

## Inventory Shortages Continued to Plague Global Auto Sales in July

- Global auto sales edged down again in July (by 3% m/m, sa) as the chip shortage continued to provide headwinds to sales. Europe and North America drove the declines as dealer lots scrambled for limited inventory. Chinese purchases provided an offset with its 6% m/m improvement (chart 1).
- Vehicle production suffered further unanticipated cuts in July that are likely to extend through September...at least. A production rebound is still pencilled in for later in the third quarter by Wards Automotive Group, but the spread of the Delta variant will likely take much of the steam out of the rally.
- Used vehicle prices saw some reprieve in July—as buyers likely balked at costs—but they still remain elevated and are unlikely to soften materially until new vehicle inventory returns. In fact, a surge in pent-up travel ahead could re-ignite price escalation through fleet demand.
- With weak global auto sales signaled for August, we will likely take down our sales forecasts modestly for 2021 in most major markets as numbers are confirmed in the coming weeks. With the prevalence of outbreaks in key chip-producing markets where vaccination rates are low, a slower-than-anticipated unwinding of bottlenecks is highly probable.
- We still believe this will fuel pent-up demand, but increasingly a greater number of sales will be pushed into 2022 (chart 2).

### GLOBAL AUTO SALES IN BRIEF

Global auto sales edged down again in July by -3% m/m (sa) for a third consecutive month of decline. On an annualised basis, sales sat at a weak 67 mn units in July after trending closer to 72 mn vehicles over the first half of the year. On a year-over-year basis, the decline was 5% (nsa). Not surprisingly, the global semiconductor chip shortage continues to weigh on the global auto sales recovery. The impact has been particularly pronounced in Europe and North America that saw declines of -12% m/m and -5% m/m, respectively, in July, whereas China buoyed Asia Pacific sales with a 6% m/m improvement. The outbreaks of the Delta variant around the world—while not expected to result in serious economic write-downs for the most part—continue to wreak havoc on supply chains and consequently auto inventory.

See Box 1 in the Annex for a more detailed view of global auto sales in July.

### INVENTORY IS EVERYTHING

Inventory shortages continue to stall further progress despite solid consumer-driven recoveries underway in key markets. North American auto production in June proved to be a teaser: the +5% m/m (sa) improvement that month stalled in July

### CONTACTS

**Rebekah Young**  
Director, Fiscal & Provincial Economics  
416.862.3876  
Scotiabank Economics  
[rebekah.young@scotiabank.com](mailto:rebekah.young@scotiabank.com)

Chart 1

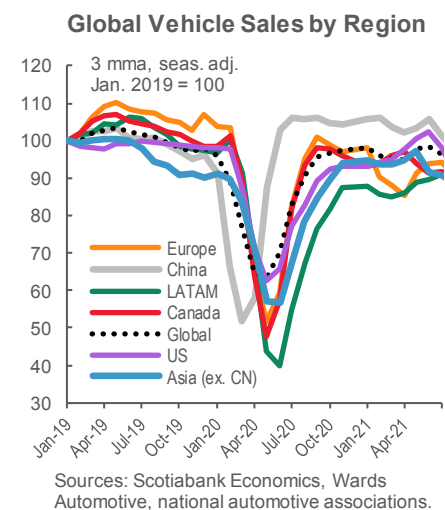
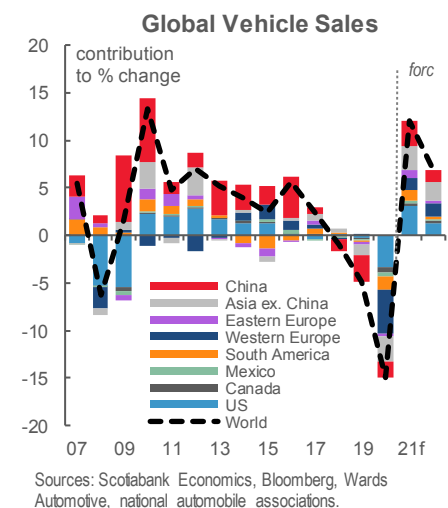


Chart 2



with production largely flat, according to Wards Automotive Group. A further 190 k units in unanticipated cuts were made in July owing to the chip shortage. While ‘flat’ may appear positive in the context of serious shortages, July 2021 output still sat 25% shy of July 2020 production so idled capacity is still substantial.

