

Sector Morsel

Autos will put the pedal-to-the-metal as shortages ease

10 February 2023

Key takeaways

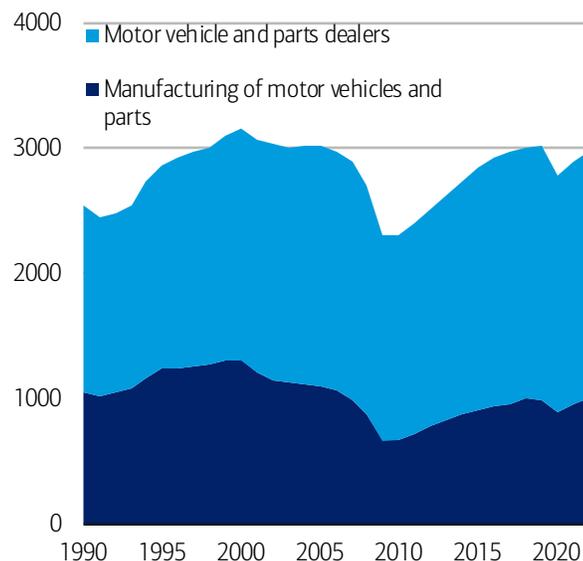
- While consumer spending grew strongly in 2022, auto sales struggled. This reflected the big global supply chain squeeze, which severely diminished new car inventories.
- Bank of America internal data suggests that car sales were weakest with older buyers (Gen Xers and Baby Boomers) since 2020, while sales to Millennial buyers were stronger in both the new and used car markets.
- While supply chain pressures are easing in 2023, in autos there may be still some road left to run before things revert to more 'normal' conditions, which may keep the brakes on sales this year. The good news is that as supply improves into 2024, we think car sales should be in a very good position to help drive a surge in consumption.

Motoring matters

Automobiles have always had a central place in the US economy. In a direct sense, there were around 3 million jobs in motor production and dealers in 2022 (Exhibit 1) and many more within the motor manufacturing supply chain. Cars are also an important part of US consumers' spending. In 2021, spending on car-related categories made up around 6.5% of total consumer spending (Exhibit 2).

Exhibit 1: Jobs in motor manufacturing and dealers

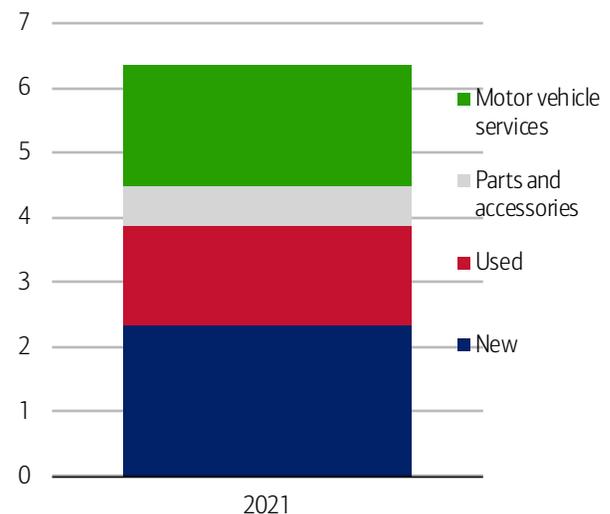
Around 3 million Jobs are directly employed in motor production and



Source: Haver Analytics

Exhibit 2: Share of motor-related spending in real personal consumption in 2021 (%)

Spending on motor related activities forms an important part of overall consumer spending



Source: Haver Analytics

These static snapshots also tend to underplay the importance of the auto industry in research and development and capital spending, as well as the key role the industry will have in the transition to a net zero emissions economy. A healthy auto sector is therefore of central importance for a strong US economy, in our view.

