

## Avis Budget Group

# Even on a Budget, CAR looks attractive; headwinds priced in and recovery likely

Initiating Coverage: BUY | PO: 170.00 USD | Price: 108.12 USD

## Driving toward a stronger earnings rebound than peers

We initiate coverage on CAR at Buy with a \$170 PO, implying 55%+ upside. We think the stock is at an attractive entry point amid recent weakness (-39% YTD vs. +7% for S&P 500). Earnings have re-based post 4Q:23 and we expect CAR to have a stronger earnings recovery than peers as it should benefit from favorable travel spending trends, steadier pricing and its efficiency efforts. Our PO is based on an EV/EBITDA multiple of 9x on 2025E. We expect earnings and cash flow to normalize off the pandemic-driven peak and are valuing the rental car companies at an EV/EBITDA multiple closer to pre-COVID levels (6x to 8x) but at the higher end, reflecting healthier industry fundamentals. We apply a 1x premium for CAR given its more consistent operating performance.

## CAR has cost advantage & strategically well-managed

CAR has historically been the stronger and better performing public US rental car company, and appears to be taking the right strategic approach to EVs. It also has a cost advantage relative to HTZ, and we expect it to maintain a strong focus on cost discipline/productivity. It has not issued specific targets, but has meaningful opportunities to reduce expenses and offset inflation from: 1) lower collision/damage costs; 2) leveraging telematics/connected car tech; and 3) improving fleet management.

## Travel spending gains support solid rental volume growth

Air travel, a leading driver of rental volumes, should support solid growth in 2024-26. BofA Airlines equity analyst Andrew Didora projects domestic RPM for leading airlines will grow 5.1% on average in 2024 and 3.6% in 2025. We use this as a baseline for our forecast for ~3% growth. Encouragingly, TSA passenger volumes so far this year are pacing above our forecast, with YoY growth of 6.6% in Jan and 5.7% in Feb.

## Pricing showing signs of stabilizing

Pricing, key to earnings and investors, appears positioned for a correction towards pre-COVID levels, but we don't expect a full reversion as fundamentals should offer near-term support. We anticipate this will come in part from de-fleeting efforts by CAR, HTZ and potentially other rental car companies in 1H:24, reducing industry supply. The stabilization in prices should be further supported by seasonally stronger demand in 2Q and 3Q coupled with solid growth in travel spending.

## Risks: Highly competitive mkt, NT fundamental headwinds

The rental market is highly competitive and volatile, with profits and cash flow often hard to forecast. Larger than expected used vehicle price declines could push up fleet costs and higher for longer interest rates could keep debt costs elevated. CAR also has concentrated ownership: Hedge fund SRS is the largest holder, owning 48.3% of shares.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	57.84	44.24	12.55	14.90	18.90
GAAP EPS	58.38	43.09	12.71	15.12	19.20
EPS Change (YoY)	156.0%	-23.5%	-71.6%	18.7%	26.8%
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	1.9x	2.4x	8.6x	7.3x	5.7x
GAAP P/E	1.9x	2.5x	8.5x	7.2x	5.6x
EV / EBITDA*	9.3x	15.5x	39.8x	35.2x	33.3x
Free Cash Flow Yield*	69.2%	31.2%	3.3%	3.8%	5.5%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 22.

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### Stock Data

Price	108.12 USD
Price Objective	170.00 USD
Date Established	19-Mar-2024
Investment Opinion	C-1-9
52-Week Range	99.60 USD - 232.73 USD
Mkt Val (mn) / Shares Out (mn)	3,936 USD / 36.4
Free Float	47.2%
Average Daily Value (mn)	120.44 USD
BofA Ticker / Exchange	CAR / NAS
Bloomberg / Reuters	CAR US / CAR.OQ
ROE (2024E)	NA
Net Dbt to Eqty (Dec-2023A)	NA

### Acronyms:

**ABS:** asset-backed security  
**ATP:** average transaction price  
**CF:** cash flow  
**EV:** electric vehicle  
**NT:** near term  
**OEM:** original equipment manufacturer  
**RPD:** revenue per day  
**RPM:** revenue per passenger mile  
**TSA:** Transportation Security Administration  
**Ticker**  
**CAR:** Avis Budget  
**HTZ:** Hertz Global

# iQprofile<sup>SM</sup> Avis Budget Group

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	13.7%	7.3%	2.0%	1.9%	1.9%
Return on Equity	NM	NM	NM	NM	NM
Operating Margin	46.9%	27.1%	10.1%	10.1%	10.5%
Free Cash Flow	2,725	1,227	129	150	218

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.1x	0.9x	1.0x	1.0x	1.0x
Asset Replacement Ratio	1.1x	1.3x	1.3x	1.3x	1.3x
Tax Rate	24.1%	14.1%	25.0%	25.0%	25.0%
Net Debt-to-Equity Ratio	NM	NM	NM	NM	NM
Interest Cover	15.8x	7.7x	2.6x	2.9x	3.4x

## Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	8,396	8,406	8,406	8,610	8,820
% Change	28.8%	0.1%	0%	2.4%	2.4%
Gross Profit	5,873	4,594	3,428	3,558	3,699
% Change	52.1%	-21.8%	-25.4%	3.8%	4.0%
EBITDA	4,133	2,490	968	1,095	1,156
% Change	71.3%	-39.8%	-61.1%	13.1%	5.6%
Net Interest & Other Income	(248)	(296)	(325)	(303)	(274)
<b>Net Income (Adjusted)</b>	<b>2,799</b>	<b>1,699</b>	<b>393</b>	<b>427</b>	<b>490</b>
<b>% Change</b>	<b>88.7%</b>	<b>-39.3%</b>	<b>-76.9%</b>	<b>8.5%</b>	<b>14.9%</b>

## Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	2,799	1,699	393	427	490
Depreciation & Amortization	225	216	219	223	228
Change in Working Capital	126	(196)	92	(27)	(37)
Deferred Taxation Charge	682	191	105	114	131
Other Adjustments, Net	(861)	(410)	(400)	(300)	(300)
Capital Expenditure	(246)	(273)	(280)	(287)	(294)
<b>Free Cash Flow</b>	<b>2,725</b>	<b>1,227</b>	<b>129</b>	<b>150</b>	<b>218</b>
<b>% Change</b>	<b>59.3%</b>	<b>-55.0%</b>	<b>-89.5%</b>	<b>16.0%</b>	<b>45.8%</b>
Share / Issue Repurchase	(3,329)	(951)	(1,500)	(500)	(500)
Cost of Dividends Paid	0	(355)	0	0	0
Change in Debt	2,234	3,942	4,513	3,070	2,828

## Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	570	555	299	461	391
Trade Receivables	810	900	855	859	863
Other Current Assets	506	684	684	684	684
Property, Plant & Equipment	594	719	780	844	910
Other Non-Current Assets	23,447	29,711	32,611	34,977	37,087
<b>Total Assets</b>	<b>25,927</b>	<b>32,569</b>	<b>35,230</b>	<b>37,826</b>	<b>39,936</b>
Short-Term Debt	27	32	32	32	32
Other Current Liabilities	2,547	2,627	2,674	2,652	2,619
Long-Term Debt	4,644	4,791	4,441	4,141	3,741
Other Non-Current Liabilities	19,409	25,462	30,377	33,804	37,097
<b>Total Liabilities</b>	<b>26,627</b>	<b>32,912</b>	<b>37,525</b>	<b>40,629</b>	<b>43,489</b>
<b>Total Equity</b>	<b>(700)</b>	<b>(343)</b>	<b>(2,295)</b>	<b>(2,803)</b>	<b>(3,553)</b>
<b>Total Equity &amp; Liabilities</b>	<b>25,927</b>	<b>32,569</b>	<b>35,230</b>	<b>37,826</b>	<b>39,936</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 22.

## Company Sector

Autos/Car Manufacturers

## Company Description

Avis Budget Group is a leading global provider of vehicle rental services primarily through its Avis and Budget brands (among others), car-sharing services with its Zipcar network, and commercial truck rental services via its Budget Truck operations. Avis Budget's car rental fleet is around 690,000 vehicles, operating in roughly 10,250 car and truck rental locations across 180 countries (including 3,700 locations operated by licensees).

## Investment Rationale

We have a Buy on CAR. The company has historically been the stronger and better performing public US rental car company. We think it is trading at an attractive valuation and 2024 earnings headwinds appear to be in the stock. CAR appears positioned for an earnings recovery in 2025 supported by solid volume growth, relatively stable pricing and its productivity and efficiency efforts.

## Stock Data

Average Daily Volume 1,113,958

## Quarterly Earnings Estimates

	2023	2024
Q1	7.95A	-2.50E
Q2	11.49A	3.80E
Q3	17.18A	10.40E
Q4	7.69A	1.45E

## Executive summary

### Initiate coverage on CAR with Buy rating and \$170 PO

We are initiating coverage on Avis Budget (CAR) at Buy with a \$170 PO, based on an EV/EBITDA multiple of 9x on 2025E. CAR is a leading global provider of vehicle rental services through its Avis and Budget brands, car-sharing services with its Zipcar network, and commercial truck rental services via its Budget Truck operations. Given our expectation for earnings and cash flow to normalize off the pandemic-driven peak, we are valuing the rental car companies at an EV/EBITDA multiple that is closer to where they traded before the pandemic (6x to 8x) but at the higher end reflecting currently healthier industry fundamentals with the companies showing more discipline in managing supply / demand and a solid growth outlook. We take this and apply a 1x premium for CAR given its more consistent operating performance and lower leverage.

### Travel trends support solid growth in rental volumes

Travel trends should support solid growth in rental volumes in 2024-26, in our view. The single biggest determinant of car rental volumes are enplanements (number of consumers traveling by air) as airport rentals account for 65-70% of industry-wide sales, including 67% for CAR. BofA's Airlines equity analyst Andrew Didora projects domestic revenue per passenger mile (RPM) for the leading airlines will grow 5.1% on average in 2024 and 3.6% in 2025. We use this as a baseline for our forecast for ~3% growth in rental days over the next three years. Should volumes prove stronger-than-expected, this could provide support for better pricing. TSA passenger volumes are pacing above our forecast so far in 2024 with YoY growth of 6.6% in January and 5.7% in February.

### Pricing showing signs of stabilizing

Pricing is a key driver of earnings for rental car companies and investors seem positioned for a return to pre-COVID pricing levels. While we do expect some reversion off recent peaks, fundamentals should offer near-term support and could keep it solidly above pre-COVID price points. We anticipate this will come in part from de-fleeting efforts by CAR, HTZ and potentially other rental car companies in 1H:24, reducing industry supply. Prices should be further supported by seasonally stronger demand in 2Q and 3Q coupled with continued solid growth in travel spending. Our recent industry discussions also suggest rental car pricing is stabilizing, an encouraging sign following the declines seen in 4Q. In our model, we assume pricing comes down in 2024 due to likely weakness in 1Q before some firming thereafter. We assume additional declines of ~1% in 2025 and 2026, consistent with longer-term rental car pricing trends.

### CAR has cost advantage and strategically well-managed

CAR has historically been the stronger and better performing public US rental car company, and appears to be taking the right strategic approach to EVs. Additionally, CAR has a cost advantage relative to HTZ, and maintains a strong focus on cost discipline. This is supported by the company's compensation structure that ties incentive compensation to variable and fixed cost goals as well as adj. EBITDA targets. CAR has not put out specific cost saving targets, but we believe it has meaningful opportunities to improve its cost position from: 1) reducing collision / damage costs; 2) further leveraging telematics / connected car technology; and 3) improving fleet management.

