US AUTO PARTS RETAIL OMNI CHANNEL EXPANSION WITH ADVANCE AUTO PARTS

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ABSTRACT

This report highlights the structure of Auto Parts Retail industry in US and going forward its relation with Real Estate expansion. The fall of SEARs Inc and very recent the bankruptcy filing by JC Penny raises the question of historic Big Boxes stores expansion setting up Brick & Mortar point of sale. The expansion in the Brick & Mortar space of the Auto Stores hasn't really kept up with sale growth. Industry as a whole is considered to be in a terminal growth phase and almost all players Advance Auto Parts, AutoZone, O'Reilly and Genuine Parts Company have not posted double digit growth for last decade with the exception of COVID.

Apart from Brick & Mortar expansion the industry also has challenges from the changing eco-system and consumer preferences. Auto Vehicle purchase is considered to be a necessity as well as a status symbol unlike the Auto parts customers classified as DIY (Do-it-Yourself) and DIFM (Do-it-for-me). Each Auto Store player has different Revenue mix in DIY and DIFM segment having their own competitive advantages with potential competition from E-commerce giants namely Amazon and E-bay.

The report also highlights how the changing trends in mobility can also be challenging in future specially in the advent of Electric Vehicles which require little or no maintenance. Diversification or changing the current business will become inevitable and hence setting up an on-line market-place of auto parts is advised to capture the $250 - $300 bn fragmented market who have no tech infrastructure for selling their merchandise.

To achieve the proposed hypothesis, Advance Auto Parts has been selected as the target company which has highest commercial sales mix in its topline as compared to others to qualify as target company for business transformation. Advance Auto Parts is supposed to be merged with carparts.com, and online seller of parts with 1.2m Sq ft of real estate and highest per sq ft

sales in the industry. The acquisition is proposed to prevent Advance Auto Parts own brand cannibalization and access to higher no of SKUs. Apart from setting up market-place for auto parts it also proposed to foray into used car market optimizing real estate space of auto stores yards by setting up physical market matching buyers & sellers.

ACKNOWLEDGEMENTS

It feels honored to be supervised by a Chair Like Dr. Edward Graham and sincerely thankful for his support and gratitude extended in finishing this CFA Project thesis. I feel myself very lucky to be working with Dr. Graham on this project whose co-operation and supervision was extremely boundless to reach the finish line.

Apart from Dr. Graham I am extremely thankful to Dr. Tammy Huntt, Bill Sackley, Joseph Farinella, Cetin Ciner and rest of all faculty members who have been part of IMBA program and taught us during the course of study.

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INTRODUCTION

This study is conducted to highlight the brick & mortar expansion of the Auto Parts Retailer, Advance Auto Parts from the Hard-Line Retail sector. The Auto Stores Retail sector hasn't shown any signs of organic growth for more than a decade despite the growth of number of used cars on road. All three players namely AutoZone, O'Reilly and Advance Auto Parts have registered growth of 3-5% in topline versus other hard-line retail industry.

The study also covers the US economic and Industry analysis to ascertain the factors impeding growth in the sector and upcoming change in mobility eco-system. Advance Auto Parts Unique sales Mix makes it more prone to competition from the on-line retailers in comparison to rest of players who have revenues tilted towards DIY (Do-it-yourself) segment.

COVID brought a major change in consumer purchasing behavior as more and more people adopted the on-line purchases including auto mobiles. Even before COVID a close of analysis of 20 years data of Advance Auto Parts real estate expansion hasn't paced up with topline apart from acquisitions in 2012 and 2014. Companies unlike Advance Auto Parts who had only on-line mechanism to sell their merchandize posted better results and growth rates in their topline. The study tries to evaluate as how Advance Auto Parts in the changing eco-system of mobility and e-commerce should adopt a strategy to insulate it from future competition and not fall to the fate of SEARS Inc or JC Penny.

LITERATURE REVIEW

US Economic outlook

United States by far remains the dominating economy on earth contributing close to 25% of world GDP by $23tn size with strong labor market, rising income and unemployment below 5% in addition to 16.0m of auto sales and 3.0% growth of new home sales at 610,000 units. On broader discussion we would like to highlight few import aspects of US economy and its implication to our Target Company Advanced Auto Parts Inc to forecast the consumer spending trends affecting the US auto industry.

GDP, Inflation & Interest Rates.

According to IMF estimates GDP is to slow to 2.9% for 2022 is highly unlikely and that with dollar index moderately overvalued by 10-20%, instead expects growth to be around 2.0% for 2023 and reduced further to 0.8% for 2024 and 1.7% for 2025. Global institutions have consistently been advising US Fed to unwind its balance sheet by withdrawing the stimulus Post COVID and earlier in 2008 Global financial crisis (Table 1)

Core inflation remains uncontrolled and highest ever recorded after 1981 in US history of 9.1%. Though IMF estimates have been somewhat conservative, including major international financial institutions expecting 2022 average inflation to be 4.6% same as 2021. FED has been on increasing rates to control the inflation monster but critics cite it as too little even after last hike of 75 bps and a similar move in upcoming FOMC.