In '22 squeezed auto inventories led to frustrated buyers and higher prices

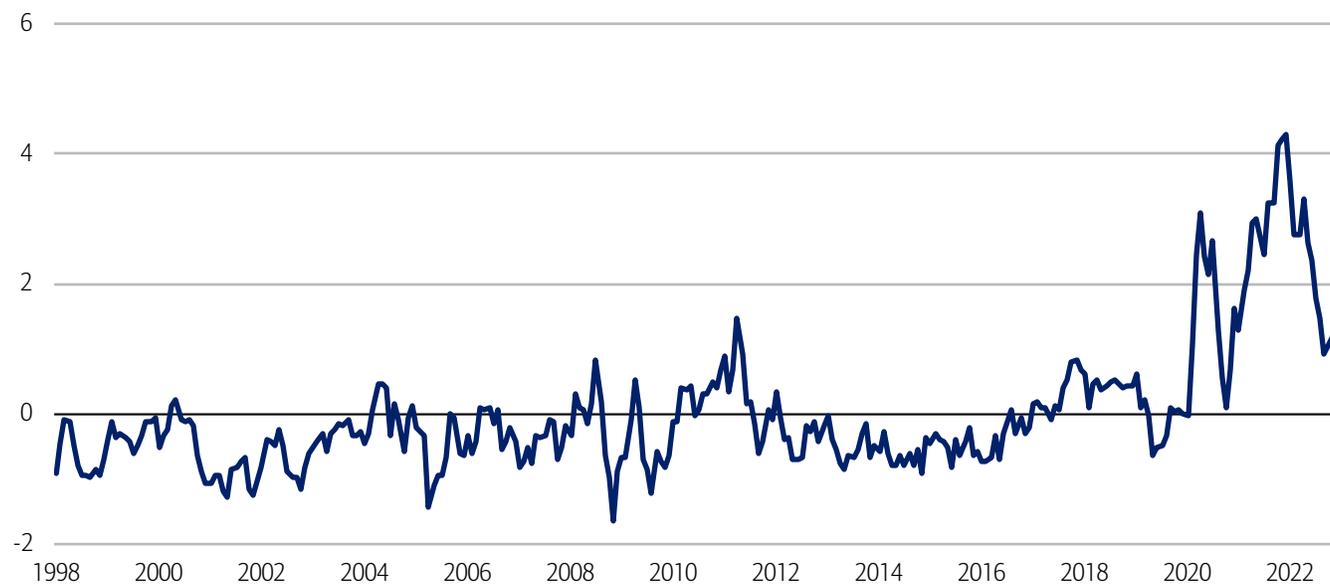
In 2022, US consumer spending, as measured by the Bureau of Economic Analysis (BEA), increased by a healthy 2.8% on the previous year. However, the post-pandemic hangover meant that there was a marked difference in the performance of goods and services. Consumer spending on goods (measured by BEA) declined by 0.4% over the same period, while services rose by 4.5%. This weakness in goods consumption in 2022 in part reflected an unwind from strong goods demand earlier in the pandemic, fuelled by stimulus checks and the inability of consumers to spend their cash on services due to lockdowns and social distancing.

Within the weaker goods picture for spending, spending on autos was a particular soft point - auto sales (as measured by the BEA) started to decline from the middle of 2021 and then continued to remain soft over most of 2022.

What was behind the slowdown in auto sales? A key factor was related to global supply chain shortages, rather than softer consumer demand per se. Many parts of the economy were impacted by supply shortages as the economy opened up. The New York Federal Reserve's Global Supply Chain Pressure Index (Exhibit 3) provides one gauge of these pressures. This measure combines data on global shipping costs with survey responses from manufacturing firms. Exhibit 3 shows that the GSCPI measure reached levels unprecedented in the series' history over the re-opening of the global economy.

