

North American Auto Production Begins To Rebound

- Global sales gains moderate as purchases decline temporarily in Asia.
- US inventories fall below a year earlier, setting the stage for a rebound in production.
- New models and greater heavy-truck output will boost industrial activity.

GLOBAL NEW VEHICLE SALES GAINS MODERATE

The growth in global car sales temporarily softened in October from the quickening pace of the summer. In October, global volumes edged up only 2% y/y, the smallest gain in four months. Much of the slowdown reflects a temporary 0.2% y/y decline in Asia, which is likely to be reversed in coming months, as most macroeconomic indicators continue to strengthen across the region. The weakness was concentrated in South Korea and reflects a distortion due to the timing of the mid-Autumn Festival Holiday which fell in early-October this year, but was in September in 2016. As a result, auto sales in South Korea slumped 11% below a year earlier, but combined September/October purchases actually advanced 3.5% y/y.

Sales continue to strengthen across Western Europe, rising 4.6% y/y in October buoyed by improving economic growth. The euro-zone economy expanded 2.5% y/y in the third quarter, the best performance of the past decade; a recent survey points to a further acceleration in hiring last month to the fastest pace in seventeen years. Five countries reported double-digit sales gains in October, up from an average of four nations per month since April. Purchases also continue to gain momentum in both Eastern Europe and South America, advancing year-over-year in October by 17% and 32% respectively. In fact, the gain in South America is the largest year-over-year increase since April 2013, when economic growth in the region was in excess of 4% y/y.

More recent data for November point to some softening across North America from the record high of recent months. In Canada, purchases declined below a year earlier for the first time since April, putting an end to the six consecutive monthly records. However, November sales remained above an annualized 2 mn units for the ninth consecutive month. Light trucks continue to be the source of strength, with nearly all manufacturers reporting year-over-year sales gains.

US car and light truck sales remained above expectations in November, but eased from the record-setting pace of the previous two months. The solid results since September ensure that full-year 2017 purchases will exceed 17 mn units for the third consecutive year. We expect this trend to continue in 2018, supported by a strong economy and ongoing replacement demand.

NEW MODELS AND HEAVY TRUCKS LIFT NORTH AMERICAN PRODUCTION

Stronger-than-expected US motor vehicle sales in recent months have reduced inventories on dealer lots, setting the stage for a rebound in US auto production from the summer doldrums. Output gains will become more widespread across North America in 2018, driven by the introduction of new models and a rebound in heavy-truck assemblies due to the recent surge in new orders.

CONTACTS

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

Chart 1

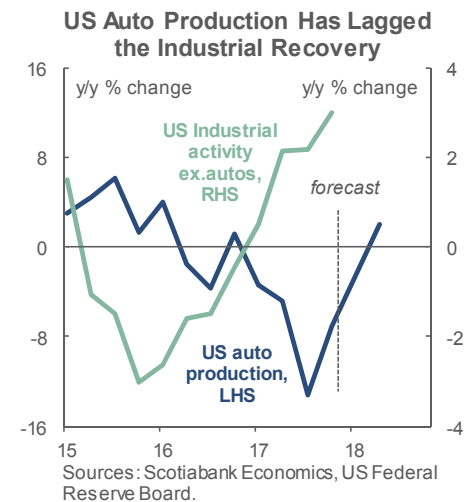
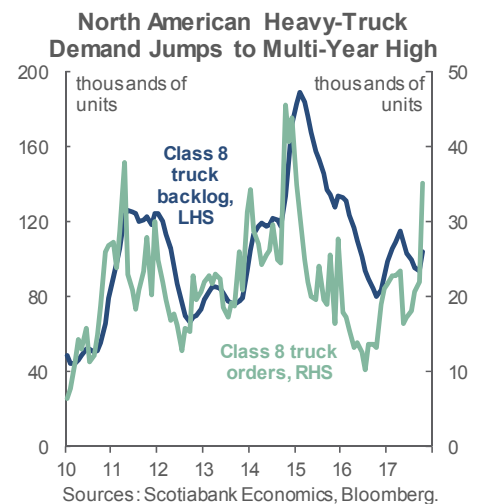


Chart 2



The US and Canadian auto industries have not participated in the broadly-based industrial recovery that has taken hold across both developed and developing markets over the past year (chart 1). While overall US industrial activity has jumped 1.7% y/y in the first ten months of 2017, the best performance since 2014, US auto production has slumped 8% y/y from January through October and is set to post its first annual decline since the global economic downturn of 2008–09. A similar fall-off is occurring in Canada, due to the closure of an assembly plant in Oshawa, Ontario and a prolonged strike at another facility.