Dollar index has rallied 15% in 1 year and roughly 11% in YTD on back of FED target rate to put reins on Inflation. Strong dollar doesn’t bode well for the US manufacturing sector and neither for US President’s promises to balance the imbalance with its trading partners. The

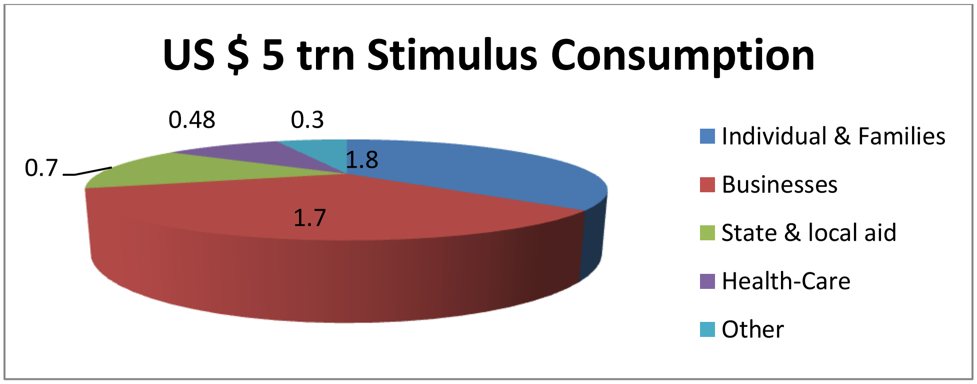
Global pessimism is in-line with US economic outlook supported by the fact that a 10-year yield also declined by 55 bps before reaching a high of 3.4%, currently priced at 2.85%. US 10 year yield correction also provides an indication that FED may not turnout too hawkish as being anticipated.

COVID

COVID has been termed as the Black Swan event of 21st Century disrupting Supply Chains and plummeting world economic order from Asia to America. US Economy which was already under pressure by Global financial institutions for winding up of Balance Sheets had to introduce two Stimulus to offset the economic losses due to wide spread lock-downs and subsequent shut downs.

Stimulus

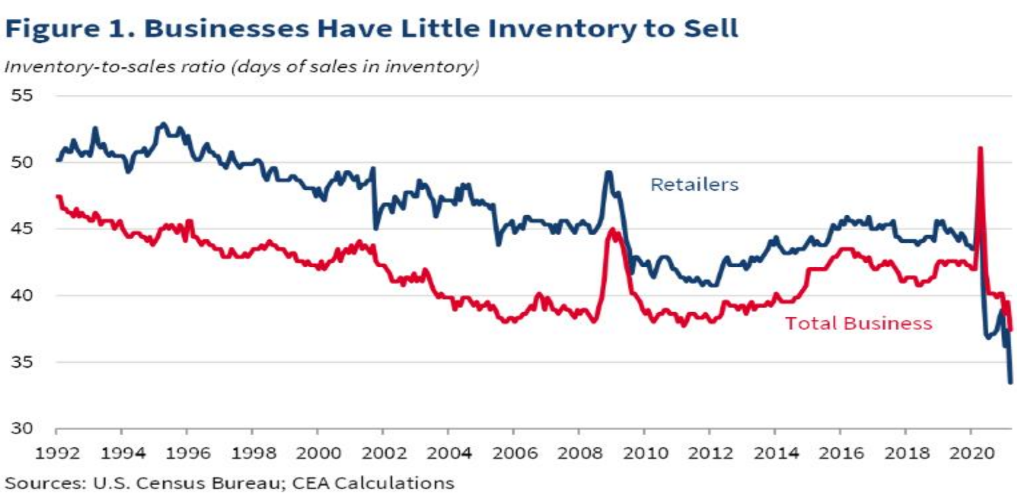
US Government unleashed the largest Stimulus program in US history of USD 5 Trillion by CARES act which according to major surveys helped poor families with some exploiting or capitalizing on situation as well. The Chart below from New York Times is well articulated of \$5.0 trn break-up as which portion of economy got what.



Supply Chain & Distribution

Covid brought massive supply chain disruptions which to-date haven't been able to return to pre-covid levels and also main reason causing inflation. Supply disruptions sent prices of essential commodities sky-rocketing and never seen in US history since 1974 as Producer Price Index rose by 19% in 2021.

Higher prices and low inventory led to one of the lowest inventory levels to 32 days compared average inventory of more than 50 days. Figure 1 shows below the levels of inventory with retailer when pandemic hit



However as the world started to open and gradually choking ports able to offset traffic, there have been reports of Major retailers such as Target, Home Depot.. etc are left with unwanted inventory to the extent that most of these are not accepting return request and letting customers keep the items only returning money.

Outlook

Most of institutions have slashed 2Q 2022 GDP forecast by -1.6% and expect growth rate to be between 0.3 – 0.5%, while most economists also fear 40% chances of recession. However recent drop in oil prices after Citi Bank's bold outlook for $65/bl for 2022 seems to have traction vs JP Morgan's $200/bbl for WTI. Major Commodities have already receded more than 50% including Wheat, Cooking Oil, Corn and other major grains it is highly likely that inflation will tame going forward and FED may not hawkish as being anticipated.

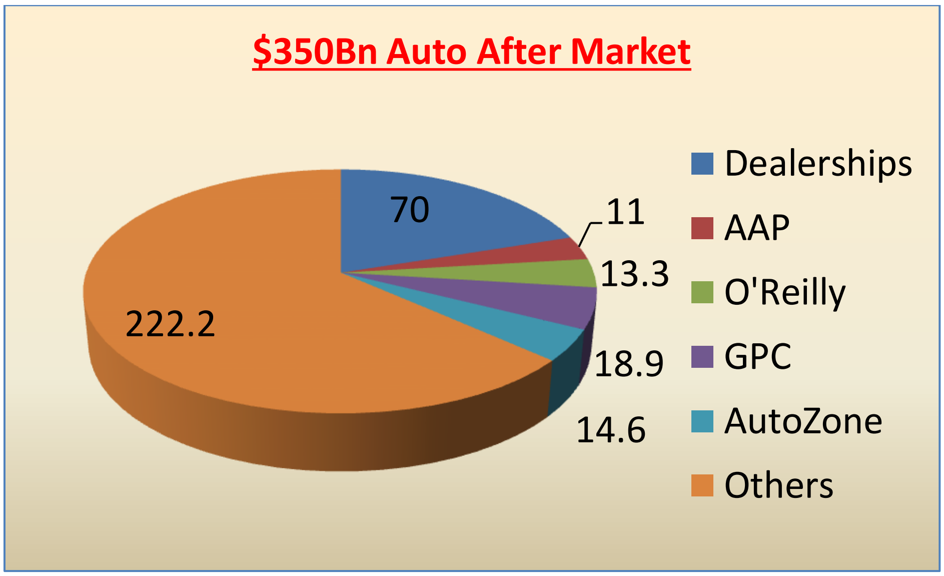
However High current account deficits have put some emerging market economies in trouble such as India, Brazil and South Africa after respective currency depreciation which to some-extent to be blamed for Russia-Ukraine war. In-wake of global imbalances, there is less to be concerned about US economy and expect it to post growth estimates cited by IMF.