### Rising depreciation costs a risk, but should moderate in 2025

Vehicle depreciation is the largest standalone cost component for rental car companies, and is expected to increase 55% YoY in 2024 to ~\$325/unit. While a sizable earnings headwind, it is now in the stock following CAR's 2024 guidance commentary and we think depreciation should decrease in 2025 and 2026. On that point, the gap between used and new pricing is likely to narrow in 2025 as used price declines moderate with reduced supply and new vehicle prices trending lower. Additionally, depreciation per unit is at the high-end of the historical range (\$275-\$350/unit) and CAR could ride its cars longer in ride-hail if residual values are meaningfully different than expected.



# Investment thesis and valuation

## Investment thesis

We have a Buy rating on Avis Budget Group (CAR). The company has historically been the stronger and better performing public US rental car company and its stock is now trading at an attractive valuation at only 5.7x 2025E EV/EBITDA. Recall, the stock is down 44% YTD relative to S&P 500 after 4Q:23 commentary brought industry pressures to the forefront (i.e., higher vehicle depreciation and interest costs) and suggested that earnings will be down sharply in 2024. That said, we believe CAR is positioned for an earnings recovery in 2025 supported by solid volume growth, relatively stable pricing, and productivity and efficiency efforts. Additionally, we think vehicle depreciation on a per unit basis will be lower as used vehicle price declines moderate. Interest costs could move somewhat higher and serve as a partial offset, but this will be notably more meaningful for its closest publicly traded peer (HTZ). Given these points and CAR's more consistent track than HTZ, we believe a Buy rating is appropriate.

Avis Budget is the second largest rental car company in the world, with operations in the Americas (78% of revenue in 2023), Europe, Australia, and New Zealand, among other geographies. It has several well-known brands that include Avis (premium), Budget (value conscious), and Payless (deep value), as well as the Zipcar car-sharing service. CAR's rental fleet totals more than 690,000 vehicles across 10,250 car and truck rental locations. Additionally, the company's Budget Truck brand operates one of the largest commercial truck rental businesses in the US.

## Investment positives and risk

### Positives

- Attractive entry point following recent weakness (-39% YTD vs. +7% for S&P 500) and multiples suggest it is priced well vs. past periods (at 6.1x 2025E EV/EBITDA vs. range of 6x to 8x in years preceding the pandemic);
- Spending on travel should continue to grow at a solid pace, which is supported by TSA volumes showing YoY growth of 6.6% in January and 5.7% in February;
- Pricing appears to be stabilizing and should be supported by solid demand and as we expect de-fleeting efforts by CAR, HTZ and potentially other rental car companies to reduce industry supply;
- CAR has a cost advantage relative to HTZ, and we expect it to maintain a strong focus on cost discipline and productivity;
- Vehicle depreciation on a per unit basis should moderate in 2025 as the gap between used and new pricing is likely to narrow;

### Risks

- Rental car market in the US is: 1) small (vs. auto/parts manufacturing); 2) mature (modest growth); 3) competitive; and 4) volatile (profits, cash flow, and stocks);
- Used vehicle prices are trending lower and greater-than-expected declines in such pricing could keep fleet costs elevated;
- Interest rates could stay higher for longer, which would keep the costs of financing vehicle purchases and interest expense on corporate debt elevated;
- SRS Investment Management is CAR's largest shareholder and its sizable stake (48.3% of outstanding shares) potentially reduces the actively traded float, which could cause undue volatility in the stock. Additionally, the stock could come under pressure should the investor choose to wind down its stake.

## Valuation

### PO of \$170 based on multiple analysis

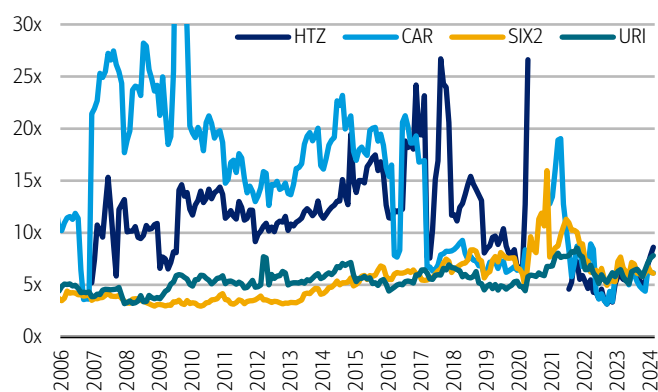
Our PO for CAR shares of \$170 is based on an EV/EBITDA multiple of 9x on our 2025 estimates. Given that we expect earnings and cash flow to normalize off the pandemic-driven peak, we use an EV/EBITDA multiple that is close to where the rental car companies traded before the pandemic (6x to 8x) but at the higher end reflecting a currently healthier industry with more discipline in managing the size of rental car fleets relative to demand and a solid growth outlook. We take this and apply a 1x premium for CAR given its more consistent operating performance.

### Peer group includes publicly traded rental car & equipment rental companies

Our valuation analysis is based on peers with comparable business models. Our analysis includes the publicly traded rental car competitors Hertz Global (HTZ) and Sixt (SIX2) as well as the equipment rental company United Rentals (URI).

#### Exhibit 1: Historical EV/EBITDA multiples for rental car and equipment rental companies (2006 to 2024)

PO based on EV/EBITDA multiple of 9x

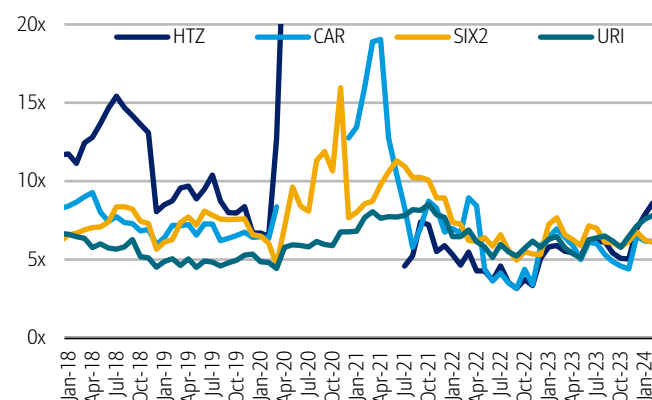


Source: Bloomberg

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#### Exhibit 2: EV/EBITDA multiples for rental car and equipment rental companies (2006 to 2024)

Rental car stocks traded on avg. around 6x to 8x EV/EBITDA before pandemic



Source: Bloomberg

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### EV/EBITDA appears to be most meaningful metric for valuing CAR

We have determined that the most appropriate multiple to use in our valuation of CAR shares is adjusted EV/EBITDA, with EBITDA including depreciation for vehicles in fleet (the largest operating cost component), but enterprise value excluding debt associated with vehicle programs (provided via bankruptcy remote qualifying special purpose limited liability company).

EV/EBITDA is commonly used among investors to value the rental car companies. Choosing an appropriate multiple, however, is more an art than a science, as 1) global car rental peers do not always treat fleet financing/accounting similarly (on balance sheet versus off balance sheet); and 2) rental car companies and the equipment rental peers we include in our analysis do not always have comparable capital structures (ABS debt, etc.). Nevertheless, we believe it is important to consider a number of relevant companies in determining the appropriate valuation for CAR.

### Valuation basis year is 2025

We are using 2025 as the basis year for valuation and most of our price objectives across our coverage. In our view, 2025 will likely be more reflective of a “normalized” year for rental car companies following headwinds in 2024 and with low-to-mid single digit volume growth and a low-single digit decline in revenue per unit per day, consistent with the trend seen over the last 20 years in a normal competitive environment.



# Company overview

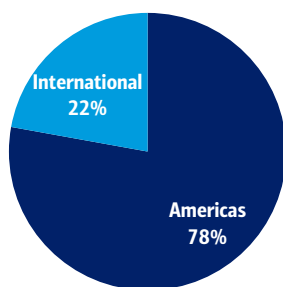
## Company description

### Business includes rental car, rental truck, and car-sharing (Zipcar)

Avis Budget is a global provider of vehicle rental and car-sharing services, operating primarily in the Americas (North, Central and South America and the Caribbean), as well as Europe, Australia, and New Zealand (Exhibit 33), among other countries through the Avis (premium), Budget (value conscious), and Payless (deep value) brands, while Zipcar operates as a car-sharing service. Avis Budget's car rental fleet is over 690,000 vehicles, operating in roughly 10,250 car and truck rental locations across 180 countries (3,700 locations operated by licensees). Internationally, Avis Budget also operates through the Maggiore and Morini Rent brands in Italy, FranceCars in France, Apex in New Zealand and Australia, Turiscar in Portugal, and ACL Hire and McNicoll Hire in the UK.

#### Exhibit 3: CAR Revenue by Geography (2023)

CAR derived 78% of revenue from the Americas in 2023

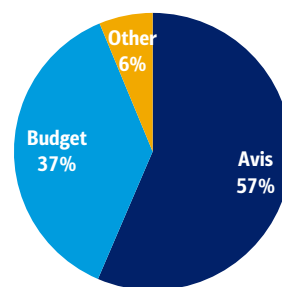


Source: Company filings

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#### Exhibit 4: CAR Revenue by Brand (2023)

CAR derived 94% of revenue from its key Avis and Budget brands in 2023



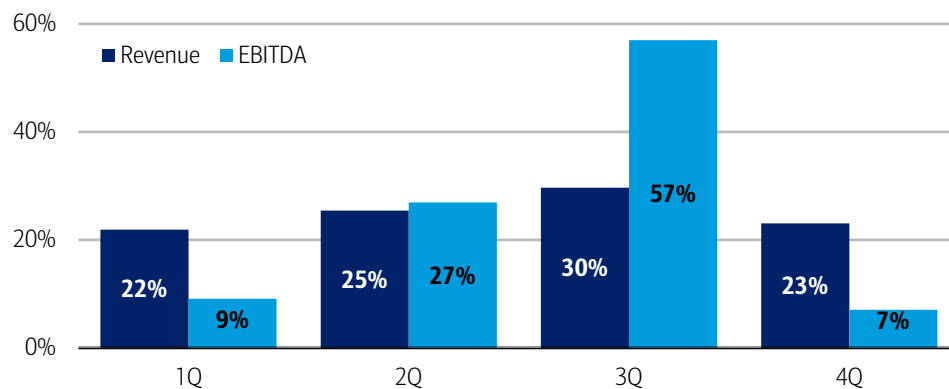
Source: Company filings

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Avis Budget primarily derives revenue from leisure customers (66%), though commercial customers are still a sizable portion (34%). It's worth noting that ~50% of vehicle rentals from Avis locations are stipulated through agreements between travelers' employers or organizations with which Avis has a contractual affiliation. As for the company's individual brands, the customer composition for Avis is fairly balanced between leisure and commercial customers (56% vs. 44%), while for Budget it is skewed towards leisure (83% vs. 17%). Given Avis Budget's exposure to leisure customers, its financial results have a strong seasonal component. Typically, 3Q is the strongest quarter due to the increased level of travel during the summer, while 1Q is the slowest quarter.

