CARMAX STRATEGY REPORT



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EXECUTIVE SUMMARY

CarMax (NYSE: KMX) is the largest used car retailer in the United States. Founded in 1993 as a subsidiary of electronics retailer Circuit City, the company differentiates itself from competitors in the used car space with its wide selection of high quality vehicles and a customer-oriented sales process that includes "no-haggle" pricing. CarMax has had its own publicly traded stock since 1997 and has been a standalone company since October 2002. Although CarMax specializes in late-model used vehicles (vehicles 0 to 6 years old, typically priced between \$12,000 and \$32,000, constituted 90% of CarMax's used vehicle sales in fiscal 2012), the company also sells older used vehicles at retail, lower-quality used vehicles at wholesale, and three makes of new vehicles at four of the company's approximately 116 locations. In addition to new and used vehicles, CarMax also provides a variety of complementary products and services, including the CarMax Auto Finance operation, the purchase of vehicles from consumers, and vehicle repairs.

Having opened its first store in 1993, CarMax has grown rapidly to over 116 superstores. The company anticipates opening 10 new locations in fiscal 2013, as well as 10-15 superstores each year from fiscal 2014-2016. Since fiscal 2007, the company has grown revenues by roughly 34%, and net income has risen by 114% in the same period. In fiscal 2012, net earnings rose 10% to \$413.8 million. CarMax continues to grow rapidly, as the company had stores in markets covering only about 50% of the US population in February 2012.

CarMax's rapid expansion and innovative business model have been the key elements of the company's success. The company was the first to pioneer "no-haggle" prices in a used car sales environment, and it was among the earliest to rely heavily on Internet traffic to its website for selling cars. In recent years, CarMax has continued this tradition of innovation with its mobile application, which is essentially its website content optimized for the smartphone platform.



COMPANY BACKGROUND

The CarMax story began in 1990 when top executives Rick Sharp and Austin Ligon of now-defunct retail electronics chain Circuit City sought to find new growth opportunities in retail. The used car market looked promising, as there were no retailers with national scale in that segment. When the Circuit City board of directors approved \$50 million in funding for the new venture in December 1991, the CarMax idea started to become a reality. Richard Sharp became the chairman and CEO.

After extensive testing with focus groups in 1992, the CarMax founders realized how dissatisfying the traditional car-buying experience was for a typical consumer. Circuit City VP of Corporate Planning Austin Ligon decided to reinvent the car-buying process from the ground up. Even from the beginning, CarMax was destined to be a revolutionary car-buying experience: free of haggling, transparent, convenient. In September 1993, the CarMax idea became a reality with the opening of the first location in Richmond, Virginia. The company initially took a conservative approach to growth in 1994 and 1995, as it opened only three new locations during those years.

1996 proved to be an important year for CarMax. Management launched an aggressive five-year expansion plan with the aim of having 80-90 retail locations by 2001. To achieve this goal, the company would have to grow rapidly, opening 15-20 new superstores each year. CarMax's website, carmax.com, made its debut in October 1996. Like the company's retail stores, the CarMax website offered a convenient and transparent experience to customers: The website features a complete searchable vehicle database with information about price, make, model, mileage, and features. AutoNation, the largest auto retailer in the US, entered the used car superstore market in 1996.

In 1997 CarMax had its initial public offering, even though the company was still a subsidiary of Circuit City at the time. Circuit City sold a stake of approximately 25% in the company. The \$413 million net proceeds of the IPO repaid growth-incurred debt to the corporate parent. In 1998 CarMax moved into the new car retailing space with the purchase of a Toyota dealership in Maryland and a Wisconsin auto mall selling several makes of vehicles. Total sales for fiscal 1999 surpassed \$1 billion; however, CarMax reneged on its earlier growth plans, deciding instead to focus on store-level profitability and the operational side of the business. In response to mounting losses, competitor AutoNation exited the used car retail market in 1999.

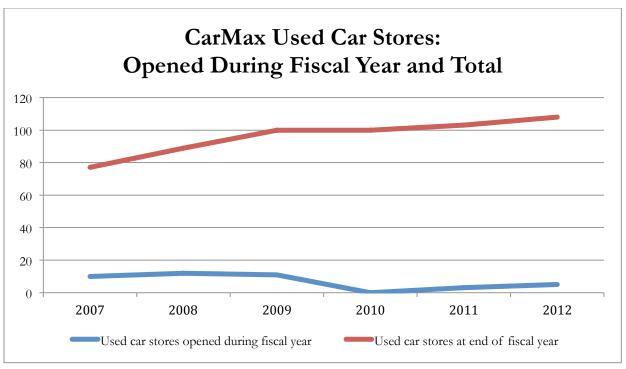


CarMax earned its first annual profit in fiscal 2000; shortly thereafter in calendar 2001, the company announced its plan to resume rapid growth (15% to 20%) of its store base. The company announced its goal of doubling sales to nearly \$5 billion in revenue within five years. In mid-2001, Circuit City sold a further 10% of CarMax stock; the parent's ownership now stood at 65%. Circuit City completely spun off its CarMax business in October 2002. With the separation of Circuit City and CarMax came the promotion of President Austin Ligon to CEO for the auto retailer, while Richard Sharp retained the title of chairman.

