ECONOMIC VIEWPOINT

Canada's Auto Market is Out of Balance: Price Pressures Intensify

By Hélène Bégin, Senior Economist

2021 promised to be an excellent year for the auto sector after the plunge in sales experienced at the start of the pandemic. The economy's unprecedented deterioration in spring 2020 had cooled demand for vehicles, but those impacts quickly dissipated. Last year, the buyers were there, but supply problems slowed Canadian dealer sales. Sales delays lengthened and price increases were especially steep for some new and used vehicle models. Will the overheating situation resolve soon? That will depend on whether the supply starts to get back to normal. For now, production and inventory indicators are showing little signs of improving, while demand remains strong.

Look Back at 2021: Sales Went Up Despite the Situation

The global chip shortage curbed motor vehicle production sharply last year, triggering stock outs for many new vehicle makes and models, and lengthening delivery delays by several weeks and even months in numerous cases. Despite these constraints, the number of new vehicles sold increased 6.6% last year in Canada. Four provinces, including Quebec, even recorded increases of 10% or better (table 1).

However, the upswing merely represented some catching up following the plunge recorded in 2020. The first year of the pandemic saw sales collapse in early spring, followed by a rapid

TABLE 1
Number of new vehicles sold in Canada

	2020	2021	VARIATION IN %
PROVINCES			-
British Columbia	167,561	185,637	10.8
Alberta	180,959	193,622	7.0
Saskatchewan	41,474	42,559	2.6
Manitoba	45,573	47,893	5.1
Ontario	629,898	650,100	3.2
Quebec	364,465	400,844	10.0
New Brunswick	33,645	36,726	9.2
Prince Edward Island	7,083	7,987	12.8
Nova Scotia	39,540	44,383	12.2
Newfoundland	27,190	28,647	5.4
Total Canada	1,537,388	1,638,398	6.6

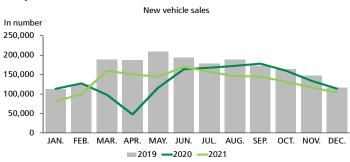
Sources: DesRosiers Automotive Consultants Inc. and Desjardins, Economic Studies

recovery that was completed in just a few months (graph 1). A year later, the supply problems slowed dealer sales, which could have been much higher in 2021, since the strong buyer demand was not fully met. Buyers were faced with inadequate inventories and unusual delays with respect to the availability of several types of vehicle.

Slow Start to 2022

In January and February 2022, Canada saw fewer new vehicles sold than in the same period of 2021. Many purchases were probably delayed by the restrictions in force in several provinces because of the Omicron wave. These are not usually the most active two months for sales, so the year could still end well if the

GRAPH 1Canadian new vehicle sales still below the 2019 level, prior to the pandemic



Sources: Statistics Canada and Desjardins, Economic Studies

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inventory of new vehicles increases a little. As we will see, it will probably take a few more quarters before production returns to a solid pace. The constraints worsened at the start of 2022, and several North American plants are operating at a crawl. For now, new vehicle manufacturing remains subdued given the shortage of some parts, in particular chips.

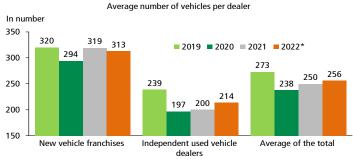
Rush on Used Vehicles

The strong demand for new vehicles that was unmet in 2021 because of the dealers' supply problems and lengthy delivery times guickly impacted the secondary market (box). However, there weren't enough used vehicles to meet buyer needs either. Dealer sales still advanced somewhat in 2021. New vehicle dealers had an advantage, since their used vehicle stock was fed by trade-ins and lease returns. However, independent used car dealers did not have this source to help build their inventories; their sales barely edged up in 2021. Sales were well below where they were in 2019, prior to the pandemic.

The latest used market statistics for Canada and most provinces aren't available yet. However, the results of a survey conducted by Desrosiers Automotive Consultants with two types of Ontario motor vehicle dealers provide us with a good barometer. According to the survey, independent dealer sales went up more slowly than those of franchise dealers last year (graph 2). The survey also makes it possible to establish a prognosis for 2022: sales should be similar to last year, but remain below the 2019 level due to the used vehicle shortage.

The Société d'assurance automobile du Québec (SAAQ) compiles sales of used vehicles by dealers and direct sales between individuals in the province. In all, 1,272,811 transactions were recorded last year, up 4.1% from 2020. However, 2021 sales were 2.5% lower than 2019's, just prior to the pandemic. According to the SAAQ, about 45% of used vehicle sales were handled without an intermediary, while 55% were handled through a dealer in Quebec.