#### Exhibit 5: CAR seasonality: Revenue and EBITDA distribution across the quarters

CAR operates in a highly seasonal business and derives a large portion of its annual earnings in 3Q



Source: Company filings, BofA Global Research

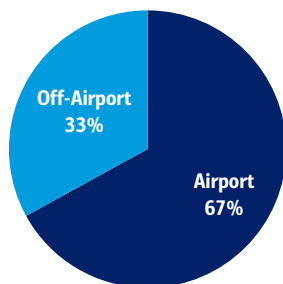
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Similar to other rental car companies, Avis Budget has sizable operations in close proximity to major traveler hubs, including airports and also railway stations in Europe. This creates somewhat of a moat as any player that wants to operate at airport locations has to bid for a concession that typically lasts for multiple years (3-10 years). Avis Budget is one of the largest worldwide airport vehicle rental companies, and derived 67% of its revenue from airport services in 2023 and 33% through off-airport.

#### Exhibit 6: HTZ Revenue by Market (2023)

Avis Budget derives 66% of its sales from car rentals at its Airport locations

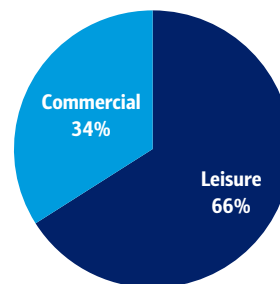


Source: Company filings

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#### Exhibit 7: CAR Revenue by Customer (2023)

66% of revenue is attributable to leisure customers & 34% to commercial



Source: Company filings

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From a competitive standpoint, CAR competes both with other rental car companies and mobility service providers. The largest players in the rental market beside Avis are Hertz, Enterprise Holdings (private), Europcar Mobility Group (acquired by a consortium led by Volkswagen), and Sixt SE (ticker: SIX2). Aside from these competitors, CAR also competes to some degree with other mobility service providers that include cabs, public transportation, and ride-hail services such as Uber and Lyft.

## Company history

### A roll up story through early 2000s

Avis Budget Group was formed in 2006 following a series of corporate transactions that included the acquisition of Avis Car Rental and Budget Rent a Car System, which were founded in 1946 and 1958, respectively.

Avis operations commenced in Michigan in 1946 at the Willow Run Airport near Detroit, which at the time was the key passenger hub for the city. Given the long distance from downtown Detroit, the airport was also well-suited for a rental car business. Avis rapidly expanded in the US and by 1953 started to expand internationally. Avis underwent several corporate transactions in the ensuing years, and ultimately went public in 1972. Starting in 1977, Avis underwent several other ownership changes before it was acquired by Cendant Corporation in 2001. Then in 2006, Cendant split into four different businesses, one of which was the Avis Budget Group.

Budget was founded in 1958 in Los Angeles with the idea of attracting the value-conscious clientele and it rapidly expanded in both the domestic and international markets. Following a series of transactions, Budget became a public company in 1987. However, its financial condition deteriorated in the late 1990s / early 2000s and Budget filed for Chapter 11 bankruptcy in 2002. That year, Cendant Corporation, which already owned Avis, acquired Budget's assets.

### **Industry pressure, rationalization, and consolidation in 2008-2009**

Similar to the automotive industry at large, the rental car companies weathered a very harsh period in 2008-2009, including deterioration in travel and rental car volumes, defleeting efforts into a weak secondary market, and tightening credit conditions, all of which significantly pressured profitability. While Avis successfully navigated the downturn, other competitors like Advantage Rent A Car were forced into bankruptcy, and the industry broadly underwent significant consolidation, with several large acquisitions made by the three larger players: Enterprise, Hertz, and Avis. After a failed acquisition pursuit of Dollar Thrifty in 2011 (Hertz instead acquired Dollar Thrifty), Avis acquired Zipcar (car-sharing company) in early 2013 and Payless (deep value brand) in late 2013.

### **2010-2020 marked by recovery, volatility, and business evolution**

CAR exited the financial crisis with a focus on operational efficiency and profitable market segments, which resulted in improved profitability for several years. However, unfavorable market and competitive dynamics began to materially impair financial performance of the rental car companies in 2015-2016. As the auto cycle in North America reached its peak in 2015-2016 some headwinds to the company materialized, such as weaker resale values and a mild increase in interest rates. Meanwhile, the last few years for CAR have been marked by market volatility and fierce industry competition, establishment/implementation of various business turnaround efforts, management turnover, and involvement from activist investor SRS. However, the COVID crisis functioned as a catalyst for much needed capacity rationalization by CAR and the industry, as well as for aggressive cost reduction efforts, and ultimately for the company's longer-term business evolution towards a mobility services model.

### **Post COVID market spurred record earnings for CAR and rental car industry**

As COVID restrictions faded, travel picked up and strong demand for rentals ensued. In addition, with auto production impaired due to supply chain disruptions, fleet growth was limited and pricing subsequently strengthened. This helped drive strong operating results. Further, the cascading effect on the auto value chain that light vehicle production hurdles caused drove used vehicle prices meaningfully higher. This raised residual values for vehicles, thereby reducing vehicle depreciation (the largest component of fleet costs) and also the amount of capital Avis had to reinvest in the business. The combined effect of stronger rental demand, higher pricing and higher residual values enabled CAR to aggressively return capital to shareholders through share buybacks. These corporate actions together with its strong financial performance drove the stock price higher, which was furtherly magnified by a short squeeze in late 2021.



## Key investment points

Like many others, we focus on the operating period of the vehicle to understand what earnings may be. However, we put greater weight on the purchase and sale of the vehicle as this is something that is often missed and can meaningfully impact earnings, cash flow and valuation.

### Solid growth in rental car demand supported by air travel

#### Expect rental volumes to grow ~3% in 2024-26; YTD trends above this forecast

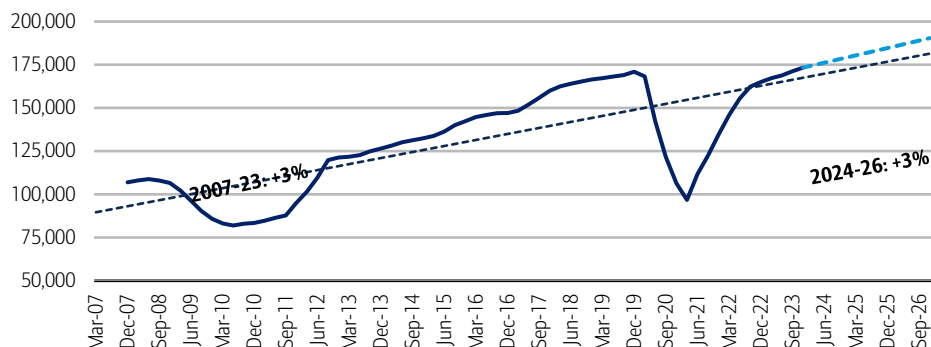
We expect rental car demand will continue to grow at a solid pace over the forecast period. We project CAR's rental volumes (as measured by rental days) will grow ~3% in 2024 through 2026. While down from the double-digit growth experienced in the post-COVID years, it is in range of the growth CAR experienced leading up to the pandemic. Our forecast is driven by BofA's expectations for growth in air travel, with our colleague Andrew Didora (BofA's Airlines equity analyst) projecting domestic revenue per passenger mile (RPM) will grow 5.1% on average in 2024 for the leading airlines and 3.6% in 2025. We'd also note that airline demand has historically grown at ~1.5x real GDP. Given that BofA projects US real GDP growth of 2.7% in 2024 and 1.9% in 2025, this implies growth in airline demand of around 4.1% and 2.9%, respectively. We used these two metrics to back into our volume growth forecast. TSA passenger volumes so far in 2024 are encouraging with YoY growth of 6.6% in January and 5.7% in February.

#### Air travel is the single biggest driver of car rental volumes

The single biggest determinant of car rental volumes are enplanements, or the number of consumers traveling by air, as CAR and HTZ derive 67% and 66% of sales, respectively, from airport car rentals.

#### Exhibit 8: Historical and projected rental volumes (as measure by rental days) – 2007-26E

Rental days projected to grow ~3% in 2024-26, in range of growth in the 5 years before Covid-19



Source: Company filings, BofA Global Research estimates

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### Pricing likely to stabilize above pre-COVID levels

#### Pricing showing signs of stabilizing, despite investor concerns

Pricing is a key driver of earnings for rental car companies and investors seem positioned for a return to pre-COVID levels. In our view, though, fundamentals should provide near-term support to rental car pricing, and could keep it solidly above pre-COVID price points. On that point, our recent industry discussions suggest rental car pricing is stabilizing at current levels. This is encouraging following the decline in 4Q. Pricing should be further supported by seasonally stronger demand in 2Q and 3Q coupled with continued solid growth in travel spending (discussed above) as well as our expectation for some de-fleeting by rental car companies.

#### Rental car companies likely to de-fleet in 1H:24, reducing supply

On this latter point, we believe both CAR and HTZ are over-fleeted, and we anticipate the companies will de-fleet in 1H. We expect HTZ will do so largely through a reduction in its electric vehicle (EV) fleet, which is expected to decline from 60k at the end of



2023 to around 40k in 2024. Meanwhile, CAR de-fleeted in 4Q:23 in part due delayed deliveries of new vehicles by several OEMs and indicated that it will continue to right-size its fleet into 1Q:24. We'd add that CAR has historically been disciplined in matching supply and demand and noted on its 4Q:23 earnings call that "you should expect to see this stringent discipline continue in the New Year." Coupled with pressures from rising vehicle costs, we expect CAR will be vigilant in managing its fleet size.

### **Expect only moderate price declines in 2024 given fundamentals**

Recall that CAR's average revenue per unit per day peaked in 2022 and came down ~5% in 2023. We do expect pricing to decrease further in 2024, but primarily due to our expectation for weak pricing in 1Q. We anticipate fundamentals will improve from there. For CAR, our model has pricing down 3% in 2024 with additional declines of ~1% in 2025 and 2026, which is largely consistent with historical trends. Should the de-fleeting efforts prove more meaningful than expected and/or travel volumes be stronger, this could provide support for better pricing than we are anticipating.

### **Price decay is nothing new for rental car industry**

Price decay has historically been an issue for the rental car companies, driven by competitive dynamics. These dynamics are likely to return to normal in a slower growth environment, though we do expect more discipline on a go forward basis given the learnings from the COVID-19 period that contributed to much improved earnings profiles for the companies. Additionally, companies like CAR have more technology and data to leverage to help manage supply and demand and improve their overall rate strategy.

### **CAR has cost advantage & remains focused on efficiency**

CAR has a cost advantage relative to HTZ, and continues to maintain a strong focus on cost discipline. This is supported by the company's compensation structure, that ties incentive compensation to variable and fixed cost goals as well as adj. EBITDA targets.

