA imports are only around 5% of their combined sales in the US.** Given the high number of vehicles assembled in Canada and Mexico, in addition to those built in the US, **Honda would be the least affected of all non-US automakers:** 93% of its sales in the US are autos assembled in North America.

An import tariff on all foreign autos, including those from Canada and Mexico, would impact a much larger swath of vehicles sold in the US, and would seriously hurt the Detroit Three firms. Beyond the automakers mentioned in the previous paragraph, some companies with large manufacturing operations in Canada and/or Mexico would lose their free-trade advantage under NAFTA. The share of Fiat-Chrysler autos sold in the US affected by the tariffs would go from 7% in an ex. Canada and Mexico scenario to around 54% of their sales if the US also imposes tariffs on its NAFTA partners. For General Motors, this share would climb from 6.3% to 37%. Ford would see tariffs on about a fifth of its US-sold vehicles compared to only 1%. Volkswagen could go from facing double-digit tariffs on only about 11% of the vehicles it sells in the US to almost 75% of its US sales falling under tariffs owing to the large number of autos the company assembles in Mexico for the US market.

If tariffs were imposed on all motor vehicle imports, German automakers, as a whole, would be hit hardest with around three-quarters of their US-sold autos subject to the tariffs, followed by Korean firms at around 55%, and Japanese companies at roughly half. The Detroit Three firms would nevertheless face tariffs on over a third of their autos sold in US markets based on 2017 levels.

In the still-unlikely scenario where the US imposes tariffs on motor vehicle imports from all countries there could be a significant rebalancing of market share toward firms with the highest vehicle production volumes in the US: namely the Big Three, Honda, Toyota and Nissan.

The vehicle assembly industry in the US is, however, operating at close to its full utilisation rate, which implies that auto production in the US would likely increase only marginally in response to the tariffs. The economic downturn that would result from retaliatory tariffs or an all-out trade-war-induced recession would keep firms from making significant outlays toward increasing capacity. In this scenario, sales are bound to heavily decrease amid rising prices for imported vehicles and depressed household expenditures.



Sources: Scotiabank Economics, Wards Auto, AMIA. *Jaguar Land Rover, Mitsubishi, Volvo, and Porsche. Estimates for Canadian and Mexican share based on production and sales figures from Wards Auto and AMIA

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-May**	Annual f
(thousands of units, annualized)						
CANADA	1,398	1,668	1,949	2,041	2,003	2,000
Cars	797	776	662	644	592	610
Domestic	583	490	439	438	387	415
Imports	214	286	223	206	205	195
Light Trucks	601	892	1,287	1,397	1,411	1,390
(millions of units, annualized)						
UNITED STATES	15.5	14.4	17.5	17.1	17.1	17.1
Cars	8.3	6.9	6.9	6.1	5.4	5.8
Light Trucks	7.2	7.5	10.6	11.0	11.7	11.3
(millions of units, annualized)						
NORTH AMERICAN PRODUCTION*	15.58	14.63	18.15	17.48	17.97	17.71
CANADA	2.50	2.24	2.37	2.19	2.17	2.05
UNITED STATES	11.67	9.80	12.18	11.23	11.77	11.45
MEXICO	1.41	2.59	3.60	4.06	4.03	4.21

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

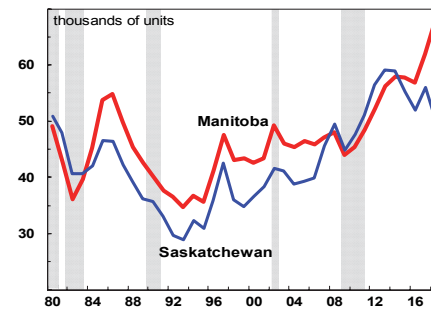
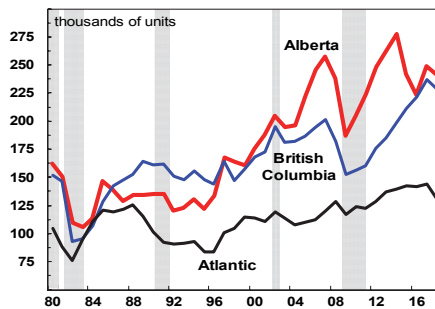
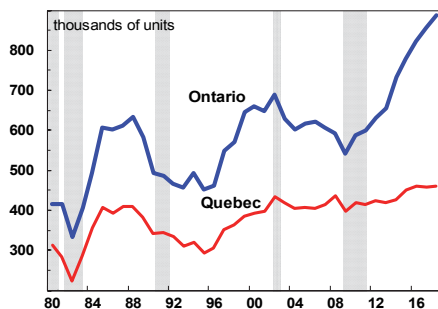
VEHICLE SALES OUTLOOK BY PROVINCE*

