

Contributors

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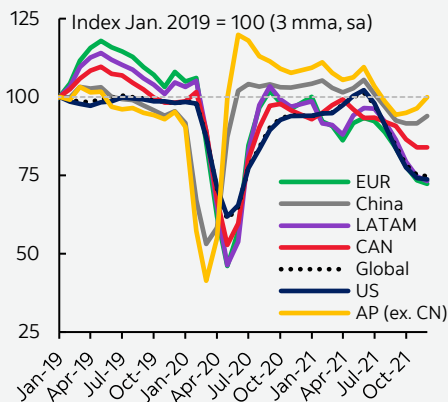
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Chart 1

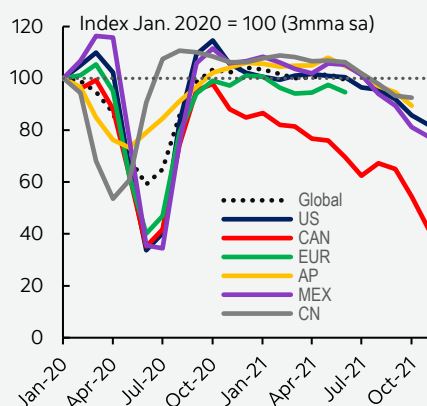
Global Vehicle Sales by Region



Sources: Scotiabank Economics, Wards Automotive, national automotive associations.

Chart 2

Global Auto Production



Sources: Scotiabank Economics, Wards Automotive.

November's Global Auto Sales Stale in the Face of Further Pandemic Risk

- Global auto sales posted another +2.8% m/m (sa) improvement in November for a second consecutive gain after nearly half a year of monthly declines. The year-over-year shortfall narrowed to -11.5% but, increasingly, base effects will minimize the perceived impact of the semiconductor chip shortage that surfaced nearly a year ago.
- Global auto sales sit at a seriously depressed 67 mn saar units (ytd)—well-below the 75 mn sales watermark of 2019—as no region has evaded the impacts of inventory shortages that have otherwise curtailed what should have been a robust year for global auto sales (chart 1).
- The regional picture was mixed, with largely flat sales (give or take a percentage) in most major markets such as the US (-0.7% m/m), Germany (+0.8% m/m), and China (+1.1% m/m), but with some important outliers that boosted the headline number (Japan, +15% m/m; UK, +12% m/m; France, +9% m/m, and Brazil, +5% m/m).
- The nascent recovery in global auto production underpins these gains in sales, but output is still well-below pre-pandemic levels (chart 2) and recent improvements are not yet translating into meaningfully higher inventory on dealers' lots.
- Consequently, sentiment is likely curbing some sales activity as consumers defer purchases amidst still-escalating prices and limited selection. We do believe this is fueling pent-up demand for vehicle purchases down the road given strong household balance sheets and improving labour markets in countries like Canada and the US.
- While we had assumed auto production would accelerate through the first half of 2022, we now believe there is a serious risk that this will only happen towards the middle of the year owing to omicron outbreaks around the world and the potential for further supply chain disruptions (not to mention health impacts).
- This would dampen the global auto sales outlook with an expectation that limited supply and a high pricing environment would persist through 2022 and into 2023. Auto production capacity would be the limiting factor to how quickly the sector could capitalize on mounting pent-up demand as supply chain bottlenecks unwind.
- We expect global auto sales will finish the year with only a modest 3% improvement relative to last year, and have pencilled in 9% y/y and 6% y/y gains for 2022 and 2023, respectively. While we do not forecast out to 2024, it is reasonable to expect that this auto cycle could extend advances over this horizon despite policy tightening that is imminent in many major markets.
- There is considerable risk around this outlook including policy uncertainty. In the near term, this includes how governments around the world react to the latest outbreak. There is also potential for policy missteps that could lead to harder-than-anticipated exits with some erosion of the pent-up demand that could otherwise be expected.

GLOBAL AUTO SALES IN BRIEF

Global auto sales posted another positive gain in November for a second consecutive month of improvement following the latest setback in supply chain challenges.

Purchases accelerated by another 2.8% m/m (sa) last month following a similar advance in

October, (briefly) offering hope that bottlenecks related to the global semiconductor chip shortage (and in some cases other materials, labour, and shipping constraints) were beginning to durably unwind. Annualised sales still stood at a meagre 61 mn saar units in November, bringing year-to-date sales up only marginally to 67 mn saar units. This is well-below the 75 mn vehicles sold in 2019.