CAR has not put out specific cost saving targets, but we believe it has meaningful opportunities to improve its cost position and offset cost inflation. This could come from reducing direct operating costs by leveraging data and technology to lower fuel and collision/damage costs, among others. Additionally, the company could use technology to drive improvements in fleet management and reducing delivery costs (i.e., costs of transferring vehicles from one location to another). We go through these below:

- **Telematics / Connected Car:** Using telematics and other technology, CAR can leverage the data collected from its connected vehicles on vehicle health, fuel readings, maintenance needs, etc. that can enable it to better service the vehicles, reduce downtime, and save on fuel costs. CAR could also use the data to optimize the resale value of its vehicles in part by managing them better, particularly as it pertains to mileage thresholds. Further, Avis could expedite and simplify the vehicle return process and potentially reduce the amount of labor in its field operations. While CAR is already leveraging telematics / technology to reduce costs and improve productivity, we believe further improvements in data analytics and/or use of artificial intelligence could lead to additional and sizable benefits.
- **Collision / damage:** CAR is working to reduce the costs associated with incidents that damage its vehicles. It is accomplishing this in part by deploying digital tools to more easily document damage and by catching a greater percentage of damage incidents, thereby improving reimbursement. We expect technology will further aid both the capture and reimbursement from damage incidents.
- **Fleet management:** CAR is well-versed in fleet management, but with the help of technology and artificial intelligence tools, we see potential for the company to adjust to demand in nearly real-time. This could improve utilization and ensure cars are in the most profitable channels and delivered to customers at limited cost. As an example, CAR could price a one-way rental to incentivize one customer to drive the vehicle to another location where the next customer needs the same vehicle.

## Declining used vehicles prices pose earnings, CF headwind

Used vehicle prices are likely to continue trending lower in 2024, with some moderation in the pace of declines in 2025 as lower new vehicle production over the last few years starts to crimp used vehicle supply. This is important for the rental car companies as it impacts depreciation expense and the recovery value for vehicles they sell, thereby having an impact on cash flow.

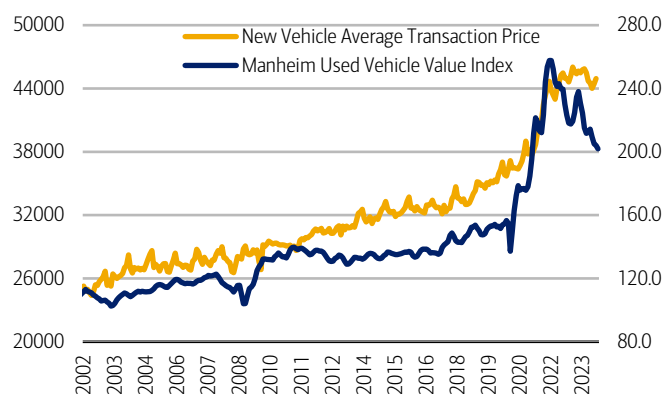
### Depreciation to increase in 2024, with potential for relief in 2025

Depreciation expense is the largest standalone cost component for rental car companies and covers the difference in value of the vehicles from the original price (acquisition) to the residual price (disposal), including the costs for repairs and maintenance of the vehicles during usage (although some are included in direct vehicle/operating expenses). Given that, the direction in used vehicle pricing is an important determinant for depreciation expense.

Strong declines in used vehicle prices will push depreciation expense to ~\$325/unit on a total company basis. This would equate to a roughly 55% YoY increase. As Exhibit 9 and Exhibit 10 show, the downward price trend for used vehicles has been quite steep recently and buyer challenges related to higher interest rates and affordability could keep demand sufficiently weak that prices maintain this trajectory through the year. However, the gap between used and new pricing is likely to narrow in 2025 as used price declines moderate with reduced supply and new vehicle prices trending lower.

#### Exhibit 9: New vehicle pricing vs. Manheim Used Vehicle Index

There is a quickly widening gap between New vehicle pricing and Used vehicle pricing as measured by the Manheim Used Vehicle Index

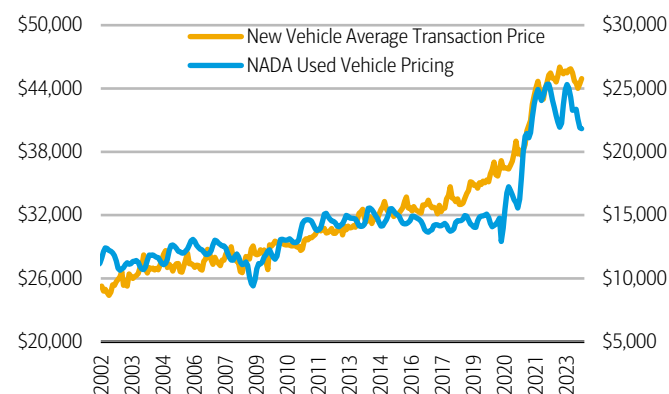


Source: TrueCar, Kelley Blue Book, Cox Automotive

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#### Exhibit 10: New vehicle pricing vs. NADA used vehicle pricing

NADA used vehicle pricing also shows a widening gap between new and used prices, but not quite the disparity shown with Manheim.



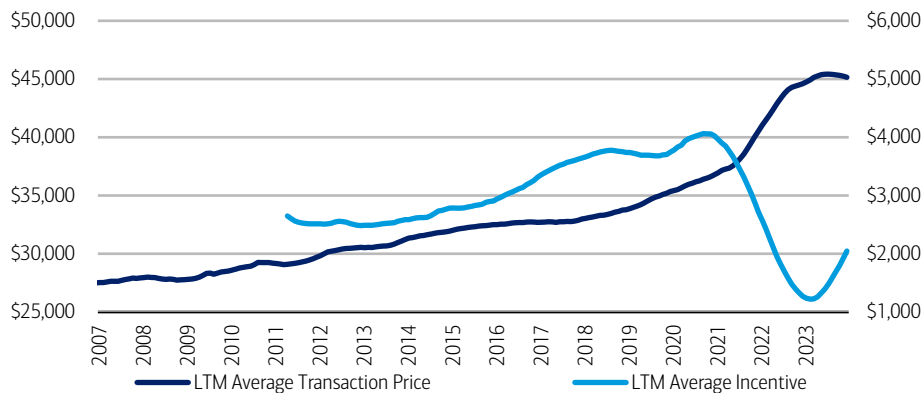
Source: TrueCar, Kelley Blue Book, NADA

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As we show in Exhibit 11 below, average transaction prices (ATPs) on new vehicles remain elevated but have pulled back off late 2022 / early 2023 highs, with prices down 2.4% from the peak of around \$46k. This comes as average incentives have risen meaningfully, from a low of roughly \$1,220 to nearly \$2,050 currently. However, incentives remain well below pre-pandemic levels. With weak consumer confidence and vehicle affordability challenges from near-historically high prices and elevated interest rates, new vehicle prices are likely to continue trending lower in 2024. Recall, Ford and GM recently signaled during 4Q:23 earnings reporting that they expect prices to decline around 2.0%-2.5% in 2024.

### Exhibit 11: New vehicle last twelve month (LTM) average transaction pricing vs. LTM average incentives

ATPs on new vehicles are down 2.4% from the peak while incentives have increased



Source: TrueCar, Kelley Blue Book

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### Weaker used pricing could weigh on residual values & thereby cash flow

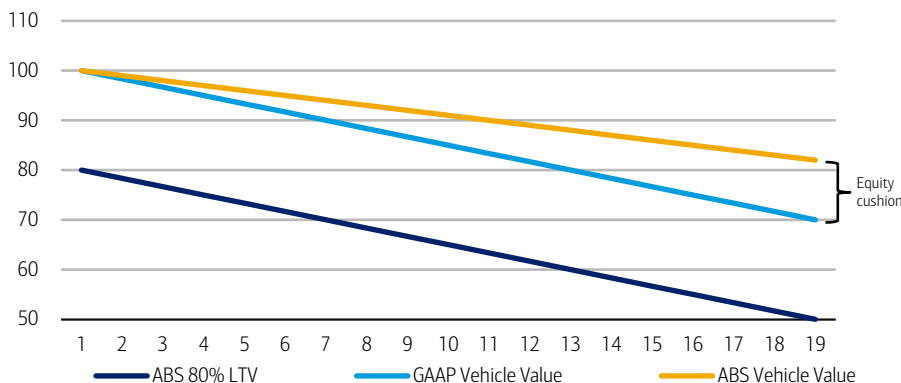
CAR tends to keep vehicles for an average of 2-3 years (around 30k to 35k miles) before selling them, and there is risk that weaker used vehicle pricing could have the company sell them at prices below the estimated residual values. Recall, CAR sells through several channels including dealer direct wholesale, auctions, retail channels and direct sales to third parties. Should it sell for less than the estimated residual values, CAR could incur a loss on the sale in addition to the aforementioned effects of higher depreciation. However, we'd note that if residual values are meaningfully different than expected CAR could choose to ride its cars longer in ride-hail.

### Weaker residual values could require more capital

CAR finances vehicles through an asset-backed security (ABS) structure that assumes depreciation of 1.67% MoM per vehicle. In normal times, this is a conservative depreciation rate and typically results in an equity cushion. However, depreciation accelerated in 2023 with the higher pace of used vehicle price declines. We believe CAR still has some equity cushion, but if used prices continue to decline sharply this could require the company to commit more capital which would push its net leverage higher.

### Exhibit 12: ABS Structure Example

CAR finances its vehicles through an ABS structure that assumes depreciation of 1.67% MoM per vehicle



**Note:** Example above assumes a vehicle is purchased for \$100 and financed through the ABS structure at 80%. GAAP depreciation is 1% per month while ABS depreciation is 1.67% per month. Over 18 months, this structure creates an equity cushion of 12%.

Source: Company filings

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## Higher for longer rates would keep interest costs elevated

### Interest costs will increase in '24 and could increase further in '25

CAR will have meaningfully higher interest expense in 2024, and interest expense could increase further in 2025 if rates hold near current levels. This will come from the impact of higher rates on financing vehicle purchases and also interest expense on corporate (non-vehicle) debt. BofA's Economics team currently projects the Federal Reserve will cut interest rates several times in 2024, with the cutting cycle beginning in June. Should this scenario play out, interest expense could be down modestly in 2025. However, there is risk that rates stay higher for longer, and forecasts for the start of the rate cutting cycle have been steadily pushed back over the last year+. We aren't assuming any interest rate cuts in our model, and that interest costs will increase modestly as a result.

### Nearly a third of debt is variable; 100bp chg in rates could have \$76mm impact

The company has \$23.8bn of total debt as of the end of 2023, including \$4.8bn of corporate debt and \$18.9bn of vehicle debt. Among that debt, \$7.6bn or 32% is unhedged interest rate sensitive debt. We estimate every 100bp change would have an approximately \$76mm impact, or about \$1.57 in annualized EPS.

### Maturing debt could see higher interest rates as well

In addition to higher rates on variable rate debt, CAR could see an increase in interest expense as existing debt matures and is replaced with new higher cost debt. On that point, CAR doesn't have any corporate debt maturing in the next two years but \$4.1bn in vehicle debt will mature in 2024 (including \$2.4bn in short-term borrowings with a 4.8% rate) and \$6.7bn will mature in 2025 (including \$4.5bn in short-term borrowings). Every 25bp increase in the cost of the long-term debt would increase vehicle interest expense by an estimated \$9-10mm and \$15-20mm for the short-term debt.

### Vehicle debt is facilitated by financing mechanisms

For both CAR and HTZ, the vehicle debt is facilitated by financing mechanisms, primarily the asset-backed securities (ABS) market. Nearly all of the vehicles acquired/deployed in the companies' rental fleets are financed through (bankruptcy-remote) special-purpose entities (SPE) or through various credit facilities, other secured financings, or asset-backed securities programs, which is a function of the significant capital outlay involved in purchasing vehicles for deployment into fleets.