2003 saw the opening of five used car superstores but the sale of four new car dealerships as CarMax refocused on its bread-and-butter used car business. 10 years after its founding, the company sold its one millionth used car. CarMax became a Fortune 500 company in 2004, starting at #435. CarMax reached its sales goal of \$5 billion in fiscal 2005, one year ahead of its 2006 goal set in 2001. Having reached this high goal a year ahead of schedule, CarMax soon after announced another ambitious sales goal of \$10 billion to \$12 billion by fiscal 2010. In 2006, CEO Austin Ligon retired; Tom Folliard, previously EVP of Store Operations, succeeded him as the company's chief executive. In January 2007, the company reached another milestone: two million used vehicles sold.

Because of poor prevailing macroeconomic conditions and a particularly bleak outlook for auto sales, CarMax suspended its store growth and cancelled the opening of new locations in December 2008, with the exception of the 100th store, which was already under construction at the time the decision was announced. This location opened in 2009. In 2010 CarMax reached the milestone of three million used vehicles sold but missed its sales target of \$10 billion. The expansion plan resumed in 2010, with a goal of opening three stores in fiscal 2011, between three and five in fiscal 2012, and between five and ten in fiscal 2013. Although the company was growing again, its expansion plan for 2010-2012 paled in comparison to the ambitious growth seen in the early 2000s. Fiscal 2012 sales finally met the 5-year target set in 2005 of \$10 billion. The pace of expansion picked up for fiscal 2013, coming in at the high end (10) of the previous target of five to ten new locations. As for the future, the company plans to open between ten and 15 stores each fiscal year from 2014 through 2016.





Data Sources: 2012 and 2009 CarMax 10-K's



FINANCIAL ANALYSIS

Profitability & Shareholder Returns

CarMax revenues and profits have been rising steadily over the past several years. Net sales and operating revenues increased 10% to \$10.96 billion from FY 2012, while net earnings increased 5% to \$434.3 million, or \$1.87 per share. Total gross profit increased 13.4% to \$1.46 billion from \$1.38 billion FY 2012 as well. In the most recent quarter for which data are available, Q4 2013 (ended February 28, 2013), sales rose 14% to \$2.8 billion, above analyst consensus estimates of \$2.7 billion. Net income for the quarter was \$107.2 million, or \$0.46 per share, in line with analyst expectations.

CarMax has also boosted its top line by both expanding sales at existing locations and expanding aggressively with new store locations. Same-store used vehicle unit sales grew 5% in fiscal 2013; same-store used vehicle dollar sales increased 7% for the fiscal year. After temporarily ceasing store growth due to weak economic conditions in 2008, CarMax resumed its expansion in FY 2011 by opening three superstores, and five followed in 2012. CarMax planned to open 10 superstores in FY 2013, and between 10 and 15 stores for the following three years. As of November 30, 2012, CarMax had 110 used car superstars in markets that comprised approximately 53% of the U.S. population.

Comparable Store Used Vehicle Sales Changes

	Three Months Ende	ed February 28 or 29	Three Months Ended February 28 or 29		
	2013	2012	2013	2012	
Units	6 %	4 %	5 %	1 %	
Dollars	10 %	7 %	7 %	7 %	

Data Source: CarMax News Release 4/10/13¹

CarMax generates revenue in three principal ways. Firstly, CarMax's core business is the sale of used vehicles, typically between 0-6 years old. For the last fiscal year for which full data are available (FY 2012), revenues in this area increased 9% to \$7.83 billion from \$7.21 billion in FY 2011. While the average used vehicle selling price has increased 5% in this period, this rise is mainly

¹ http://phx.corporate-ir.net/phoenix.zhtml?c=232927&p=irolnewsArticle&ID=1805179&highlight=



a reflection of the increased acquisition costs due to increased wholesale values. Total used vehicle unit sales increased 3% from FY 2011, reflecting both a 1% increase in comparable store used unit sales and sales from the newest locations, which have not yet been included in the comparable store base. This 1% increase reveals a dramatic drop from the 10% comparable store sales witnessed in 2011, which has mainly been attributed to the continuation of weak economic conditions and low consumer confidence.

Secondly, CarMax generates profits through its wholesale operations, which includes the selling of cars that do not make the cut for its used vehicle sales. Total wholesale vehicle revenues increased 32% in FY 2012 to \$1.72 billion. This large increase in revenues can be explained by a 20% increase in wholesale vehicle sales, increased appraisal traffic, and a 10% increase in of the average wholesale selling price seen across the industry.

Thirdly, CarMax's auto financing division (CAF) experienced a 19% increase in income in FY 2012 to \$262.2 million. Interest and fee income grew by \$29.6 million headed by the growth in average managed receivables, while at the same time interest expense declined \$27.7 million due to the fact that a larger percentage of their managed portfolio was funded with lower-cost securitizations. In addition, the provision for loan losses increased to \$36.4 million from \$27.1 million in FY2011, reflecting both the absolute increase in managed receivables as well as the origination and retention of higher-risk loans.