There was some regional differentiation across markets, but mostly reflective of monthly volatility around pandemic and inventory factors. North American auto sales were down by -0.8% m/m (sa) driven by the contraction in US sales (-0.7% m/m, sa). Wards Automotive data pointed to a 2% m/m (sa) gain for Canada (in contrast to an earlier-reported contraction of almost 8% m/m (sa) by Desrosiers Automotive Consultants Inc.). Western European auto sales saw a positive advance (7% m/m, sa) driven by improvements in the UK and France (12% m/m and 9% m/m, respectively), while largely flat sales in Germany (0.8% m/m, sa) directionally supported the regional trend. Asia Pacific posted a 4% m/m (sa) improvement as sales surged in Japan by 15% m/m (sa) and—to a lesser extent—in China (1% m/m). South American auto purchases were up by almost 4% m/m (sa), driven mostly by a 5% m/m (sa) gain in Brazil.

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

PRODUCTION POISED FOR ANOTHER SETBACK?

Leading data suggest global auto production continued to accelerate through November, but another setback is likely in the cards. North American auto production was up +7% m/m (sa) in November on the back of October’s sharp +10% m/m (sa) improvement as the sector began its slow recovery from summer supply disruptions owing to Delta variant outbreaks in South Asia (chart 3). Though November data is not yet available for other major auto producers, China and Japan likely saw gains as well.

The nascent recovery could be short-lived. With outbreaks of omicron taking off around the world by mid-December, it is reasonable to expect further supply disruptions in what has been a bumpy path for auto production over the past year and a half. Recall, Delta-related impacts through supply chains saw North American auto output pull back by almost -10% q/q (sa) in the third quarter of 2021. The higher contagion of omicron could potentially lead to larger spillbacks through supply chains into the early winter months of 2022.

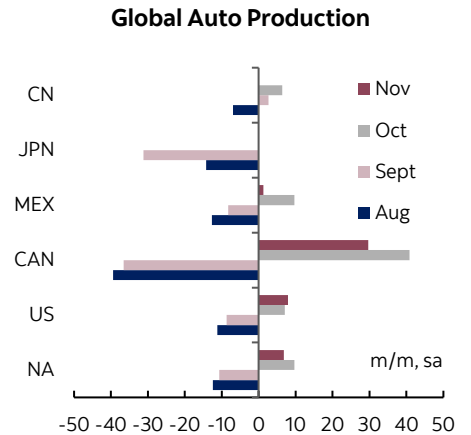
Other idiosyncratic factors could also impact regional auto production in the weeks ahead. This includes potentially more stringent lockdowns ahead of China’s Olympics, as well as delayed impacts from the late-November flooding in British Columbia given the oversized share of motor vehicles and parts moving through the Port of Vancouver.

PERCEPTION REFLECTS REALITY

Despite positive developments in auto production in November, the transmission to sales is not clear-cut just yet. Even if retail inventory metrics have improved modestly (in the US for example, the inventory-to-sales ratio nudged back up above one again in November), weaker sales provided some assist. While inventory picked up by almost 3% m/m (nsa), US auto sales slipped by -4% m/m, nsa (nsa used for comparability only here).

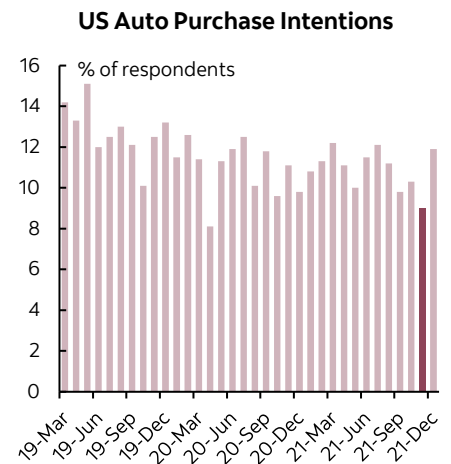
These improvements are likely not yet discernible to the consumer. Annualised inventory in the US still stood at a paltry 12.1 mn saar units in November. And prices have not let up: new vehicle price appreciation surged into double-digit territory in the US

Chart 3



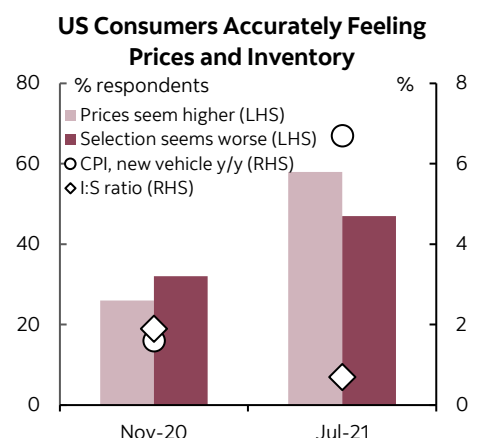
Sources: Scotiabank Economics, Wards Automotive.