The key financing/interest costs for vehicle debt incurred by the rental car companies cover the costs of securitizing the vehicle assets/acquisition costs in the ABS market, or through the SPE or other financing mechanism. As such, even though the vehicle fleet assets sit on the rental car companies balance sheets, they are technically owned (or at least serve as collateral for) by the vehicle debt lenders. We designate vehicle interest as an operating cost item for the rental car companies for the same reason we classify floorplan financing as an operating cost item for the automotive retailers: it is critical to facilitating the business operations.

## Concentrated ownership could add to volatility in shares

SRS Investment Management is CAR's largest shareholder with about 48.3% of total outstanding shares, according to Bloomberg data. Should the investor decide to meaningfully reduce its stake in CAR, the stock could come under pressure. We'd also note that the investor's sizable stake also potentially reduces the actively traded float, which could cause undue volatility.

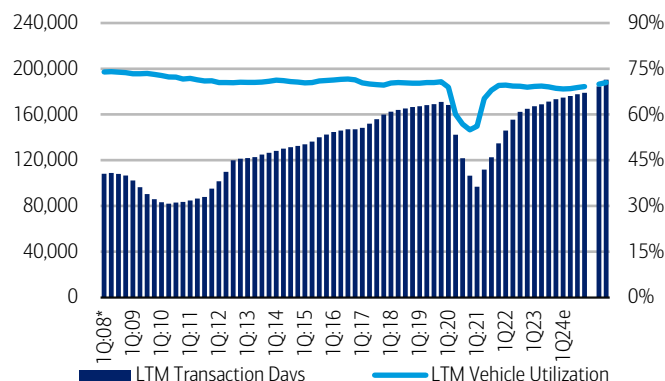
SRS first acquired shares in the company in 2010 and sought to drive change in the ensuing years. While SRS has generally been supportive of CAR's management team, it notably took a more activist role in 2017/2018 as it pushed for board seats and various corporate/ business changes. SRS gained three board seats from the activist push and still has two members on the board. SRS built up a particularly meaningful stake from 2017 through 2020 as it acquired ~10mm shares over this time. SRS sold 1.3mm shares over the last year, bringing its stake to 17.1mm shares.



# BofA f'cast: Solid vols, moderating price

## Exhibit 13: LTM transaction days vs. vehicle utilization (2008-2026E)

We expect 3% YoY growth in transaction days over 2024-26E, with vehicle utilization generally holding around 70%

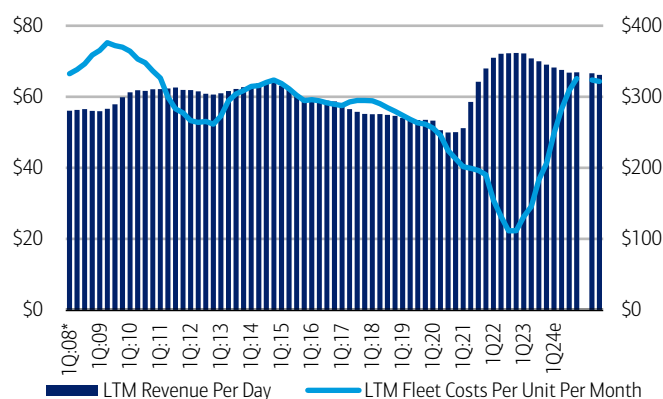


Source: Company filings, BofA Global Research estimates

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## Exhibit 14: LTM revenue/day vs. fleet cost/month (2008-2026E)

We expect revenue/day to trend downwards over 2024-26E, while we anticipate fleet cost/month will increase in 2024 before reversing in 2025

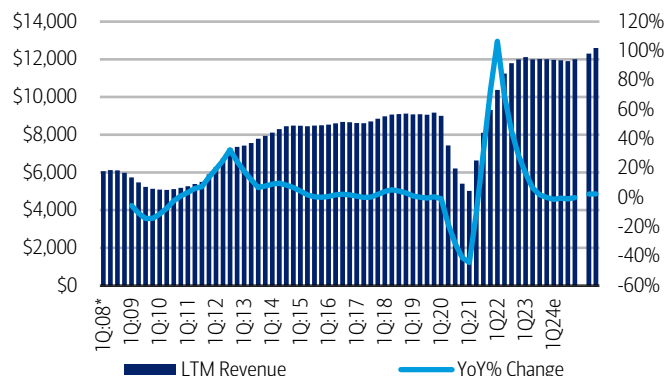


Source: Company filings, BofA Global Research estimates

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## Exhibit 15: LTM revenue vs. YoY % change (2008-2026E)

We expect modest revenue growth of ~2-3% annually through 2026.



Source: Company filings, BofA Global Research estimates

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Since the last trough in 2009-2010, CAR had been growing global rental days at a CAGR of 5% up until the COVID-induced downturn, which outpaced growth in US enplanements of 3% and miles driven of 1%. This growth was despite pressure from the emergence of new mobility service providers and competitive pressures from incumbents (Hertz, etc.). With a persistent focus on matching supply and demand, CAR's vehicle utilization has generally trended in the profitable ~70% range, only temporarily reaching lows of 66-67% in 2017 and 35% in 2Q:20 with the COVID crisis.

We project 3% YoY growth in rental days in 2024-26 based on the outlook for US enplanements. We anticipate vehicle utilization will hold ~70% with CAR's growth in rental days pacing modestly above growth in its fleet. CAR has historically been disciplined in matching supply and demand and we expect it will be vigilant in managing the fleet size.

Price decay has been a challenge for the industry and is dependent on supply/demand. Trends in revenue per day (RPD) often lag trends in fleet cost, with the biggest determinant of fleet cost being acquisition/disposal values and depreciation. Rental car companies generally pass through the incremental benefit/hit in the form of pricing, with a 1-3 quarter lag.

CAR's revenue per day trended downwards from 2014 to 2020, driven by excessive industry fleet (HTZ was viewed to be the main culprit) and competitive pressures from newer mobility service providers. Fleet cost per unit for the industry trended downwards as well. In 2021/2022 revenue per unit climbed meaningfully, bucking the downwards trend in fleet costs. Despite the 5% decline in 2023, revenue per unit ended the year well above pre-pandemic levels. This bucked the trend in fleet costs per unit that we expect will increase in 2024 before starting to reverse in 2025 as vehicle depreciation moderates and CAR drives direct operating expenses lower.

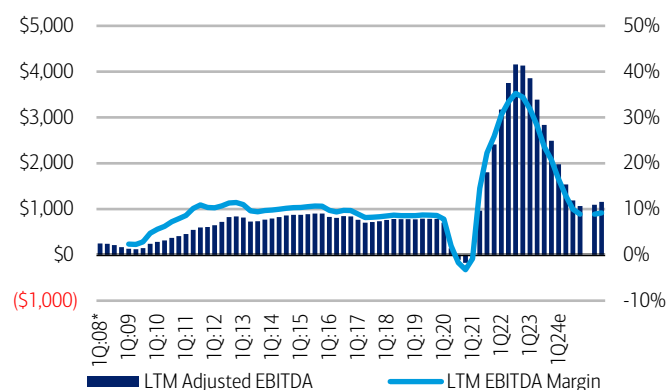
Driven by the opposing forces of increasing rental days (7% CAGR from 2010-2019), but declining revenue per day (-1% CAGR from 2010-2019), CAR's total revenue had been improving YoY from 2010 until the COVID-induced downturn in 2020, but grew at a more modest 1.5% CAGR in 2015-2019, which is comparable to GDP growth over that timeframe.

Revenues grew strongly in the years following the COVID-induced downturn, with growth of ~72% in 2021 and 29% in 2022 followed by flattish revenues in 2023. Our model assumes modest growth of ~2-3% annually through 2026 with growth in rental days offsetting declines in RPD.



**Exhibit 16: LTM adjusted EBITDA vs. EBITDA margin (2008-2026E)**

CAR's adj. EBITDA margin should improve after troughing in 2024, supported by its ongoing cost reduction efforts, and still solid pricing and volumes



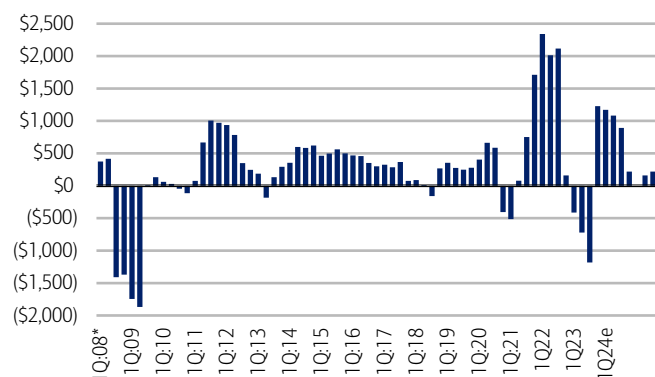
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CAR's adj. EBITDA (including vehicle depreciation) has generally been more volatile than revenue, even on an LTM basis, driven by two main factors: 1) Excess supply versus demand puts pressure on profitability in the form of lower vehicle utilization, with unutilized vehicles still incurring significant operating costs; 2) Fading used vehicle values pressure profitability in the form of higher vehicle depreciation, which can then be offset on a 1-3 quarter lag by higher price. The rental car business is also very seasonal, with EBITDA negligible/losses in 1Q, highest EBITDA in 3Q, followed by 2Q, and lower in 4Q.

Following a significant EBITDA loss in 1H:20 on COVID-related pressures, CAR's profitability improved meaningfully in 2021/2022 as supply chain constraints drove pricing higher. EBITDA has since pulled back from peak levels and we expect further moderation in 2024 with a decline in pricing and higher operating costs. That said, we project EBITDA will improve in 2025/2026 as CAR drives direct operating expenses lower.

**Exhibit 17: LTM adjusted free cash flow (2008-2026E)**

We expect CAR will be cash flow positive on an adjusted basis in 2024-2026



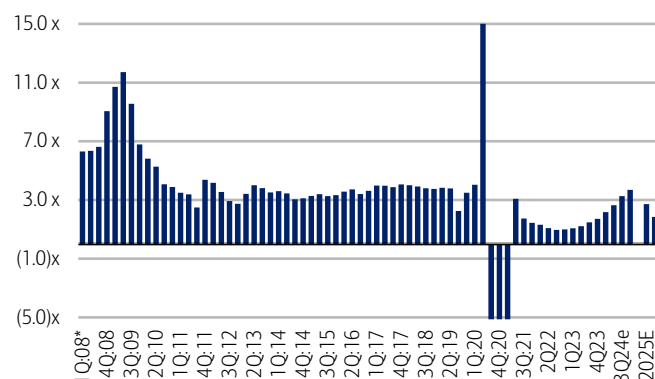
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More pronounced than trends with adjusted EBITDA, CAR's adjusted free cash flow is highly volatile, even measured on an LTM basis. This is primarily due to cash inflows associated with vehicle dispositions and cash outflows with vehicle investments, which we characterize as operating items and which can fluctuate highly from quarter to quarter driven by market supply/demand dynamics and company strategy around vehicle acquisition/disposal times to maximize profits/cash.

We expect CAR to see a drop in adjusted free cash flow generation in 2024 driven by the pullback in earnings. However, cash flow should improve in 2025/2026 helped by the company's productivity and cost improvement efforts.