CarMax's return on equity of 14.91% is slightly above the industry average of 14.5%. Return on equity measures how effectively an investor's money is being utilized, and CarMax management appears to be doing an effective job managing paid-in capital.

Liquidity & Solvency

In addition to CarMax's relatively high profit margins, the company also has an impressive current ratio of 3.62. The higher the current ratio, the better a company is able to cover its liabilities for the upcoming year with its liquid assets, with a solid benchmark current ratio considered about 2. A current ratio of 1 or above is typically considered satisfactory. CarMax's debt-to-equity ratio of 1.9 is below that of industry peers Sonic Automotive, AutoNation, and Penske Auto Group, which



have ratios of 2.8, 2.7, and 2.3, respectively. CarMax could take on additional debt to boost profits and finance its continued expansion. This relatively low debt-to-equity ratio is particularly unusual given the company's rapid growth. CarMax has a cash flow of \$567.2 million, which is the cash generated by its sales and services.

Many analysts are concerned about CarMax's increase in expenditures, with the company spending \$819.3 million in cash while only booking a net income of \$422.1 million, meaning that free cash flow is much less than net revenue, which ideally should be the opposite. In addition, 19.4% of CarMax's operating cash flow has been labeled as coming from "questionable" sources such as changes in taxes payable, tax benefits from stock options, and asset sales, with stock based compensation and associated tax benefits accounting for the biggest boost. Most analysts do not like this number to exceed 10%. However, the largest drag on free cash flow was capital expenditures (44.3%), which is in line with CarMax's plans to expand its superstores.

DuPont Analysis

	Profit Margin	Asset Turnover	Equity Multiplier	ROE
CarMax (KMX)	4.14%	1.29	3.15	16.85%
AutoNation (AN)	2.02%	2.34	3.74	17.66%
Copart (CPRT)	19.71%	0.83	2.01	32.63%
Penske (PAG)	1.41%	2.67	4.03	15.15%
Group 1 (GPI)	1.34%	2.72	3.30	12.02%
Sonic (SAH)	1.07%	3.27	4.87	16.98%
Asbury (ABG)	1.77%	3.01	4.22	22.54%
Lithia (LAD)	2.42%	2.51	3.32	20.21%

Data Source: Yahoo Finance

In the automotive retailing business, CarMax leads its peers in net profit margin. Asset turnover is lower than for competitors, as one would expect for a company whose primary business is selling used, rather than new cars. AutoNation and Penske Automotive Group in particular have numerous luxury brands in their portfolio of dealerships, so the significantly higher retail sales price of new luxury vehicles compared to used non-luxury cars explains these companies' greater asset turnover. As for leverage, CarMax appears to be on the lower end of the spectrum, which indicates



the company might want to issue some new debt to finance its aggressive expansion plans. CarMax's ROE is broadly in line with industry norms, thanks to the company's stellar profit margin, though niche players Asbury, which operates primarily in the South, and Lithia, which focuses on more rural markets, have markedly higher return on equity than CarMax.

Stock Performance

CarMax (NYSE: KMX) has performed relatively well compared to its peers, although it should be noted that CarMax is in many ways a class of its own. Many of CarMax's "competitors," or the companies to which it is often compared, include large retail dealer chains and automotive parts/services companies, although they do not truly compete directly with CarMax for business.

The current price of a stock of CarMax is \$42.09 (as of 4/15/13). The stock has seen an upward climb since January of 2012, but it is currently trading within a narrow range. Analysts generally have a positive outlook for CarMax, as they forecast future revenue growth of approximately 10% for FY 2014 spurred by a combination of comparable store sales growth, new store additions and increased credit availability. However, operating margins will decrease slightly as selling, general & administrative costs will increase with the opening and operation of new stores.

Although CarMax has an industry-leading market cap of \$9.54B, the company still accounts for only 2% of all total late model units sold. It also has the highest 5-year PEG ratio (1.73) of its peer group, meaning that one is not paying a premium for the stock price based on future expected growth. Although PEG is not always a valid indicator based on the type of company, due to CarMax's rapid growth and plans for expansion, PEG should be an important metric to consider. In addition, it has a P/E ratio of just over 22, which is slightly higher than the sector average of 21.05. While CarMax may trade at a premium to other automotive retailers, most analysts feel such a price is warranted for better-than-peers net margins.



KMX vs. Industry Leaders						
Statistic	Industry Leader		KMX	KMX Rank		
Market Capitalization	INCH.L	2.35B	9.51B	7 / 29		
P/E Ratio (ttm)	LOOK.L	1,397.06	22.51	7 / 29		
PEG Ratio (ttm, 5 yr expected)	APE.AX	6.67	1.70	2 / 29		
Revenue Growth (Qtrly YoY)	1728.HK	65.70%	14.20%	8 / 29		
EPS Growth (Qtrly YoY)	CFYN.L	140.30%	15.00%	12 / 29		
Long-Term Growth Rate (5 yr)	1728.HK	31.90%	12.78%	14 / 29		
Return on Equity (ttm)	AMA.AX	40.42%	15.26%	12 / 29		
Long-Term Debt/Equity (mrq)			205.654	N/A		
Dividend Yield (annual)	KAR	3.60%	N/A	N/A		

Source: Yahoo Finance (4/15/13). Industry is auto dealers.



