CarMax: A Disrupter Faces Disruption



CarMax was founded in 1993 as a subsidiary of Circuit City Stores. The automobile industry had a high level of fragmentation and a reputation for poor customer satisfaction. CarMax intended to shake up the industry by offering a broad array of used vehicles in a no-pressure, no-haggle environment.

In 2002, CarMax became an independent, separately traded company. The next several years would prove to be fatal for Circuit City, but the story of CarMax is considerably happier. The company is now the largest retailer of used vehicles in the United States operating 237 retail locations in 41 states.

CarMax has performed well over the years. The stock price has increased from a split-adjusted \$8.15 on October 1, 2002 to \$101.59 on August 12, 2022, an annualized return of 13.5%. As a company that disrupted the automobile industry in the 1990s and 2000s, will CarMax avoid being disrupted by new entrants such as Carvana in the years to come?

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Table of Contents

INTRODUCTION	4
USED VEHICLE ECONOMICS	7
OPERATING HISTORY AND BUSINESS MODEL	10
CARMAX SALES OPERATIONSCARMAX AUTO FINANCE	11
CarMax Auto Finance	16
BALANCE SHEET AND CAPITAL ALLOCATION	19
GROWTH OPPORTUNITIES AND RISKS	22
CONCLUSION	24
NOTES	25
FINANCIAL STATEMENTS	26
BALANCE SHEETS – 2012 TO 2022	26
INCOME STATEMENTS – 2012 TO Q2 2022	27
Income Statements – Q1 2020 to Q2 2022	28
CARMAX AUTO FINANCE INCOME – 2011 TO Q2 2022	29
CASH FLOW STATEMENTS – 2012 TO 2022	30

Introduction

CarMax was founded in 1993 as a subsidiary of Circuit City Stores. Circuit City was looking for growth and diversification opportunities outside consumer electronics. The automotive sector was identified due to its large size, high level of fragmentation, and reputation for low customer satisfaction. By bringing its experience in big box retailing to the used car market, Circuit City intended to disrupt automotive retailing by providing a wide array of inventory and a no-haggle shopping experience.

The initial rollout of CarMax locations was restricted to the southeast. By 1996, CarMax had five retail locations and \$305 million in sales. Although the venture was weighing on Circuit City's financial results at the time, management saw enough positive signs to pursue an aggressive national rollout of the CarMax concept. In 1997, Circuit City created a tracking stock for CarMax and raised \$412 million by selling 22.5% of the economic interest in CarMax to the public. Circuit City retained the remaining 77.5% interest in CarMax. Five years later, CarMax operated 41 retail locations and reported \$3.2 billion of revenue and \$91 million of net income.

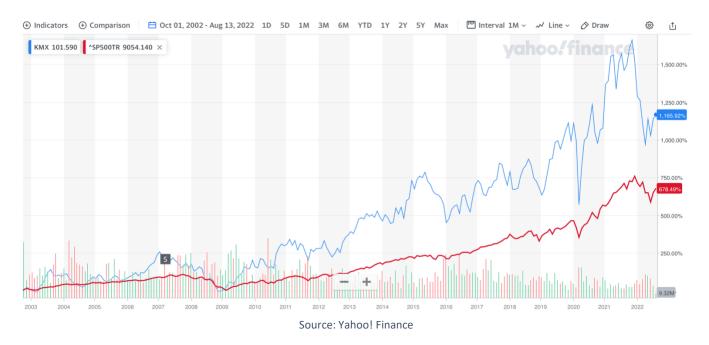
On October 1, 2002, CarMax became an independent, separately traded company. Owners of the CarMax tracking stock received one share of the newly independent company for each share of tracking stock they owned while Circuit City shareholders received 0.314 share of CarMax for each share of Circuit City they owned.⁴ To say that the next several years would not be kind to Circuit City is a major understatement. A series of management missteps followed by the 2008 financial crisis and economic downturn destroyed the business. Circuit City filed for bankruptcy in late 2008 and, despite efforts to arrange a restructuring, all stores were closed by March 2009 in a liquidation. Circuit City stock ended up being worthless.⁵

The story of CarMax is considerably happier. The company is now the largest retailer of used vehicles in the United States and operates 237 retail locations in 41 states.⁶ In the four quarters that ended on May 31, 2022, CarMax sold 1.6 million vehicles, posted \$33.5 billion of revenue, and brought \$967 million to the bottom line.⁷



Source: Fiscal 2022 Annual Report

As the business has performed well over time, so has CarMax stock. The stock price has increased from a split-adjusted \$8.15 on October 1, 2002 to \$101.59 as of August 12, 2022. This represents a 13.5% annualized return and has outpaced the S&P 500 total return index, as seen in the chart below. CarMax has never paid a dividend. Total market capitalization stands at \$16.2 billion.



While CarMax has done very well over the past three decades, it is always hazardous to grow complacent in a competitive business environment. The history of the company's former parent presents cautionary lessons. While there were many reasons for the downfall of Circuit City, one important factor involved management's failure to adapt its sales approach to compete with Best Buy:

... Circuit City didn't see Best Buy as a threat. "We thought we were smarter than anybody," says Alan Wurtzel, who remained on the board of directors until 2001. "But the time you get in trouble is when you think you know the answers." ⁸

Alan Wurtzel is the son of the founder of Circuit City and served as the company's CEO from 1972 to 1986. In a 2013 interview, Mr. Wurtzel cited hubris as a significant element in the decline and ultimate fall of Circuit City. In particular, he observed that management did not take the threat of Best Buy seriously because they believed that it was skating on thin ice financially and would likely fail.

It turned out that Best Buy's retail approach was a better fit for what consumers actually wanted, and Circuit City shareholders paid dearly for the hubris of the company's management in the long run. Circuit City's management was simply not paranoid enough to take the threat seriously. This proved to be fatal.

Over the past quarter-century, we have repeatedly seen consumer preferences change in ways that might have initially seemed quite unlikely. Often, new competition comes from industry upstarts that have the funding to sustain operating losses for a considerable period of time while gaining scale and operational experience.

The new kid on the block in automotive retailing is Carvana, an upstart founded in 2013 that sells automobiles entirely online. CarMax has enhanced its online presence significantly in recent years, but the company continues to maintain an extensive network of retail locations. While CarMax management considers this "omnichannel" approach to be a competitive advantage, Carvana has been able to eliminate the significant cost of running a network of dealerships.

CarMax is a highly profitable company with a long history of sound financial results. Carvana, which went public in 2017, is the polar opposite with a history of losses and shaky financials. However, Carvana has been growing rapidly in order to achieve the scale that its management believes will eventually lead to profitability. After years of rapid growth, Carvana became the second largest used car dealer in 2021.¹⁰

Andy Grove, the longtime CEO of Intel Corporation, wrote a book entitled <u>Only the Paranoid Survive</u> in which he discussed the importance of management taking aggressive actions to deal with strategic inflection points. Are used car buyers ready to abandon the opportunity to test drive cars at retail dealerships and make purchases entirely online? If so, a network of retail locations might become an albatross for CarMax in the long run, ruining the company's economics.

This profile of CarMax is divided into the following sections:

- **Used Vehicle Economics**. Discussion of the industry's size, fragmentation, recent trends, basic economics, and growth opportunities. *The Automobile Industry*, a companion article to this report, which was published on August 4, provides general industry background.
- Operating History and Business Model. Review of long-term operating results and recent trends. The CarMax business model involves selling to consumers at retail, liquidating inventory unsuitable for retail sale through a wholesale auction process, and financing retail purchases through CarMax Auto Finance.
- Balance Sheet and Capital Allocation. CarMax generates significant free cash flow, much of which has been dedicated to share repurchases, with share count declining by nearly 30% over the past decade. In 2021, CarMax acquired Edmunds, a well-known consumer-oriented vehicle research website.
- **Growth Opportunities and Risks**. Fragmentation of the used car market provides opportunities for further expansion while online-only competitors such as Carvana pose significant risks.

Used Vehicle Economics

CarMax is the largest retailer of used vehicles in the United States, but the company still has a relatively small share of the overall market due to the highly fragmented nature of the industry. At the end of 2021, there were more than 18,000 franchised dealerships operating in the United States. These dealerships sell the majority of late model used vehicles. The following excerpt is from the fiscal 2022 CarMax 10-K:

"Based on industry data, there were approximately 42 million used cars sold in the U.S. in calendar 2021, of which approximately 23 million were estimated to be age 0- to 10-year old vehicles. While we are the largest retailer of used vehicles in the U.S., in calendar 2021, we estimate we sold approximately 4.0% of the age 0- to 10-year old vehicles sold on a nationwide basis, an increase from 3.5% in calendar 2020. We estimate we sold approximately 4.9% of the age 0- to 10-year old vehicles sold in the current comparable store markets in which we operate in calendar 2021, an increase from 4.3% in 2020."

CarMax's management has set a goal to increase its share of the 0-10 year old share of the used car market on a nationwide basis to 5% by 2025. 11

Used car sales volume has decreased recently. There were 38.2 million used vehicles sold between July 2021 and June 30, of which 20.1 million vehicles were sold at retail. On a seasonally adjusted annualized basis, the pace of sales in June was 38.8 total used vehicle sales and 20.5 million retail used vehicle sales.¹²

In the exhibit below, the graph on the left shows total used units and the seasonally adjusted annual rate of sales (SAAR) while the graph on the right shows the same data restricted to retail units sold through dealerships. The left axis of each chart corresponds to monthly units while the right axis is the SAAR in millions of units.



Source: Cox Automotive

Slightly more than half of used vehicles are sold at retail while the remainder represent transactions between private parties. Used car dealerships compete with each other as well as private-party sellers when it comes to acquiring inventory and selling vehicles to customers.

The attraction of a private-party transaction is that the margin captured by a used car dealership is avoided. This savings is typically shared by the seller and the buyer in a proportion that depends on the negotiating ability of each party to the transaction. The downside of transacting privately is that it is more time consuming for both the buyer and the seller, it can be unpleasant for people uncomfortable with haggling, and the level of real and perceived risk is much higher.

As an example of the economics of used cars at a micro-level, let's take the case of a 2008 Ford Mustang GT, a vehicle I purchased new and drove for six years before <u>selling it in 2014</u>. In "clean" condition with 130,000 miles, Edmunds makes the following appraisal of the car's current market value: ¹³

Trade-in value: \$6,082
Private party value: \$7,219
Dealer retail value: \$9,083

Obviously, if a buyer and seller can find each other and negotiate a deal, they are both better off than if they transact with a dealership. The seller gets about \$1,200 more for the car and the buyer saves about \$1,800. However, the two parties have to find each other, negotiate with each other, and ultimately have some level of trust in each other.

Rather than going through the process of listing a car for sale, allowing strangers to test drive the car, negotiating a deal, and trusting that the buyer's check will clear, the seller could decide to forego the potential \$1,200 savings and trade it in.