GRAPH 2 Used vehicle sales by Ontario dealers



^{*} Survey of sales forecasts Sources: DesRosiers Automotive Consultants Inc. and Used Car Dealers Association Of Ontario

BOX

Size of the Used Vehicle Market

In Canada, the number of new vehicles sold each year accounts for about 40% of the market, while nearly 60% are used vehicles, according to Desrosiers Automotive Consultants. Sales can be handled through dealers selling new motor vehicles, independent dealers that specialize in used vehicles, and via direct sales between individuals. Each category accounts for about one third of the number of used vehicles sold in Canada a year.

Pressure on New Vehicle Prices: Fewer Financial Incentives

The limited supply of new vehicles combined with strong demand pushed prices up rapidly. According to the numbers from J.D. Power, which compiles motor vehicle dealer transactions, on average, Canadians spent about 15% more to purchase a new vehicle in 2021, or \$42,500 compared to \$36,500 in 2020.

Prices rose more slowly for vehicles whose popularity had been waning for the last few years in favour of larger vehicles. Prices for light trucks, vans and sport utility vehicles (SUVs) climbed more given the stronger demand and substantial decrease in production for some models. This category went over 80% of all new motor vehicles sold in Canada for the first time in 2021. The stronger enthusiasm for this type of vehicle-more expensive than a car-helped push the average price up.

Much of the steep increase in new vehicle prices is due to the less general financial incentives being offered to consumers. The average incentive went from \$5,900 to \$4,200 per vehicle from 2020 to 2021, a decrease of 28.8% according to J.D. Power. According to this source, dealers are achieving a better profit margin on vehicle sales this way. Profit margins averaged \$2,600 in Canada in 2021, about 30% more than in 2020. In Quebec, the annual increase in the margin is close to 30%; incentives averaged \$2,713 in 2021.

Beyond the decrease in financial incentives, low inventories are also bringing down dealer costs and helping increase profits. Fewer vehicles on the lot means savings on insurance premiums, maintenance costs, and snow removal. The costs of financing unsold vehicles also went down substantially, given that inventories are so low. In other words, dealers are benefiting in several ways, even if sales are lower in the current context.

Used Vehicle Prices Are Also Climbing

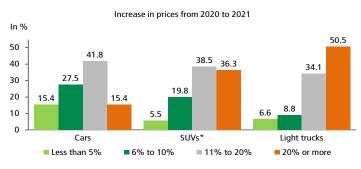
The pressure on new car prices quickly spilled over into the used car market. According to J.D. Power, the average price for a used vehicle sold by a dealer in Canada rose 7.4% to \$25,727 in 2021.

¹ In 2021, the statistics were based on 45,843 transactions in Quebec and 258,874 across Canada.



In Quebec, the average is \$21,200. Passenger vehicle prices went up more slowly than prices for other kinds of vehicles, generally 10% to 20% compared to other vehicle types. According to Desrosiers Automotive Consultants, prices for used SUVs went up more than 20% for a substantial portion of the sales. This was the case for over half of light trucks as well (graphs 3 and 4). The chip shortage slowed pick-up production more, making inventories plunge and triggering a faster rise by prices in both the new and used markets. The long sales delays forced buyers to turn to used vehicles. With some vehicle makes and models, prices for used vehicles even outstripped new vehicle prices.

GRAPH 3 New vehicle franchises in Ontario



^{*} Sport utility vehicles. Sources: DesRosiers Automotive Consultants Inc. and Used Car Dealers Association of Ontario

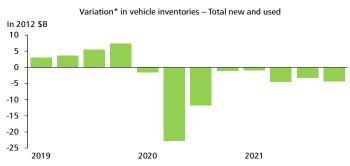
GRAPH 4
Ontario independent used car dealers



^{*} Sport utility vehicles. Sources: DesRosiers Automotive Consultants Inc. and Used Car Dealers Association of Ontario

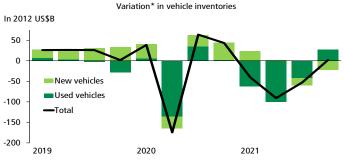
The pressure on new and used vehicle prices should persist as long as the supply of vehicles remains limited. For now, vehicle dealer inventories continue to decline in Canada (graph 5). In the United States, the inventory of used vehicles weakened again at the end of 2021, while new vehicles saw a slight rise. Overall, U.S. inventories stabilized in the last quarter of last year, which sends a good signal in this context (graph 6). It could take inventories several quarters to get back to normal after a real improvement begins. Only a lasting increase in manufacturer production could turn the situation around and create a ripple effect from the new to used car market. In this context, vehicle