Exhibit 3: Global Supply Chain Pressure Index

The NY Fed supply chain measure shows a significant improvement in bottlenecks, but not yet a return to 'normal'



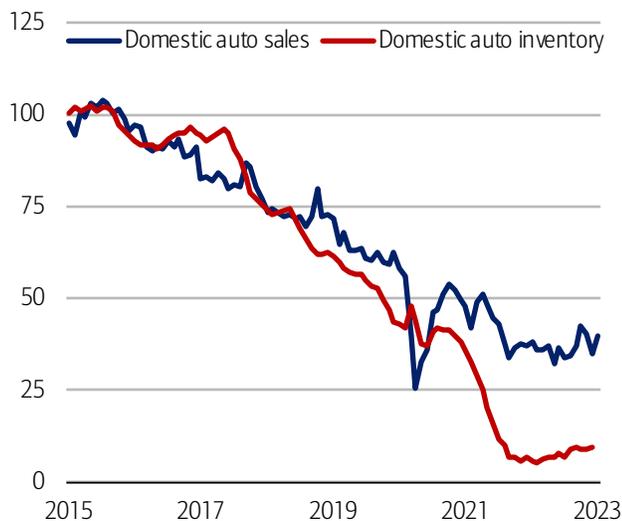
Source: Federal Reserve Bank of New York

The auto sector felt these supply shortages as strongly, and perhaps more so, than other areas of manufacturing. For autos, semi-conductor shortages were a particular binding constraint. The modern car uses an ever-increasing number of semi-conductors and the move towards electrification is, if anything, only accelerating this trend.

The impact of a persistent supply chain squeeze can be clearly seen in data on US auto inventories. Exhibit 4 shows that domestic auto inventories (using Bureau of Economic Analysis (BEA) data) fell to record lows at times over 2022, before some recovery into the end of the year. Relative to domestic auto sales, this meant very thin inventory of new vehicles at dealers. Exhibit 5 shows the ratio of domestic auto sales to inventories (BEA data) was and remains well below historical levels.

Exhibit 4: Domestic auto sales and inventories (2015=100)

Auto inventories plunged over the last few years...



Source: Haver Analytics (BEA data)

Exhibit 5: Domestic auto sales to inventory ratio

...implying the ratio of sales to inventories was very low.

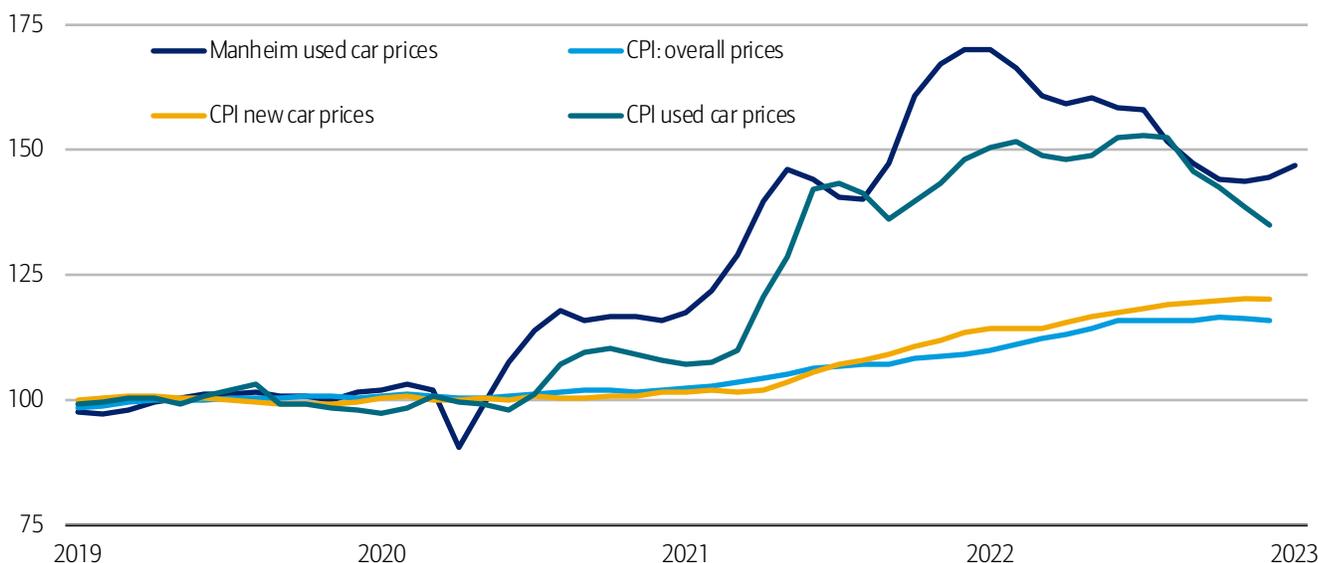


Source: Haver Analytics (BEA data)