However, the advance in US sales since September to the highest level since 2005 has reduced inventories below a year earlier for the first time in two years, setting the stage for higher assemblies. In fact, the auto industry's latest production schedule calls for US motor vehicle assemblies to climb to an annualized 11.2 mn units in the final months of 2017, up from only 10.5 mn between July and September. **We estimate that this rebound will add an annualized 0.6 percentage points to US GDP growth in the final months of 2017, the largest contribution from the auto sector since late 2013.**

Auto production should advance further next year, buoyed by the introduction of new vehicles as Volkswagen/Audi, Kia, and Subaru all offer new 2018 models built in North America. We estimate that these new models will add more than 220,000 units to North American vehicle output next year, accounting for more than half of the expected increase in auto production across the continent in 2018.

However, the largest percentage increase in North American vehicle output is coming from heavy trucks, as stronger US economic activity, rising traffic, and stronger business and consumer confidence have recently led to a surge in heavy-truck orders. So far this year, heavy-truck orders have spiked 72% y/y across North America, roughly four times the increase in heavy-truck output (chart 2). To meet the latest surge in demand, heavy-truck manufacturers are planning to boost production 50% y/y in the final months of 2017. A further 15–20% output gain is likely in 2018, which would lift annual 2018 heavy-truck production to the highest level in three years.

PRODUCTION REVIVES OUTSIDE OF NORTH AMERICA

Vehicle production is also rebounding outside of North America. For example, new orders for vehicles built in Germany and Spain have increased more than 6% y/y in the 12-months through September, but output has edged lower so far this year, setting the stage for rising assemblies in 2018. Meanwhile, strengthening demand combined with multi-year low inventories in China point to higher production in Asia. However, South America is leading the revival in vehicle output, and will continue to post the fastest growth in assemblies in 2018. Vehicle production in the region has jumped more than 20% this year and a further double-digit increase is likely in 2018, as demand continues to recover from the sharp downturn during 2014–2016.

INTERNATIONAL CAR SALES OUTLOOK

(millions of units)

	<u>1990–99</u>	<u>2000–13</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017f</u>
TOTAL SALES	39.20	53.74	71.18	72.61	77.29	79.56
North America*	16.36	17.74	19.42	20.64	21.05	20.73
Canada	1.27	1.61	1.85	1.90	1.95	2.03
United States	14.55	15.15	16.44	17.39	17.50	17.10
Mexico	0.54	0.98	1.13	1.35	1.60	1.60
Western Europe	13.11	13.79	12.11	13.20	13.97	14.39
Germany	3.57	3.25	3.04	3.21	3.35	3.47
Eastern Europe	1.18	3.03	3.81	3.15	3.14	3.39
Russia	0.78	1.83	2.49	1.60	1.43	1.55
Asia	6.91	16.08	31.69	32.29	36.06	37.58
China**	0.43	6.52	18.37	20.01	23.57	24.28
India	0.31	1.18	1.87	2.06	2.09	2.23
South America	1.64	3.10	4.15	3.33	3.07	3.47
Brazil	0.94	1.90	2.50	1.82	1.39	1.53