**August is unlikely to offer much reprieve.** Wards has pencilled in a +5% m/m (sa) improvement for August, but this is likely to be revised downward in the current, highly fluid environment. With the rapid spread of the Delta variant further disrupting chip production in parts of Southeast Asia, Toyota is the latest OEM—and one that had until now weathered well the shortage—to cut its production outlook amidst supply constraints. Last week, it slashed its September production plans by 40%, with a quarter of the cuts (or 80 k) in North America. However, the company has maintained its annual production target (ending March 31, 2022) with an expectation that production losses will be recouped later in the fall, while noting a highly uncertain outlook.

**It is reasonable to expect more production cuts will be announced by other auto manufacturers in September as the Delta variant persists.** This would delay the recovery in retail inventory levels, already at all-time lows. Days supply stood at 24 days heading into August in the US (with a normal range being 60–65 days), while inventory (as a share of sales) sat below 1 again in July (chart 3). Even though US vehicle sales will likely retreat further in August, a higher-than-anticipated contraction in production would put more downward pressure on inventory levels heading into September.

**A recovery in production later in the fall is still in baselines, but conviction is highly tenuous.** The forecasted third-quarter rebound of 15% q/q (sa) in North American auto production by Wards is more of a place-holder pending further announcements from manufacturers that would push out the recovery (chart 4). As elaborated in last month’s [report](#), we do not expect a more balanced supply-demand market until well-into 2022 for new vehicles and even later for used vehicles.

### PEAK PRICING OR PEAKING PRICES?

**It is premature to expect softening in new vehicle prices until inventory bottlenecks are resolved.** According to J.D. Power, average transaction prices for new vehicles in the US were tracking at an all time-high of over USD41K—nearly 17% higher than July 2020—and 3% m/m higher than June 2021. This translated into a +1.7% m/m increase in new vehicle price inflation as measured by the US Consumer Price Index in July. This is trending globally with similar patterns across developed and emerging markets alike; for example, new vehicle price inflation approaching 10% y/y in Mexico in July (chart 5).

**Limited inventory and sky-high pricing in used vehicle markets have arguably neutralized some of the sticker shock on new car prices.** While used vehicle retail prices in the US have stabilized in recent weeks according to Black Book, they still stand 24% above the start of the year. And used car price appreciation relative to new vehicle pricing is still high, at least in the US where it is measured (chart 6). This is working in favour of potential new car buyers with a trade-in as July trade-in values were tracking over 80% above July 2020 levels in the US, according to J.D. Power. This would helpfully reduce financing needs for many new vehicle buyers, along with lower interest rates. The recovery in gasoline prices may have eaten into vehicle ownership affordability but this, so far, has not been a deterrent in markets with insatiable demand for SUVs.

Chart 3



Chart 4

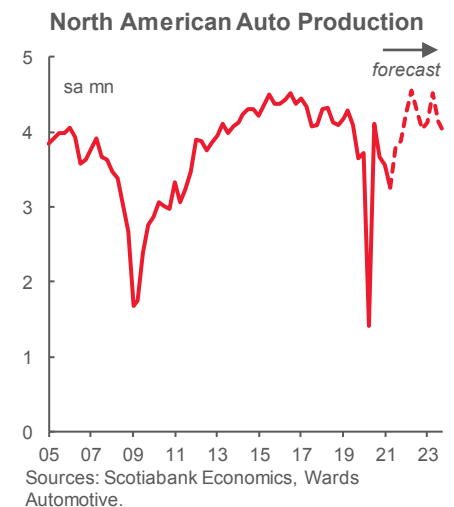
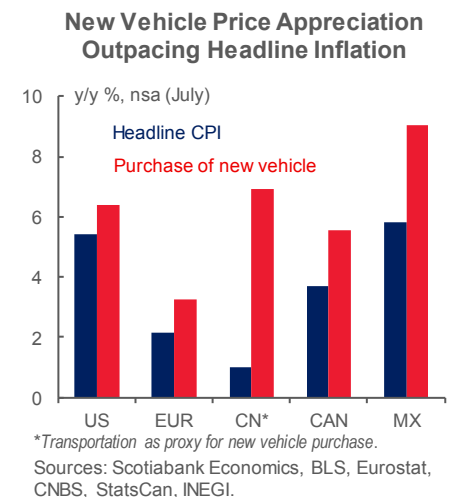