The impact of this relative scarcity in new cars was clearly felt in prices both in the new and used car markets. Exhibit 6 shows that used car prices surged over the pandemic, as frustrated new car buyers had to enter the used (and nearly new) market to secure a vehicle.

Exhibit 6: New and used car prices (2019=100)

Used car prices surged over the pandemic



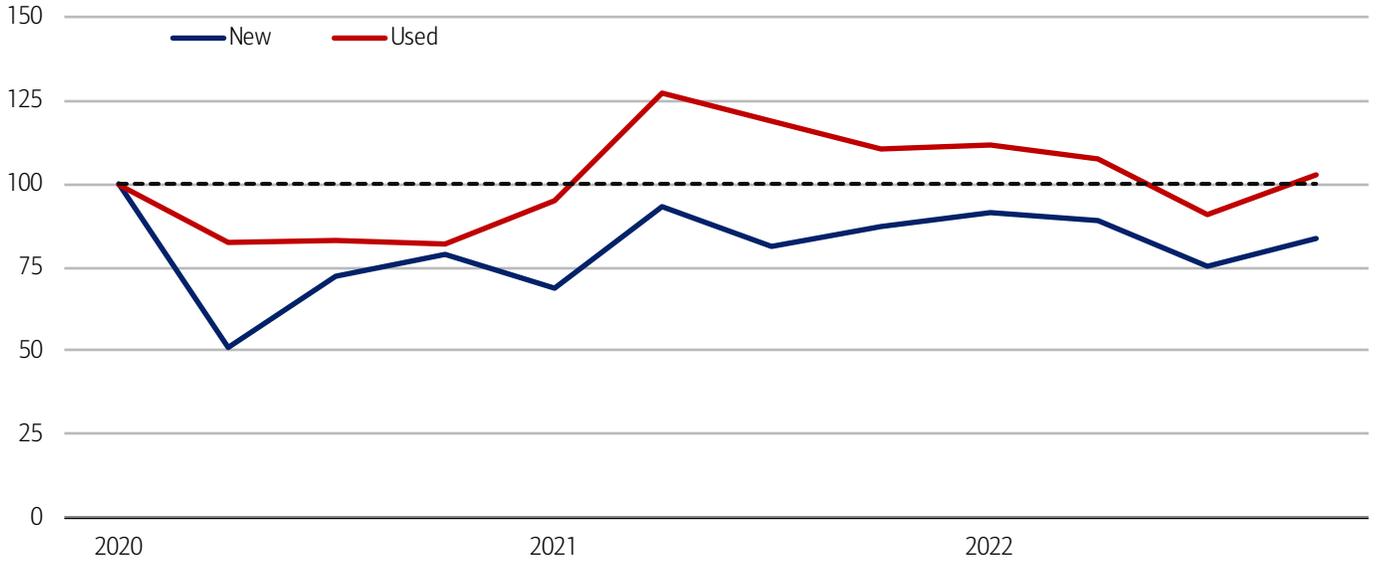
Source: Haver Analytics

Who missed out on a new vehicle?

Bank of America consumer loan origination data confirms the picture of a relative strengthening in the used car market compared to the new market. Exhibit 7 shows new and used auto loan originations. Used auto loan originations rose sharply over 2021, before some softening in 2022. By contrast, new auto loan originations did not recover to 2020-Q1 levels over the period and remained fairly flat in 2021 and 2022.