*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>	<u>2006-14</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	
	Average				Jan-Oct **	Annual f
(thousands of units, annualized)						
CANADA	1,398	1,643	1,898	1,949	2,043	2,030
Cars	797	783	714	662	651	650
Domestic	583	491	476	438	454	455
Imports	214	292	238	224	197	195
Light Trucks	601	860	1,184	1,287	1,392	1,380
(millions of units, annualized)						
UNITED STATES	15.5	14.1	17.4	17.5	17.1	17.1
Cars	8.3	6.9	7.5	6.9	6.1	6.1
Light Trucks	7.2	7.2	9.9	10.6	11.0	11.0
(millions of units, annualized)						
NORTH AMERICAN PRODUCTION*	15.58	14.25	17.95	18.17	17.41	17.51
CANADA	2.50	2.24	2.28	2.37	2.18	2.18
UNITED STATES	11.67	9.53	12.10	12.20	11.20	11.23
MEXICO	1.41	2.48	3.57	3.60	4.03	4.10

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

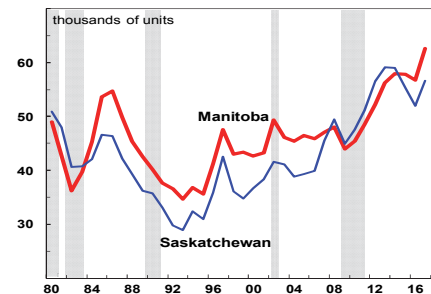
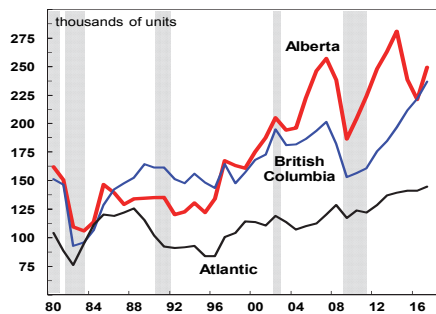
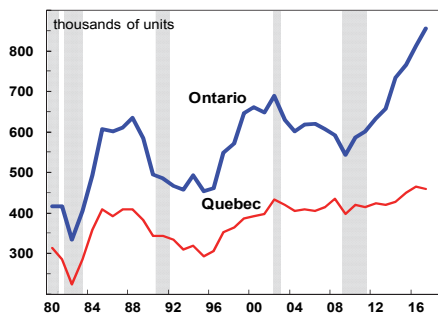
VEHICLE SALES OUTLOOK BY PROVINCE*

(thousands of units, annual rates)

	<u>1994-05</u>	<u>2006-14</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	
	Average				Jan-Oct**	Annual f
CANADA	1,446	1,643	1,898	1,949	2,043	2,030
ATLANTIC	102	123	140	140	145	142
CENTRAL	936	1,017	1,205	1,265	1,299	1,295
Quebec	366	411	444	458	455	450
Ontario	570	606	761	807	844	845
WEST	408	503	553	544	599	593
Manitoba	42	48	56	55	60	60
Saskatchewan	36	49	54	51	56	55
Alberta	166	231	236	220	248	248
British Columbia	164	175	207	218	235	230

*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>2016</u>		<u>2017</u>		<u>2016</u>		<u>2017</u>	
	Jan to Nov		Jan to Nov		Nov		Nov	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	624.2	100.0	608.1	100.0	48.9	100.0	43.7	100.0
Big Three	128.6	20.6	116.3	19.1	10.5	21.3	7.2	16.6
General Motors	64.8	10.4	63.4	10.4	5.8	11.8	4.7	10.8
Ford	44.3	7.1	36.0	5.9	3.4	6.9	2.1	4.9
Chrysler	19.5	3.1	16.9	2.8	1.3	2.6	0.4	0.9
Japanese	271.8	43.5	274.4	45.1	21.1	43.1	19.5	44.6
Honda	88.1	14.1	90.5	14.9	7.2	14.8	6.1	13.9
Toyota	84.6	13.6	83.9	13.8	6.2	12.7	6.1	13.9
Nissan	45.4	7.3	43.0	7.1	3.2	6.5	2.9	6.7
Mazda	30.2	4.8	31.8	5.2	2.6	5.3	2.4	5.4
Mitsubishi	9.1	1.5	7.9	1.3	0.7	1.5	0.7	1.5
Subaru	14.5	2.3	17.4	2.9	1.1	2.2	1.4	3.1
Hyundai	79.0	12.7	67.3	11.1	5.7	11.6	4.7	10.6
Volkswagen	45.4	7.3	46.8	7.7	3.4	6.9	3.5	8.0
Kia	37.7	6.0	38.1	6.3	2.9	6.0	3.2	7.3
BMW	22.4	3.6	20.9	3.4	2.0	4.1	1.9	4.4
Mercedes-Benz	21.4	3.4	21.7	3.6	2.0	4.2	1.8	4.2
Other	17.9	2.9	22.6	3.7	1.3	2.8	1.9	4.3