**Exhibit 18: LTM corporate net debt/EBITDA (2008-2026E)**

CAR's corporate net debt/EBITDA will likely increase in 2024 with softer earnings, but should decline in 2025 and 2026



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Following the industry downturn and trough in 2008-2009, where CAR's financial leverage spiked significantly, the company's net leverage ratio has trended pretty consistently in the 3-4x range, which is admittedly higher than most companies in our coverage universe. It should be noted that we calculate net leverage as corporate net debt to adjusted EBITDA, which excludes debt associated with vehicle programs that is collateralized by assets under vehicle programs, but includes vehicle depreciation as an operating cost in EBITDA.

Adjusted net debt/EBITDA ended 2023 at 1.7x and we expect it to progressively increase in 2024 before trending lower in 2025/2026. We expect this movement to be driven by earnings as we anticipate maturing debt will be refinanced, although we do assume around \$300mm to \$400mm in debt is paid down each year.



# Management

Avis Budget has over time demonstrated a track record of smart decision-making, with more steady and positive results than its key competitor HTZ. Since Joe Ferraro took on the role of President & CEO in 2020, CAR has beaten consensus expectations in 12 of 16 quarters on revenue (vs. 6 of 10 for HTZ since emerging from bankruptcy), 14 of 16 quarters on EBITDA (vs. 6 of 10), and 16 of 16 quarters on EPS (vs. 8 of 10).

Additionally, CAR's management team has significant experience in the rental car industry, and is composed of executives with lengthy tenures at the company, as we show in Exhibit 19. There have been two key role changes recently, with Brian Choi taking on the role of EVP & Chief Transformation Officer in January 2024, after serving as EVP & CFO for about 4 years. Izzy Martins, meanwhile, moved into the role of EVP & CFO after serving as EVP, Americas for around 4 years.

Before the more recent period of stability at the management level, there had been some notable turnover after activist investor SRS Investment Management got more involved. This turnover included two CEOs (Larry De Shon from 2015-2019 and Joe Ferraro appointed in 2020), four CFOs (David Wyshner from 2006-2017, Martyn Smith from 2017-2019, John North from 2019-2020, and Brian Choi appointed in 2020), and two Chairmans (Ron Nelson from 2006-2018 and Bernardo Hees appointed in 2020).

## Exhibit 19: CAR management team

CAR's management team has significant experience in the industry and a long history with the company

Management				
Name	Age	Joined Avis Budget	Years in Role	Position
Joe Ferraro	66	1979	4	President & CEO
Izzy Martins	51	2004	<1	EVP & CFO
Brian Choi	40	2020	<1	EVP & Chief Transformation Officer
Keith Rankin	53	1998	5	President, International
Edward Linnen	53	2001	11	EVP & Chief Human Resources Officer
Ravi Simhambhatla	55	2022	2	EVP & Chief Digital and Innovation Officer
Jean Sera	53	2002	4	SVP, General Counsel, Chief Compliance Officer
David Calabria	-	2004	5	SVP, Corporate Finance & Treasurer
Board of Directors				
Name	Age	Joined Avis Budget	Position	
Bernardo Hees	53	2020	Director	
Anu Hariharan	42	2022	Director	
Lynn Krominga	72	2006	Director	
Glenn Lurie	57	2018	Director	
Jagdeep Pahwa	49	2018	Director	
Karthik Sarma	48	2020	Director	

Source: Company filings

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## Joe Ferraro: President & CEO

Joe Ferraro was appointed as President & CEO of Avis Budget in June 2020, after serving as interim CEO since January 2020, which followed Larry De Shon's departure from the company in 2019. Mr. Ferraro has been with the company for more than four decades, previously serving as President of Americas from 2015-2020, where he was responsible for the Avis, Budget, Payless, and Zipcar brands in North and South America, and Senior Vice President of Operations from 2011-2015, where he oversaw all Avis and Budget car and truck rental operations in the US and Canada.

## Izzy Martins: EVP & CFO

Izzy Martins was appointed EVP and CFO in January 2024. Before taking on this role, Ms. Martins was EVP, Americas from 2020 to 2024, SVP and CFO, Americas from 2014 to 2020, SVP and Acting Chief Accounting Officer from 2010 to 2014, VP of Tax from 2006 to 2010, and Director of Tax Planning and M&A of Cendant (as the company was previously known) from 2004 to 2006. Ms. Martins worked at Deloitte & Touche for seven years before joining Cendant.

## **Brian Choi: EVP & Transformation**

Brian Choi was appointed as EVP & Chief Transformation Officer in January 2024. Previously, Mr. Choi served as EVP & Chief Financial Officer, a role he started in August 2020 following the departure of the company's prior CFO John North, who was in the role for 18 months before moving on to a role outside the company. Prior to becoming CFO, Mr. Choi served on CAR's Board of Directors from 2016-2020, having assumed the seat through activist investor SRS Investment Management, where he had been a partner and served in various roles since 2008.

**Exhibit 20: CAR summary income statement**

BofA forecasts through 2026E

Amounts in \$mm, except per share data	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Revenue Driver Metrics</b>													
Average rental fleet	513,343	546,953	561,684	627,113	647,780	660,460	532,661	528,910	654,380	691,505	706,439	723,165	740,291
Rental days (000s)	132,473	142,364	147,072	159,898	166,529	170,919	106,426	134,694	165,017	173,305	178,995	184,602	190,386
<b>Revenues</b>													
Vehicle rental	6,026	6,026	6,081	6,219	6,387	6,420	3,781	6,519	8,396	8,406	8,406	8,610	8,820
Other	2,459	2,476	2,578	2,629	2,737	2,752	1,621	2,794	3,598	3,602	3,603	3,690	3,780
<b>Net Revenues</b>	<b>\$8,485</b>	<b>\$8,502</b>	<b>\$8,659</b>	<b>\$8,848</b>	<b>\$9,124</b>	<b>\$9,172</b>	<b>\$5,402</b>	<b>\$9,313</b>	<b>\$11,994</b>	<b>\$12,008</b>	<b>\$12,008</b>	<b>\$12,301</b>	<b>\$12,601</b>
<b>Expenses</b>													
Operating	4,251	4,284	4,382	4,472	4,639	4,742	3,196	4,255	5,293	5,675	5,817	5,934	6,045
Vehicle depreciation & lease charges, net	1,996	1,933	2,047	2,221	2,179	2,063	1,368	1,197	828	1,739	2,763	2,809	2,856
Selling, general & administrative	1,080	1,093	1,108	1,134	1,220	1,235	695	1,130	1,338	1,368	1,408	1,461	1,519
Vehicle interest, net	282	289	284	286	314	344	318	313	402	736	952	1,001	1,025
Non-vehicle related depreciation & amortization	147	163	194	201	200	207	220	220	195	216	219	223	228
<b>Adjusted Operating Income</b>	<b>729</b>	<b>740</b>	<b>644</b>	<b>534</b>	<b>572</b>	<b>581</b>	<b>(395)</b>	<b>2,198</b>	<b>3,938</b>	<b>2,274</b>	<b>849</b>	<b>872</b>	<b>928</b>
Interest expense related to corporate debt, net	209	194	203	188	188	178	231	218	250	296	325	303	274
Restructuring & other related charges	0	0	0	0	0	0	0	0	(2)	0	0	0	0
Transaction-related costs	0	0	0	0	(9)	0	0	0	0	0	0	0	0
<b>Total Expenses</b>	<b>7,965</b>	<b>7,956</b>	<b>8,218</b>	<b>8,502</b>	<b>8,731</b>	<b>8,769</b>	<b>6,028</b>	<b>7,333</b>	<b>8,304</b>	<b>10,030</b>	<b>11,484</b>	<b>11,732</b>	<b>11,947</b>
<b>Adjusted Income before Income Taxes</b>	<b>\$520</b>	<b>\$546</b>	<b>\$441</b>	<b>\$346</b>	<b>\$393</b>	<b>\$403</b>	<b>(\$626)</b>	<b>\$1,980</b>	<b>\$3,690</b>	<b>\$1,978</b>	<b>\$524</b>	<b>\$569</b>	<b>\$653</b>
Provision for/(benefit from) income taxes	194	213	168	104	106	124	(188)	497	891	279	131	142	163
<b>Adjusted Net Income/(Loss)</b>	<b>\$326</b>	<b>\$333</b>	<b>\$273</b>	<b>\$242</b>	<b>\$287</b>	<b>\$279</b>	<b>(\$438)</b>	<b>\$1,483</b>	<b>\$2,799</b>	<b>\$1,699</b>	<b>\$393</b>	<b>\$427</b>	<b>\$490</b>
Minority interest, net of tax	0	0	0	0	0	0	0	2	8	(3)	0	0	0
Non-recurring items, net of tax	(81)	(20)	(110)	119	(127)	23	(246)	(201)	(43)	(63)	0	0	0
Discontinued operations, net of tax													
Cumulative effect of accounting changes, net of tax													
<b>GAAP Net Income</b>	<b>\$245</b>	<b>\$313</b>	<b>\$163</b>	<b>\$361</b>	<b>\$160</b>	<b>\$302</b>	<b>(\$684)</b>	<b>\$1,280</b>	<b>\$2,764</b>	<b>\$1,633</b>	<b>\$393</b>	<b>\$427</b>	<b>\$490</b>
<b>Adjusted Diluted EPS from Cont. Ops.</b>	<b>\$2.95</b>	<b>\$3.17</b>	<b>\$2.93</b>	<b>\$2.87</b>	<b>\$3.59</b>	<b>\$3.69</b>	<b>(\$6.20)</b>	<b>\$22.59</b>	<b>\$57.84</b>	<b>\$44.24</b>	<b>\$12.55</b>	<b>\$14.90</b>	<b>\$18.90</b>
<b>Weighted Average Shares Outstanding</b>													
Basic	105.4	103.4	92.0	83.4	79.4	75.2	70.5	65.0	47.3	37.9	30.9	28.2	25.5
Diluted	110.6	105.0	93.3	84.4	79.9	75.6	70.6	65.6	48.4	38.4	31.3	28.6	25.9
<b>Adjusted EBIT &amp; EBITDA Calculation</b>													
GAAP Net Income	\$245	\$313	\$163	\$361	\$160	\$302	(\$684)	\$1,278	\$2,756	\$1,635	\$393	\$427	\$490
(+) Provision for income taxes	147	69	116	(150)	102	(15)	(272)	425	880	279	131	142	163
(=) Income before income taxes	\$392	\$382	\$279	\$211	\$262	\$287	(\$956)	\$1,703	\$3,636	\$1,914	\$524	\$569	\$653
(+) Restructuring & other related charges	26	18	29	70	22	80	118						
(+) Acquisition-related amortization expense	33	55	59	51	61	56	66						
(+) Transaction-related costs, net	13	68	21	23	20	10	3						
(+) Early extinguishment of debt, net	56	23	27	3	19	12	9						
(+) Other			26	(12)	9	(42)	134	1	(15)	43	0	0	0
<b>(=) Adjusted pre-tax income</b>	<b>\$520</b>	<b>\$546</b>	<b>\$441</b>	<b>\$346</b>	<b>\$393</b>	<b>\$403</b>	<b>(\$626)</b>	<b>\$1,975</b>	<b>\$3,691</b>	<b>\$1,978</b>	<b>\$524</b>	<b>\$569</b>	<b>\$653</b>
(+) Non-vehicle related depreciation & amortization	147	163	194	201	195	207	220	220	192	216	219	223	228
(+) Interest expense related to corporate debt, net	209	194	203	188	188	178	231	218	250	296	325	303	274
<b>(=) Adjusted EBITDA</b>	<b>\$876</b>	<b>\$903</b>	<b>\$838</b>	<b>\$735</b>	<b>\$776</b>	<b>\$788</b>	<b>(\$175)</b>	<b>\$2,413</b>	<b>\$4,133</b>	<b>\$2,490</b>	<b>\$968</b>	<b>\$1,095</b>	<b>\$1,156</b>
(=) Traditional EBITDA	\$2,725	\$2,673	\$2,691	\$2,755	\$2,751	\$2,644	\$973	\$3,395	\$4,766	\$4,013	\$3,613	\$3,681	\$3,784