From the buyer's perspective, going to a dealership might seem less risky, especially if some kind of warranty is provided, even of very limited duration. Doing business with a dealership like CarMax does not require negotiating over the price and, in normal times, there is likely to be plenty of inventory to choose from. Those advantages could easily be worth \$1,800 to the busy and risk averse buyer who needs financing.

The value proposition of using a dealer can be even greater for someone trading in their car for a newer model. The trade-in of the current vehicle, the purchase of a newer vehicle, financing, and warranty protection can all be arranged quickly and easily without the hassle and risk of engaging in two private-party transactions.

From the perspective of a dealership, sourcing vehicles from private parties is a relatively cheap way to obtain inventory for resale. If a vehicle appears to be in good enough shape to sell at retail, the dealership will spend some money to recondition and inspect it prior to selling it. The dealership's gross margin is the price it is able to sell the vehicle for less the cost of acquisition and reconditioning. Vehicles falling short of retail standards will normally liquidated through an auction.

Earning a gross margin on each vehicle sold is only one part of the economics of used car retailing. For most consumers, buying a car is a large expense that requires financing. While many consumers may arrange for

financing with their own bank or credit union, it is common for dealerships to arrange financing for customers. In addition, retailers typically earn commissions or profit sharing revenues from selling extended warranties as well as guaranteed asset protection (GAP) plans that cover the unpaid balance of an auto loan in the event of a total loss.

Since the used car market is so large and fragmented, auto retailers have many plausible strategies for gaining market share. Within existing geographical markets, an auto retailer can attempt to compete more effectively with other retailers as well as gain share at the expense of private-party transactions. Expansion into adjacent geographic markets is also possible for retailers with sufficient capital and a proven business model.

Operating History and Business Model

Before we take a deeper dive into the key drivers of CarMax's business, let's examine the company's overall operating history. The company operates in two segments: CarMax Sales Operations and CarMax Auto Finance.

The following exhibit shows the income statement over the past decade:

	3 Mo	nths	Fiscal Years ending on February 28 or 29									
Figures in thousands except per share amounts	5/31/22	5/31/21	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Sales and operating revenues:												
Used vehicle sales	7,014,490	6,157,344	24,437,095	15,713,583	17,169,462	15,172,772	14,392,360	13,270,662	12,439,401	11,674,520	10,306,256	8,746,965
New vehicle sales (included in "other") after FY15	-	-	-	-	-	-	-	-	-	240,004	212,036	207,726
Wholesale vehicle sales	2,116,517	1,374,357	6,763,813	2,668,753	2,500,042	2,392,992	2,181,156	2,082,464	2,188,267	2,049,133	1,823,425	1,759,555
Other sales and revenues	180,614	165,898	699,504	567,813	650,483	607,336	546,693	521,992	522,007	305,059	232,582	248,572
Net sales and operating revenues	9,311,621	7,697,599	31,900,412	18,950,149	20,319,987	18,173,100	17,120,209	15,875,118	15,149,675	14,268,716	12,574,299	10,962,818
Cost of sales:												
Used vehicle cost of sales	6,451,010	5,560,337	22,398,651	14,124,715	15,349,401	13,544,033	12,824,741	11,818,951	11,100,763			
Wholesale vehicle cost of sales	1,924,850	1,188,513	5,999,277	2,245,431	2,045,680	1,961,959	1,788,704	1,719,821	1,800,167	12,381,189	10,925,598	9,498,456
Other cost of sales	60,370	24,240	214,942	200,878	202,566	186,517	177,905	153,052	229,985			
Total cost of sales	8,436,230	6,773,090	28,612,870	16,571,024	17,597,647	15,692,509	14,791,350	13,691,824	13,130,915	12,381,189	10,925,598	9,498,456
Gross profit	875,391	924,509	3,287,542	2,379,125	2,722,340	2,480,591	2,328,859	2,183,294	2,018,760	1,887,527	1,648,701	1,464,362
CarMax Auto Finance Income	204,473	241,731	801,507	562,810	456,030	438,690	421,182	368,984	392,036	367,294	336,167	299,267
Selling general and administrative expenses	656,740	554,069	2,325,220	1,704,419	1,750,168	1,730,275	1,617,051	1,488,504	1,351,935	1,257,725	1,155,215	1,031,034
Depreciation and amortization	55,648	49,890	211,956	194,356	189,899			In	cluded in SG8	&A		
Interest expense	28,775	20,534	94,095	86,178	83,007	75,792	70,745	56,416	36,358	24,473	30,834	32,357
Other expense (income)	2,099	(25,577)	(34,568)	(8,275)	(5,690)	408	(1,363)	953	12,559	3,292	1,497	(1,113)
Earnings before income taxes	336,602	567,324	1,492,346	965,257	1,160,986	1,112,806	1,063,608	1,006,405	1,009,944	969,331	797,322	701,351
Income tax provision	84,337	130,568	341,049	218,338	272,553	270,393	399,496	379,435	386,516	371,973	304,736	267,067
Net earnings	252,265	436,756	1,151,297	746,919	888,433	842,413	664,112	626,970	623,428	597,358	492,586	434,284
Weighted average common shares, diluted	161,798	166,293	165,176	165,133	166,820	175,884	184,470	192,215	205,540	218,691	227,584	231,823
Net earnings per share, diluted	1.56	2.63	6.97	4.52	5.33	4.79	3.60	3.26	3.03	2.73	2.16	1.87
Gross margin	9.4%	12.0%	10.3%	12.6%	13.4%	13.6%	13.6%	13.8%	13.3%	13.2%	13.1%	13.4%
Net margin	2.7%	5.7%	3.6%	3.9%	4.4%	4.6%	3.9%	3.9%	4.1%	4.2%	3.9%	4.0%

Source: 10-K and 10-Q SEC Filings

Due to significant recent changes in the industry due to the pandemic, it is also helpful to look at recent trends on a quarterly basis. Note that the effects of the pandemic were felt starting in **fiscal 2021** which began on March 1, 2020. Fiscal 2020 covers March 1, 2019 to February 29, 2020 and was unaffected by the pandemic.

Figures in thousands except per share amounts	Fiscal 2023		Fiscal	2022			Fiscal	2021			Fiscal	2020		
Quarters Ending on	5/31/22	2/28/22	11/30/21	8/31/21	5/31/21	2/28/21	11/30/20	8/31/20	5/31/20	2/29/20	11/30/19	8/31/19	5/31/19	
Sales and operating revenues:														
Used vehicle sales	7,014,490	5,739,795	6,435,590	6,104,366	6,157,344	4,328,400	4,209,748	4,389,233	2,786,202	4,253,699	4,028,811	4,346,295	4,540,657	
Wholesale vehicle sales	2,116,517	1,765,601	1,922,283	1,701,572	1,374,357	678,457	828,362	819,082	342,852	548,324	610,983	678,286	662,449	
Other sales and revenues	180,614	181,299	169,886	182,421	165,898	157,400	146,834	163,851	99,728	160,467	150,234	176,570	163,212	
Net sales and operating revenues	9,311,621	7,686,695	8,527,759	7,988,359	7,697,599	5,164,257	5,184,944	5,372,166	3,228,782	4,962,490	4,790,028	5,201,151	5,366,318	
Cost of sales:														
Used vehicle cost of sales	6,451,010	5,313,235	5,927,237	5,597,842	5,560,337	3,900,840	3,791,134	3,908,065	2,524,676	3,799,956	3,615,704	3,889,917	4,043,824	
Wholesale vehicle cost of sales	1,924,850	1,588,102	1,710,103	1,512,559	1,188,513	575,836	713,961	674,712	280,922	444,107	504,177	560,906	536,490	
Other cost of sales	60,370	74,369	53,859	62,474	24,240	46,212	48,419	37,246	69,001	45,570	56,500	56,875	43,621	
Total cost of sales	8,436,230	6,975,706	7,691,199	7,172,875	6,773,090	4,522,888	4,553,514	4,620,023	2,874,599	4,289,633	4,176,381	4,507,698	4,623,935	
Gross profit	875,391	710,989	836,560	815,484	924,509	641,369	631,430	752,143	354,183	672,857	613,647	693,453	742,383	
CarMax Auto Finance Income	204,473	193,775	165,968	200,033	241,731	188,220	176,445	147,195	50,950	111,907	114,033	114,131	115,959	
Selling general and administrative expenses	656,740	620,935	575,930	574,286	554,069	506,824	430,781	441,923	324,891	484,728	484,848	480,831	489,660	
Depreciation and amortization	55,648	54,849	54,428	52,789	49,890	49,230	48,016	48,285	48,825	484,728	404,040	480,831	489,000	
Interest expense	28,775	26,848	24,303	22,410	20,534	20,289	19,462	22,469	23,958	22,307	21,843	21,073	17,784	
Other expense (income)	2,099	885	(8,094)	(1,782)	(25,577)	(9,003)	(887)	(1,680)	3,295	1,096	(6,570)	143	(359)	
Earnings before income taxes	336,602	201,247	355,961	367,814	567,324	262,249	310,503	388,341	4,164	276,633	227,559	305,537	351,257	
Income tax provision	84,337	41,411	86,523	82,547	130,568	52,304	75,203	91,645	(814)	61,699	54,403	71,938	84,513	
Net earnings	252,265	159,836	269,438	285,267	436,756	209,945	235,300	296,696	4,978	214,934	173,156	233,599	266,744	
Weighted average common shares, diluted	161,798	163,869	164,873	165,643	166,295	165,596	165,773	165,623	163,537	165,810	166,534	167,272	167,643	
Net earnings per share, diluted	1.56	0.98	1.63	1.72	2.63	1.27	1.42	1.79	0.03	1.30	1.04	1.40	1.59	
Gross margin	9.4%	9.2%	9.8%	10.2%	12.0%	12.4%	12.2%	14.0%	11.0%	13.6%	12.8%	13.3%	13.8%	
Net margin	2.7%	2.1%	3.2%	3.6%	5.7%	4.1%	4.5%	5.5%	0.2%	4.3%	3.6%	4.5%	5.0%	

Source: 10-K and 10-Q SEC Filings

- From fiscal 2013 through fiscal 2020, CarMax exhibited steady growth. Sales revenue increased from \$11 billion in fiscal 2013 to \$20.3 billion in fiscal 2020, net income increased from \$434.3 million to \$888.4 million, and net income per share increased from \$1.87 to \$5.33 due to higher net income and a decreasing share count due to stock repurchases.
- Business boomed in fiscal 2022 with revenue increasing by 68.3% and net income increasing by 54.1%.
 Revenue was boosted by a combination of higher unit volume coupled with dramatically higher prices in the retail and wholesale channels due to rapid inflation in the price of used vehicles.
- Gross and net margins were quite stable from fiscal 2013 to fiscal 2020 and held up in fiscal 2021.
 However, rapid used vehicle inflation in fiscal 2022 pressured margins significantly and this has continued in the first quarter of fiscal 2023.
- CarMax Auto Finance income increased from \$299.3 million in fiscal 2013 to \$456 million in fiscal 2020 representing relatively stable growth before increasing to \$562.8 million in fiscal 2021 and \$801.5 million in fiscal 2022. The segment has experienced tailwinds from growth in the loan portfolio coupled with higher recovery rates when vehicles are repossessed and sold at auction.