Auto Parts Stores

Auto Parts industry mainly consist of four player namely, AutoZone Inc, O'Reilly Automotive Inc, Genuine Parts Inc, and Advanced Auto Parts Inc. The combined revenue of these four firms comes close to $44.0bn which is approx. 70% of the industry revenue of $60bn[1]. The health of Auto Parts industry which includes vendors, used car sellers and whole sellers is a direct function of Automobile consumption in United States which stands at record hovering

[1] www.ibisworld.com

above 16.0m vehicles for two consecutive years and has been growing since 2011. Employment by these big four players is little above 250,000 as full time employees and industry as whole employs roughly 380,000 including part time wagers.



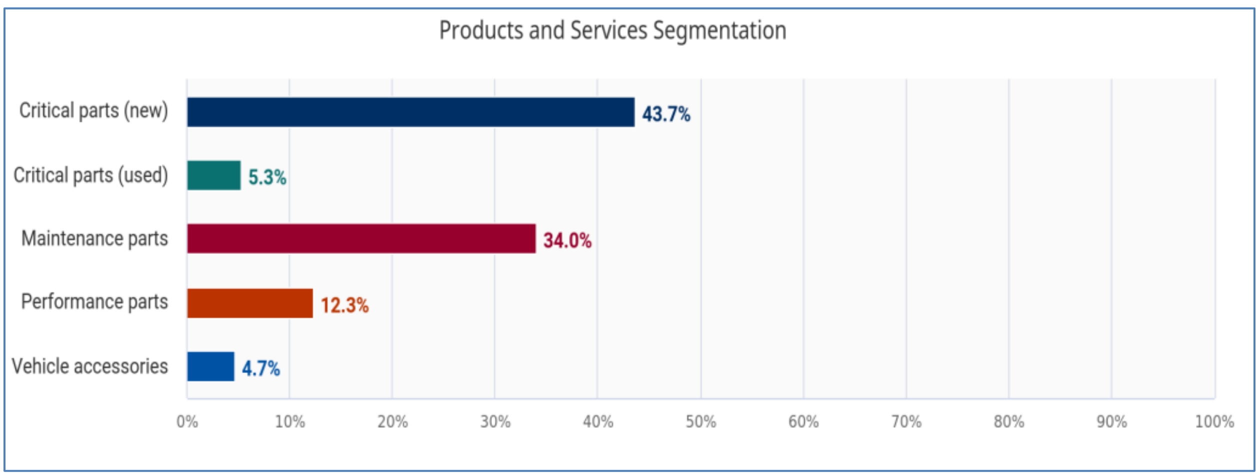
Business Model

Auto Parts Stores operate with physical store locations across United States and much smaller footprint in Mexico and Canada. Combined store locations of major four players is close to 21,000 serving direct clientele, while partial sale coming from Online and distributors network. Auto Parts stores are normally segmented between DIY (Do-it-Yourself) and Do-it-for-Me (DIM) customers and all the four notorious Auto Parts stores have altleast 60% of revenue originating from DIY segment. Interesting to mention that DIY customers don’t include the wholesale purchase of Auto accessories such as commercial car mechanic stores etc.

Auto parts industry is supplied by Auto Parts Whole sellers such as Magna International, Commercial Vehicle Group, Denso Corporation..etc who are also suppliers to Original Equipment Manufacturers (OEM) and Car Dealers. The availability and technical knowledge of customer distinguishes the choice between Auto Part Stores or Car Dealers for maintenance.

Product Mix

Industry products fall into five broad categories: critical parts, maintenance parts, performance parts, accessories and parts (e.g. radiators). Critical parts which include engine pumps, carburetors, belts and batteries contribute around 49% of industry revenue[2] while performance, maintenance & vehicle accessories make 12.3%, 34% and 4.7% respectively.



Performance parts are attributed to enhance engine performance and can be termed as non-essential and directly to linked to high disposable income related expense. Other categories known as maintenance which could include Oil Filters, viper blades, brake pads, headlights..etc

[2] 44131 Auto Parts Store IBIS World

contribute 8% of industry product mix while accessories which account for only 3% is considered to be as luxury expenses such wooden interiors, stereo systems…etc.