Chart 5

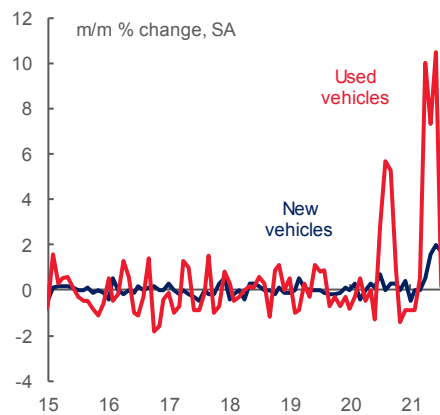


**Wholesale vehicle prices have been moderating faster than retail prices.** Over the course of July, Black Book reported softening weekly price appreciation in wholesale prices in the US and Canada as potential buyers backed away from high prices and limited inventory—though potentially the calibre of supply may also be deteriorating as older and/or higher wear-and-tear vehicles are entering the market. Vehicle retention indices, which aim for comparability, also finally pulled back in July, according to Black Book, after months of skyward escalation (chart 7).

**There is a risk that used vehicle prices pick up again temporarily given the persistence of the chip shortage and consequent delays in new vehicle inventory replenishment.** Used vehicle supply relies on retail trade-ins, as well as retiring fleets, both of which have more down- than up-side in the near term. But July data may have shown there is a limit to willingness to pay as price elasticities started kicking in for used vehicles.

Chart 6

US New vs Used Vehicle Inflation



Sources: Scotiabank Economics, Bloomberg.

Chart 7

Black Book Used Vehicle Retention Indices



Sources: Scotiabank Economics, Black Book, Canadian Black Book.

**BOX 1: TRENDS IN REGIONAL AUTO SALES**

**Global auto sales edged down again in July by -3% m/m (sa) for a third consecutive month of decline.** On an annualised basis, sales sat at a weak 67 mn units in July after trending closer to 72 mn vehicles over the first half of the year. On a year-over-year basis, the decline was 5% (nsa). Not surprisingly, the global semiconductor chip shortage continues to weigh on the global auto sales recovery. The outbreaks of the Delta variant around the world—while not expected to result in serious economic write-downs—continue to impact supply chains. The recovery in auto production has consequently been pushed out yet again as manufacturers announce September production plans.

**The impact has been particularly biting for North American markets where an exceptionally strong rebound in US demand has outstripped supply.** After surging sales earlier in the spring, US auto sales pulled back in July by -4% m/m (sa) for a third month in a row, albeit with some deceleration relative to the -10% m/m retrenchment in June. Sales were a mere 14.7 mn units on an annualized basis in July—or a full 10% below the 16.5 mn mark they had been trending in the first half of the year. (See more details for US and Canadian July sales [here](#).) Industry guidance suggests another decline is in the cards for August sales.

**Chinese auto sales—representing about 30% of the global light vehicle market—bucked the global trend with a 6% m/m (sa) improvement in July auto sales, but were still depressed relative to earlier months' activity.** July auto purchases came in at 20.8 mn annualized sales, which is almost 5% below first-half sales that trended around a healthy 21.8 mn units. Nevertheless, sales still sit modestly above pre-pandemic levels. The more aggressive approach to virus containment muted the economic impact, and has supported a stronger recovery in auto sales, while importantly in the near term, domestic chip production is likely minimizing some of the impact on auto production. Elsewhere on the continent, India also saw sales improve on a month-over-month basis (4%), while Japanese sales were largely flat.

**European auto sales suffered the sharpest regional contraction in July with a -12% m/m decline.** As usual, transactions in the largest market—Germany—have influenced headline numbers with its pull back of -11.5% m/m, though almost all markets saw declines (i.e., France, -16% m/m; Italy, -14% m/m; UK, -6% m/m; Russia, -8% m/m). European sales are being affected by inventory shortages in the near term, while some re-opening effects following fourth waves in countries like the UK and Spain offset some of the impact on month-over-month basis. The region is nevertheless experiencing a structural shift following last year's tighter emissions regulations with July sales a mere 75% of 2019 annual sales.

**Latin American auto sales also saw sharp declines in July (-7% m/m, sa), ending a five-month string of monthly improvements.** Brazilian sales drove headline numbers with a retrenchment of -10% m/m, followed by Mexico (-7% m/m). Both countries are still struggling to approach pre-pandemic levels with year-to-date sales around 20% below 2019 sales levels. Peru and Colombia also experienced slow-downs in July (-11% m/m and -2% m/m, respectively) with only Chile pulling off a modest increase (1% m/m). All three countries have narrowed the gap relative to pre-pandemic levels (i.e., 2019 sales levels) to within 5% of 2019 sales levels, with Chile in fact modestly above. Lower vaccination rates will continue to present headwinds to the regional recovery as the Delta variant spreads.