CarMax Sales Operations

The majority of CarMax's sales operations segment revenue (76.6% in FY22) comes from selling used vehicles to consumers at retail. In the past, the company had a small amount of revenue from selling new vehicles, but the last new car franchise was sold during fiscal 2022. Wholesale revenue (21.2% in FY22) represents the company's auction business in which vehicles that do not meet retail standards are liquidated. Other sales revenue (2.2% in FY22) represents sales of extended warranties and GAP protection plans sold to consumers.

The following exhibit displays the number of vehicles sold, average selling prices, gross profit per vehicle, and gross margin percentages over the past decade. We can spot the recent rapid inflation in the retail and wholesale markets which we will drill into shortly. Gross margin has traditionally been greater in the wholesale channel, although wholesale margins have recently compressed:

	3 Mo	nths				Fiscal Y	ears ending o	n February 28	8 or 29			
Figures in thousands except per share amounts	5/31/22	5/31/21	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Vehicles sold:												
Used cars	240,950	270,799	924,338	751,862	832,640	748,961	721,512	671,294	619,936	582,282	526,929	447,728
Wholesale auctions	186,307	181,389	706,212	426,268	466,177	447,491	408,509	391,686	394,437	376,186	342,576	324,779
Total vehicles sold	427,257	452,188	1,630,550	1,178,130	1,298,817	1,196,452	1,130,021	1,062,980	1,014,373	967,335	877,266	780,362
Average selling prices:												
Used vehicles	28,844	22,533	26,207	20,690	20,418	20,077	19,757	19,586	19,917	19,897	19,408	19,351
Wholesale vehicles	10,996	7,266	9,238	5,957	5,089	5,098	5,102	5,106	5,327	5,273	5,160	5,268
Per unit information:												
Used vehicle gross profit	2,339	2,205	2,205	2,113	2,186	2,175	2,173	2,163	2,159	2,179	2,171	2,170
Wholesale vehicle gross profit	1,029	1,025	1,083	993	975	963	961	926	984	970	916	949
Gross Margins:												
Used vehicles	8.1%	9.8%	8.4%	10.2%	10.7%	10.8%	11.0%	11.0%	10.8%	11.0%	11.2%	11.2%
Wholesale vehicles	9.4%	14.1%	11.7%	16.7%	19.2%	18.9%	18.8%	18.1%	18.5%	18.4%	17.8%	18.0%

Source: 10-K and 10-Q SEC Filings

The primary drivers of the CarMax business model involve sourcing inventory, selling vehicles through retail channels, selling vehicles at wholesale auctions, and arranging financing for customers. Let's take a brief look at each of these activities.

Sourcing Inventory

The business model of any used automobile retailer must start with a strategy to source inventory at a cost that allows for a sufficient gross margin to be earned from retail sales. The availability of used vehicles depends on a number of factors including the size of the vehicle fleet, the number of new vehicles sold in a given year, and the propensity of consumers to want to upgrade to newer models.

In general, it is advantageous to source inventory directly from customers rather than to rely on wholesale auctions. CarMax refers to the percentage of vehicles sourced from customers as its self-sufficiency rate which stood at 70% in fiscal 2022 and remained at that level in the first quarter of fiscal 2023. Historically, the self-sufficiency rate has been in the 36-41% range. CarMax credits improvements in instant online appraisals for improving self-sufficiency.

Anyone can sell their vehicle to CarMax regardless of whether they are buying a vehicle from CarMax. For many customers, this entire process can be accomplished by answering an online questionnaire which results in an instant online quote.

On June 1, 2021, CarMax acquired Edmunds, a well-known resource for consumer research. Edmunds has long offered users an online appraisal tool. As I verified recently, CarMax has integrated its inventory acquisition process with Edmunds. In fact, the "path of least resistance" when using the Edmunds appraisal tool is to obtain an instant offer from CarMax which could further increase the self-sufficiency rate.¹⁴

In addition to sourcing inventory from consumers, CarMax buys vehicles from wholesalers, other dealers, and fleet owners including leasing and rental companies, but this inventory generally comes at a higher cost. To the extent that CarMax can maintain its self-sufficiency rate at the recent level of ~70%, this could represent a tailwind for gross margins going forward.

Retail Sales

In the four fiscal quarters that ended on May 31, 2022, CarMax sold 894,489 vehicles to consumers via its retail sales channel. In recent years, an increasing percentage of CarMax's sales have originated through its website and mobile app. The company's omni-channel strategy is intended to provide consumers with a seamless integration between shopping for a vehicle online and at retail locations.

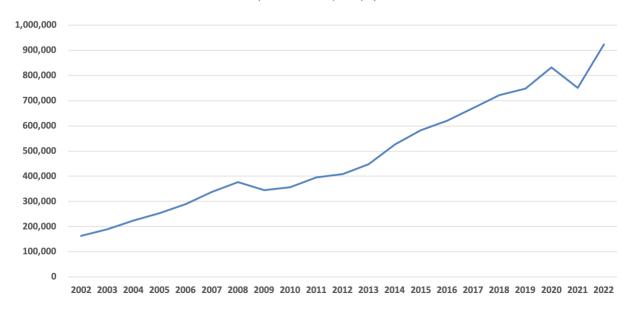
All vehicles sold at retail are "CarMax Qualified Certified" which excludes inventory with salvage titles as well as flood or frame damage. No vehicles are sold to retail customers on an "as is" basis. To reduce the level of risk to customers, CarMax offers a 24 hour test drive with a limit of 150 miles. Additionally, the "Love Your Car Guarantee" allows customers to return any vehicle within thirty days with a limit of 1,500 miles. All vehicles

come with a 90 day/4,000 mile limited warranty and extended warranty options are offered at additional cost. In combination, these policies reduce the real and perceived risk of purchasing a vehicle from CarMax.

In the latest fiscal quarter, 11% of CarMax retail sales were entirely online and 54% were omni-channel where consumers utilized online functionality as well as the services provided by retail locations. ¹⁵ The exhibits below show the number of retail units sold and the average sales price per unit over the past two decades:

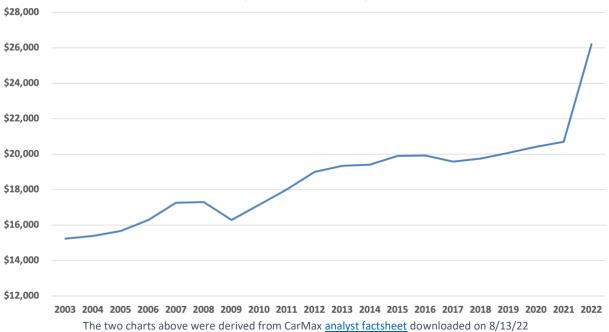
Retail Units Sold

(Fiscal Years end on 2/28 or 2/29)



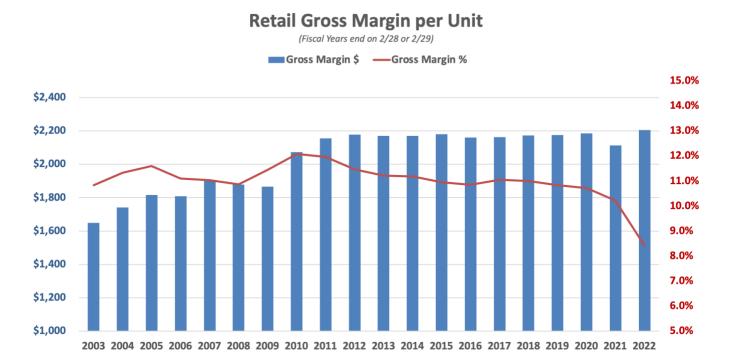
Average Retail Selling Price Per Vehicle

(Fiscal Years end on 2/28 or 2/29)



Gross margin represents the difference between the price a vehicle sells for and the cost of acquiring and reconditioning prior to sale. Over the past decade, gross margin per vehicle has been in the \$2,000 to \$2,200 range. During that period, used vehicle prices rose only slowly and gross margin as a percentage of selling price declined gradually from 12% in fiscal 2011 to 10.2% in fiscal 2021. During fiscal 2022, prices increased significantly. Gross margin as a percentage of selling price declined to 8.4% even as gross margin per-unit in dollar terms reached a record high.

The following exhibit shows retail gross margin on a per-unit basis, both in dollar terms and as a percentage of average selling price:



It is not a good idea to draw too many inferences from a single year, particularly during very volatile periods. Gross margin percentage was low in fiscal 2022 and fell further to 8.1% in the first quarter of fiscal 2023 which ended on May 31, 2022. During the latest earnings call, management appeared to focus more on gross margin per unit which was at a record high and stressed the need to keep vehicles as affordable as possible for consumers in an inflationary environment. It remains to be seen if or when CarMax will restore gross margin percentage to the 10-12% range.

Chart Derived from CarMax <u>analyst factsheet</u> downloaded on 8/13/22

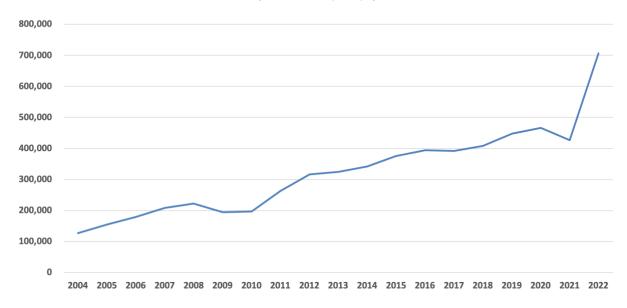
Wholesale Auctions

Many vehicles purchased by CarMax are unsuitable for sale to retail customers due to age, high mileage, poor condition, or a history of frame or flood damage. Vehicles that are not candidates to be sold at retail are liquidated at wholesale auctions. In the four fiscal quarters that ended on May 31, 2022, CarMax sold 711,130 vehicles at wholesale.

The typical vehicle sold at a wholesale auction is over ten years old and has more than 100,000 miles. Whether to sell inventory at retail or wholesale can be a judgment call. Recently, management sold some vehicles at retail that might have been liquidated through auctions in the past. This was done to meet demand for lower-priced vehicles as inflation made CarMax's retail inventory much more expensive. The exhibits below show the number of wholesale units sold and the average sales price per unit since 2005:

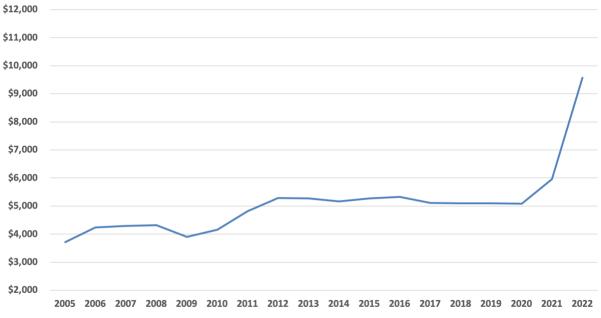
Wholesale Units Sold

(Fiscal Years end on 2/28 or 2/29)



Average Wholesale Selling Price Per Vehicle

(Fiscal Years end on 2/28 or 2/29)



The trends we have seen at the retail level are even more extreme in the wholesale channel. In Fiscal 2022, wholesale units sold increased by 65.7% while the average selling price per vehicle rose by 60.8%. At the beginning of the pandemic, CarMax switched all of its auctions to an online-only format. At this point, all auctions are still being held in a virtual online format.