Customer Segmentation

Auto Store Parts customers are segmented in four categories namely

- Household & Individual
- Repair Shops
- Retailers & Wholesalers
- Others

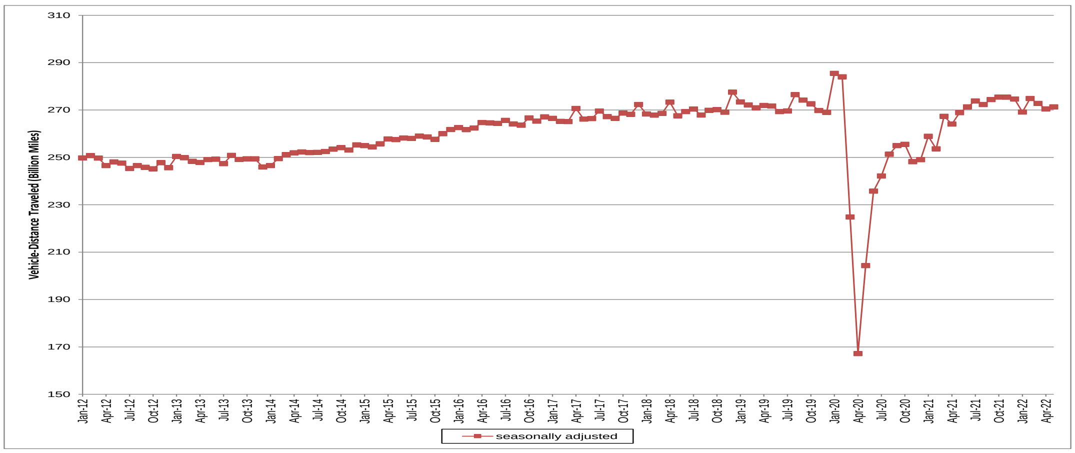
Household retailers are the largest source of revenue for the industry and account for roughly 62%. This segment represents both Do-it-Yourself and Do-it-for-me customers who purchase spares for in house repair. Repair shops which grab the second spot after Household retailers contribute close to 24% of revenue and its demand is related to growth of auto mechanics in the industry. Retailers and wholesalers which account little below 7% has a great potential to grow as the sales are directly linked to new and used car dealers who purchase parts from such stores to serve their customers at their establishments.

Demand Drivers

The demand in auto parts industry other than automobile sales are more related to three parameters which include

- Total Vehicles Miles Driven
- Per Capita disposable income
- Average age of vehicle

The Data below is collected by Federal highway Administration and provides a growing trajectory but haven't attained levels pre-covid levels close of 290 bn and reported to be at 270 billion miles[3] as of April 2022. Higher miles driven lead to increased demand for auto spare and parts due maintenance



Per capita disposable income

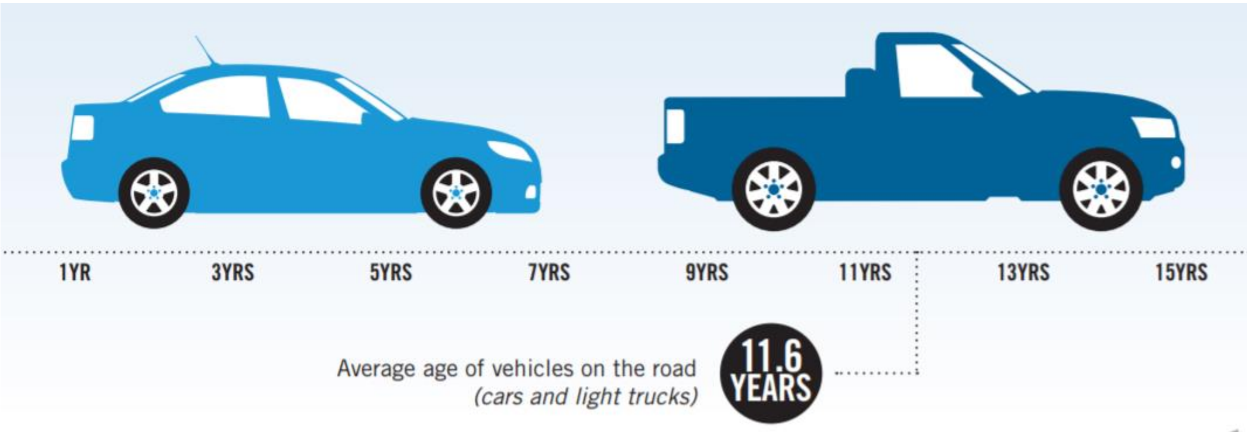
Disposable inome plays an important in determining the new automobile demand. It would be right to say the in a developed economy higher disposable income leads to higher purchase of new equipment which requires less tear and wear. The rise in number of new purchases which have peaked 17.5m vehicles drives future potential growth for demand in auto spares but the customer behavior towards the purchase of new car than to repair the existing one is detrimental to overall industry revenue and growth (Fig 1)

Average age of vehicle

Age of Vehicle provides certain idea into demand for auto spares which has shown an upward trend. According to National Automotive dealers association the average life of vehicle

[3] Federal Highway administration book

is around 11.6 years[4], higher the life of vehicle provides healthy indicators for aftermarket automotive segment. Older vehicles require more frequent maintenance and repairs, which bolsters demand for industry products.



Competition

Auto parts stores have been fiercely competing with Car Dealers who provide aftermarket automotive service to its customers. According to NADA figures the after sales service including repair and maintenance sales is around $111bn for year 2021, whereas the total revenue of Auto Parts stores comes to around $50bn.

It is estimated that around 264m cars are prevalent on US roads which provides great potential increase the pie which has been stagnant at $60.0bn. Much of increase in market share has been result of M&A over past 5 years else the industry has been in the consolidation phase; further increase in sales is more result of number of establishments/stores than any mass marketing campaigns. The four players other than competing internally has external challenges

[4] NADA Data 2022 (www.nada.org)

from used car parts wholesale industry, new and used car dealers and repair shops, which to some unverified sources is around $150.0bn market.