GRAPH 5
Canadian motor vehicle dealer inventories are still declining



* Quarterly annualized variation. Sources: Statistics Canada and Desjardins, Economic Studies

GRAPH 6 In the United States, motor vehicle inventories stabilized at the end of 2021



* Quarterly annualized variation. Sources: Bureau of Economic Analysis and Desjardins, Economic Studies

sales will remain subdued in 2022 and prices will keep climbing, at least while this big an imbalance between supply and demand persists. The critical factor will be motor vehicle production; its recent evolution and outlooks are examined later in this *Economic Viewpoint*.

Impacts of Price Increases on Buyers

Consumers who are buying their first vehicle will have to absorb the entire price increase. Monthly payments are therefore higher for both leasing and traditional financing (failing a larger down payment). While first-time buyers are the big losers, those with a vehicle to trade in are doing better. The higher value awarded on a trade-in or lease return offsets some of the higher price for the new vehicle.

Dealers are motivated to offer customers more money for their trade-ins given the problems in keeping inventories of used vehicles for resale. According to J.D. Power, in 2021, dealers were offering an overage of \$400 less than the value of the vehicle being traded in compared with \$950 less in 2020. This constitutes a \$550 improvement, on average, in the consumer's favour in one year. The statistics available since the start of the year indicate that used vehicles are still gaining value. The



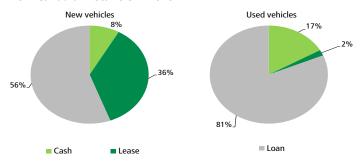
uptrend will persist in 2022 since the supply of new and used vehicles will remain limited for several more quarters.

Lease Returns: Higher Market Value

Those who opted to lease a few years ago are also in good position. The used market has been under so much pressure in the last year that the market value of the returned vehicles is often higher than the residual value established in the lease contract at the start. This becomes a net asset that can amount to several thousand dollars. In this case, buying a vehicle whose residual value is listed in the contract can be better than returning it to the dealer, since a better profit can then be made on selling it.

According to Desrosiers Automotive Consultants, in Canada, over half of new vehicles are purchased using a loan, and over one third of buyers turn to leasing (graph 7). Unsurprisingly, very few used vehicles are leased and about 80% are subject to financing. The loan amount for a used vehicle is around \$20,000 (table 2) for a car and \$45,000 for light trucks, vans and SUVs. Of course, because their prices are lower, more used vehicles are purchased in cash.

GRAPH 7
Method of payment or financing for motor vehicles purchased from Canadian retailers in 2020



Sources: Desrosiers Automotive Consultants Inc. and Desjardins, Economic Studies

Auto Financing

A large proportion of new and used vehicles are purchased by way of a loan. Interest rates will continue to rise in the coming months, which could put the brake on purchases involving credit. What remains to be seen is what kind of dampening effect this will have on households given that many consumers had to put off acquiring a vehicle because of lack of availability. Latent demand could remain high and higher interest rates may not manage to slow the auto market down much.

Because the supply of vehicles is limited, the lower financing rates offered by manufacturers only apply to certain less popular models. For very sought-after vehicles, interest rates are already relatively high, sometimes in excess of 6%. The low inventories mean that the interest rates offered by builders are much higher than they were prior to the pandemic. The cost of funds will go

TABLE 2

Average amount financed for a used vehicle				
•	2020 IN \$	2021 IN \$	VARIATION IN %	
Quebec				
Cars	17,358	19,028	9.6	
Light trucks	34,180	42,037	23.0	
Canada				
Cars	21,446	23,576	9.9	
Light trucks	37.032	44.815	21.0	

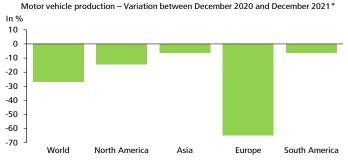
Sources: Dealertrack and Desjardins, Economic Studies

up for both financial institutions and manufacturers, driving up the interest rates on vehicle financing.