The following exhibit shows wholesale gross margin on a per-unit basis, both in dollar terms and as a percentage of average selling price:

Wholesale Gross Margin per Unit (Fiscal Years end on 2/28 or 2/29) Gross Margin \$ —Gross Margin % \$1,200 24.0% 22.0% \$1,000 20.0% 18.0% \$800 16.0% \$600 14.0% 12.0% \$400 10.0% \$200 8.0% 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Chart Derived from CarMax analyst factsheet downloaded on 8/13/22

We can see that gross margin dollars are at a record high on a per-vehicle basis, but gross margin as a percentage of average wholesale selling price is running at levels far below the level of the 2010s. From a review of management's comments, it appears that they are primarily targeting gross margin dollars per unit for both the retail and wholesale channels. It is not clear if or when the wholesale gross margin percentage will return to the 18-20% range that prevailed during the 2010s.

CarMax Auto Finance

Since the majority of customers shopping for a vehicle cannot pay cash for the purchase, providing easy and competitive financing is an integral part of operating in the retail channel. The auto finance industry is comprised of banks, captive finance divisions of new car manufacturers, credit unions, and independent finance companies. CarMax Auto Finance (CAF) primarily competes with banks and credit unions that offer direct financing to customers who are purchasing used vehicles.¹⁷

CAF income is derived from interest and fee income from the \$15.8 billion portfolio of receivables, less interest expense paid on the debt used to fund the portfolio, a provision for estimated loan losses, and direct expenses. At the end of fiscal 2022, CAF serviced 1.1 million accounts. During fiscal 2022, CAF financed 42.6% of retail used vehicle unit sales, a metric known as the penetration rate.

Customer applications for credit are initially reviewed by CAF. Applications that are declined or conditionally approved by CAF are then evaluated by third-party finance providers. When an application is referred to a third party provider, CAF is either paid or pays a fixed fee per contract. "Tier 2" providers pay a fee to CAF while "Tier 3" providers receive a fee from CAF. Tier 3 providers serve customers with low credit scores and CAF is willing to pay a fee to facilitate their financing because it provides incremental retail sales that would otherwise not occur. Regardless of whether a loan is retained or referred to another provider, CAF services all loans it originates.

The following exhibit shows key metrics for CAF over the past decade:

	3 Mc	onths				Fiscal Year	rs ending on	February 2	8 or 29			
Figures in millions	5/31/22	5/31/21	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Interest margin:												
Interest and fee income	346.7	310.3	1,296.8	1,142.0	1,104.1	972.9	856.6	762.0	682.9	604.9	548.0	495.3
Interest expense	(48.8)	(65.8)	(228.8)	(314.1)	(358.1)	(289.3)	(215.0)	(171.4)	(127.7)	(96.6)	(90.0)	(95.1)
Total interest margin	297.9	244.5	1,068.0	827.9	746.0	683.6	641.6	590.6	555.2	508.3	458.0	400.2
Provision for loan losses	(57.8)	24.4	(141.7)	(160.7)	(185.7)	(153.8)	(137.6)	(150.6)	(101.2)	(82.3)	(72.2)	(56.2)
Total interest margin after provision for loan losses	240.1	268.9	926.3	667.2	560.3	529.8	504.0	440.0	454.0	426.0	385.8	344.0
Total other income (expense)	-	-	-	(2.2)	-	(0.4)	0.4	-	(0.4)	-	0.1	-
Total direct expenses	(35.6)	(27.2)	(124.8)	(102.2)	(104.3)	(90.7)	(83.2)	(71.0)	(61.6)	(58.7)	(49.7)	(44.7)
CarMax Auto Finance income	204.5	241.7	801.5	562.8	456.0	438.7	421.2	369.0	392.0	367.3	336.2	299.3
Total averaged managed receivables	15,817.0	14,148.7	14,934.0	13,463.3	13,105.1	12,150.2	11,210.8	10,158.3	9,092.9	7,859.9	6,629.5	5,385.5
Net loans originated	2,446.8	2,483.4	9,371.2	6,395.0	7,089.7	6,330.1	5,962.2	5,643.3	5,171.0	4,727.8	4,183.9	3,445.3
Vehicle units financed	94,663	118,363	393,681	319,346	353,654	323,864	310,739	297,043	265,426	243,264	218,706	179,525
Net CAF penetration rate	39.3%	43.7%	42.6%	42.5%	42.5%	43.2%	43.1%	44.2%	42.8%	41.2%	40.9%	39.4%
Weighted average contract rate	9.0%	9.0%	8.5%	8.4%	8.4%	8.5%	7.8%	7.4%	7.3%	7.1%	7.0%	7.9%
Ending allowance for loan losses	458.2	379.5	433.0	411.1	157.8	138.2	128.6	123.6	94.9	81.7	69.9	57.3
CAF income as % avg managed receivables	5.2%	6.8%	5.4%	4.2%	3.5%	3.6%	3.8%	3.6%	4.3%	4.7%	5.1%	5.6%
Provision for loan loss as % avg managed rec	1.5%	-0.7%	0.9%	1.2%	1.4%	1.3%	1.2%	1.5%	1.1%	1.0%	1.1%	1.0%
Allowance for loan losses as % ending managed receivables	2.85%	2.62%	2.77%	2.97%	1.16%	1.10%	1.11%	1.16%	0.99%	0.97%	0.97%	0.97%
Net credit losses on managed receivables	32.6	7.2	119.8	109.4	166.1	144.2	132.6	121.9	88.0	70.5	59.6	42.2
Net credit losses as % of avg total managed receivables	0.83%	0.21%	0.80%	0.81%	1.27%	1.19%	1.18%	1.20%	0.97%	0.90%	0.90%	0.78%
Past due accounts as % of ending managed receivables	4.06%	2.10%	4.02%	2.83%	3.44%	3.61%	3.38%	3.10%	2.74%	2.62%	2.58%	2.60%
Average recovery rate	73.7%	64.7%	70.8%	53.5%	48.1%	47.7%	46.1%	47.4%	51.2%	54.2%	55.2%	58.4%
Weighted average credit score	704	695	703	706	710	706	707	706	702	701	702	696
Weighted average loan-to-value (LTV)	87.6%	90.2%	88.7%	92.0%	94.2%	94.8%	95.0%	95.0%	94.6%	94.2%	93.7%	94.8%
Weighed average term (in months)	66.6	66.3	66.6	66.0	66.1	66.0	65.8	65.8	65.9	65.4	65.4	65.9

Source: 10-K and 10-Q SEC Filings

Key observations:

- **Total managed receivables** is the size of the overall loan portfolio, whether retained by CAF or referred to third-party provider. Managed receivables have nearly tripled over the past decade.
- **Net loans originated and vehicle units financed** gives us a picture of the percentage of vehicle sales that CarMax is financing through CAF each year and the approximate amount of financing per vehicle. The penetration rate has been relatively stable over time.

- The weighted average contract rate line indicates that the interest rate charged on the overall portfolio has been increasing and recently reached 9%. The margin between the weighted average contract rate and CAF's funding costs for securitizations influences CAF income as a percentage of average managed receivables which was 5.6% in fiscal 2022 and has been on an uptrend.
- Credit scores, loan-to-value, and term. The weighted average credit score is around 700 which is considered to represent fair to good credit. The loan-to-value ratio is the amount of the loan relative to the selling price of the vehicle. This figure hovered around 95% for many years but has recently dipped below 90%, indicating more conservative underwriting. The weighted average loan term has held steady in the 65-66 month range.

CAF auto loan receivables are primarily funded through securitization transactions that are structured to legally isolate the auto loan receivables. Investors in the non-recourse notes have no recourse to CarMax assets beyond the securitized receivables plus the amounts on deposits in reserve accounts and restricted cash held by CAF. In addition to securitization, CAF has access to warehouse facilities to fund non-recourse notes. As of May 31, 2022, there were \$15.8 billion of non-recourse notes payable related to securitizations.

While the mechanics of CAF are complex, we can draw some conclusions based on the data and CarMax's history over the years. First, it is apparent that CAF is integral to CarMax's ability to successfully sell cars through the retail channel. Given the fact that most customers require financing, it is critical to have a financing unit capable of either funding loans directly or referring customers to a third party. Second, securitized funding is very important to CAF's operations. Auto loan receivables have grown significantly in support of the company's overall expansion and funding for these receivables must continue to be available to facilitate future growth.

The inflation of used vehicle prices coupled with growing unit volume has led to an increase in auto loan receivables and a commensurate increase in securitizations. Continued access to the securitization market is critical for CarMax's business model.

One side-effect of the recent price appreciation of used vehicles is that fewer customers are "upside-down" on their loans at any given point in time, meaning that it is less common for customers to owe more on their loan than the value of their vehicle. This has increased the average recovery rate when vehicles are repossessed and reduced loan losses. The array of stimulus programs, including direct payments to individuals, also ameliorated the negative effects of the brief pandemic recession.

Balance Sheet and Capital Allocation

The following exhibit is a condensed version of the CarMax balance sheet over the past decade:

CarMax, Inc. Balance Sheets						Fiscal \	fears				
	Q1 F23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Figures in thousands except per share amounts	5/31/22	2/28/22	2/28/21	2/29/20	2/28/19	2/28/18	2/28/17	2/29/16	2/28/15	2/28/14	2/28/13
CONDENSED BALANCE SHEET DATA											
Assets											
Cash	95,313	102,716	132,319	58,211	46,938	44,525	38,416	37,394	27,606	627,901	449,364
Restricted Cash	531,344	548,099	496,415	481,043	440,669	399,442	380,353	343,829	294,122	259,299	224,287
Inventory	4,691,085	5,124,569	3,157,159	2,846,416	2,519,455	2,390,694	2,260,563	1,932,029	2,086,874	1,641,424	1,517,813
Other current assets	800,225	773,906	330,903	278,017	206,951	226,783	194,298	158,529	182,336	114,600	118,667
Total current assets	6,117,967	6,549,290	4,116,796	3,663,687	3,214,013	3,061,444	2,873,630	2,471,781	2,590,938	2,643,224	2,310,131
Auto loan receivables, net	15,672,605	15,289,701	13,489,819	13,551,711	12,428,487	11,535,704	10,596,076	9,536,892	8,435,504	7,147,848	5,895,918
Property and equipment, net	3,258,614	3,209,068	3,055,563	3,069,102	2,828,058	2,667,061	2,518,393	2,161,698	1,862,538	1,652,977	1,428,970
Other	1,289,508	1,290,205	879,363	797,682	247,309	222,063	291,257	311,205	309,221	263,108	253,583
Total Assets	26,338,694	26,338,264	21,541,541	21,082,182	18,717,867	17,486,272	16,279,356	14,481,576	13,198,201	11,707,157	9,888,602
Liabilities and Shareholders Equity											
Current liabilities	2,251,751	2,047,457	1,698,548	1,534,707	1,311,509	1,174,058	1,105,787	1,005,193	997,173	875,497	684,173
Long-term debt, excluding current portion	2,569,751	3,255,304	1,322,415	1,778,672	1,163,795	995,479	952,562	715,000	300,000	-	-
Non-recourse notes payable, excluding current portion	15,218,229	14,919,715	13,297,504	13,165,384	12,127,290	11,266,964	10,387,231	9,227,000	8,212,466	7,024,506	5,672,175
Other liabilities	898,326	880,349	858,461	834,544	758,245	732,922	725,196	629,597	531,777	490,157	513,087
Total Liabilities	20,938,057	21,102,825	17,176,928	17,313,307	15,360,839	14,169,423	13,170,776	11,576,790	10,041,416	8,390,160	6,869,435
Total shareholders' equity	5,400,637	5,235,439	4,364,613	3,768,875	3,357,028	3,316,849	3,108,580	2,904,786	3,156,785	3,316,997	3,019,167
Total liabilities and shareholders' equity	26,338,694	26,338,264	21,541,541	21,082,182	18,717,867	17,486,272	16,279,356	14,481,576	13,198,201	11,707,157	9,888,602
Shares outstanding	159,614	161,054	163,172	163,081	167,479	179,748	186,549	194,712	208,870	221,686	225,906
Book value per share	33.84	32.51	26.75	23.11	20.04	18.45	16.66	14.92	15.11	14.96	13.36
Change in shares outstanding	-1%	-1%	0%	-3%	-7%	-4%	-4%	-7%	-6%	-2%	-1%

Source: 10-K and 10-Q SEC Filings

CarMax carries significant debt, but it is important to note that the largest liability is represented by non-recourse notes which approximate the level of net auto loan receivables, as discussed more fully in the CAF section above. Other debt consists of a revolving credit facility, term loans, and senior notes. The composition of CarMax's debt is shown in the exhibit below:

(In thousands) Debt Description (1)	Maturity Date	As of May 31 2022	As	of February 28 2022
Revolving credit facility (2)	June 2024	\$ 660,500	\$	1,243,500
Term loan (2)	June 2024	300,000		300,000
Term loan (2)	October 2026	699,388		699,352
3.86% Senior notes	April 2023	100,000		100,000
4.17% Senior notes	April 2026	200,000		200,000
4.27% Senior notes	April 2028	200,000		200,000
Financing obligations	Various dates through February 2059	522,414		524,766
Non-recourse notes payable	Various dates through October 2028	15,764,161		15,466,799
Total debt		18,446,463		18,734,417
Less: current portion		(632,461)		(532,272)
Less: unamortized debt issuance costs		(26,022)		(27,126)
Long-term debt, net		\$ 17,787,980	\$	18,175,019

 $^{^{(}l)}$ Interest is payable monthly, with the exception of our senior notes, which are payable semi-annually.

Source: CarMax Fiscal Q1 2023 10-Q, Note 10

CarMax has produced significant free cash flow over the years but has not paid a dividend. Instead, the company has been a regular repurchaser of its shares, as we can see from the declining share count over the past decade. Share count stood at 159.6 million on May 31, 2022, down from 225.9 million on February 28, 2013.

⁽²⁾ Borrowings accrue interest at variable rates based on the Eurodollar rate (LIBOR), or the successor benchmark rate, the federal funds rate, or the prime rate, depending on the type of borrowing.

In order to understand CarMax's cash generation capabilities, we need to address a technical issue related to how changes in auto loan receivables and changes in the securitizations supporting those receivables are categorized. In the company's consolidated statement of cash flows, changes in auto loan receivables are treated as cash flows from operating activities whereas changes in non-recourse notes payable funding those receivables are treated as cash flows from financing activities.

In my opinion, we need to consider changes in non-recourse notes payable to be *operating cash flows*, netted against changes in the auto loan receivables portfolio, as these are essentially both operating activities for CAF and the notes payable are non-recourse beyond the auto loan receivable portfolio and restricted cash.

In the exhibit below, I show cash flow from operations, as reported under GAAP, along with an adjusted cash flow from operations incorporating the adjustment.

	3 Months					For Fiscal Y	ear ended Fel	28 or 29			
Figures in thousands	5/31/22	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
SELECTED CASH FLOW DATA:											
Operating activities:											
Repoted cash flow from operations	530,952	(2,549,450)	667,760	(236,606)	162,971	(80,550)	(455,311)	(148,893)	(968,130)	(613,163)	(778,441)
Add: net issuances of non-recourse notes payable	297,363	1,701,990	151,535	1,077,868	890,790	902,189	1,214,675	1,057,121	1,222,185	1,393,354	1,171,001
Adjusted cash flow provided by operating activities:	828,315	(847,460)	819,295	841,262	1,053,761	821,639	759,364	908,228	254,055	780,191	392,560
Investing activities:											
Capital expenditures	(94,808)	(308,534)	(164,536)	(331,896)	(304,636)	(296,816)	(418,144)	(315,584)	(309,817)	(310,317)	(235,707)
Acquisition of Edmunds	-	(241,563)	-	-	-	-	-	-	-	-	-
Other investing activities	(4,230)	26,352	36,353	(57,468)	(3,877)	(5,047)	(1,815)	(63,211)	(50,927)	(26,364)	(19,567)
Total investing activities	(99,038)	(523,745)	(128,183)	(389,364)	(308,513)	(301,863)	(419,959)	(378,795)	(360,744)	(336,681)	(255,274)
Financing activities:											
Net increase (decrease) in debt excluding non-recourse notes payable	(589,864)	1,911,472	(481,341)	56,616	151,839	26,304	222,516	401,539	309,013	227	(588)
Stock repurchases	(162,974)	(576,478)	(229,938)	(567,747)	(904,726)	(579,570)	(564,337)	(983,941)	(924,328)	(313,394)	(203,405)
Stock issuance	3,443	79,805	143,148	124,397	58,130	73,520	59,869	47,038	89,810	45,146	63,396
Other financing activities	(2,925)	(11,923)	(7,424)	(4,151)	(10,012)	(8,997)	(10,817)	15,719	31,899	3,048	10,017
Total financing activities (adjusted)	(752,320)	1,402,876	(575,555)	(390,885)	(704,769)	(488,743)	(292,769)	(519,645)	(493,606)	(264,973)	(130,580)
Increase (decrease) in cash and cash equivalents	(23,043)	31,671	115,557	61,013	40,479	31,033	46,636	9,788	(600,295)	178,537	6,706
Free cash flow (Adjusted cash flow from operations - capex)	733.507	(1,155,994)	654.759	509.366	749.125	524.823	341.220	592,644	(55,762)	469.874	156,853

Source: 10-K and 10-Q SEC Filings and Author's estimates and calculations

In the interest of conservatism, my free cash flow estimate deducts the *full amount* of capex from adjusted cash flow from operations even though a portion of capex is attributable to expansion of retail stores over the years. In fiscal 2022, CarMax made its first-ever acquisition when it purchased Edmunds for \$241.6 million.

We can see strong free cash flow generation over time with the exception of fiscal 2022. During fiscal 2022, inventory increased by nearly \$2 billion due to a combination of rapid inflation in used vehicle prices and to support higher sales volume. This increase in inventory was funded by taking on additional long-term debt. As I noted in my article on the automobile industry earlier this month, the rate of inflation in used vehicle prices has decreased in recent months. However, if there is another bout of high inflation in used vehicles, free cash flow could be negatively affected.

From fiscal 2013 through the first quarter of fiscal 2023, CarMax generated \$3.5 billion of estimated free cash flow while long-term debt increased by \$2 billion. During this period, the company used \$6 billion to repurchase shares and raised \$788 million through new stock issuance. In April, CarMax's board expanded its share repurchase program by an additional \$2 billion.¹⁸

Although not specific to CarMax, I should note that a new 1% excise tax on stock repurchases will take effect in 2023. It is unlikely that a 1% tax will change management's calculations regarding returning cash via repurchases. However, the tax does slightly reduce the advantage of returning cash to shareholders via repurchases rather than dividends. CarMax has never paid a cash dividend.

Growth Opportunities and Risks

CarMax is the largest retailer of used vehicles in the United States but has a relatively low market share due to the fragmented nature of the industry. The primary ways to achieve growth are to increase market share in regions where the company already operates and to move into new markets. For example, in fiscal 2023, the company plans to move into the New York City metro area by opening three retail stores.

Management is forecasting growth over the next three fiscal years. CEO Bill Nash made the following remarks during an earnings call on April 12, 2022:

"We're revising our FY '26 targets to reflect a range of 2 million to 2.4 million combined units with revenue between \$33 billion and \$45 billion. These ranges reflect the macro factors we had earlier that could result in ongoing volatility in consumer demand and vehicle pricing. In regard to market share, I'm excited for the future and confident that we will expand it beyond 5% by the end of calendar 2025."

Although CarMax has a proven model and has been increasing its online capabilities significantly in recent years, to the point where customers can purchase a vehicle entirely online and have it delivered without ever setting foot in a dealership, there is a potential for disruption due to online-only rivals.

Assessment of the risk level of online-only competition is subjective and may involve generational differences in consumer behavior. From my perspective, buying a vehicle is something that most people do rarely. For example, in the 33 years since I obtained a driver's license, I have owned five vehicles. Other than buying a home, purchasing a vehicle is typically the most significant transaction most consumers will make and part of the reason it is intimidating is because it happens rarely.

Consumers typically dislike purchasing a vehicle because it is an unpleasant and time consuming hassle. By removing the haggling from transactions and making pricing transparent for trade-ins, the cost of a vehicle, and financing, CarMax has eliminated most of the pain points consumers hate about car shopping while also making it possible to see and test drive a vehicle in person before making a purchase. To me, this seems like the best of both the online and physical worlds.

It is true that Carvana offers consumers a seven-day money back guarantee and permits buyers to take a car for a short test drive before accepting delivery. However, CarMax offers the ability to see the vehicle in person, to take it for an overnight "test drive" before making a purchase, and allows returns for the first thirty days.

I have reviewed the CarMax and Carvana websites and find them similar in terms of being able to view inventory and take initial steps to make a purchase. A customer can execute the transaction online with both CarMax and Carvana, but with CarMax has the additional option of visiting a dealership to see and drive the vehicle in person before making the purchase. If a typical consumer buys a car every five or six years, it doesn't seem like a huge

issue to go into a dealership as a final checkpoint. In fact, providing that option seems like a strong competitive advantage for CarMax.

It must be noted that many transactions that initially seemed implausible to complete online have, in fact, moved online over the past two decades. If younger generations feel comfortable purchasing vehicles sight-unseen, then retailers that lack a physical retail presence could have a cost advantage. However, it is important to understand that online-only automobile retailers must still maintain inventory and operate reconditioning facilities. Carvana also maintains "vending machines" that allow customers to pick up vehicles rather than have them delivered.