Among notorious four players, Genuine parts Inc is the only company to expand across American continent in Australia and New Zealand when it acquired Exego Group, while rest three so far expanded in American continent. AutoZone which has largest presence in terms of no. of stores 5,800 acquired AutoAnything an online retailer and Inter-American Motor Corporation (IMC) improving latest revenues figures to around $12.5bn. O’Reilly acquired CSK Automotive in 2008, which was one of the largest auto parts retailers in West region having 1342 establishments and in 2012 O’Reilly also took over VIP Parts, Tires & Service to increase its foothold in New England region. On the other hand Advance Auto Parts acquired B.W.P distributors in 2012 and General Parts International in 2014 for $2.0b, with this acquisition Advance Auto parts increased its no. of stores to 5,189 leading to a 50% jump in revenues to $9.7bn in 2015. The No. of stores since then have dropped to 4976 for year ending 2021.

Industry Outlook & Challenges

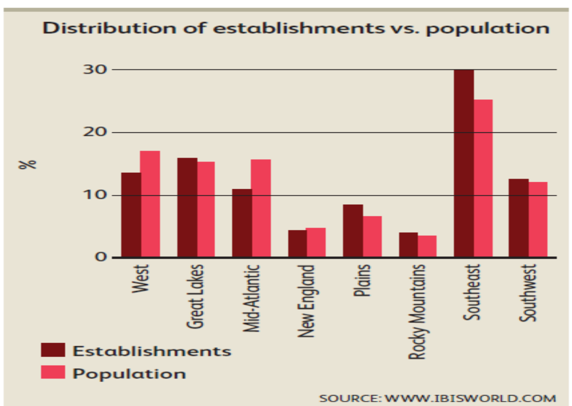
Industy is completely in mature stage and growth has been limited to that of GDP as over past five year the industry posted CAGR of 1.7%. As earlier mentioned much of revenue growth witnessed in revenue for big four is a result of acquistions instead of any growth in customers. Ironically the increase in no. of vehicles registrations and vehicle age didn’t provide growth opportunity in the sector which could be attributed to

- Major changes and innovations in engine design has resulted in lack of familiarity with engine parts and engineering.
- Higher disposable income leads to replacement behavior than repair the existing one.

- The most demanding after sales automotive component are filters and Oil which mostly customers prefer to get done at dealerships instead of DIY trend in past.

Locations

Driving habits are more popular in South as compared to north which some attribute to large share of US population around 30% residing in Southeast region[5]. Most of establishments are based in these regions which lack infrastructure in contrast to northern parts. According to NADA Oklahoma has the highest sales per dealership of $172.6m for 2016 but has only 1.5% of establishments by Auto Parts store in the region compared to 9% in California and Texas. California attracts the highest sales across all dealerships based there around $119.5m according to NADA data[6]



Electric Vehicles

Go green euphoria poses a big threat in addition to recent entry of Amazon. The advent of Electric vehicles complete changes the demand of critical parts which account for 60% of industry sales. Advance Auto Parts originate more than 50% sales by selling batteries which are important component for gasoline fired engines and would require more time to develop acquaintance for generating demand based on current DIY business model.

[5] 44131 Auto Parts Store IBIS World
[6] NADA Data 2022 – www.nada.org

Post-COVID Results

Pandemic came as a boon for tech sector supported by US stimulus and a higher disposable income. NASDAQ index doubled with a span of 6 months after hitting a low in March of 2020. Advance Auto parts was no exception registering a growth not registered in last 20 years, excluding the effect of acquisitions of 2014 and 2006.

The only Brick & Mortar businesses despite shutdowns were able to keep themselves afloat which had substantial logistical infrastructure in place to the support the E-Commerce channel. Apart from four major players AutoZone, O'Reilly, Genuine Parts Company (GPC) & Advance Auto Parts, companies such as carparts.com reported much higher growth in numbers catering only DIY customers compared to Big Four. (Table 2)

Carparts.com has 95% online sales with 35% of topline also contributed to selling on Third Party Market-places such as Ebay and Amazon.com for the year 2021. Advance Auto parts growth vs Carparts.com is not at par considering the low base topline and to some extent the digital channels. Carparts.com registered 58% and 31% topline growth 2020 & 2021 against Advance Auto Parts growth of 4% and 9% for same period. Illustrated in Fig 2 & 3

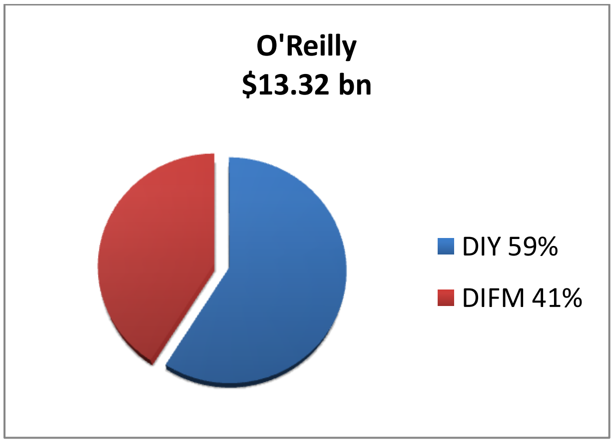
E-Commerce & Market-Places

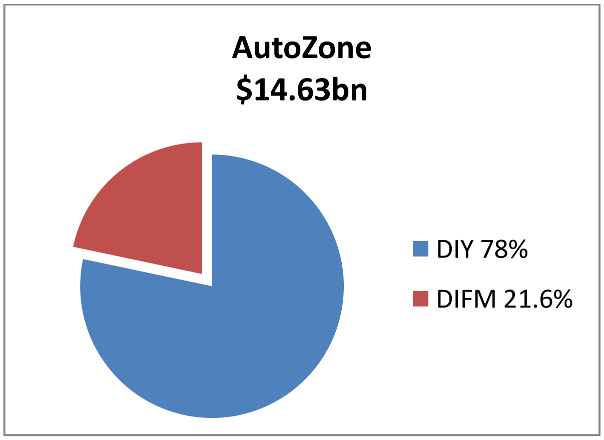
The growth in E-commerce revenues has been phenomenal as COVID turned a boon to all market-places and third party sellers on platforms. COVID acted as a catalyst for tech adoption in US and elsewhere around the globe from payment processors, logistics providers and Third Part (3P) sellers with their merchandize including influencers and providing cooking lessons.