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

TRUCK MARKET SHARE BY MANUFACTURER — CANADA*

(thousands of units, not seasonally adjusted)

	<u>2016</u>		<u>2017</u>		<u>2016</u>		<u>2017</u>	
	Jan to Nov		Jan to Nov		Nov		Nov	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
TOTAL	1,226.7	100.0	1,334.2	100.0	114.2	100.0	117.5	100.0
Big Three	665.9	54.3	707.2	53.0	63.3	55.5	59.3	50.5
General Motors	184.4	15.1	219.7	16.5	22.8	20.0	18.9	16.1
Ford	240.5	19.6	255.1	19.1	21.1	18.5	21.7	18.5
Chrysler	241.0	19.6	232.4	17.4	19.4	17.0	18.7	15.9
Other Domestic	35.5	2.9	40.2	3.0	3.4	3.0	3.4	2.9
Japanese	352.1	28.7	390.3	29.3	32.0	28.0	35.7	30.4
Honda	86.1	7.0	97.1	7.3	7.8	6.8	9.3	7.9
Toyota	119.5	9.7	128.1	9.6	10.3	9.0	10.9	9.3
Nissan	80.1	6.5	94.3	7.1	7.5	6.6	8.5	7.2
Mazda	34.3	2.8	37.5	2.8	3.1	2.8	3.6	3.1
Mitsubishi	11.5	0.9	13.5	1.0	1.0	0.8	1.3	1.1
Subaru	32.0	2.6	33.3	2.5	3.3	2.9	3.4	2.9
Hyundai	53.4	4.4	55.6	4.2	4.4	3.8	4.6	3.9
Kia	29.8	2.4	33.9	2.5	2.6	2.3	3.2	2.7
Other Imports	90.0	7.3	107.0	8.0	8.5	7.4	11.3	9.6
LIGHT TRUCKS	1,199.2	97.8	1,305.2	97.8	111.6	97.9	114.8	97.8

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

AUTO SALES BY PROVINCE

(thousands of units, not seasonally adjusted)

	<u>2016</u> Jan to Sept	<u>2017</u> Jan to Sept	<u>2016</u> Sept	<u>2017</u> Sept
CANADA	522.2	517.1	58.1	58.8
ATLANTIC	38.1	37.6	4.1	4.3
Newfoundland	7.8	7.4	0.8	0.8
Nova Scotia	16.1	17.1	1.9	2.0
New Brunswick	11.6	10.8	1.1	1.2
Prince Edward Island	2.6	2.3	0.3	0.3
CENTRAL	369.7	367.6	40.9	42.5
Quebec	159.3	150.0	17.9	17.2
Ontario	210.4	217.6	23.0	25.3
WEST	114.4	111.9	13.1	12.0
Manitoba	11.5	10.8	1.4	1.2
Saskatchewan	7.3	7.0	0.9	0.8
Alberta	37.7	37.3	4.5	3.9
British Columbia	57.9	56.8	6.3	6.1

Source: Statistics Canada.