(thousands of units, annual rates)

	<u>1994-05</u> Average	<u>2006-15</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
					Jan-May**	Annual f
CANADA	1,446	1,668	1,949	2,041	2,074	2,000
ATLANTIC	102	125	140	143	132	138
CENTRAL	936	1,034	1,265	1,300	1,340	1,266
Quebec	366	411	458	453	459	445
Ontario	570	623	807	847	881	821
WEST	408	509	544	598	602	596
Manitoba	42	49	55	62	77	61
Saskatchewan	36	49	51	56	51	56
Alberta	166	232	220	245	244	248
British Columbia	164	179	218	235	230	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)

	<u>2017</u>		<u>2018</u>		<u>2017</u>		<u>2018</u>	
	Jan to May		Jan to May		May		May	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	272.5	100.0	247.1	100.0	75.0	100.0	68.7	100.0
Big Three	57.9	21.2	51.0	20.6	16.9	22.5	15.4	22.4
General Motors	29.6	10.9	28.6	11.6	8.1	8.1	8.5	12.4
Ford	16.4	6.0	15.3	6.2	5.6	7.5	4.6	6.7
Chrysler	11.9	4.4	7.1	2.9	3.2	4.3	2.2	3.3
Japanese	123.1	45.2	114.1	46.2	32.4	43.2	31.6	45.9
Honda	40.2	14.8	39.2	15.9	11.2	14.9	11.4	16.6
Toyota	36.6	13.4	35.0	14.1	9.8	13.1	10.1	14.6
Nissan	20.8	7.6	18.3	7.4	5.1	6.8	4.4	6.4
Mazda	14.1	5.2	12.9	5.2	3.4	4.6	3.5	5.1
Mitsubishi	3.5	1.3	2.3	0.9	0.9	1.2	0.5	0.8
Subaru	7.9	2.9	6.6	2.7	2.0	2.6	1.7	2.5
Hyundai	30.0	11.0	24.2	9.8	9.2	12.3	6.4	9.4
Volkswagen	17.8	6.5	15.9	6.4	5.0	6.6	4.6	6.7
Kia	15.2	5.6	14.7	5.9	4.0	5.3	3.7	5.4
BMW	8.8	3.2	8.5	3.5	2.4	3.1	2.2	3.2
Mercedes-Benz	10.2	3.7	8.9	3.6	2.2	2.9	2.1	3.1
Other	9.6	3.5	9.7	3.9	3.0	4.0	2.6	3.8

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

TRUCK MARKET SHARE BY MANUFACTURER — CANADA*

(thousands of units, not seasonally adjusted)

	<u>2017</u>		<u>2018</u>		<u>2017</u>		<u>2018</u>	
	Jan to May		Jan to May		May		May	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	575.5	100.0	605.9	100.0	145.0	100.0	150.9	100.0
Big Three	317.7	55.2	312.6	51.6	82.0	56.5	78.5	52.0
General Motors	93.7	16.3	98.7	16.3	23.1	15.9	24.3	16.1
Ford	111.2	19.3	108.7	17.9	28.9	19.9	28.3	18.7
Chrysler	112.7	19.6	105.2	17.4	30.0	20.7	26.0	17.2
Other Domestic	17.9	3.1	22.9	3.8	4.1	2.8	6.0	3.9
Japanese	167.0	29.0	185.0	30.5	41.3	28.5	44.4	29.4
Honda	40.0	7.0	42.5	7.0	9.8	6.8	10.3	6.8
Toyota	54.2	9.4	57.8	9.5	14.1	9.7	14.1	9.3
Nissan	38.2	6.6	41.9	6.9	8.8	6.1	9.8	6.5
Mazda	15.4	2.7	18.2	3.0	3.8	2.6	4.3	2.8
Mitsubishi	5.7	1.0	8.6	1.4	1.4	0.9	2.2	1.5
Subaru	13.5	2.3	16.0	2.6	3.4	2.4	3.8	2.5
Hyundai	24.2	4.2	23.8	3.9	6.1	4.2	7.5	5.0
Kia	13.3	2.3	13.8	2.3	3.5	2.4	3.6	2.4
Other Imports	35.4	6.2	47.8	7.9	7.9	5.4	11.0	7.3
LIGHT TRUCKS	562.4	97.7	589.1	97.2	141.8	97.8	146.7	97.2