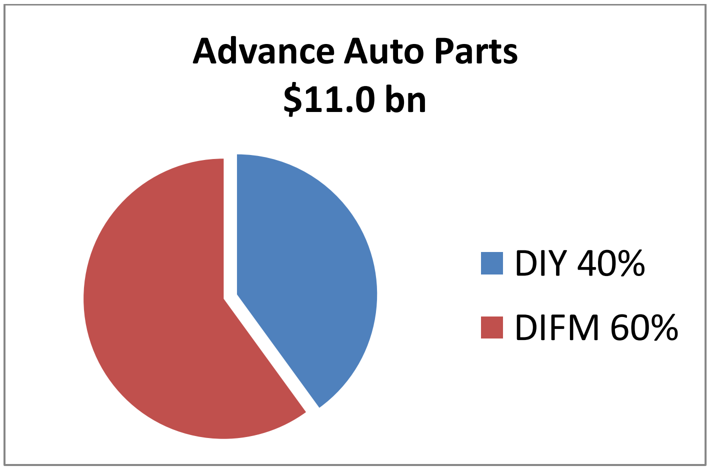
Alone Amazon witnessed 50% growth in 3P sellers on its platform from 2019 to 2021. Amazon's fulfillment services is no match for any player in US for 3P sellers at that scale for which AMAZON's charges around 40-45% of Gross Merchandized Value (GMV) (Fig 4). For the year 2021 GMV on Amazon platform surpassed its own merchandize. (Fig 5)

Revenue Segmentation | Do-it-yourself (DIY) | Do-it-for-me (DIFM)

Advance Auto Parts has unique Sales Mix compared to rest of players in reference to DIY & DIGM segmentation. AAP has highest portion of DIFM in its topline catering commercial buyers close to 60% of revenues vs 21% for AutoZone and 40% for O'Reilly for year 2021.





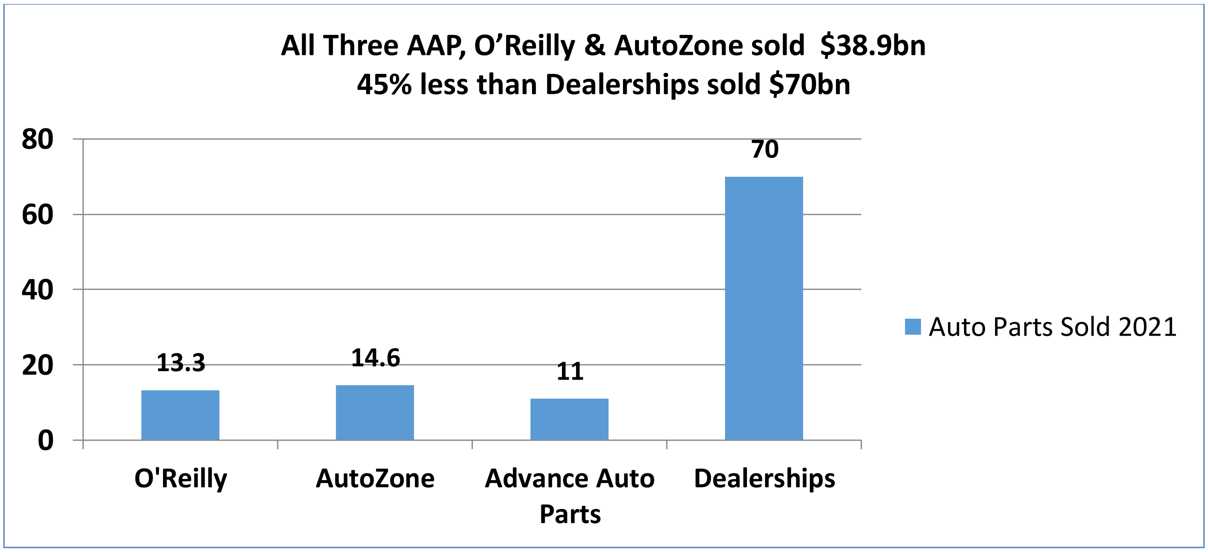


Advance Auto Part's 60% revenue generation from commercial side (DIFM) segment also makes its prone to more competition vs O'Reilly and AutoZone Online competition. So far Advance Auto Has managed to keep itself insulated from Amazon due to structure of Auto Parts market and car maintenance.