A secondary risk involves automated vehicles. Greater automation, including the ability of a car to drive itself most of time, could dramatically change the way in which individuals interact with vehicles. It is plausible to believe that private vehicle ownership will decline especially in urban and suburban locations. Large fleets of automated vehicles could transport people to their destination efficiently. It would no longer be necessary for individuals to incur the significant cost of vehicle ownership and having an expensive asset sit idle 95 percent of the time. However, despite Elon Musk's aggressive claims, full automation of the vehicle fleet in the United States seems unlikely to occur for well over a decade, if not much longer.¹⁹

Conclusion

CarMax disrupted the used vehicle market and grew rapidly during the 1990s by reducing the major pain points facing consumers. As an independent, publicly traded company over the past twenty years, CarMax has provided shareholders with attractive long term returns in a tax efficient manner by avoiding dividends and returning capital via stock repurchases. Although the company is now the largest retailer of used vehicles in the United States, it is clear that the overall market is large enough for substantial future growth.

Management has taken the risk of online-only entrants seriously and now allows customers to complete the process of trading in a vehicle, purchasing a vehicle, and arranging financing entirely online. The omni-channel approach makes it possible to begin the process online and complete it at a retail location where vehicles can be seen and driven prior to making a final commitment. Given the rarity of purchasing a vehicle, it seems likely that most consumer will prefer to inspect and drive a five-figure purchase, although this might be a matter of generational preference.

At a market capitalization of \$16.2 billion, the valuation is not particularly demanding given the company's recent growth trajectory and trailing net income of \$967 million over the past four fiscal quarters. The business model seems sound and sustainable, but investors need to avoid complacency and keep a close watch on consumer acceptance of online-only automobile retailers.

According to Alan Wurtzel, Circuit City was destroyed by hubris and complacency. CarMax is, in a sense, the surviving "child" of Circuit City and its management must remain alert to the risk of disruption to its own business model in the future.

Notes

- ¹ Circuit City Stores Fiscal 1996 10-K
- ² Circuit City Stores Fiscal 1997 10-K, Note 1
- ³ Circuit City Stores Fiscal 2002 10-K, CarMax Statement of Earnings
- ⁴ Circuit City Stores Press Release dated October 1, 2001.
- ⁵ <u>The Rise and Fall of Circuit City</u> by Jessie Romero, published in 2013, provides a brief history of the company. Also see <u>'Undead' Circuit City Won't Rise If It Forgets What Killed It</u> by Rodd Wagner, published in 2016, for some interesting details about the company's history.
- ⁶ Store count retrieved from https://www.carmax.com/stores on August 13, 2022.
- ⁷ All financial data comes from the CarMax's SEC filings. CarMax operates on a non-standard fiscal year which ends on February 28 or 29. The figures cited are for the four fiscal quarters that ended on May 31, 2022. Total vehicles sold of 1,605,619 during this period were comprised of 894,489 vehicles sold at retail and 711,130 sold at wholesale via auctions.
- ⁸ The Rise and Fall of Circuit City by Jessie Romero.
- ⁹ Alan Wurtzel wrote a history of Circuit City, <u>From Good to Great to Gone</u>, which was published in 2012. I have not read the book but have added it to my list.
- ¹⁰ Carvana's 2021 10-K, Business Description, p. 14
- ¹¹ CarMax CEO Bill Nash's Fiscal 2022 Letter to Shareholders
- ¹² Estimated Monthly Used-Vehicle SAAR and Volume published by Cox Automotive on July 15, 2022. The figures for July 2021 to June 2022 were taken from a <u>data download</u> retrieved on August 14, 2022.
- ¹³ Edmunds is a leading online resource for automotive research which was acquired by CarMax in 2021. The Edmunds "true market value" appraisal feature has a good reputation for accurately estimating used car values.
- ¹⁴ If anything, the CarMax integration with Edmunds might be a little too complete. I had to go through a couple of extra steps to obtain a "true market value" estimate without asking for a CarMax instant offer. There is a risk that consumers will no longer view Edmunds as a trustworthy source of objective data if the integration with CarMax becomes too aggressive.
- ¹⁵ CarMax Fiscal Q1 2023 earnings call, June 24, 2022.
- ¹⁶ CEO Bill Nash: "Wholesale volume was also pressured by our decision to reallocate some older vehicles from wholesale to retail to meet consumer demand for lower price vehicles.", <u>Fiscal Q1 2023 earnings call</u>, June 24, 2022.
- ¹⁷ For management's perspective on CAF, I recommend reading the <u>CarMax Lending Platform</u> slides from the company's virtual analyst day held in January 2022.
- ¹⁸ CarMax Q4 2022 Earnings Call, April 12, 2022.
- ¹⁹ In 2017, I wrote <u>The Autonomous Vehicle Revolution</u> to discuss some of these trends. If anything, over the past five years I have grown more skeptical of the prospects for automation to "revolutionize" vehicle ownership anytime soon.

Financial Statements

Balance Sheets – 2012 to 2022

	Q2 FY23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Figures in thousands except per share amounts	8/31/22	2/28/22	2/28/21	2/29/20	2/28/19	2/28/18	2/28/17	2/29/16	2/28/15	2/28/14	2/28/13	2/29/12
ASSETS												
Current assets:												
Cash and cash equivalents	56,772	102,716	132,319	58,211	46,938	44,525	38,416	37,394	27,606	627,901	449,364	442,658
Restricted cash from collections on auto loan receivables	533,253	548,099	496,415	481,043	440,669	399,442	380,353	343,829	294,122	259,299	224,287	204,314
Accounts receivable, net	402,452	560,984	239,070	191,090	139,850	133,321	152,388	132,171	137,690	79,923	91,961	86,434
Auto loan receivables held for sale	-	-	-	-	-	-	-	-	-	-	-	-
Retained interest in securitized receivables	-	-	-	-	-	-	-	-	-	-	-	-
Inventory	4,671,685	5,124,569	3,157,159	2,846,416	2,519,455	2,390,694	2,260,563	1,932,029	2,086,874	1,641,424	1,517,813	1,092,592
Deferred income taxes	-	-	-	-	-	-	-	-	-	7,866	5,193	9,938
Other current assets	208,297	212,922	91,833	86,927	67,101	93,462	41,910	26,358	44,646	26,811	21,513	17,512
Total current assets	5,872,459	6,549,290	4,116,796	3,663,687	3,214,013	3,061,444	2,873,630	2,471,781	2,590,938	2,643,224	2,310,131	1,853,448
Auto loan receivables, net	15,961,213	15,289,701	13,489,819	13,551,711	12,428,487	11,535,704	10,596,076	9,536,892	8,435,504	7,147,848	5,895,918	4,959,847
Property and equipment, net	3,312,605	3,209,068	3,055,563	3,069,102	2,828,058	2,667,061	2,518,393	2,161,698	1,862,538	1,652,977	1,428,970	1,278,722
Deferred income taxes	93,057	120,931	164,261	89,842	61,346	63,256	150,962	161,862	175,738	152,199	145,875	133,134
Operating lease assets	530,285	537,357	431,652	449,094	-	-	-	-	-	-	-	-
Goodwill	141,258	141,258	-	-	-	-	-	-	-	-	-	-
Other assets	559,666	490,659	283,450	258,746	185,963	158,807	140,295	149,343	133,483	110,909	107,708	106,392
TOTAL ASSETS	26,470,543	26,338,264	21,541,541	21,082,182	18,717,867	17,486,272	16,279,356	14,481,576	13,198,201	11,707,157	9,888,602	8,331,543
LIABILITIES AND SHAREHOLDERS' EQUITY		, ,				, ,	, ,			, ,		
Current liabilities:												
Accounts payable	928.749	937,717	799.333	737.144	593.171	529.733	494,989	441,746	454,810	427,492	336.721	324.827
Accrued expenses and other current liabilities	482,361	533,271	415,465	331,738	316,215	278,771	266,128	245,909	250,307	202,588	147,821	128,973
Accrued income taxes	-	-	218	1.389	3,784		1.404	2.029	1,554	2,438	222	3,125
Deferred income taxes	_	_		-		_	-,			2,100		
Current portion of operating lease liabilities	48,783	44,197	30,953	30.980	_	_	-	_	_	_	_	-
Short-term debt			- 30,555	40	1,129	127	62	428	785	582	355	943
Current portion of long-term debt	112,504	11.203	9.927	9.251					10,000	- 302	-	-
Current portion of finance and capital lease obligations	-	11,203	5,527	-	12,166	9,994	9,491	14,331	21,554	18,459	16,139	14,108
Current portion of non-recourse notes payable	559.792	521.069	442,652	424.165	385.044	355,433	333,713	300,750	258,163	223,938	182,915	174,337
Total current liabilities	2,132,189	2,047,457	1,698,548	1,534,707	1,311,509	1,174,058	1,105,787	1,005,193	997,173	875,497	684,173	646,313
Long-term debt, excluding current portion	2,511,417	3,255,304	1,322,415	1,778,672	1,163,795	995,479	952,562	715,000	300,000	-	-	
Finance and capital lease obligations, excluding current portion	-	-	-	-	515,240	490,369	486,645	400,323	306,284	315,925	337,452	353,566
Non-recourse notes payable, excluding current portion	15,534,801	14,919,715	13,297,504	13,165,384	12,127,290	11,266,964	10,387,231	9,227,000	8,212,466	7,024,506	5,672,175	4,509,752
Operating lease liabilities, excluding current portion	512,542	523,269	423,618	440,671	-	-	-	-	-	- 7,02 1,000	-	- 1,000,702
Other liabilities	365,367	357,080	434,843	393.873	243,005	242.553	238,551	229,274	225.493	174,232	175,635	148,800
Total liabilities	21,056,316	21,102,825	17,176,928	,-	15,360,839	14,169,423	13,170,776		10,041,416	8,390,160	6,869,435	5,658,431
Shareholders' equity:	21,030,310	21,102,023	17,170,320	17,313,307	13,300,033	14,103,423	13,170,770	11,570,750	10,041,410	0,330,100	0,005,455	3,030,431
Common stock	79,022	80,527	81,586	81,541	83,739	89,874	93,274	97,356	104,435	110,843	112,953	113,559
Capital in excess of par value	1,684,408	1,677,268	1,513,821	1,348,988	1,237,153	1,234,047	1,188,578	1,130,822	1,123,520	1,038,209	972,250	877,493
Accumulated other comprehensive income (loss)	31,999	(46,422)	(118,691)	(150,071)	(68,010)	(54,312)	(56,555)	(70,196)	(65,391)	(46,271)	(59,808)	(62,459)
Retained earnings	3,618,798	3,524,066	2,887,897	2,488,417	2,104,146	2,047,240	1,883,283	1,746,804	1,994,221	2,214,216	1,993,772	
Total shareholders' equity	5,414,227	5,235,439	4,364,613	3,768,875	3,357,028	3,316,849	3,108,580	2,904,786	3,156,785	3,316,997	3,019,167	
Total Shareholders equity	26,470,543	26,338,264	· ·	· ·	18,717,867	17,486,272	16,279,356	14,481,576	· ·		9,888,602	· ·