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

AUTO SALES BY PROVINCE

(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
CANADA	160.3	150.1	66.0	57.9
ATLANTIC	13.1	11.6	5.3	4.4
Newfoundland	2.8	2.5	1.2	1.0
Nova Scotia	5.6	5.5	2.3	2.0
New Brunswick	3.9	3.0	1.4	1.1
Prince Edward Island	0.8	0.6	0.3	0.3
CENTRAL	101.9	97.4	46.3	41.6
Quebec	19.4	19.5	19.4	16.8
Ontario	82.5	77.9	26.8	24.8
WEST	45.3	41.0	14.4	11.9
Manitoba	4.3	5.0	1.5	1.7
Saskatchewan	2.8	2.3	0.9	0.6
Alberta	15.4	12.8	5.0	3.8
British Columbia	22.8	20.9	7.0	5.8

Source: Statistics Canada.

TRUCK SALES BY PROVINCE*

(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
CANADA	432.0	453.0	134.3	137.9
ATLANTIC	28.7	27.5	9.2	9.3
Newfoundland	7.0	6.5	2.3	2.1
Nova Scotia	11.0	10.3	3.5	3.5
New Brunswick	9.2	9.2	2.9	3.2
Prince Edward Island	1.5	1.5	0.5	0.6
CENTRAL	261.6	281.0	83.4	86.3
Quebec	85.4	92.5	27.7	30.1
Ontario	176.2	188.5	55.7	56.2
WEST	141.7	144.5	41.7	42.3
Manitoba	14.4	18.6	4.2	5.1
Saskatchewan	15.0	13.0	4.0	3.9
Alberta	62.2	62.1	18.5	18.6
British Columbia	50.1	50.9	14.9	14.7

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

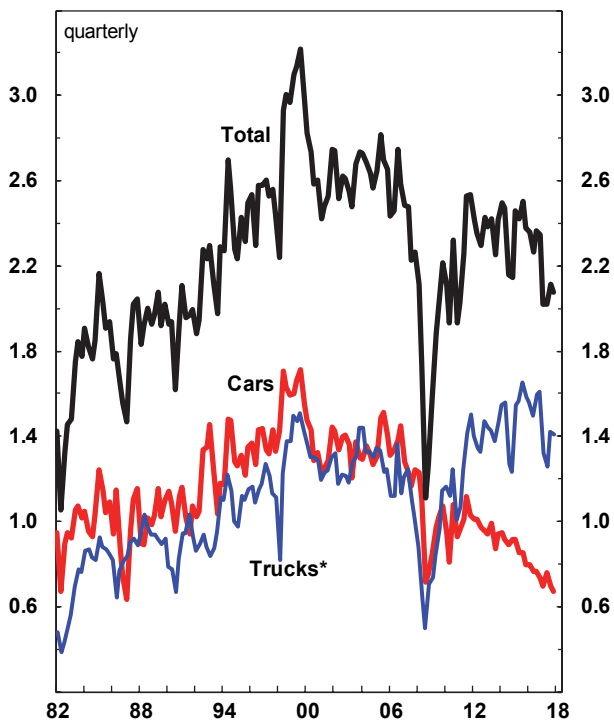
CANADIAN MOTOR VEHICLE PRODUCTION

(thousands of units, not seasonally adjusted)

	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
	Jan to May	Jan to May	May	May
TOTAL	996.5	903.4	219.1	188.5
CAR	328.3	293.4	72.7	60.2
Chrysler	91.4	89.4	22.5	17.0
GM	42.6	24.2	10.1	5.1
Honda	90.5	92.6	18.5	19.3
Toyota	103.8	87.2	21.5	18.8
TRUCKS*	668.2	610.0	146.5	128.3
Chrysler	128.8	144.9	28.7	31.3
Ford	112.9	113.8	26.2	21.8
GM	163.3	104.7	36.1	21.7
Honda	99.0	98.2	20.9	21.1
Toyota	157.1	139.9	32.6	30.3
Others	7.1	8.5	1.9	2.1

