

<b>Company: CarMax</b>	<b>Ticker: \$KMX</b>	<b>Industry: Consumer Discretionary</b> <b>Sub-Industry: Used Vehicle Retailer</b>
Target Price: \$88.88 Stop Loss: 25% 52 Week High/Low: \$87.5/\$55.8	TTM P/E: 23.89x Forward P/E: 25.46x ESP (FY23): \$3.07	Market Cap: \$11.58B Dividend Yield: 0%

### Company Overview:

CarMax, Inc. delivers an unrivaled customer experience by offering a broad selection of quality used vehicles and related products and services at competitive, no-haggle prices using a customer-friendly sales process. We are the nation's largest retailer of used cars, and we sold 807,823 used vehicles at retail during the fiscal year ended February 28, 2023. We are also one of the nation's largest operators of wholesale vehicle auctions, with 585,071 vehicles sold during fiscal 2023, and one of the nation's largest providers of used vehicle financing, servicing approximately 1.1 million customer accounts in our \$16.77 billion portfolio of managed receivables as of February 28, 2023. Our omni-channel platform, which gives us the largest addressable market in the used car industry, empowers our retail customers to buy a car on their terms – online, in-store or an integrated combination of both.

### Industry Outlook:

i. The used vehicle sector is very sensitive to economic conditions. Things like Recession, inflation, interest rates, unemployment levels, state of housing market, gasoline prices, and many more affect both the industry and CarMax. Bad economic conditions also affect supply of late model used vehicles, if this happens auto manufacturers produce less cars which in turn gives less cars to CarMax to sell. The industry is also sensitive to changes in prices of new and used vehicles. If retail prices for used cars rise relative to retail prices, could make buying a new vehicle more attractive. The used car market is expected to see a projected annual CAGR of 7.51% from 2024-2029 and increase in market size. CarMax also suggests that there is a \$1 trillion market opportunity in the broader car market, something which CarMax can capitalize on. The industry is also beginning to move to online to make it easier for customers. The acquisition of Edmunds Holdings, who sees 56% of online car research through their website, helps CarMax in this area and gives them a competitive advantage.

### Investment Thesis:

CarMax is a great investment because of two reasons. The first is that they have a strong brand equity. They are the market leader in the 3 parts of their business, used cars, wholesale cars, and financing. CarMax's stores also cover approximately 85% of the US population making it accessible for customers to engage with CarMax's services. They are also the biggest player in this market giving them a competitive advantage. The second reason is that CarMax has an adaptable strategy. They have an omnichannel system that allows customers to access CarMax's inventory freely. They invest in technology that allows them to meet shift market demands and accessing a \$1 trillion market.

### Risks and Mitigants:

Through CarMax's Auto Financing, they face the risk of customers defaulting on their payments. They mitigate this risk by conducting thorough credit checks that meet CarMax's background of a strong candidate. They also recommend down payments/trade-ins to allow CarMax to be more flexible and give them collateral. CarMax also faces the risk of economic downturn. They mitigate this by diversifying its offerings and offers flexible loan terms to maintain strong brand recognition and customer loyalty. The final risk they face is the change in consumer preferences, specifically for EV vehicles. One way that CarMax is handling this change is through Edmunds. Through Edmunds, CarMax can understand the change in the auto market therefore meeting changing consumer preferences.

## ESG:

CarMax focuses greatly on being environmentally friendly while providing benefits for employees and practicing good business. CarMax wants to achieve net-zero carbon emissions by 2050 and reduce Scope 1 and 2 GHG emissions by 50% by 2025. They also Launched an Associate Inclusion Groups pilot program, with the goal to create multiple opportunities for people with different backgrounds. They also provide a lot of healthcare and wellness benefits for all employees. For governance, they have 4 standing committees to manage different parts of the company. They also have Compliance systems for 3 big parts of business that monitor risk consistently.

## 5-Year Financial Performance:



## DCF Valuation:

Implied Equity Value and Share Price	
PV of FCF	\$3,799
PV of Terminal Value	\$11,389
Enterprise Value	\$15,188
Less: Debt	\$1,909.4
Add: Cash & Equivalents	\$314.8
Equity Value	\$13,593
Diluted Shares Outstanding	158,274
Implied Share Price	\$85.88
Current Price	\$73.33
Margin of Safety	14.62%
Implied Perpetuity Growth Rate	
Terminal Year FCF	\$1,015
Discount Rate	9.00%
Terminal Value	\$19,100
Perpetuity Growth Rate	3.50%

## CarMax vs. Competitors

Company Na	Market Data				Financial Data			Valuation			
	Price (\$/share)	Outstanding (m)	Market Cap (\$m)	TEV (\$m)	Sales (\$m)	EBITDA (\$m)	EPS (\$)	EV/Sales x	EV/EBITDA x	ROE %	P/E x
Carvana Co.	69.23	116.28	13820.00	18706.00	10771.00	527.00	1.51	1.74	35.50	-39.06	46.00
Penske Autor	150.99	66.99	10115.00	11438.10	29527.40	1560.50	15.80	0.39	7.33	22.26	9.55
AutoNation	140.93	41.66	5871.00	8938.10	26948.90	1570.70	24.51	0.33	5.69	46.17	5.75
CarGurus	23.80	96.27	2676.00	2206.48	1655.04	126.84	0.82	1.33	17.40	10.24	29.02
<b>CarMax</b>	<b>73.33</b>	<b>157.92</b>	<b>11580.00</b>	<b>13203.55</b>	<b>29684.87</b>	<b>865.25</b>	<b>3.07</b>	<b>0.44</b>	<b>15.26</b>	<b>8.63</b>	<b>23.89</b>
<b>Average</b>								<b>0.85</b>	<b>16.23</b>	<b>9.65</b>	<b>22.84</b>
<b>Median</b>								<b>0.44</b>	<b>15.26</b>	<b>10.24</b>	<b>23.89</b>