Exhibit 7: Bank of America number of new and used auto loan originations (Index 2020 Q1=100)

Used car originations rose sharply over 2021, while new car originations have remained lower than 2020 Q1

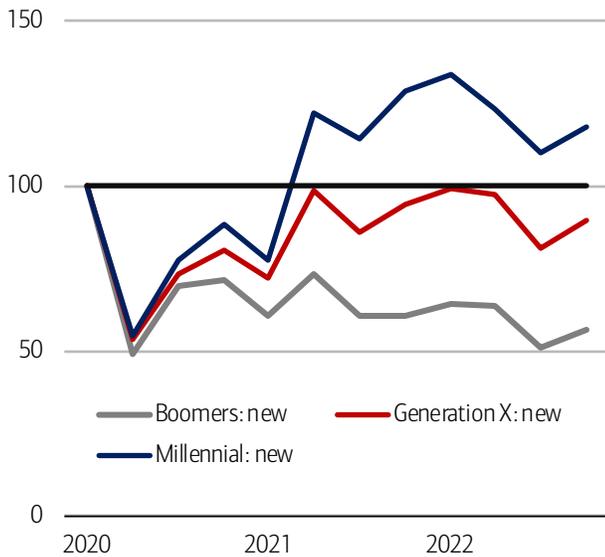


Source: Bank of America internal data

Interestingly, when we break out the data by generation we see somewhat different patterns. In new cars (Exhibit 8) Millennials look to have had more luck securing a vehicle, with their loan originations higher than 2020 Q1. Both Boomers and Generation X, however, ended 2022 with originations below 2020 Q1. For used cars, stronger demand in 2021 and 2022 is largely a Generation X and Millennial story, while for Boomers, their used car loan originations remain significantly softer.

Exhibit 8: Bank of America number of new auto loan originations by generation (Index 2020 Q1=100)

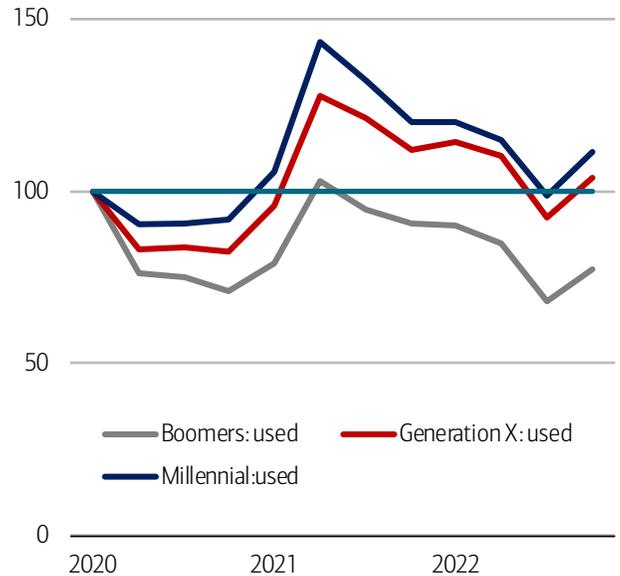
Boomers and, to a lesser extent, Generation X have the weakest new loan originations



Source: Bank of America internal data

Exhibit 9: Bank of America number of used auto loan originations by generation (Index 2020 Q1=100)

Boomers' originations in the used car market were also soft



Source: Bank of America internal data

What might explain these differences? For one, the labor market in the US appears to have been particularly strong for younger workers, while increase in pay for older workers appears to have been lower (see [US labor market: changing for the better?](#)). Additionally, some older workers have not returned to the labor market following the pandemic. These differences might explain a weaker overall demand picture for autos for older workers.

Is respite coming down the road?

It could be that demand from older consumers may take some time to recover, particularly if more structural issues with the labor market are playing a role.