**Canadian auto markets benefited from some re-opening activity in July as major provincial economies continued to lift restrictions over the summer, but limited inventory curbed some of the enthusiasm.** DesRosiers Automotive Consultants Inc. estimates 156 k vehicles were sold—a 5.7% decline relative to last year (and by about -10% relative to July 2019). On a seasonally adjusted basis, sales eked out a 3.6% m/m (sa) improvement relative to June at 1.71 mn saar, according to the same source. Note, however, that Wards Automotive Group that reports Canadian auto sales with a lag is reporting a decline in monthly sales (of -7% m/m). With Statistics Canada guiding a decline in retail sales for July despite re-opening, it may well be that the pullback in auto sales was sharper than initially reported. With quarterly reporting by OEMs, we won't know but a trending decline in auto sales is consistent with expectations. Industry guidance suggests August sales will see another slow-down as inventory remains shut and further production cuts were announced toward the end of August.

**Table 1 — Global Auto Sales Outlook (mns units)**

	2010-19	2019	2020	2021f	2022f	Jul-21, SA % m/m	Jul-21, NSA % y/y	2021, NSA % y/y
<b>Total Sales</b>	<b>71.0</b>	<b>74.9</b>	<b>63.8</b>	<b>71.4</b>	<b>75.4</b>	<b>-2.9</b>	<b>-4.5</b>	<b>23.0</b>
<b>North America</b>	<b>18.7</b>	<b>20.2</b>	<b>17.0</b>	<b>19.3</b>	<b>20.5</b>	<b>-4.7</b>	<b>3.5</b>	<b>24.7</b>
Canada	1.82	1.92	1.54	1.75	1.95	-7.2	-6.2	25.9
United States	15.7	17.0	14.5	16.4	17.4	-4.1	4.2	25.1
Mexico	1.22	1.32	0.95	1.12	1.20	-7.7	12.7	17.6
<b>Western Europe</b>	<b>13.0</b>	<b>14.1</b>	<b>10.7</b>	<b>11.6</b>	<b>12.6</b>	<b>-11.7</b>	<b>-25.7</b>	<b>16.6</b>
Germany	3.2	3.6	2.9	3.0	3.3	-11.5	-24.9	6.7
United Kingdom	2.3	2.3	1.6	1.8	2.0	-5.8	-29.5	24.7
<b>Eastern Europe</b>	<b>3.3</b>	<b>2.9</b>	<b>2.8</b>	<b>3.3</b>	<b>3.4</b>	<b>-12.8</b>	<b>-16.6</b>	<b>26.8</b>
Russia	2.1	1.7	1.5	1.8	1.9	-7.8	-6.5	28.4
<b>Asia</b>	<b>31.8</b>	<b>33.8</b>	<b>30.6</b>	<b>33.8</b>	<b>35.2</b>	<b>2.8</b>	<b>0.0</b>	<b>23.0</b>
China	19.7	21.5	20.1	21.8	22.7	6.1	-6.8	21.3
India	3.3	3.6	2.8	3.8	4.0	4.2	44.8	81.6
Japan	5.1	5.2	4.6	4.8	4.8	0.3	-4.8	9.1
<b>South America</b>	<b>4.3</b>	<b>3.8</b>	<b>2.8</b>	<b>3.5</b>	<b>3.6</b>	<b>-6.8</b>	<b>16.8</b>	<b>36.0</b>
Brazil	2.91	2.67	1.95	2.30	2.40	-9.6	-0.7	26.0
Chile	0.34	0.37	0.26	0.40	0.42	0.9	233.4	90.1
Colombia	0.26	0.26	0.19	0.26	0.27	-2.4	60.2	54.9
Peru	0.16	0.15	0.11	0.14	0.14	-11.0	12.1	69.3

Sources: Scotiabank Economics, Wards Automotive, Bloomberg.

**Table 2 — North American Production Outlook**

	2010-19	2019	2020	2021f	2022f
	(millions of units, annualised)				
<b>North American Production*</b>	<b>15.9</b>	<b>16.2</b>	<b>13.0</b>	<b>15.2</b>	<b>16.9</b>
Canada	2.2	1.9	1.4	1.4	1.7
United States	10.4	10.5	8.6	10.6	12.0
Mexico	3.2	3.8	3.0	3.2	3.2

Sources: Scotiabank Economics, Wards Automotive.

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