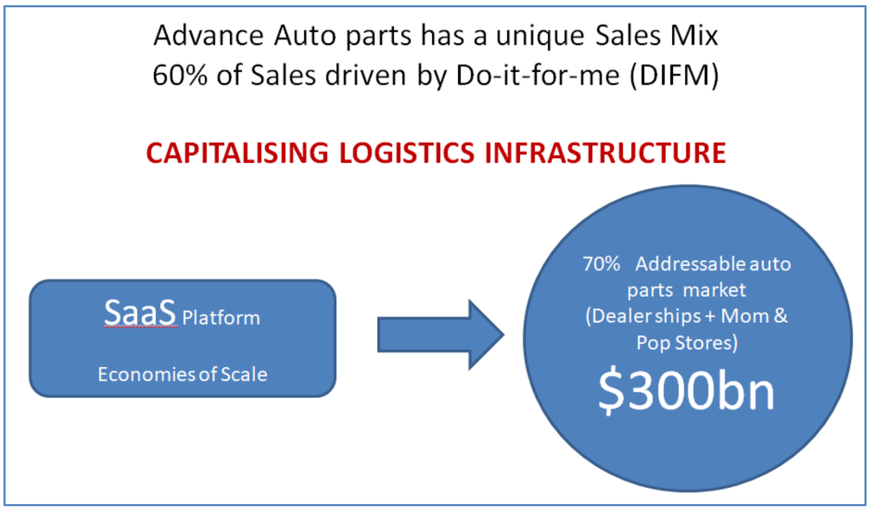
StarBoard LP an activist investor in 2015 sought changes to Advance Auto Parts revenue mix to focus more on DIY and high margin segment. It also termed the DIFM segment as logistics business with higher receivables to inventory vs Payables to Inventory which could come at sector par ratios subsequent to higher DIY sales.

Capitalising the DIFM segment.

Advance Auto Parts Unique sales Mix can also be treated as an opportunity in the Fragmented Auto Parts market approx. $300bn which have limited choices for Online Sales & fulfillment of merchandize. It is pertinent to mention that alone dealerships share of auto parts sale is almost double the size of all Big three's combined topline.



Apart from Dealerships, AAP, AutoZone and O'Reilly $200bn market is completely fragmented and untapped. AAP's logistics infrastructure can be capitalized by setting-up an Online-Market place for Auto parts retail industry including fulfillment likes of Amazon.



DATA & METHODOLOGY

We have analyzed 20 years of Advance Auto Parts Data to establish the relation topline and its Real-Estate expansion. Advance or other Auto parts retail has one of lowest per sq ft sales and which isn't in-line with rest of the Hard-Line retail. There has been significant debate in press and electronic media about US per Sq ft sales vs the China which has 3.9bn sq ft retail space generating $6.5trn for the year 2021. US on the other hand has double the retail space of 8.4bn sq ft generating similar amount of $6.5trn according to US census bureau.

Among the hard-line retail industry Advance Auto parts has 54.1m sq ft of space distributed between 4,972 store locations, 52 distribution center and corporate office. Past 20 year data suggest the major expansion between real estate has come via acquisitions adding almost 12m sq ft of space during 2014 and some 8m sq ft in 2007 (Table 3)

Pertinent to mention that past 20 years data of Topline and per sq ft sales suggest that relationship isn't linear anymore and specially during to COVID where Topline sales surpassed the overall per sq ft expansion as evident from below graphs. The average USD per sq ft sales for year 2021 was recorded at $ 266.0 for Advance Auto Parts (Fig 6)

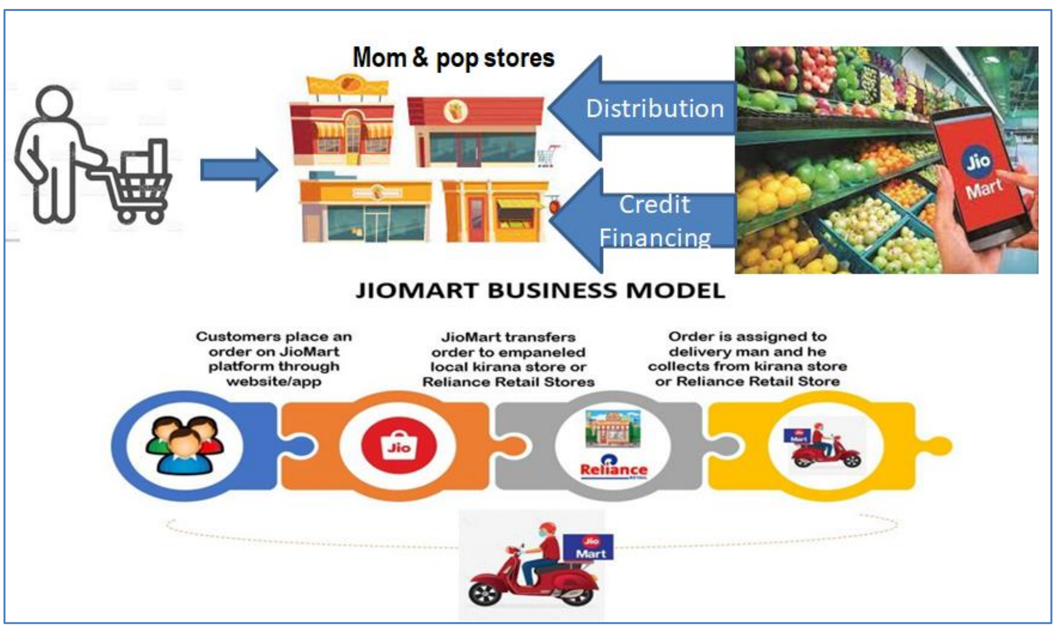
It is also worth noting that relationship between Retail Real Estate expansion and topline isn't linear either as shown in figure below. The COVID made topline grow much faster than real estate expansion first time in last 20 years data (Fig 7). The Relationship between Net-Income and Real Estate Expansion was no different, the growth in Net-Income has been at higher rate as compared to Real Estate Expansion (Fig 8)

Proposed Acquisition Strategy

Based on Real Estate correlation to Sales and Net-Income and Pandemic's expediting adoption of e-commerce it is proposed that Advance Auto Parts should acquire carparts.com to launch a market-place for Auto Parts. Advance Auto Parts is an established brand and hence acquiring carparts.com will help avoid brand cannibalization for putting Mom & Pop stores or Car dealerships online who wish to sell their excess inventory.