Source: Yahoo Finance (4/15/13)

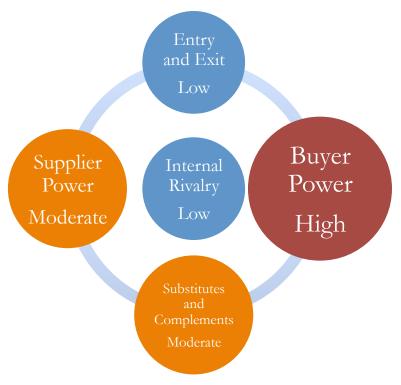


Company	CarMax	AutoNation	CoPart	Penske	Group 1	Sonic	Asbury	Lithia	
Profit	3.87%	2.02%	19.05%	1.41%	1.34%	1.07%	1.77%	2.42%	
Margin	3.0770	2.02/0	17.0370	1.71/0	1.5470	1.0770	1.///0	2.42/0	
Current	3.62 times	1.05 times	1.47	1.03	1.12	1.11	1.27	1.29	
Ratio			times	times	times	times	times	times	
Return on	14.91%	17.71%	31.64%	15.79%	12.02%	16.87	22.84%	19.97	
Equity	14.91%	17./170	31.0470	13./970	12.0270	%	ZZ.04/0	0/0	
Debt to	1.90 times	1.90 2.75 times	0.62	2.33	1.97	2.89	2.6	2.06	
Equity		2.75 times	times	times	times	times	times	times	
Cash Flow	\$5777 2	w \$567.72		\$192.41	\$323.4	\$75.32	\$21.64	\$234.9	\$212.4
from	M \$307.72	\$316.6 M	ф192.41 М	₩ М	∌/3.32 M	φ21.04 Μ	φ234.9 M	β212.4 8 M	
Operations	1V1		1V1	17/1	1V1	1/1	1VI	0 1/1	

Source: http://www.macroaxis.com/invest/compare/LAD



COMPETITIVE ANALYSIS



Market Definition

The automotive retail market in the US can be broken down into two primary submarkets of new and used retailing, as well as complementary services such as financing and maintenance/repairs, which are almost always offered at car dealerships. Consumers often elect to return to the original dealership where they purchased a vehicle for post-sale services such as maintenance. Geographic positioning is an equally important factor on two levels: Automotive retailers are either independent or part of a national (or perhaps regional) group, and they can choose to locate in major metropolitan areas, rural areas, or somewhere in between. For the purposes of this analysis, the market is considered to be national automotive retailers with operations concentrated in medium and large metropolitan areas. CarMax is a national full-service automotive retailer that sells primarily used cars², primarily in mid-sized markets, which the company defines as those with a TV viewing population between 600,000 and 2,500,000 people.

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² "During fiscal 2012, we sold 408,080 used cars, representing 98% of the total 415,759 vehicles we sold at retail" 2012 CarMax 10-K. Used vehicle sales at retail also accounted for approximately 97.5% of revenues from car sales in fiscal 2012.



Internal Rivalry – Low

Although there are few companies with national scale in the industry – only AutoNation, CarMax, Group 1 Automotive, Penske Automotive Group, and Sonic Automotive come to mind – the industry is highly fragmented because most dealerships are not part of a much larger group. Even franchises belonging to the same company and selling the same make may compete with each other because of the commission-based compensation structure common to most automotive retailers. There were approximately 17,000 new car dealerships³ in the US in 2012, and estimates for the number of used-car dealerships hover around 35,000. The top 50 companies in automotive retail generate less than 15% of total revenue.⁴

Market concentration within the used auto sales space continues to be low, as CarMax, the nation's leading retailer of used vehicles, sold roughly 2% of the total. Despite its low market share, CarMax still sold twice as many vehicles as the next-largest retailer of used cars, AutoNation.

Despite operating in a highly fragmented industry, CarMax stands alone as the only national automotive retailer whose primary business is selling used vehicles and which has separate, dedicated used car stores. CarMax also differentiates itself through a business strategy unique in its industry: No-haggle, transparent pricing and a customer-oriented experience. The company briefly faced competition from AutoNation in the mid-1990s when AutoNation opened approximately 30 used vehicle superstores. AutoNation exited the market several years later after incurring substantial losses.

Entry & Exit – Low

Sizable barriers to entry exist in the automotive retail industry. First and foremost, the industry is capital-intensive and has high startup costs. Revenue per worker averages about \$650,000 in the industry.⁵ Large-scale competitors in the industry must have large, well-appointed showrooms,

⁴ Hoover's Automobile Dealers First Research Custom Report 3/12/13

³ NADA Data State of the Industry Report 2012

⁵ Hoover's Automobile Dealers First Research Custom Report 3/12/13



which are often required to secure or maintain a franchise agreement with a vehicle manufacturer. For potential entrants to the used car space, showroom size and quality can also have an important signaling effect. A convenient location (at street level) is also necessary to ensure success for both new and used car dealerships, so the cost of leasing space is likely to be relatively higher than for industries. For major automotive retailers serving large metropolitan markets, a service department is also a must-have item. The typical service department has 18 service bays and handles 13,000 work orders annually at an average value of approximately \$200 each. Capital equipment required for the service department is specific to the automotive industry, and many such items are expensive. Costs for outfitting a service department will only continue to increase in the future as vehicle technology becomes increasingly sophisticated, and high-tech equipment is required for diagnostics and evaluation of mechanical failures.