TRUCK SALES BY PROVINCE*

(thousands of units, not seasonally adjusted)

	<u>2016</u> Jan to Sept	<u>2017</u> Jan to Sept	<u>2016</u> Sept	<u>2017</u> Sept
CANADA	1,011.1	1,092.5	117.7	130.8
ATLANTIC	73.8	77.7	8.9	9.4
Newfoundland	18.9	19.4	2.4	2.5
Nova Scotia	26.5	30.3	3.2	3.7
New Brunswick	24.0	23.5	2.7	2.6
Prince Edward Island	4.4	4.5	0.6	0.6
CENTRAL	627.2	658.1	71.5	78.0
Quebec	204.0	209.1	23.2	24.6
Ontario	423.2	449.0	48.3	53.4
WEST	310.1	356.7	37.3	43.4
Manitoba	32.4	37.2	4.0	4.7
Saskatchewan	32.3	36.6	4.1	4.4
Alberta	133.2	155.8	16.2	18.9
British Columbia	112.2	127.1	13.0	15.4

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

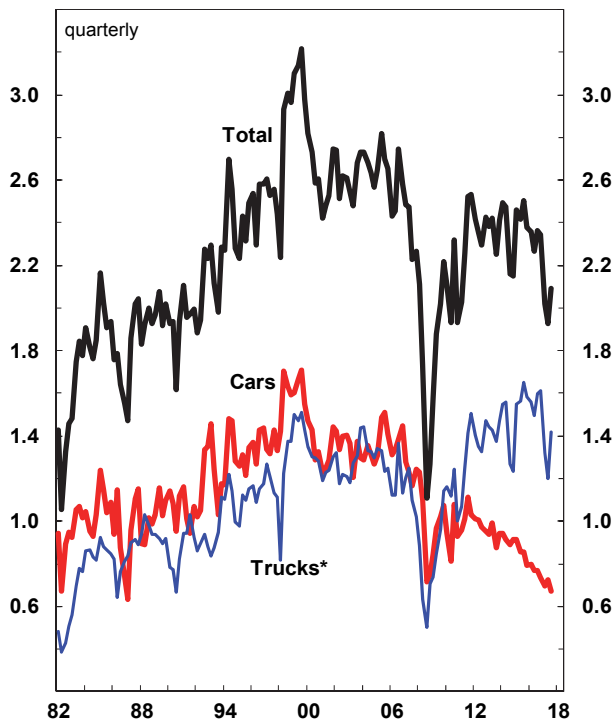
CANADIAN MOTOR VEHICLE PRODUCTION

(thousands of units, not seasonally adjusted)

	<u>2016</u>	<u>2017</u>	<u>2016</u>	<u>2017</u>
	Jan to Oct	Jan to Oct	Oct	Oct
TOTAL	1,997.3	1,849.3	196.2	154.3
CAR	674.7	625.5	63.4	65.2
Chrysler	197.6	189.3	15.7	20.9
GM	102.0	79.6	10.6	9.5
Honda	173.8	175.7	17.4	18.4
Toyota	201.3	180.9	19.7	16.4
TRUCKS*	1,322.6	1,223.8	132.8	89.1
Chrysler	264.0	241.4	27.5	2.3
Ford	229.2	214.2	21.1	22.2
GM	334.8	260.1	34.4	11.2
Honda	176.6	185.8	17.2	19.1
Toyota	305.1	305.3	31.4	31.2
Others	12.9	17.0	1.2	3.1

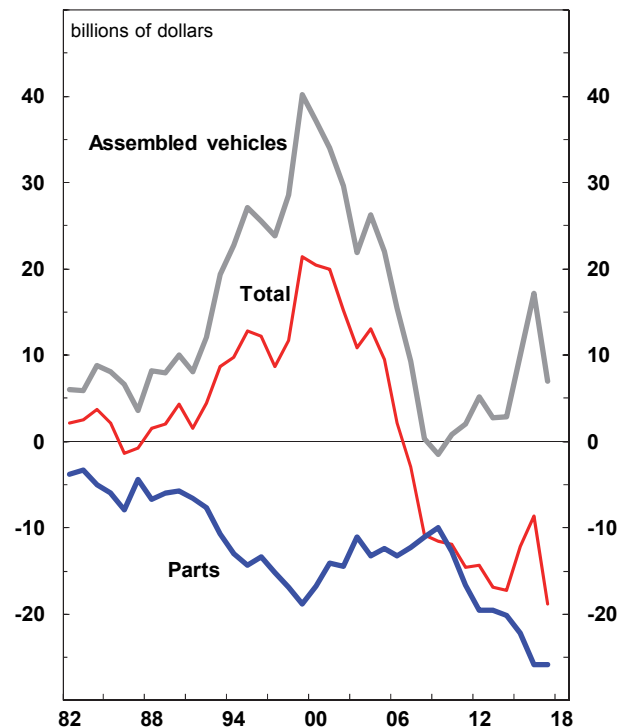
*Light, medium and heavy trucks. Source: Ward's Automotive Reports.