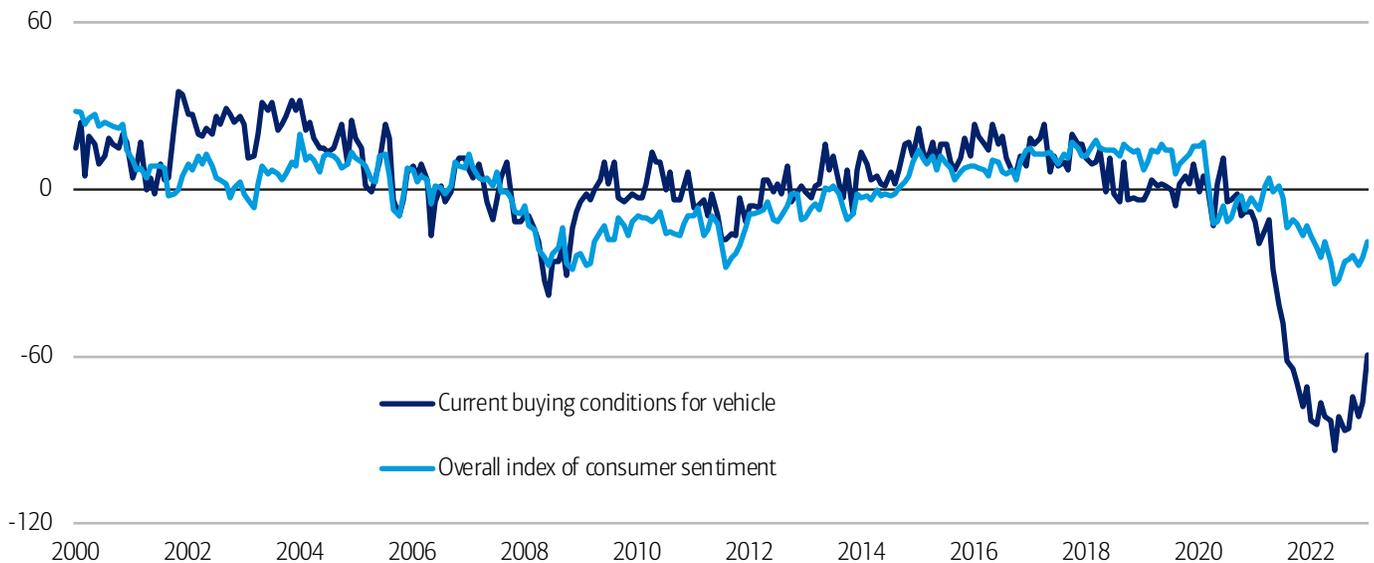
More broadly, many forecasters are expecting overall US consumer spending to soften this year. BofA Global Research forecasts consumer spending to slow to 0.8% in 2023, from 2.8% in 2022. The full extent of this slowing hinges on how the labor market pans out across all the age generations, both in terms of employment and pay growth; BofA Global Research expects the easing in the labor market to be fairly gradual.

Historically, it would not be unreasonable to expect this potential overall cooling in consumer spending to also be reflected in demand for autos. After all, buying a vehicle is a major outlay and if consumers become worried about their employment prospects, they may well be reluctant to commit to either buying a car outright or entering into a credit arrangement.

One caveat is that because many people found it difficult to buy a car in 2022 due to low inventory there may be a degree of frustrated demand that could come back into the market as conditions ease. Exhibit 10 illustrates just how unfavorably people judge the current buying position for vehicles relative to their overall sentiment, in part reflecting perceptions that prices of vehicles are relatively high due to the lack of supply.

Exhibit 10: University of Michigan survey of consumers: overall sentiment and current buying conditions for new vehicles (mean-adjusted)

Sentiment towards buying a vehicle has picked up, but remains much weaker than would normally be implied by overall consumer sentiment