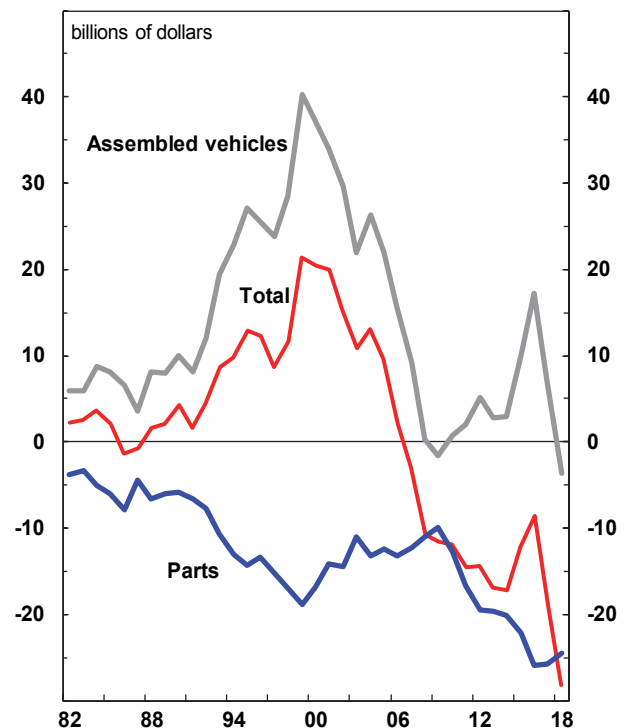
*Light, medium and heavy trucks. Source: Ward's Automotive Reports.

Canada — Motor Vehicle Production



Millions of units, seasonally adjusted annual rates.
*Light, medium and heavy trucks.
Source: Ward's Automotive Reports.

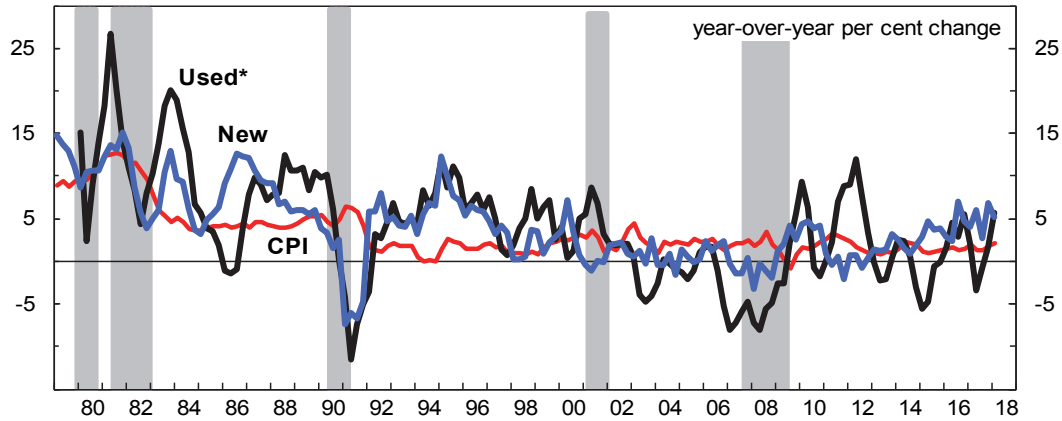
Canada — World Auto Trade Balances



2018 data are January-March annualized.
Source: Statistics Canada.