Income Statements – 2012 to Q2 2022

	6 Ma	nths					Fiscal Years e	nding on Febr	ruary 28 or 29				
Figures in thousands except per share amounts	8/31/22	8/31/21	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Sales and operating revenues:													
Used vehicle sales	13,298,575	12,261,710	24,437,095	15,713,583	17,169,462	15,172,772	14,392,360	13,270,662	12,439,401	11,674,520	10,306,256	8,746,965	7,826,911
New vehicle sales (included in "other") after FY15	-	-	-	-	-	-	-	-	-	240,004	212,036	207,726	200,584
Wholesale vehicle sales	3,806,843	3,075,929	6,763,813	2,668,753	2,500,042	2,392,992	2,181,156	2,082,464	2,188,267	2,049,133	1,823,425	1,759,555	1,721,647
Other sales and revenues	351,006	348,319	699,504	567,813	650,483	607,336	546,693	521,992	522,007	305,059	232,582	248,572	254,457
Net sales and operating revenues	17,456,424	15,685,958	31,900,412	18,950,149	20,319,987	18,173,100	17,120,209	15,875,118	15,149,675	14,268,716	12,574,299	10,962,818	10,003,599
Cost of sales:													
Used vehicle cost of sales	12,240,108	11,158,179	22,398,651	14,124,715	15,349,401	13,544,033	12,824,741	11,818,951	11,100,763				
Wholesale vehicle cost of sales	3,474,519	2,701,072	5,999,277	2,245,431	2,045,680	1,961,959	1,788,704	1,719,821	1,800,167	12,381,189	10,925,598	9,498,456	8,624,838
Other cost of sales	129,261	86,714	214,942	200,878	202,566	186,517	177,905	153,052	229,985				
Total cost of sales	15,843,888	13,945,965	28,612,870	16,571,024	17,597,647	15,692,509	14,791,350	13,691,824	13,130,915	12,381,189	10,925,598	9,498,456	8,624,838
Gross profit	1,612,536	1,739,993	3,287,542	2,379,125	2,722,340	2,480,591	2,328,859	2,183,294	2,018,760	1,887,527	1,648,701	1,464,362	1,378,761
CarMax Auto Finance Income	387,342	441,764	801,507	562,810	456,030	438,690	421,182	368,984	392,036	367,294	336,167	299,267	262,185
Selling general and administrative expenses	1,322,781	1,128,355	2,325,220	1,704,419	1,750,168	1,730,275	1,617,051	1,488,504	1,351,935	1,257,725	1,155,215	1,031,034	940,786
Depreciation and amortization	113,340	102,679	211,956	194,356	189,899			In	cluded in SG8	&A			
Interest expense	61,520	42,944	94,095	86,178	83,007	75,792	70,745	56,416	36,358	24,473	30,834	32,357	33,714
Other expense (income)	(1,940)	(27,359)	(34,568)	(8,275)	(5,690)	408	(1,363)	953	12,559	3,292	1,497	(1,113)	(464)
Earnings before income taxes	504,177	935,138	1,492,346	965,257	1,160,986	1,112,806	1,063,608	1,006,405	1,009,944	969,331	797,322	701,351	666,910
Income tax provision	126,007	213,115	341,049	218,338	272,553	270,393	399,496	379,435	386,516	371,973	304,736	267,067	253,115
Net earnings	378,170	722,023	1,151,297	746,919	888,433	842,413	664,112	626,970	623,428	597,358	492,586	434,284	413,795
Weighted average common shares, diluted	161,015	165,969	165,176	165.133	166,820	175,884	184.470	192,215	205,540	218,691	227,584	231,823	230,721
Net earnings per share, diluted	2.35	4.35	6.97	4.52	5.33	4.79	3.60	3.26	3.03	2.73	2.16	1.87	1.79
Gross margin	9.2%	11.1%	10.3%	12.6%	13.4%	13.6%	13.6%	13.8%	13.3%	13.2%	13.1%	13.4%	13.8%
Net margin	2.2%	4.6%	3.6%	3.9%	4.4%	4.6%	3.9%	3.9%	4.1%	4.2%	3.9%	4.0%	4.1%
CarMax auto finance income as % of Pre-tax earnings	77%	47%	54%	58%	39%	39%	40%	37%	39%	38%	42%	43%	39%
SG&A as % of net sales	8.2%	7.8%	8.0%	10.0%	9.5%	9.5%	9.4%	9.4%	8.9%	8.8%	9.2%	9.4%	9.4%
Change in sales	11%		68%	-7%	12%	6%	8%	5%	6%	13%	15%	10%	11%

Income Statements – Q1 2020 to Q2 2022

Figures in thousands except per share amounts	Fiscal	2023		Fiscal	2022			Fiscal	2021			Fiscal	2020	
Quarters Ending on	8/31/22	5/31/22	2/28/22	11/30/21	8/31/21	5/31/21	2/28/21	11/30/20	8/31/20	5/31/20	2/29/20	11/30/19	8/31/19	5/31/19
Sales and operating revenues:														
Used vehicle sales	6,284,085	7,014,490	5,739,795	6,435,590	6,104,366	6,157,344	4,328,400	4,209,748	4,389,233	2,786,202	4,253,699	4,028,811	4,346,295	4,540,657
Wholesale vehicle sales	1,690,326	2,116,517	1,765,601	1,922,283	1,701,572	1,374,357	678,457	828,362	819,082	342,852	548,324	610,983	678,286	662,449
Other sales and revenues	170,392	180,614	181,299	169,886	182,421	165,898	157,400	146,834	163,851	99,728	160,467	150,234	176,570	163,212
Net sales and operating revenues	8,144,803	9,311,621	7,686,695	8,527,759	7,988,359	7,697,599	5,164,257	5,184,944	5,372,166	3,228,782	4,962,490	4,790,028	5,201,151	5,366,318
Cost of sales:														
Used vehicle cost of sales	5,789,098	6,451,010	5,313,235	5,927,237	5,597,842	5,560,337	3,900,840	3,791,134	3,908,065	2,524,676	3,799,956	3,615,704	3,889,917	4,043,824
Wholesale vehicle cost of sales	1,549,669	1,924,850	1,588,102	1,710,103	1,512,559	1,188,513	575,836	713,961	674,712	280,922	444,107	504,177	560,906	536,490
Other cost of sales	68,891	60,370	74,369	53,859	62,474	24,240	46,212	48,419	37,246	69,001	45,570	56,500	56,875	43,621
Total cost of sales	7,407,658	8,436,230	6,975,706	7,691,199	7,172,875	6,773,090	4,522,888	4,553,514	4,620,023	2,874,599	4,289,633	4,176,381	4,507,698	4,623,935
Gross profit	737,145	875,391	710,989	836,560	815,484	924,509	641,369	631,430	752,143	354,183	672,857	613,647	693,453	742,383
CarMax Auto Finance Income	182,869	204,473	193,775	165,968	200,033	241,731	188,220	176,445	147,195	50,950	111,907	114,033	114,131	115,959
Selling general and administrative expenses	666,041	656,740	620,935	575,930	574,286	554,069	506,824	430,781	441,923	324,891	484.728	484,848	480,831	489,660
Depreciation and amortization	57,692	55,648	54,849	54,428	52,789	49,890	49,230	48,016	48,285	48,825	404,720	404,040	460,651	469,000
Interest expense	32,745	28,775	26,848	24,303	22,410	20,534	20,289	19,462	22,469	23,958	22,307	21,843	21,073	17,784
Other expense (income)	(4,039)	2,099	885	(8,094)	(1,782)	(25,577)	(9,003)	(887)	(1,680)	3,295	1,096	(6,570)	143	(359)
Earnings before income taxes	167,575	336,602	201,247	355,961	367,814	567,324	262,249	310,503	388,341	4,164	276,633	227,559	305,537	351,257
Income tax provision	41,670	84,337	41,411	86,523	82,547	130,568	52,304	75,203	91,645	(814)	61,699	54,403	71,938	84,513
Net earnings	125,905	252,265	159,836	269,438	285,267	436,756	209,945	235,300	296,696	4,978	214,934	173,156	233,599	266,744
Weighted average common shares, diluted	160,218	161,798	163,869	164,873	165,643	166,295	165,596	165,773	165.623	163,537	165.810	166,534	167.272	167.643
Net earnings per share, diluted	0.79	1.56	0.98	1.63	1.72	2.63	1.27	1.42	1.79	0.03	1.30	1.04	1.40	1.59
Gross margin	9.1%	9.4%	9.2%	9.8%	10.2%	12.0%	12.4%	12.2%	14.0%	11.0%	13.6%	12.8%	13.3%	13.8%
Net margin	1.5%	2.7%	2.1%	3.2%	3.6%	5.7%	4.1%	4.5%	5.5%	0.2%	4.3%	3.6%	4.5%	
CarMax auto finance income as % of Pre-tax earnings	109%	61%	96%	47%	54%	43%	72%	57%	38%	1224%	40%	50%	37%	33%
SG&A as % of net sales	8.2%	7.1%	8.1%	6.8%	7.2%	7.2%	9.8%	8.3%	8.2%	10.1%	9.8%	10.1%	9.2%	9.1%