Financed inventories also serve as a barrier to entry. Most new car dealerships fund their inventories through "floor plan" financing obtained from commercial banks or vehicle manufacturers. A new entrant (i.e., one new to the industry, not a new franchise for an existing player) is likely to face higher financing rates and lower availability of financing. A smaller inventory relative to the existing players and higher "floor plan" finance costs are likely to hinder a new entrant's ability to offer customers pricing competitive with that of the established dealerships.

In the used vehicle space, reputation for quality and integrity is another barrier to entry. As the incumbent, CarMax benefits from its first-mover advantage in having already established a positive reputation among most of its customers, particularly through word-of-mouth. A commitment to ensuring high quality would be costlier for an entrant, which would need to not only offer guarantees but also advertise heavily to build its image among consumers. Additionally, exit is costly and time-consuming. An automotive retailer with national scale wishing to exit the industry must find a buyer for its industry-specific assets. Some diagnostic equipment is proprietary to specific manufacturers, and the appearance of showrooms is often specific to a particular manufacturer as well.

⁶ Hoover's Automobile Dealers First Research Custom Report 3/12/13



Substitutes & Complements – Moderate

Substitutes to large-scale automotive retailers include direct sales of new vehicles by the manufacturer and consumer-to-consumer sales of used vehicles. Tesla Motors, the California-based startup electric vehicle manufacturer, uses the first strategy of directly selling its vehicles to consumers. Tesla does have service centers as well as showrooms where consumers can learn about the vehicle and purchase lifestyle products (but not buy any vehicles themselves). The Internet has facilitated private party sales of used vehicles through channels such as eBay Motors and Craigslist. Particularly for consumers interested in purchasing a used vehicle, the Internet has reduced search costs by providing more information about vehicles, such as space to list complete features/specifications and provide photos. Many states (including California) have laws that prohibit auto manufacturers from selling directly to consumers if they have existing franchisees, so the auto manufacturers are unlikely to deploy this tactic any time in the near future.

Complements to automotive retailers include big-box retail stores and suburban sprawl. Despite the accompanying rise in traffic with suburban sprawl, cars are more necessary in areas where population centers are spread out from employment, recreation, and retail centers. Transporting purchases from big-box retailers via public transportation is unwieldy, so cars have an intrinsic appeal for shoppers at big-box stores.

Supplier Power - Moderate

The principal suppliers to automotive retailers with national scale are suppliers of vehicles and labor, notably salespeople, service technicians, and service advisors. Some of the labor employed by auto retailers, such as salespeople and service advisors, typically has negligible market power because there are relatively few specific qualifications or advanced skills for these occupations. Service technicians and mechanics, on the other hand, have considerably more power, not only because they are often unionized but also because some franchise agreements for new car dealerships require manufacturer certification for technicians working in a dealership's service center.



As for suppliers of vehicles, supplier power depends on the specific source. Auto manufacturers hold considerable power over franchised new car dealers, as they set conditions and restrictions to which the franchisee must adhere in order to continue receiving a supply of new vehicles and maintain the franchise rights. Franchise agreements for new car dealerships typically impose requirements for certain dealership operations, including inventory levels, monthly financial reporting, working capital, dealership signage and appearance, and cooperation with manufacturer marketing initiatives. Another common feature of new car dealer franchise agreements is the authorization to perform warranty work on the specified make and to sell complementary parts and services in a given market area. These agreements generally stipulate that "market areas" for dealerships are considered non-exclusive. As a result, dealerships selling the same make in large cities may compete aggressively on price, much to their own detriment and to the benefit of the vehicle manufacturer.

Used car retailers may face considerably less power wielded by their vehicle suppliers.

Common sources of vehicles for used car dealerships include purchases directly from consumers, auctions, fleet owners (such as corporate fleet owners and rental car companies), and wholesalers. A dealer that does not have a long-term arrangement with any supplier of used vehicles can rely on another source of vehicles if a given supplier seeks to exercise control over its customer.

Buyer Power – High

Buyers of new and used vehicles have gained increasing power over the last decade as reliable information about market pricing has become available through Internet channels such as Edmunds.com and Kelley Blue Book, among others. Some services offer buyers the capability to anonymously receive price quotes for specific vehicles in stock, which buyers can then use to cross-shop at other dealers. As more transactions are negotiated primarily over the Internet, dealerships lose some of their ability to offer additional profit-generating products and services.

For instance, customers can easily seek financing approval from a financial institution with which they have an existing relationship, rather than financing through a dealership's finance office.

⁷ 2012 CarMax 10-K



A consumer who goes to the dealership only to sign the documents, test drive the vehicle before purchase, and pick up a new vehicle is less likely to be persuaded to select a vehicle with more features (and more profit for the dealer) or to choose a more expensive model altogether. Customers of new and used vehicle dealerships have virtually no switching costs between dealerships.