Source: Have Analytics

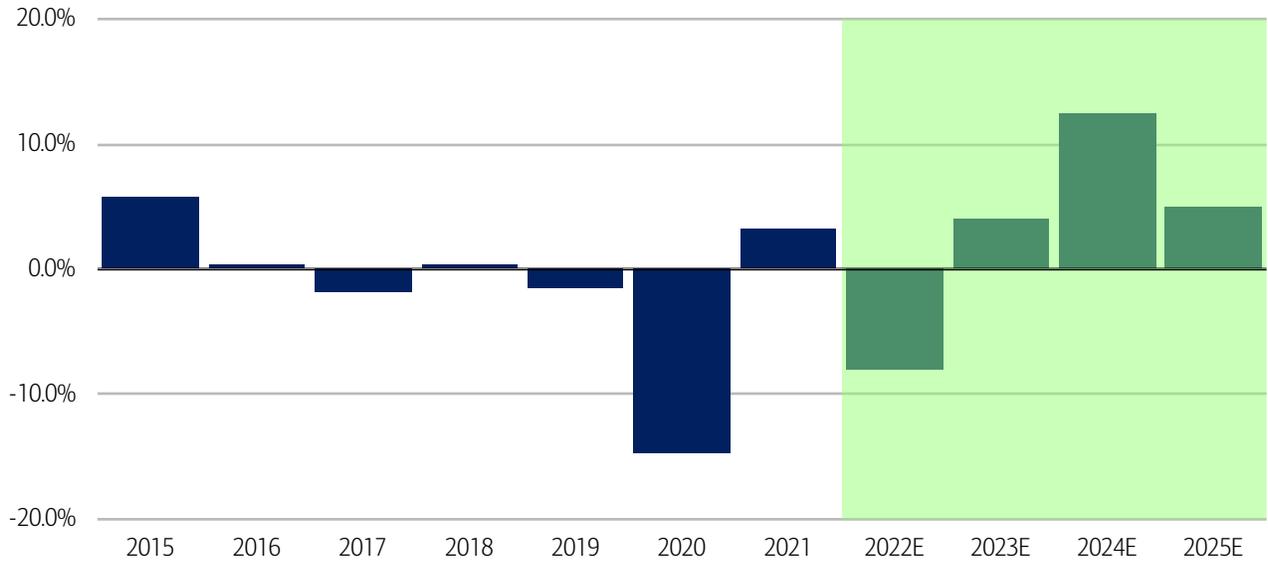
Could these frustrated buyers help support auto sales as inventories and car prices normalize, even as the overall economy softens?

The answer here is 'yes,' but this seems more of a potential for 2024. The key reason is supply chain issues in autos are likely to persist in 2023. BofA Global Research notes that 'semiconductor supply is still somewhat challenged for the auto industry, even as availability has improved for most other sectors. Semiconductor companies confirmed this point during 3Q:22 reporting, noting that backlogs are quite large for the automotive end-market. In their view, it could take another 12+ months for semiconductor availability to meaningfully improve.'

So, consumer spending on cars might not be able to provide too much of an offset to cooling demand in other areas this year. However, the better news is that heading into 2024 as supply issues fade, we think auto sales are likely to be in a position to come back strongly, with consumers at last being able to satisfy their demand for new vehicles. BofA Global Research expects a steep increase in 2024 in sales and does not expect the next peak in the US auto cycle to occur until 2028.

Exhibit 11: BofA Global Research forecast of light vehicle sales (% YoY)

Vehicle sales should grow strongly in 2024 as inventory issues ease



Source: BofA Global Research

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Methodology

Selected Bank of America transaction data is used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used is not comprehensive; it is based on **aggregated and anonymized** selections of Bank of America data and may reflect a degree of selection bias and limitations on the data available.

Bank of America consumer auto loan originations data reflect loans for private vehicle sales and covers originations at dealers, direct purchases and refinances.

Generations, if discussed, are defined as follows:

- 1) Gen Z, born after 1996
- 2) Younger Millennials: born between 1989-1995
- 3) Older Millennials: born between 1978-1988
- 4) Gen Xers: born between 1965-1977
- 5) Baby Boomer: 1946-1964

Unless otherwise stated, data is not adjusted for seasonality, processing days or portfolio changes, and may be subject to periodic revisions.

Additional information about the methodology used to aggregate the data is available upon request.

Disclosures

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