Chart 4



Sources: Scotiabank Economics, Conference Board.

Chart 5



Sources: Scotiabank Economics, CarGurus, BLS, BEA.

(11.1% y/y, 1.1% m/m), while used vehicle prices also continued to climb higher (31.4% y/y, 2.5% m/m) in November. The high pricing environment and limited inventory likely took a toll on consumer confidence in November with auto purchase intentions dipping sharply, according to The Conference Board (chart 4). The most recent CarGurus [survey](#) indicates that 31% of US shoppers have delayed their auto purchase due to the pricing environment with perceptions around price and selection deteriorating sharply since late 2020. The situation has only worsened since polling in July, but perceptions are not far from reality (chart 5).

This current softening in auto demand should rebound as inventory picks up (and prices stabilize). At a fundamental level, auto demand should be strong in markets such as the US and Canada where substantial policy supports have offset (if not overshot) the pandemic impacts on household balance sheets. Scotiabank Economics’ modeling, for example, finds housing wealth a strong driver of US auto sales. Soaring real estate asset values propelled net household wealth to another all-time high in the third quarter of 2021—and not incidentally—new home purchases are motivating auto purchase intentions (chart 6). The US household savings rate (i.e., on a flow basis) has dipped back down to pre-pandemic levels at the end of October, but wealth effects (i.e., stock effects) and trend improvements in labour markets should underpin (financial) confidence as inventory and prices normalise (charts 7 & 8).

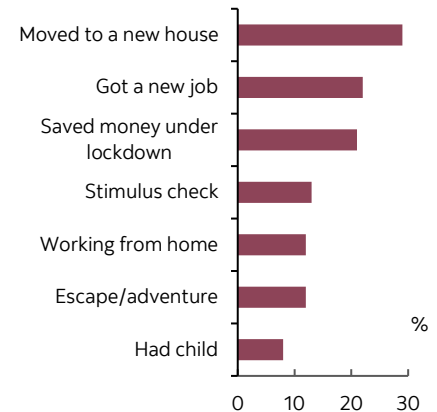
NORMALISATION LIKELY DELAYED

We have maintained that auto production capacity is a limiting factor to how quickly auto sales can capitalize on pent-up demand. Wards Automotive still has a 5% q/q (sa) rebound in North American auto production pencilled in for the first quarter of 2022, followed by double-digit gains in the middle quarters, that would see annual output at 15.1 mn vehicles before accounting for potential omicron impacts (chart 9). This would be substantially better than the estimated 12.9 mn vehicles that will likely be produced by the end of this year, but well-below the 16.2 mn vehicles assembled in 2019. This would put capacity utilization for the industry (in the US) at around 70% in 2022, not much below the 20-year average of 72%. Wards’ outlook for 2023 auto production is back to pre-pandemic levels of 16.2 mn vehicles with US capacity utilization running at a solid 75%.

Even without pandemic risk ahead, the industry would be stretched to catch up to demand in 2022. The pent-up demand from 2021 is likely now closer to 2.5 mn (versus our earlier 2 mn estimate), while the production shortfall (relative to demand) in 2022 could add another 1 mn. We base this on North American auto production numbers, which are not one-for-one with respect to sales, but the share of domestically produced auto purchases has been relatively stable (around 78% of new vehicle purchases) over the past five years, while other regional auto production is facing similar constraints suggesting limited potential for displacement (chart 10). For these reasons, we continue to believe that pricing will remain elevated over this horizon for both new and used vehicles (given the former is the feeder for the latter with a lag).

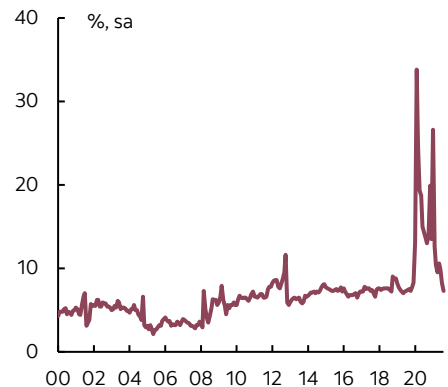
It is still too early to change baselines owing to omicron just yet, but downside risks have widened in the past few weeks. For illustrative purposes only, pushing the North American auto production recovery out by another quarter, along with a -10% q/q contraction in first quarter of 2022, would see auto output back around 13 mn again for 2022, layering on another 2 mn shortfall in regional production relative to demand in 2022. This would push the demand-supply shortfall above 5 mn vehicles accrued over