Canada — Motor Vehicle Production



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

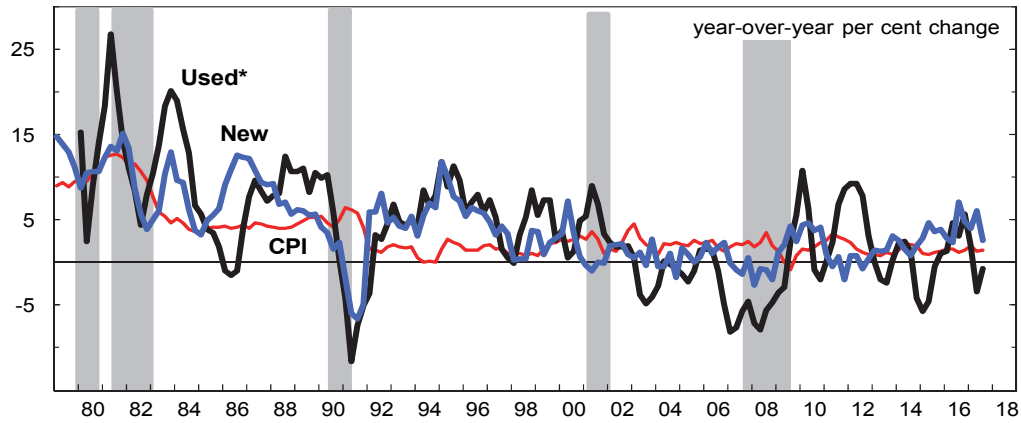
Canada — World Auto Trade Balances



2017 data are January-October annualized.
Source: Statistics Canada.