CarMax Auto Finance Income – 2011 to Q2 2022

Figures in millions	3 Months		Fiscal Years ending on February 28 or 29											
	5/31/22	5/31/21	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Interest margin:														
Interest and fee income	346.7	310.3	1,296.8	1,142.0	1,104.1	972.9	856.6	762.0	682.9	604.9	548.0	495.3	448.7	419.1
Interest expense	(48.8)	(65.8)	(228.8)	(314.1)	(358.1)	(289.3)	(215.0)	(171.4)	(127.7)	(96.6)	(90.0)	(95.1)	(106.1)	(133.8)
Total interest margin	297.9	244.5	1,068.0	827.9	746.0	683.6	641.6	590.6	555.2	508.3	458.0	400.2	342.6	285.3
Provision for loan losses	(57.8)	24.4	(141.7)	(160.7)	(185.7)	(153.8)	(137.6)	(150.6)	(101.2)	(82.3)	(72.2)	(56.2)	(36.4)	(27.7)
Total interest margin after provision for loan losses	240.1	268.9	926.3	667.2	560.3	529.8	504.0	440.0	454.0	426.0	385.8	344.0	306.2	257.6
Total other income (expense)	-	-	-	(2.2)	-	(0.4)	0.4	-	(0.4)	-	0.1	-	1.5	7.5
Total direct expenses	(35.6)	(27.2)	(124.8)	(102.2)	(104.3)	(90.7)	(83.2)	(71.0)	(61.6)	(58.7)	(49.7)	(44.7)	(45.5)	(45.1)
CarMax Auto Finance income	204.5	241.7	801.5	562.8	456.0	438.7	421.2	369.0	392.0	367.3	336.2	299.3	262.2	220.0
Total averaged managed receivables	15,817.0	14,148.7	14,934.0	13,463.3	13,105.1	12,150.2	11,210.8	10,158.3	9,092.9	7,859.9	6,629.5	5,385.5	4,662.4	4,229.9
Net loans originated	2,446.8	2,483.4	9,371.2	6,395.0	7,089.7	6,330.1	5,962.2	5,643.3	5,171.0	4,727.8	4,183.9	3,445.3	2,842.9	2,147.4
Vehicle units financed	94,663	118,363	393,681	319,346	353,654	323,864	310,739	297,043	265,426	243,264	218,706	179,525	152,468	120,183
Net CAF penetration rate	39.3%	43.7%	42.6%	42.5%	42.5%	43.2%	43.1%	44.2%	42.8%	41.2%	40.9%	39.4%	36.7%	29.7%
Weighted average contract rate	9.0%	9.0%	8.5%	8.4%	8.4%	8.5%	7.8%	7.4%	7.3%	7.1%	7.0%	7.9%	8.8%	8.7%
Ending allowance for loan losses	458.2	379.5	433.0	411.1	157.8	138.2	128.6	123.6	94.9	81.7	69.9	57.3	43.3	38.9
CAF income as % avg managed receivables	5.2%	6.8%	5.4%	4.2%	3.5%	3.6%	3.8%	3.6%	4.3%	4.7%	5.1%	5.6%	5.6%	5.2%
Provision for loan loss as % avg managed rec	1.5%	-0.7%	0.9%	1.2%	1.4%	1.3%	1.2%	1.5%	1.1%	1.0%	1.1%	1.0%	0.8%	0.7%
Allowance for loan losses as % ending managed receivables	2.85%	2.62%	2.77%	2.97%	1.16%	1.10%	1.11%	1.16%	0.99%	0.97%	0.97%	0.97%	0.93%	0.92%
Net credit losses on managed receivables	32.6	7.2	119.8	109.4	166.1	144.2	132.6	121.9	88.0	70.5	59.6	42.2	32.0	47.5
Net credit losses as % of avg total managed receivables	0.83%	0.21%	0.80%	0.81%	1.27%	1.19%	1.18%	1.20%	0.97%	0.90%	0.90%	0.78%	0.69%	1.12%
Past due accounts as % of ending managed receivables	4.06%	2.10%	4.02%	2.83%	3.44%	3.61%	3.38%	3.10%	2.74%	2.62%	2.58%	2.60%	2.34%	2.80%
Average recovery rate	73.7%	64.7%	70.8%	53.5%	48.1%	47.7%	46.1%	47.4%	51.2%	54.2%	55.2%	58.4%	59.7%	58.4%
Weighted average credit score	704	695	703	706	710	706	707	706	702	701	702	696	Data do	oes not
Weighted average loan-to-value (LTV)	87.6%	90.2%	88.7%	92.0%	94.2%	94.8%	95.0%	95.0%	94.6%	94.2%	93.7%	94.8%	appear in 10-K	
Weighed average term (in months)	66.6	66.3	66.6	66.0	66.1	66.0	65.8	65.8	65.9	65.4	65.4	65.9	65.3	64.5

Cash Flow Statements – 2012 to 2022

	6 Months			2020		For Fiscal \	Year ended Fe	b 28 or 29	2015	2014	2013	2012	Cumulative FY12-Q123
Figures in thousands	8/31/22	2022	2021		2019	2018	2017	2016					
Operating activities:													
Net earnings	378,170	1,151,297	746,919	888,433	842,413	664,112	626,970	623,428	597,358	492,586	434,284	413,795	7,859,765
Adjustments to reconcile net earnings to net cash used in operating earnings:													
Depreciation and amortization	137,903	273,188	242,156	215,811	182,247	179,942	168,875	137,360	115,173	101,911	95,283	82,812	1,932,661
Share-based compensation expense	47,010	109,197	121,899	108,861	75,011	61,879	91,595	51,077	81,880	66,480	62,112	48,089	925,090
Provision for loan losses	133,343	141,692	160,703	185,695	153,848	137,591	150,598	101,199	82,343	72,212	56,168	36,439	1,411,831
Provision for cancellation reserves	59,208	114,928	72,235	89,272	63,937	62,749	64,120	77,118	70,987	76,746	31,667	22,840	805,807
Deferred income tax provision (benefit)	800	15,000	(35,787)	(1,102)	2,300	81,007	2,324	17,237	(4,299)	(17,185)	3,858	(872)	63,281
Loss on disposition of assets and other	9,713	(19,139)	(1,409)	3,507	2,825	1,298	4,169	13,136	3,852	2,707	1,945	2,817	25,421
Net decrease (increase) in:													-
Accounts receivable, net	158,532	(288,195)	(43,507)	(51,240)	(6,529)	19,067	(20,217)	5,519	(57,767)	12,038	(5,527)	33,163	(244,663)
Inventory	452,884	(1,967,432)	(323,318)	(326,961)	(128,761)	(130,131)	(328,534)	154,845	(445,450)	(123,611)	(425,221)	(43,115)	(3,634,805)
Other current assets	79,188	(80,790)	(50)	(19,843)	32,890	(34,620)	(2,781)	15,229	(16,947)	(3,019)	(3,252)	15,919	(18,076)
Auto loan receivables, net	(804,855)	(1,941,574)	(300,838)	(1,308,919)	(1,046,631)	(1,077,219)	(1,209,782)	(1,202,587)	(1,369,999)	(1,324,142)	(992,239)	(675,711)	(13,254,496)
Other assets	(31,703)	(32,272)	(12,862)	4,265	(7,230)	(2,361)	143	(160)	825	(6,754)	(1,722)	(6,986)	(96,817)
Net (decrease) increase in:													-
Accounts payable, accrued expenses and other current liabilities & acc inc tax	(74,986)	175,106	106,788	85,442	86,360	38,286	74,579	(55,187)	51,960	117,405	(575)	43,138	648,316
Other liabilities	(65,618)	(200,456)	(65,169)	(109,827)	(89,709)	(82,150)	(77,370)	(87,107)	(78,046)	(80,537)	(35,222)	(34,492)	(1,005,703)
Net cash used in operating activities	479,589	(2,549,450)	667,760	(236,606)	162,971	(80,550)	(455,311)	(148,893)	(968,130)	(613,163)	(778,441)	(62,164)	(4,582,388)
Investing activities:													
Capital expenditures	(204,463)	(308,534)	(164,536)	(331,896)	(304,636)	(296,816)	(418,144)	(315,584)	(309,817)	(310,317)	(235,707)	(172,608)	(3,373,058)
Proceeds from sales of assets	84	260	1,846	3	692	97	1,229	1,542	5,869	5,095	-	-	16,717
Increase in restricted cash from collections on auto loan receivables	-	-	-	-	-	-	-	(49,707)	(34,823)	(35,012)	(19,973)	(43,262)	(182,777)
Increase in restricted cash in reserve accounts	-	-	-	-	-	-	-	(12,264)	(16,556)	(10,403)	(13,385)	(12,364)	(64,972)
Release of restricted cash from reserve accounts	-	-	-	-	-	-	-	8,357	6,346	19,202	17,368	12,096	63,369
Proceeds from sale of business	-	12,298	29,911	-	-	-	-	-	-	-	-	-	42,209
Purchases of investments	(5,428)	(24,614)	(3,729)	(59,050)	(6,147)	(6,836)	(3,774)	-	-	-	-	-	(109,578)
Sales of investments	2,492	38,408	8,325	1,579	1,578	1,692	730	-	-	-	-	-	54,804
Business acquisition, net of cash acquired	-	(241,563)	-	-	-	-	-	-	-	-	-	-	
Purchases of money market securities, net	-	-	-	-	-	-	-	(6,168)	(8,604)	(3,661)	(2,139)	(678)	(21,250)
Purchases of trading securities	-	-	-	-	-	-	-	(5,295)	(3,814)	(2,051)	(31,756)	(2,638)	(45,554)
Sales of trading securities	-	-	-	-	-	-	-	324	655	466	30,318	52	31,815
Net cash used in investing activities	(207,315)	(523,745)	(128,183)	(389,364)	(308,513)	(301,863)	(419,959)	(378,795)	(360,744)	(336,681)	(255,274)	(219,402)	(3,588,275)
Financing activities:													
(Decrease) increase in short-term debt, net	-	-	(40)	(1,089)	1,002	65	(366)	(357)	203	227	(588)	(59)	(1,002)
Proceeds from issuances of long-term debt	2,412,900	7,684,400	1,754,300	6,277,600	4,314,500	4,203,150	2,974,600	2,057,100	985,000	-	-	-	32,663,550
Payments on long-term debt	(3,057,565)	(5,752,796)	(2,217,305)	(6,199,793)	(4,146,600)	(4,160,650)	(2,734,600)	(1,652,100)	(675,000)	-	-	-	(30,596,409)
Cash paid for debt issuance costs	(10,240)	(20,132)	(18,296)	(20,102)	(17,063)	(16,261)	(17,118)	(3,104)	(1,190)	-	-	-	(123,506)
Payments on finance and capital lease obligations	(9,883)	(11,923)	(7,424)	(4,151)	(10,012)	(8,997)	(10,817)	(16,417)	(18,243)	(19,596)	(14,083)	(12,560)	(144,106)
Issuances of non-recourse notes payable	8,230,501	14,328,298	10,805,546	11,786,432	10,892,502	10,198,962	9,610,035	9,553,805	7,783,000	6,907,000	5,851,000	5,130,000	111,077,081
Payments on non-recourse notes payable	(7,576,056)	(12,626,308)	(10,654,011)	(10,708,564)	(10,001,712)	(9,296,773)	(8,395,360)	(8,496,684)	(6,560,815)	(5,513,646)	(4,679,999)	(4,459,572)	(98,969,500)
Repurchase and retirement of common stock	(325,168)	(576,478)	(229,938)	(567,747)	(904,726)	(579,570)	(564,337)	(983,941)	(924,328)	(313,394)	(203,405)	-	(6,173,032)
Equity issuances	13,282	79,805	143,148	124,397	58,130	73,520	59,869	47,038	89,810	45,146	63,396	15,577	813,118
Excess tax benefits from share-based payment arrangements	-	-	-	-	-	-	-	32,136	50,142	22,644	24,100	9,717	138,739
Net cash provided by financing activities	(322,229)	3,104,866	(424,020)	686,983	186,021	413,446	921,906	537,476	728,579	1,128,381	1,040,421	683,103	8,684,933
Increase (decrease) in cash and cash equivalents	(49,955)	31,671	115,557	61,013	40,479	31,033	46,636	9,788	(600,295)	178,537	6,706	401,537	.,,
Cash and cash equivalents at beginning of year	803,618	771,947	656,390	595,377	554,898	523,865	477,229	27,606	627,901	449,364	442,658	41,121	
Cash and cash equivalents at end of year	753,663	803,618	771,947	656,390	595,377	554,898	523,865	37,394	27,606	627,901	449,364	442,658	_