Chart 6
US Auto Purchase Motivations



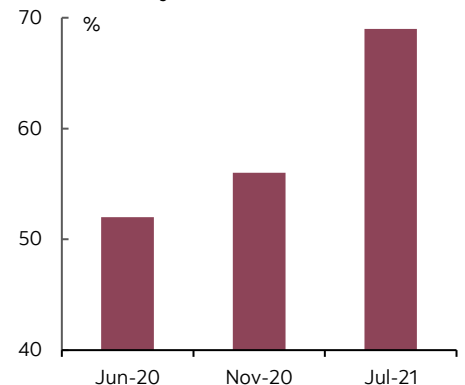
Sources: Scotiabank Economics, CarGurus.

Chart 7
US Saving Rate Back to Pre-Pandemic Levels



Sources: Scotiabank Economics, BEA.

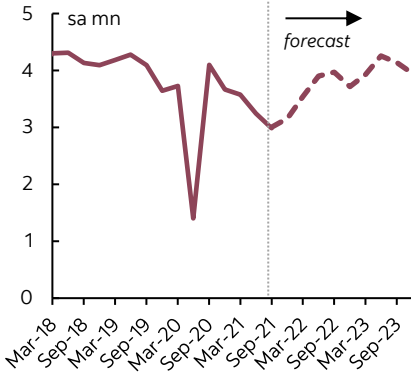
Chart 8
US Consumers Confident in Ability to Afford a Vehicle



Sources: Scotiabank Economics, CarGurus (n=600).

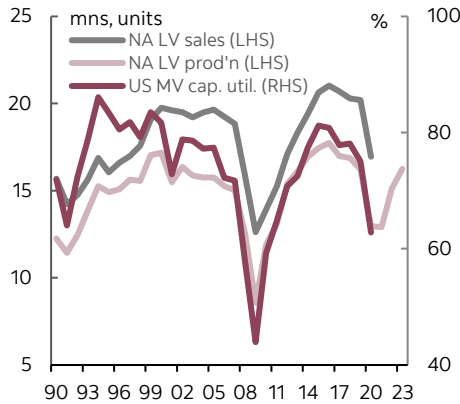
the course of 2021 through 2023. And the longer this demand is unmet, the more tenuous it could become as the economic cycle matures. This is a risk not only for producers and retailers, but also economies where the auto sector is a larger share. This includes countries such as Germany, Mexico, and Japan which are likely banking on rebounds ahead given that the estimated impacts on 2021 are material (chart 11).

Chart 9
Wards Automotive North American Auto Production Outlook



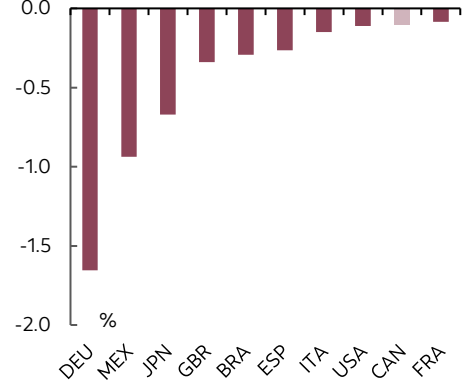
Sources: Scotiabank Economics, Wards Automotive.

Chart 10
North American Auto Sector



Sources: Scotiabank Economics, Wards Automotive, Fed Reserve.

Chart 11
GDP Losses From Auto Production Supply Disruptions in 2021



Sources: Scotiabank Economics, OECD.

BOX 1: TRENDS IN REGIONAL AUTO SALES

Global auto sales posted another positive m/m gain for a second consecutive month in November at 2.8% (sa), with most regions showing signs of stabilizing. On an annualised basis, sales sat just shy of 61 mn units in November after trending closer to 72 mn vehicles over the first half of the year, and still 16.9% (y/y, nsa) lower relative to the same month last year. It is obvious that the slow recoupment of the global semiconductor chip production continues to weigh on the speed of global auto sales recovery.

Auto sales in Asia Pacific led the recovery and further recouped some sales loss from the sharp dip in August and September.

Japanese auto sales have been at full steam and rose by a whopping 15.3% m/m (sa) in November, although still long way from reaching levels before the production disruptions (-14.4% y/y, nsa). Chinese auto sales—representing over 60% of the Asia Pacific light vehicle market, picked up 1.1% m/m sa in November, yet still 4.6% (y/y, nsa) lower compared to the same month last year. Indian auto sales recorded a 5.6% m/m growth (sa), after a notable growth of 19.1% in October.