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH



**Exhibit 21: CAR summary balance sheet**

BofA forecasts through 2026E

Amounts in \$mm, except per share data	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Assets</b>													
<b>Current assets:</b>													
Cash & cash equivalents	\$624	\$452	\$490	\$611	\$615	\$686	\$692	\$534	\$570	\$555	\$299	\$461	\$391
Restricted cash	0	0	0	290	120	214	73	92	72	89	89	89	89
Receivables, net	599	668	808	922	955	911	647	775	810	900	855	859	863
Other current assets	456	507	519	243	484	334	383	446	434	595	595	595	595
Assets of discontinued operations	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total current assets</b>	<b>1,679</b>	<b>1,627</b>	<b>1,817</b>	<b>2,066</b>	<b>2,174</b>	<b>2,145</b>	<b>1,795</b>	<b>1,847</b>	<b>1,886</b>	<b>2,139</b>	<b>1,839</b>	<b>2,004</b>	<b>1,938</b>
Property & equipment, net	\$638	\$681	\$685	\$704	\$736	\$792	\$657	\$537	\$594	\$719	\$780	\$844	\$910
Operating lease right-of-use assets	0	0	0	0	0	2,596	2,560	2,368	2,405	2,654	2,654	2,654	2,654
Deferred income taxes	1,511	1,488	1,493	931	1,301	1,662	1,198	1,615	1,379	1,868	1,816	1,759	1,693
Goodwill	842	973	1,007	1,073	1,092	1,101	1,137	1,108	1,070	1,099	1,099	1,099	1,099
Other intangibles, net	886	917	870	850	825	798	774	724	666	670	670	670	670
Other non-current assets	228	232	193	196	242	217	244	382	499	441	441	441	441
<b>Total assets, exclusive of assets under vehicles programs</b>	<b>5,784</b>	<b>5,918</b>	<b>6,065</b>	<b>5,820</b>	<b>6,370</b>	<b>9,311</b>	<b>8,365</b>	<b>8,581</b>	<b>8,499</b>	<b>9,590</b>	<b>9,298</b>	<b>9,471</b>	<b>9,406</b>
<b>Assets under vehicle programs:</b>													
Program cash	\$119	\$258	\$225	\$283	\$115	\$211	\$72	\$89	\$70	\$85	\$85	\$85	\$85
Vehicles, net	10,215	10,658	10,464	10,626	11,474	12,177	8,153	12,866	15,961	21,240	24,192	26,616	28,791
Receivables from vehicle manufacturers & other	362	438	527	547	631	778	281	222	421	443	443	443	443
Investment in Avis Budget Rental Car Funding (AESOP) LLC - related party	362	362	362	423	559	649	667	842	976	1,211	1,211	1,211	1,211
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total assets under vehicle programs</b>	<b>11,058</b>	<b>11,716</b>	<b>11,578</b>	<b>11,879</b>	<b>12,779</b>	<b>13,815</b>	<b>9,173</b>	<b>14,019</b>	<b>17,428</b>	<b>22,979</b>	<b>25,931</b>	<b>28,355</b>	<b>30,530</b>
<b>Total Assets</b>	<b>\$16,842</b>	<b>\$17,634</b>	<b>\$17,643</b>	<b>\$17,699</b>	<b>\$19,149</b>	<b>\$23,126</b>	<b>\$17,538</b>	<b>\$22,600</b>	<b>\$25,927</b>	<b>\$32,569</b>	<b>\$35,230</b>	<b>\$37,826</b>	<b>\$39,936</b>
<b>Liabilities &amp; Stockholders' Equity</b>													
<b>Current liabilities:</b>													
Accounts payable & other current liabilities	\$1,491	\$1,485	\$1,488	\$1,619	\$1,693	\$2,206	\$2,034	\$2,389	\$2,547	\$2,627	\$2,674	\$2,652	\$2,619
Short-term debt & current portion of long-term debt	28	26	279	26	23	19	19	19	27	32	32	32	32
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Liabilities of discontinued operations	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total current liabilities</b>	<b>1,519</b>	<b>1,511</b>	<b>1,767</b>	<b>1,645</b>	<b>1,716</b>	<b>2,225</b>	<b>2,053</b>	<b>2,408</b>	<b>2,574</b>	<b>2,659</b>	<b>2,706</b>	<b>2,684</b>	<b>2,651</b>
Long-term debt	\$3,325	\$3,435	\$3,244	\$3,573	\$3,528	\$3,416	\$4,191	\$3,990	\$4,644	\$4,791	\$4,441	\$4,141	\$3,741
Long-term operating lease liabilities	0	0	0	0	0	2,140	2,078	1,910	1,884	2,117	2,117	2,117	2,117
Other non-current liabilities	766	734	764	717	767	757	731	625	554	528	528	528	528
<b>Total liabilities, exclusive of liabilities under vehicles programs</b>	<b>5,610</b>	<b>5,680</b>	<b>5,775</b>	<b>5,935</b>	<b>6,011</b>	<b>8,538</b>	<b>9,053</b>	<b>8,933</b>	<b>9,656</b>	<b>10,095</b>	<b>9,792</b>	<b>9,470</b>	<b>9,037</b>
<b>Liabilities under vehicle programs:</b>													
Debt	\$1,760	\$2,064	\$2,183	\$2,741	\$2,874	\$3,132	\$1,777	\$2,542	\$2,534	\$3,496	\$5,927	\$7,107	\$8,237
Debt due to Avis Budget Rental Car Funding (AESOP) LLC - related party	6,296	6,796	6,695	6,480	7,358	7,936	5,080	8,848	11,275	15,441	17,872	20,063	22,161
Deferred income taxes	2,267	2,367	2,429	1,594	1,961	2,189	1,383	2,242	2,754	3,418	3,470	3,527	3,593
Other	244	288	340	376	531	675	400	244	408	462	462	462	462
<b>Total liabilities under vehicle programs</b>	<b>10,567</b>	<b>11,515</b>	<b>11,647</b>	<b>11,191</b>	<b>12,724</b>	<b>13,932</b>	<b>8,640</b>	<b>13,876</b>	<b>16,971</b>	<b>22,817</b>	<b>27,732</b>	<b>31,159</b>	<b>34,452</b>
<b>Total Liabilities</b>	<b>\$16,177</b>	<b>\$17,195</b>	<b>\$17,422</b>	<b>\$17,126</b>	<b>\$18,735</b>	<b>\$22,470</b>	<b>\$17,693</b>	<b>\$22,809</b>	<b>\$26,627</b>	<b>\$32,912</b>	<b>\$37,525</b>	<b>\$40,629</b>	<b>\$43,489</b>
<b>Stockholders' equity</b>													
Preferred stock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Common stock	1	1	1	1	1	1	1	1	1	1	1	1	1
Additional paid-in capital	7,212	7,010	6,918	6,820	6,771	6,741	6,668	6,676	6,666	6,634	6,634	6,634	6,634
Accumulated deficit	(2,115)	(1,802)	(1,639)	(1,222)	(1,091)	(785)	(1,470)	(185)	2,579	3,854	3,402	3,394	3,144
Accumulated other comprehensive income/(loss)	(22)	(147)	(154)	(24)	(133)	(167)	(187)	(122)	(98)	(90)	(90)	(90)	(90)
Treasury stock	(4,411)	(4,623)	(4,905)	(5,002)	(5,134)	(5,144)	(5,167)	(6,579)	(9,848)	(10,742)	(12,242)	(12,742)	(13,242)
<b>Total Stockholders' Equity</b>	<b>\$665</b>	<b>\$439</b>	<b>\$221</b>	<b>\$573</b>	<b>\$414</b>	<b>\$656</b>	<b>(\$155)</b>	<b>(\$209)</b>	<b>(\$700)</b>	<b>(\$343)</b>	<b>(\$2,295)</b>	<b>(\$2,803)</b>	<b>(\$3,553)</b>
<b>Total Liabilities &amp; Stockholders' Equity</b>	<b>\$16,842</b>	<b>\$17,634</b>	<b>\$17,643</b>	<b>\$17,699</b>	<b>\$19,149</b>	<b>\$23,126</b>	<b>\$17,538</b>	<b>\$22,600</b>	<b>\$25,927</b>	<b>\$32,569</b>	<b>\$35,230</b>	<b>\$37,826</b>	<b>\$39,936</b>