SWOT

Strengths - Hassle-free buying - Advertising and customer satisfaction - Location of stores - Production and non-production stores Opportunities - Service for older Weaknesses - Not managing online reputation - No videos of vehicles - Not providing full list of vehicle equipment Threats - Tightening of credit

- Baby boomers likely to continue driving far

into the future

Drop off in new-car

manufacturer financing

Strengths

The CarMax business model of a hassle-free car-buying or -selling experience is one of the company's key strengths. In providing a supply of late model, high quality used cars backed by a 5-day refund guarantee and a minimum 30-day warranty, CarMax helps solve the used car lemons problem. The company also creates a more efficient experience for people seeking to get rid of their old cars, as CarMax agrees to buy any car it appraises, whether or not the owner of that vehicle buys a car from them. With a fully searchable online inventory of over 35,000 vehicles nationwide, including lots of pictures of the vehicles in inventory, CarMax is also able to leverage its scale to reduce inventory levels in each store and still provide a large variety of vehicles to customers. No transfer fees within a regional market (for instance, a vehicle being transferred from the company's Ontario store to the one in Duarte would incur no cost to the customer) essentially create a "shared inventory" across multiple stores in the same region. Although significantly higher, fees for coast-to-coast transfers are still under \$1000 and are generally broadly in line with or lower than prices charged by car transport providers.

⁸ http://www.carmax.com/enus/why-carmax/why-carmax-reasons.html



Fixed commissions⁹ in states other than California for CarMax sales consultants also help align sales consultants' interests with those of customers in purchasing an appropriate vehicle, rather than encouraging upselling.

As the first large-scale nationwide used car retailer, CarMax has built a strong reputation for quality and customer satisfaction. This strong brand image continues to be reinforced through word-of-mouth; additionally, radio and television advertising further supports the brand and raises awareness prior to the company's expansion into new markets. A 2012 shift to advertising via national cable and radio media is expected to generate significant cost savings. The message of current CarMax television ads, "Start here," is straightforward and compelling. Start here is a friendly, customer-centric proposition; it represents a dramatic departure from the traditional car advertisement script, which is generally a variant of "Buy from us for these reasons." The "start here" ads also support the company's no-hassle, no-pressure sales environment for both buyers and sellers of used cars.

Geographic location of stores is also a significant strength of CarMax relative to its competitors. Mid-income midsized cities with significant a large geographic footprint are ideal for car ownership. Although large urban areas are also likely to have significant demand for vehicles, there is often greater competition from local-area used car retailers, which occasionally have several retail locations. Some large cities, such as New York City, also have extensive rail-based public transportation networks. As of February 29, 2012, CarMax operated in 53 markets, of which 41 were mid-sized, 11 were large, and 1 was small.¹²

11 http://www.carmax.com/enus/why-carmax/why-carmax-start-commercials.html

⁹ http://www.carmax.com/enus/why-carmax/why-carmax-reasons.html

¹⁰ 2012 CarMax 10-K

¹² 2012 CarMax 10-K





Source: 2012 CarMax Annual Report

Another of CarMax's core strengths is its dual-format retailing approach for its used car stores. The company has "production" and "non-production" stores: The former perform vehicle reconditioning on-site; the latter do not. This approach enables CarMax to adequately serve the needs of each market while maintaining a lean cost profile and while spreading the relatively high overhead cost of production superstores over a larger number of vehicles reconditioned. When CarMax enters a new market with high projected growth, it may choose to construct a store that can support vehicle reconditioning but may initially operate that store as a non-production location. The company's 108 locations (as of February 29, 2012) consisted of 63 production stores and 45 non-production stores.¹³

13 2012 CarMax 10-K



Weaknesses

One clear weakness for CarMax is the company's lack of awareness and responsiveness to its online reputation. Although many CarMax stores have a number of very positive reviews, more so than for certain other car dealerships, there are still a decent number of negative reviews. Many other businesses take the opportunity to thank customers for positive feedback and address negative feedback on sites such as Yelp. The ability of businesses to tell their side of the story can be critical in mitigating negative reviews; additionally, it can present an opportunity for companies to improve their reputation by offering remedies to those who have had a bad experience.

Another weakness is the lack of videos of CarMax vehicles on the company's website. Specifically, a brief interior/exterior overview and recording of the engine sound could help entice buyers. Especially for cars, which are often highly emotional purchases, a video would offer CarMax the opportunity to connect with potential customers on a more emotional level.

Finally, the listings for vehicles in CarMax's searchable online vehicle database do not include as much information about features and specifications as would be desirable for those seeking a car with a specific set of options. For instance, although features such as leather seats and "sport package" options are searchable, other features/optional equipment, such as HID xenon headlights, are not. This lack of detailed information has the potential to cost CarMax sales to detail-oriented customers.