The headline trends were also driven by sales in Western Europe, which finally showed signs of a widespread rebound in November after some major monthly declines since July. France and Italy experienced similar bounce-backs (8.7% m/m and 4.6% m/m, respectively), while Germany saw virtually no sign of recovery after the October slowdown (0.8% m/m sa in November, and -11% in October). UK auto sales posted another strong gain of 11.9% m/m (sa), compounding October's 6.5% m/m (sa) improvement.

North American auto sales saw growth stagnate in November after some encouraging improvement in October. Still strained by limited inventory, US sales declined by -0.7% m/m (sa) at a very weak annualised sales rate of 12.9 mn vehicles. Very low inventories are curbing otherwise relatively strong demand-side factors as discussed [here](#). There are mixed messages in monthly sales figures for Canada—Wards Automotive reported some slight m/m improvement of 2.1% (sa) in November following October's -3.2% m/m (sa) contraction, whereas DesRosiers Automotive Consultants Inc. pointed to a -7.6% m/m (sa) decline, following October's modest gain (1.3% m/m, sa).

Latin American sales ended the four-month streak of decline and were up slightly by 1.4% m/m (sa). The sales gains mostly came from the Brazilian market, which posted a 5% m/m (sa) gain in November. Argentina and Peru also saw sales picking up by 15.1% m/m (sa) and 6.4% m/m (sa), respectively. On the flip side, Mexican auto sales doubled down on its downtrend started in May, and continued to weigh on the headline growth with another -6% m/m (sa) decline in November. Overall, Latin American auto sales stood at -14.4% lower relative to the same month last year, and the year-to-date sales were still -19.1% lower than in 2019.

Table 1 — Global Auto Sales Outlook (mns units)

	2010-19	2019	2020	2021f	2022f	2023f	Nov-21, SA % m/m	Nov-21, NSA % y/y	2021 ytd, NSA % y/y
Total Sales	71.0	74.9	63.8	65.7	71.5	73.5	2.8	-11.5	6.4
North America	18.7	20.2	17.0	17.7	19.2	21.2	-0.8	-15.3	7.0
Canada	1.82	1.92	1.54	1.67	1.77	1.93	2.1	-5.6	9.6
United States	15.7	17.0	14.5	15.0	16.3	18.1	-0.7	-16.5	6.7
Mexico	1.22	1.32	0.95	1.04	1.13	1.19	-6.0	-13.5	8.6
Western Europe	13.0	14.1	10.7	10.1	11.4	11.4	6.6	-17.5	0.1
Germany	3.2	3.6	2.9	2.5	2.8	3.0	0.8	-31.7	-8.1
United Kingdom	2.3	2.3	1.6	1.6	1.9	2.1	11.9	1.7	2.7
Eastern Europe	3.3	2.9	2.8	2.9	3.2	3.2	-1.5	-23.0	5.1
Russia	2.1	1.7	1.5	1.6	1.8	1.9	-4.2	-20.4	6.9
Asia	31.8	33.8	30.6	31.9	34.4	34.4	3.7	-7.0	7.7
China	19.7	21.5	20.2	20.8	22.2	22.9	1.1	-4.6	7.0
India	3.3	3.6	2.8	3.5	4.0	4.5	5.6	-18.9	28.1
Japan	5.1	5.2	4.6	4.5	4.6	4.6	15.3	-14.4	-2.5
South America	4.3	3.8	2.8	3.1	3.3	3.3	3.8	-14.0	13.6
Brazil	2.91	2.67	1.95	2.00	2.13	2.25	5.2	-24.7	3.6
Chile	0.34	0.37	0.26	0.39	0.44	0.47	-5.2	32.2	62.3
Colombia	0.26	0.26	0.19	0.24	0.27	0.30	-4.9	5.2	38.8
Peru	0.16	0.15	0.11	0.15	0.17	0.18	6.4	18.1	43.1

Sources: Scotiabank Economics, Wards Automotive, Bloomberg.

Table 2 — North American Production Outlook

	2010-19	2019	2020	2021f	2022f	2023f
	(millions of units, annualised)					
North American Production	15.9	16.2	13.0	13.2	15.1	16.2
Canada	2.2	1.9	1.4	1.1	1.4	1.5
United States	10.4	10.5	8.6	9.1	10.3	10.9
Mexico	3.2	3.8	3.0	3.0	3.4	3.7

Sources: Scotiabank Economics, Wards Automotive.

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