Motor Vehicle Production: Still Sluggish

The decline in world motor vehicle production (graphs 8 and 9), which also impacted plants in North America, is mainly due to the chip shortage. As shown in a recent <u>Economic Viewpoint</u>, chips are needed for many of a vehicle's electronic functions. The current shortage is compromising assembly at many of the world's plants, which have had to slow down. Some have even

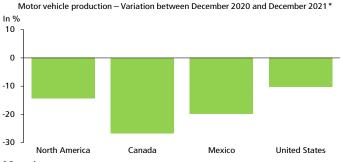
GRAPH 8
The drop in global motor vehicle production is fairly widespread



* 3-month average. Sources: Wards and Desjardins, Economic Studies

GRAPH 9

North American motor vehicle production fell in all three countries



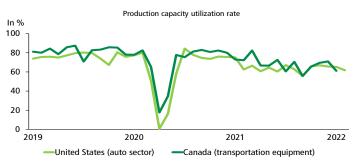
* 3-month average. Sources: Wards and Desjardins, Economic Studies



temporarily halted production. This has happened in Europe, the United States and Canada.

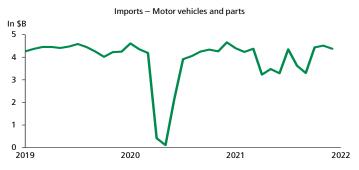
At the start of 2022, some auto manufacturers announced cuts or temporary halts to production at certain North American plants. February's blockade at the Ambassador Bridge between Detroit and Windsor, which lasted about a week, also sharply disrupted motor vehicle manufacturing on both sides of the border. U.S. plants were operating at about 60% of their production capacity in February 2022 (graph 10). In Canada, the data is only available for the transportation equipment industry as a whole;² its utilization rate was 61.2% in January. A substantial proportion of the vehicles purchased here are imported from the rest of North America or from overseas. The Canadian auto sector's imports have not progressed much in the last year (graph 11), since global production remains limited.

GRAPH 10 Despite strong demand for vehicles, plants remain sluggish in the United States and Canada



Sources: Federal Reserve Board, Statistics Canada and Desjardins, Economic Studies

GRAPH 11 Canada's auto sector imports have been disrupted for a year

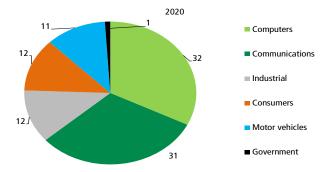


Sources: Statistics Canada and Desjardins, Economic Studies

The Chip Shortage Is the Key

The global chip shortage is largely due to the weakness in motor vehicle production. Since the pandemic started, demand has exploded in many other industries. The component is essential in making computers, video game consoles, smartphones, televisions, washing machines and air conditioners. The proportion of electronic chips going to the motor vehicle market was only about 10% in 2020 worldwide (graph 12).

GRAPH 12Chip market share by final use



Sources: World Semiconductor Trade Statistics and Desiardins, Economic Studies

Although the global chip shortage is far from over, some signs of improvement are starting to materialize. Manufacturers, particularly in Northern Asia, accelerated production significantly in the second half of 2021. The global shortage is therefore starting to ease slightly, although the supply is still nowhere near enough given the robust demand. Several countries have announced major investments to boost electronic chip manufacturing. However, it takes several years to add capacity. For example, the two new Intel plants in the United States will start producing in 2025. Meanwhile, the pandemic is not over and some countries are vulnerable to temporary plant closures, as is happening in some regions of China right now.

According to Oxford Economics, the war between Russia and Ukraine is raising concerns about some types of gas that are essential to producing electronic chips. Ukraine played a leading role in the global supply, which is sapping the chip industry. Over the next few months, the impacts should be limited, since the inventory of producer inputs had risen before the war began. If the war lasts, however, the ongoing rise in electronic chip production could be compromised.

Back to Normal Soon?

Several other materials and commodities that are also used in making chips and other auto parts come from Russia and Ukraine as well. The entire global supply chain is being impacted. This could further slow motor vehicle manufacturing in the coming months. The plants were already operating at a slow pace before the war, and inventories were low. The upswing in global chip

 $^{^{\}rm 2}$ Including motor vehicles, aerospace, ship building and railroad rolling stock manufacturing.



production is encouraging, but we cannot expect the situation to return to normal before 2023.

In this context, vehicle sales will remain subdued in Canada in 2022 and prices will keep climbing, at least as long as the imbalance between supply and demand remains this substantial. What remains to be seen is the extent to which rising interest rates will be able to curb the motor vehicle market given that latent demand for vehicles remains high. Nothing indicates that the overheating situation will be resolved soon, but it should start to cool as of 2023.