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH



**Exhibit 22: CAR summary cash flow statement**

BofA forecasts through 2026E

Amounts in \$mm, except per share data	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
<b>Operating Activities:</b>													
<b>Net Income/(Loss)</b>	<b>\$245</b>	<b>\$313</b>	<b>\$163</b>	<b>\$361</b>	<b>\$165</b>	<b>\$302</b>	<b>(\$684)</b>	<b>\$1,283</b>	<b>\$2,756</b>	<b>\$1,635</b>	<b>\$393</b>	<b>\$427</b>	<b>\$490</b>
Vehicle depreciation	1,840	1,837	1,877	1,947	1,974	1,890	1,330	1,402	1,709	2,228	3,703	3,764	3,828
Amortization of right-of-use assets	0	0	0	0	0	989	945	806	877	1,006	1,721	1,750	1,779
(Gain)/loss on sale of vehicles	(7)	(60)	(10)	52	(48)	(82)	(157)	(361)	(1,019)	(656)	(600)	(800)	(800)
Non-vehicle related depreciation & amortization	180	218	253	259	256	263	286	272	225	216	219	223	228
Deferred income taxes	65	58	51	(192)	14	(103)	(317)	378	682	191	105	114	131
Stock-based compensation	25	28	27	13	24	22	9	30	25	30	20	20	20
Amortization of debt financing fees	41	42	37	34	28	31	33	33	34	40	40	40	40
Early extinguishment of debt costs	56	23	27	3	19	12	9	136	0	5	0	0	0
<b>Net change in assets &amp; liabilities:</b>	<b>(26)</b>	<b>(139)</b>	<b>(69)</b>	<b>(26)</b>	<b>39</b>	<b>89</b>	<b>(65)</b>	<b>243</b>	<b>126</b>	<b>(196)</b>	<b>92</b>	<b>(27)</b>	<b>(37)</b>
Receivables	(60)	(42)	(65)	(59)	(44)	10	115	(143)	(97)	(43)	45	(4)	(4)
Income taxes & deferred income taxes	37	(18)	5	(16)	35	(5)	1	(28)	6	(81)	0	0	0
Accounts payable & other current liabilities	(3)	(79)	(9)	49	48	84	(181)	414	217	(72)	47	(23)	(33)
Operating lease liabilities	0	0	0	0	0	(981)	(936)	(801)	(879)	(1,002)	(1,721)	(1,750)	(1,779)
Other, net	160	264	273	197	138	154	238	70	171	331	100	100	100
<b>Net Cash Provided by Operating Activities</b>	<b>\$2,579</b>	<b>\$2,584</b>	<b>\$2,629</b>	<b>\$2,648</b>	<b>\$2,609</b>	<b>\$2,586</b>	<b>\$691</b>	<b>\$3,491</b>	<b>\$4,707</b>	<b>\$3,828</b>	<b>\$4,072</b>	<b>\$3,861</b>	<b>\$4,000</b>
Property & equipment additions	(\$182)	(\$199)	(\$190)	(\$197)	(\$231)	(\$250)	(\$94)	(\$108)	(\$246)	(\$273)	(\$280)	(\$287)	(\$294)
Proceeds received on asset sales	21	15	19	8	17	11	6	3	2	3	0	0	0
Net assets acquired (net of cash acquired)	(416)	(256)	(55)	(21)	(91)	(77)	(69)	(46)	(3)	(65)	0	0	0
Other, net	(11)	6	3	5	(44)	81	0	(3)	(33)	6	0	0	0
<b>Net cash used in investing activities, exclusive of vehicle programs</b>	<b>(588)</b>	<b>(434)</b>	<b>(223)</b>	<b>(205)</b>	<b>(349)</b>	<b>(235)</b>	<b>(157)</b>	<b>(154)</b>	<b>(280)</b>	<b>(329)</b>	<b>(280)</b>	<b>(287)</b>	<b>(294)</b>
<b>Vehicle programs:</b>													
Decrease/(increase) in program cash	(10)	(148)	31	(61)	0	0	0	0	0	0	0	0	0
Investment in vehicles	(11,875)	(11,928)	(12,461)	(11,538)	(12,589)	(12,887)	(5,401)	(10,054)	(10,491)	(15,185)	(15,513)	(15,880)	(16,256)
Proceeds received on disposition of vehicles	9,666	9,680	10,504	9,600	9,648	10,460	8,753	4,077	6,606	8,403	8,857	9,693	10,254
Investment in/(proceeds from) debt securities of related party	0	0	0	0	(136)	(90)	(18)	(175)	(134)	(235)	(100)	(100)	(100)
Other, net	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Net cash used in vehicle programs</b>	<b>(2,219)</b>	<b>(2,396)</b>	<b>(1,926)</b>	<b>(1,999)</b>	<b>(3,077)</b>	<b>(2,517)</b>	<b>3,334</b>	<b>(6,152)</b>	<b>(4,019)</b>	<b>(7,017)</b>	<b>(6,756)</b>	<b>(6,287)</b>	<b>(6,103)</b>
<b>Net Cash Used in Investing Activities</b>	<b>(\$2,807)</b>	<b>(\$2,830)</b>	<b>(\$2,149)</b>	<b>(\$2,204)</b>	<b>(\$3,426)</b>	<b>(\$2,752)</b>	<b>\$3,177</b>	<b>(\$6,306)</b>	<b>(\$4,299)</b>	<b>(\$7,346)</b>	<b>(\$7,035)</b>	<b>(\$6,574)</b>	<b>(\$6,397)</b>
Proceeds from long-term borrowings	871	377	894	589	485	402	991	1,100	729	936	0	0	0
Payments on long-term borrowings	(762)	(301)	(847)	(602)	(515)	(509)	(308)	(1,354)	(24)	(818)	(350)	(300)	(400)
Net change in short-term borrowings	5	(22)	4	(4)	(4)	(1)	0	1	(1)	0	0	0	0
Debt financing fees	(17)	(7)	(20)	(9)	(15)	(7)	(26)	(24)	(7)	(22)	0	0	0
Issuances of common stock	0	0	0	0	0	0	15	0	0	0	0	0	0
Repurchases of common stock	(297)	(393)	(387)	(210)	(216)	(67)	(119)	(1,460)	(3,329)	(951)	(1,500)	(500)	(500)
Payment of dividends	0	0	0	0	0	0	0	0	0	(355)	0	0	0
Other, net	0	(7)	0	1	3	0	0	38	40	0	0	0	0
<b>Net cash used in financing activities, exclusive of vehicle programs</b>	<b>(200)</b>	<b>(353)</b>	<b>(356)</b>	<b>(235)</b>	<b>(262)</b>	<b>(182)</b>	<b>553</b>	<b>(1,699)</b>	<b>(2,592)</b>	<b>(1,210)</b>	<b>(1,850)</b>	<b>(800)</b>	<b>(900)</b>
<b>Vehicle programs:</b>													
Proceeds from borrowings	14,373	14,138	15,769	17,212	17,339	19,869	13,558	14,467	17,419	23,980	24,498	25,078	25,672
Payments on borrowings	(13,963)	(13,648)	(15,826)	(17,269)	(16,385)	(19,346)	(18,138)	(10,056)	(15,160)	(19,220)	(19,635)	(21,708)	(22,444)
Net change in short-term borrowings	(28)	(22)	(25)	(16)	(25)	(23)	(18)	(25)	(27)	(44)	0	0	0
Other, net	(28)	(22)	(25)	(16)	(25)	(23)	(18)	(25)	(27)	(44)	0	0	0
<b>Net cash provided by vehicle programs</b>	<b>382</b>	<b>468</b>	<b>(82)</b>	<b>(73)</b>	<b>929</b>	<b>500</b>	<b>(4,598)</b>	<b>4,386</b>	<b>2,232</b>	<b>4,716</b>	<b>4,863</b>	<b>3,370</b>	<b>3,228</b>
<b>Net Cash Provided by Financing Activities</b>	<b>\$182</b>	<b>\$115</b>	<b>(\$438)</b>	<b>(\$308)</b>	<b>\$667</b>	<b>\$318</b>	<b>(\$4,045)</b>	<b>\$2,687</b>	<b>(\$360)</b>	<b>\$3,506</b>	<b>\$3,013</b>	<b>\$2,570</b>	<b>\$2,328</b>
Effect of changes in exchange rates on cash & cash equivalents	(23)	(41)	(4)	45	(16)	13	42	(11)	(32)	14	0	0	0
<b>Net increase in cash &amp; cash equivalents</b>	<b>(\$69)</b>	<b>(\$172)</b>	<b>\$38</b>	<b>\$181</b>	<b>(\$166)</b>	<b>\$165</b>	<b>(\$135)</b>	<b>(\$139)</b>	<b>\$16</b>	<b>\$2</b>	<b>\$49</b>	<b>(\$144)</b>	<b>(\$69)</b>
Cash & cash equivalents, beginning of period	693	624	452	720	901	735	900	765	626	642	644	693	550
<b>Cash &amp; cash equivalents, end of period</b>	<b>\$624</b>	<b>\$452</b>	<b>\$490</b>	<b>\$901</b>	<b>\$735</b>	<b>\$900</b>	<b>\$765</b>	<b>\$626</b>	<b>\$642</b>	<b>\$644</b>	<b>\$693</b>	<b>\$550</b>	<b>\$480</b>

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH



## Price objective basis & risk

### Avis Budget Group (CAR)

Our price objective for CAR shares of \$170 is based on an EV/EBITDA multiple of 9x on our 2025 estimates. The EV/EBITDA multiple reflects our expectation for earnings and cash flow to normalize off the pandemic-driven peak. As such, this multiple is closer to where the rental car companies traded before the pandemic (6x to 8x) but the higher end, reflecting currently healthier industry fundamentals in our view. We take this and apply a 1x premium for CAR given its more consistent operating performance and lower leverage.

Risks: 1) Inability to effectively match supply/demand via fleeting/de-fleeting, 2) Softer macro environment could lead to weakness in rental days/transactions, 3) Faster deterioration in revenue per day, 4) Inability to fleet/de-fleet at attractive price points, 5) Inability to secure financing critical to funding fleeting/de-fleeting efforts, 6) Inability to improve business operations and lower costs, 7) Management turnover.

## Analyst Certification

I, John P. Babcock, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

### US - Automotives Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Adient Plc	ADNT	ADNT US	John Murphy, CFA
	Aptiv PLC	APTIV	APTIV US	John Murphy, CFA
	Asbury Auto	ABG	ABG US	John Murphy, CFA
	AutoNation, Inc.	AN	AN US	John Murphy, CFA
	Avis Budget Group	CAR	CAR US	John P. Babcock
	BorgWarner	BWA	BWA US	John Murphy, CFA
	Ferrari	RACE	RACE US	John Murphy, CFA
	Ferrari NV	XJHKF	RACE IM	John Murphy, CFA
	Ford Motor	F	F US	John Murphy, CFA
	General Motors Company	GM	GM US	John Murphy, CFA
	Group 1 Auto	GPI	GPI US	John Murphy, CFA
	Lear Corp.	LEA	LEA US	John Murphy, CFA
	Lithia Motors A	LAD	LAD US	John Murphy, CFA
	Magna Intl	MGA	MGA US	John Murphy, CFA
	Magna Intl	YMG	MG CN	John Murphy, CFA
	Penske Auto Group	PAG	PAG US	John Murphy, CFA
	Rivian Automotive	RIVN	RIVN US	John Murphy, CFA
	Visteon	VC	VC US	John P. Babcock
<b>NEUTRAL</b>				
	Gentex	GNTX	GNTX US	John Murphy, CFA
	Hertz Global Holdings	HTZ	HTZ US	John P. Babcock
	Lucid Group	LCID	LCID US	John Murphy, CFA
	Luminar Technologies	LAZR	LAZR US	John P. Babcock
	Tesla Motors	TSLA	TSLA US	John Murphy, CFA
<b>UNDERPERFORM</b>				
	American Axle	AXL	AXL US	John Murphy, CFA
	America's Car-Mart, Inc.	CRMT	CRMT US	John Murphy, CFA
	CarMax, Inc.	KMX	KMX US	John Murphy, CFA
	Mobileye	MBLY	MBLY US	John Murphy, CFA
	OPENLANE	KAR	KAR US	John Murphy, CFA
	Sonic Automotive	SAH	SAH US	John Murphy, CFA



## US - Automotives Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>RVW</b>	Fisker	FSR	FSR US	John P. Babcock

**iQmethod<sup>SM</sup> Measures Definitions****Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

**Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

**Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

**Numerator**

$\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) \times (1 - \text{Tax Rate}) + \text{Goodwill Amortization}$   
Net Income  
Operating Profit  
Expected 5 Year CAGR From Latest Actual  
Cash Flow From Operations – Total Capex

**Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

**Numerator**

Current Share Price  
Current Share Price  
Annualised Declared Cash Dividend  
Cash Flow From Operations – Total Capex  
 $\text{EV} = \text{Current Share Price} \times \text{Current Shares} + \text{Minority Equity} + \text{Net Debt} + \text{Other LT Liabilities}$   
Enterprise Value

**Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

**Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

**Denominator**

Diluted Earnings Per Share (Basis As Specified)  
Shareholders' Equity / Current Basic Shares  
Current Share Price  
Market Cap = Current Share Price × Current Basic Shares  
Sales

Basic EBIT + Depreciation + Amortization

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### Equity Investment Rating Distribution: Autos Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	67	55.83%	Buy	39	58.21%
Hold	30	25.00%	Hold	15	50.00%
Sell	23	19.17%	Sell	12	52.17%

### Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

<sup>R1</sup> Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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