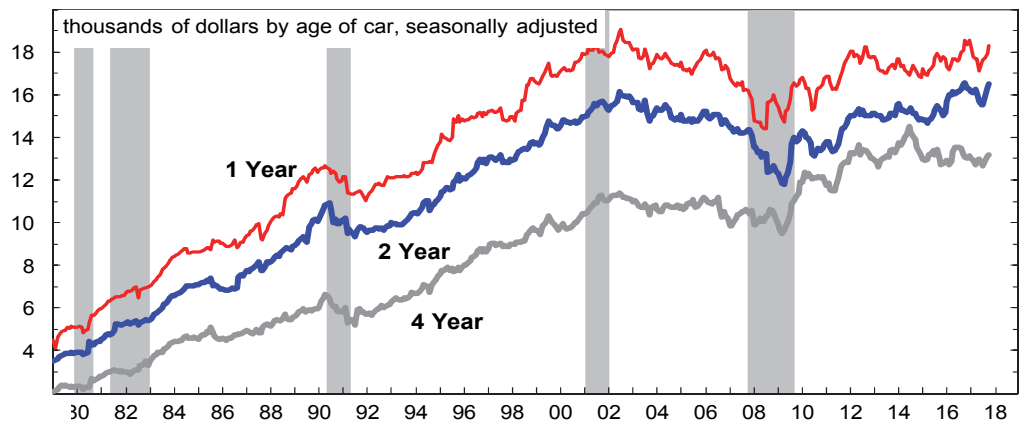
New & Used Car Prices

Scotiabank Car Price Indicators — Canada



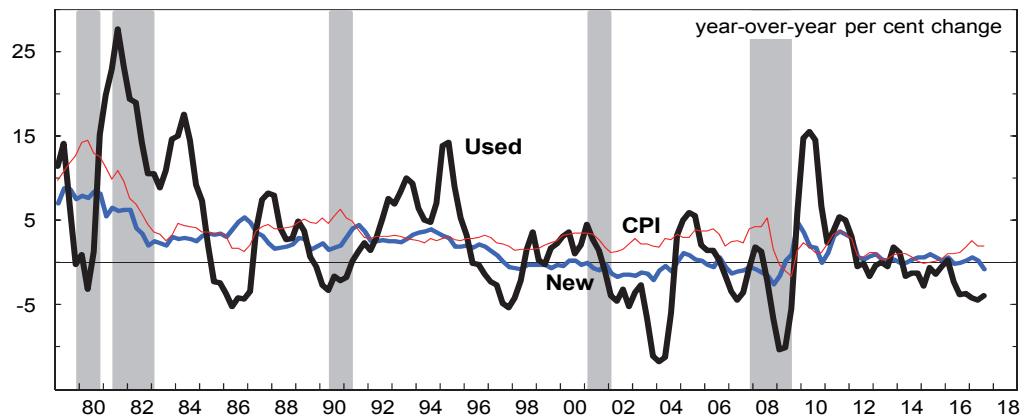
*Scotiabank estimate from Canadian Black Book data.
Sources: Canadian Black Book, Statistics Canada.

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	2004	571	0.69	4.98	2.25	3.17	10.49
	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	2929	2.63	5.16	7.54	1.93	21.31
2016	2963	2.40	5.03	7.70	1.96	20.02	
Quarterly at annual rates							
	2016Q3	3116	2.43	5.17	8.05	1.94	20.71
	Q4	2852	2.65	4.84	6.99	1.94	18.62
	2017Q1	2128	2.65	4.31	6.09	2.09	13.97
	Q2	3904	2.43	5.29	8.84	2.06	25.05
	Q3	3820	2.43	5.10	8.29	1.97	23.13
Average (89–16)		930	1.32	6.04	3.38	2.34	12.09
Low (89–16)		-68	0.10	4.38	1.10	3.57	-1.20

Definition of Ratios:

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

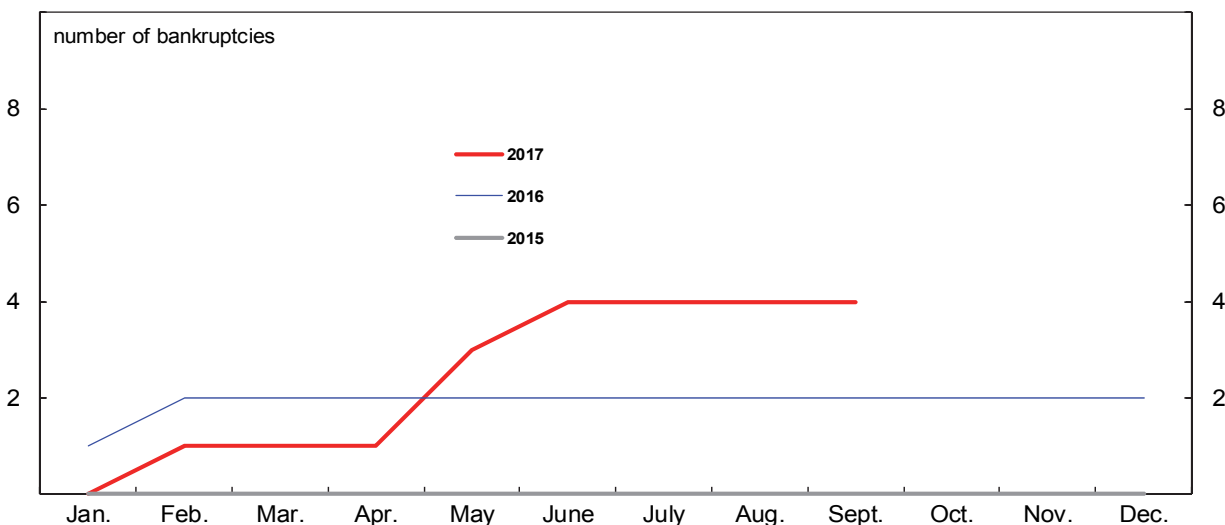
Inventory Turnover Ratio: sales/inventory

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.