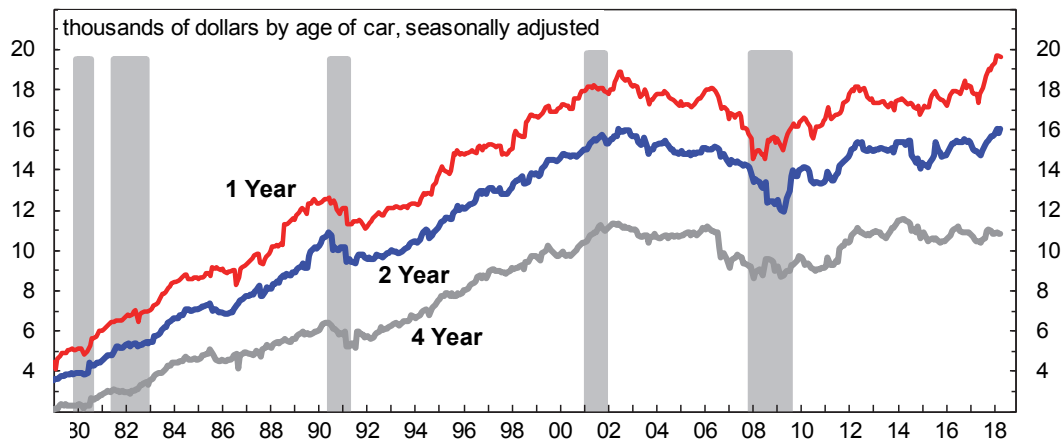
New & Used Car Prices

Scotiabank Car Price Indicators — Canada



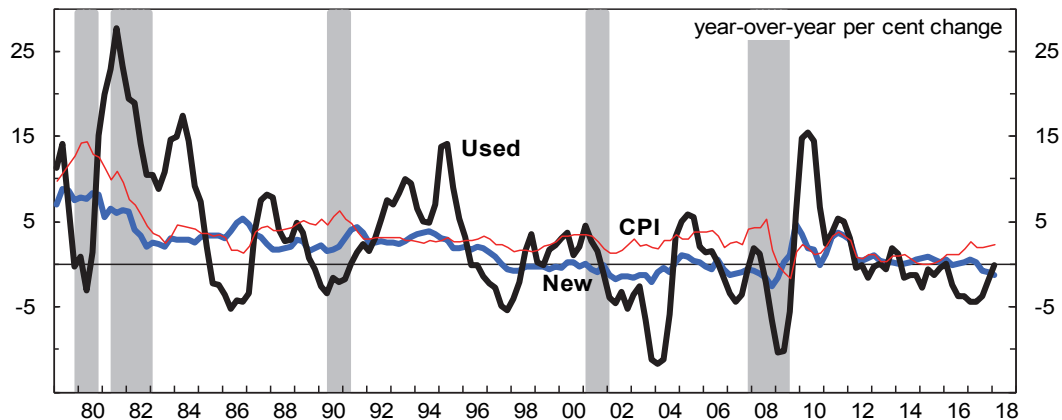
*Scotiabank estimate from Canadian Black Book data.
Sources: Canadian Black Book, Statistics Canada.

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

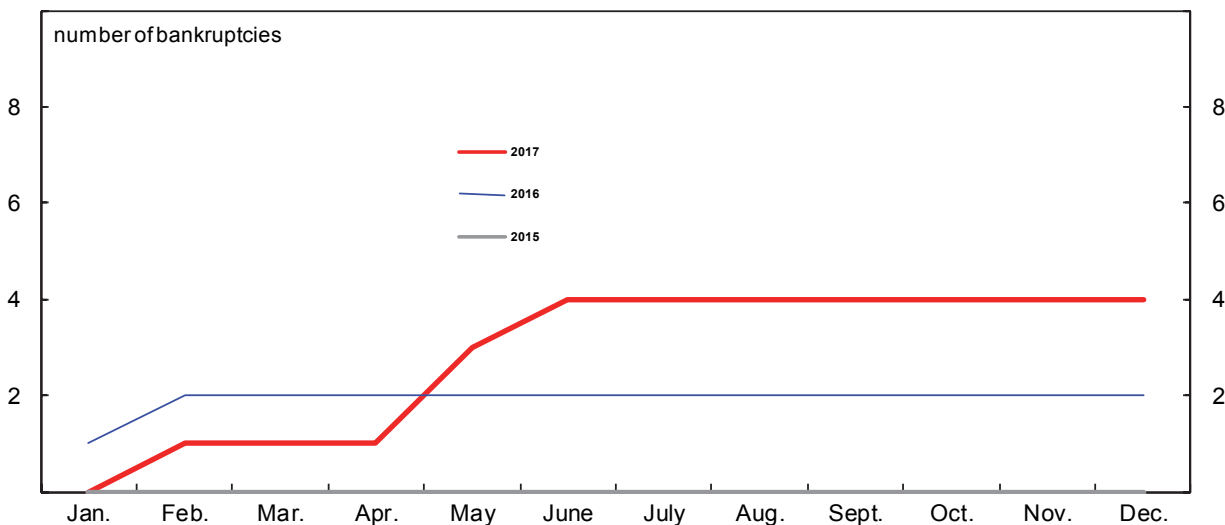
Inventory Turnover Ratio: sales/inventory

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 constructed 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.