Opportunities

The average age of light vehicles in operation in the US has increased significantly over the most recent 10 years for which data are available, from just under 9 years in 2001 to nearly 11 years in 2011.¹⁴ As the fleet has grown older, major service and repairs have become a growth opportunity for dealerships and independent third-party service centers alike. CarMax could take advantage of this trend by positioning the company as a trustworthy, reliable, and fairly priced service center for older vehicles whose original manufacturer warranties have expired. If CarMax

¹⁴ NADA Data State of the Industry Report 2012



were to advertise its in-store service centers as an equally transparent and straightforward transaction as the company's hallmark retailing process, the company could substantially increase its service revenues. A focus on vehicle servicing is likely to also yield additional benefits in increased vehicle sales from the foot traffic generated by customers having their vehicles serviced at CarMax locations. This approach is consistent with the "dealership as profit center" mentality employed by many car dealers; CarMax currently embodies some aspects of this approach, particularly with its captive lender CarMax Auto Finance.

Another branding and marketing opportunity exists with the aging baby boomer population, the oldest of whom are now at retirement age. Because the boomer generation considers itself more active than previous generations, driving is likely to continue to be an important part of the generation's life for a time to come. Despite relatively long careers many boomers have spent in the workforce, a large number of boomers have amassed little savings. These individuals are likely to be prime candidates for purchasing pre-owned rather than new vehicles, so CarMax could effectively target the baby boomer generation.

Threats

One potential threat to CarMax is an industry-wide tightening of credit availability, particularly from third-party financing providers. Although the CarMax Auto Finance arm provides some insulation against this, lack of credit from third-party banks and finance companies would significantly reduce CarMax's ability to sell its inventory. CarMax cannot guarantee that its external financing partners will continue to provide auto loans to its customers.

A huge drop-off in new car leasing is, ironically, a risk factor to CarMax, as the company specializes in high quality late-model vehicles. A reduction in leasing likely leads to a decrease in CarMax's supply of vehicles. Another threat to CarMax is a sudden drastic (and permanent) spike in gas prices. Consumers in cities with adequate public transportation would greatly reduce their driving; those in the other areas would be less likely to purchase used cars because brand new vehicles are generally more fuel-efficient than older models.



Other risk factors for CarMax include anything that makes a new car relatively more attractive than a used car, including an industry-wide shift to offering longer warranties on new cars, below-cost financing incentives from manufacturer-affiliated captive finance companies, and rapid innovation that improves affordability of new vehicles.

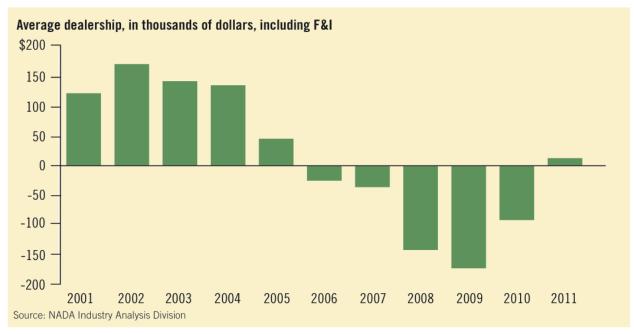


STRATEGIC RECOMMENDATIONS

Spin Off or Wind Down New Car Retailing Business

In fiscal 2012, CarMax's new vehicle sales represented only 2% of total unit sales. By revenue, new cars were about 2.5% of total vehicle sales revenues. CarMax currently operates only four new car franchises, a small fraction of its 119 used car superstores. These franchises sell Chrysler, Nissan, and Toyota vehicles – hardly one-off sport or luxury models with commensurately high profit margins. The new car business is typically far less lucrative for dealerships than the used car business, having generated well under \$50,000 in net profit for the average dealership in 2011, rather than the nearly \$125,000 level seen in the used vehicle department. Having closed a Chevrolet dealership in 2010 after losing the franchise and having decided to terminate a Chrysler franchise in Los Angeles one year later to focus on used vehicle retailing, CarMax has already made important moves in this direction.

New-vehicle department net profit

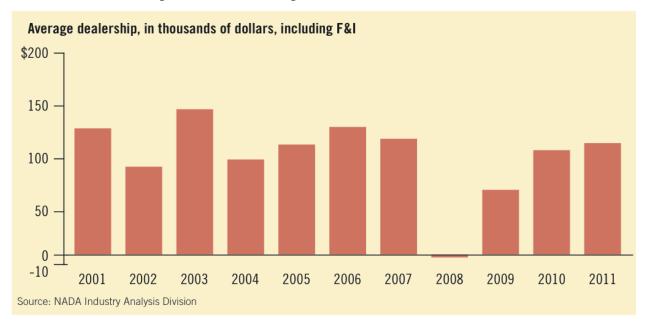


Source: NADA Data State of the Industry Report 2012

 $^{^{\}rm 15}$ NADA Data State of the Industry Report 2012



Used-vehicle department net profit

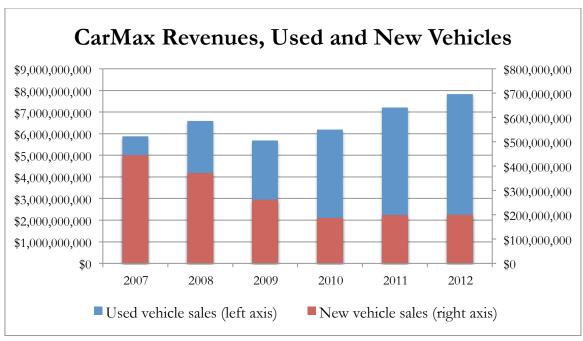


Source: NADA Data State of the Industry Report 2012

The low-profit new car retailing business is not a worthwhile endeavor for CarMax, as vehicle manufacturers typically have significant latitude over the franchisee on issues "including inventory levels, working capital, monthly financial reporting, signage and cooperation with marketing strategies. A manufacturer may terminate a dealer agreement under certain circumstances." New car retailing restricts CarMax's ability to operate how it would like, and non-exclusive franchises can be subject to termination without significant advance notice.

¹⁶ 2012 CarMax 10-K





Data Source: 2012 CarMax 10-K

Start Underwriting Extended Service Plans

Although CarMax currently sells extended service plans to roughly 60% of all customers who purchase a used vehicle from the company¹⁷, these plans are provided under agreements with independent third parties. CarMax believes that the wide variety of options offered in these extended service plans, including mileage and time-based coverage limits and varying deductibles, are broadly in line with what customers would like. Such plans are sold at fixed prices, and CarMax receives a commission on the sale of each extended service plan. Despite the fact that these plans were tailored to CarMax specifications, CarMax ultimately has little say in customer satisfaction with extended service plans. Under the existing system, underwriters decide which repair costs to cover, and repairs are performed at independent and franchised service centers not affiliated with CarMax.

If CarMax were to start offering its own extended service plans, which it could do in a similar manner to how the company provides financing through its CarMax Auto Finance arm, CarMax could better ensure customer satisfaction. CarMax could leverage its substantial expertise in captive auto financing through to enter the extended service plan market. For instance, predicting

^{17 2012} CarMax 10-K



warranty repair claims might be closely related to estimating loan losses and defaults. In this CarMax-centric model, the company could allow repairs to be performed only at CarMax stores or CarMax-licensed repair facilities whose technicians had undergone CarMax-specified customer service training. There is another significant advantage to underwriting extended service plans inhouse: CarMax would amass a wealth of panel data about vehicle reliability. Such information could be incorporated into CarMax pricing models so the company could adjust the price it offers to owners selling their vehicles based on real-world reliability data for each make and model. Additionally, this proprietary dataset would enable CarMax to spot potential future problems in the used vehicles it sells and possibly make proactive repairs, if necessary. By taking such proactive steps, CarMax could go a long way to ensuring customer satisfaction with vehicle reliability.

Continue Rapid Expansion

CarMax has successfully increased its revenues and profits with its expansion into key midsize markets, most recently in Jacksonville, FL; Harrisonburg, VA; and Savannah, GA. Continuing to expand rapidly will boost the company's bottom line and also ensure a sustainable long-term competitive advantage, as existing CarMax markets cover only approximately 50% of the US population. Even in the CarMax's bread-and-butter midsize markets of television viewing populations between 600,000 and 2.5 million people, there are still significant growth opportunities that remain. Slowing down the company's aggressive expansion plans could offer a nimble potential competitor the opportunity to enter the market.

Remove CarMax Badging from Vehicles

CarMax currently places a sticker on all the vehicles it sells. Although the practice of dealers adding badging to cars is commonplace in some parts of the country, it is generally not standard practice in California, home to some of CarMax's largest markets. Consumers in markets where this practice is not commonplace are likely to be somewhat less satisfied with their CarMax experience if having a sticker that advertises CarMax on the car is a non-negotiable part of the buying experience. Further, a CarMax sticker on a vehicle generally indicates that it was purchased used. At least some CarMax customers are likely to prefer the anonymity of the general public not knowing whether the vehicle was purchased new or used.



Improve Online Reputation Management

CarMax should establish online reputation management responsibilities for employees at each of its stores. A local approach to managing the company's online reputation would ensure that employees responding to comments online are those who have previously interacted with the customers posting reviews about a particular CarMax store. Such social and online media specialists would serve a crucial role in tempering poor online reviews by sharing with the public how the company rectifies poor service experiences. Additionally, these employees would be able to dispel inaccurate comments that are unfairly damaging CarMax's reputation.

Consider Potential "Spoke" Stores in Smaller Markets as a Defensive Measure

A model of smaller "spoke" stores in smaller markets (generally with a population of several hundred thousand people) within approximately 100-150 miles from existing CarMax "hub" superstores would offer the company a relatively low-cost way to enter small but heavily cardependent markets. These "spoke" stores would carry only a small inventory (but have free transfers from "hub" superstores) and would focus exclusively on vehicle retailing, with neither reconditioning facilities nor service bays. Such stores could operate under a sub-brand, such as "CarMax Local," to distinguish them from superstores offering the full range of CarMax products and services. CarMax Local stores would need only a small staff of sales consultants and a couple finance office employees. Most of the finance office support could be shared with hub stores. Instead of the traditional CarMax store of 10,000 to 25,000 square feet, CarMax Local stores could be between 5,000 and 8,000 square feet. Although CarMax Local stores would not offer in-house service, customers could drop off their vehicle at a Local store for service and pick it up at the end of the day after it had been serviced at the nearest full-service CarMax store.