In view of Past transactions for FBA Rollups likes of Thrasio the average deal price of a 3P seller is some what between 3x-4x of EBITDA and same is proposed for carparts.com. However carparts.com having negative EBITDA, the acquisition price has been assumed at PB of 1.0 and for academic reasons as well but realistically the deal price is likely to be at Price-to-sales of 1x – 2x multiple.

Post-acquisition Advance Auto Parts is expected to setup an online market place imitating Reliance Jio's model adopted in India.



Evolution of any tech-platform needs to be consistent with customer acquisition arbitrage which is defined as

Customer Acquisition cost (CAC) should be less than the long-term revenue (LTR) from the same customer. It is however challenging to determine the expected revenue to be generated from a customer but historical trends help in developing of repeat or new customers on any platform. Amazon has grown on the same arbitrage formulae and several startups fail as to what should be acquisition cost vs the revenues being generated.

CAC < LTR | Arbitrage Formulae

<u>Fulfilled by Advance Auto Parts</u>

Digital channels sales are not limited to single product and the concept of Super App or cross selling products come into play of providing prospective sellers with financing on merchandize and complete fulfillment services likes of Amazon. Advance Auto Parts can become either seller or buyer of the estimated $300bn market which is highly fragmented.

Fulfillment services offered in US except Amazon are not one-window services and every 3P seller other than on Amazon has to co-ordinate from order receiving, processing & last mile delivery. It is proposed that Advance Auto should setup complete fulfillment services for its market-place and potential buyers.

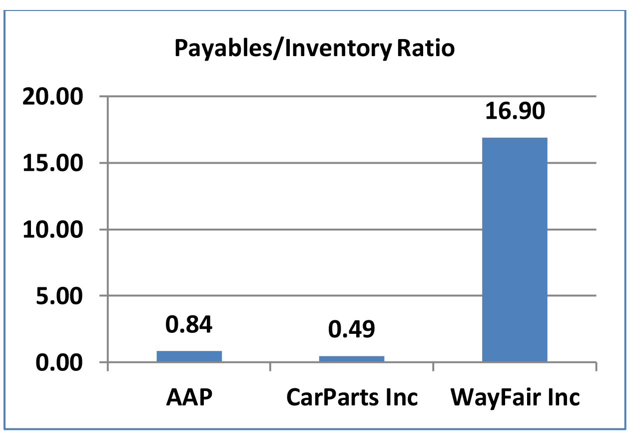
Channel	In-house	3rd Party	Complete	Multi
Amazon	✓	✓	✓	✓
Ebay	✓	✓	✗	✗
Advance Auto	✓	✓	✓	✗

Mutli-Channel fulfillment can be done-away as it would require more resources in logistics for fulfillment of orders sold on multiple market-places which so far only Amazon offers in US. Amazon despite having large scale operations is reported to have challenges to in the last mile delivery and effective utilization of warehouses.

Payables to Inventory

Companies using digital channels are reported to have high payables/ Inventory ratios vs Brick & Mortar business. As a matter of explanation we have taken Wayfair Inc which uses Drop-ship model. Wayfair sells home and office furniture via its website with 21m sq ft of space generating topline of $13.5bn against Advance Auto parts of $11.0bn with 54m sq ft of space.

Drop-Ship model is sourcing directly from manufacturer without keeping inventory on you books. It allows maintaining less Real Estate vs conventional brick & mortar and a high payables to inventory ratio. The Chart below gives an idea how online channels can better manage inventory increasing Free Cash Flow



Inventory levels of AAP, Carparts & Way Fair Inc

CY21 (000s)	Inventory	Receivables	Payables
AAP	4,659,018	782,785	3,922,007
Carparts	138,851	5,015	67,372
WayFair	69,000	226,000	1,166,000

Having lower payables vs higher receivables was also one of the center of attention by StarBoard LP explained in its document. Almost all online places tend to have low inventory and higher payables creating more fiscal space for FCF from Operations.

Unlike other merchandize, Auto Parts purchase is not an aesthetic choice i.e. vehicle maintenance or replacement part choice is not necessarily associated to particular type or brand unless some major overhauling of an auto vehicle is required. In accessories purchase such choice is even more broadened to fulfill the necessity and not bound by any contract.

Based on Customer purchase and industry structure it is highly that any part can be replenished from any location of a Mom & Pop store or Advance Auto location for fulfillment. Such strategy can be adopted to keep the minimal inventory and increasing the number of SKUs. Advance auto parts despite 54m sq ft of space it has only 280,000 SKUs compared to carparts.com 750,000 SKUs due to Drop-ship model.

RESULTS

Carparts.com acquisition at PB of 1x can be achieved with available cash balance. Wall Street consensus for the fair value assumption without acquisition is between $205 - $255, we have arrived at fair value estimate of USD 229 @ 2.9% Risk Free rate and 5% economic growth

Financial Analysis

Advance Auto parts have reported of CAGR of 4% for last three years and have assumed similar growth rates in below model post merging Carparts.com and Advance Auto parts for last year.

Consolidated Balance Sheet

USD in 000	2020	2021, Consolidated	2022	2023	2024	2025	2026
Cash & Cash Equivalents	834,992	46,164	180,730	354,399	563,847	804,069	1,057,560
Receiveables, net	749,999	787,800	827,190	860,278	886,086	903,808	921,884
Inventories	4,538,199	4,797,869	5,037,762	5,239,273	5,396,451	5,504,380	5,614,468
Other current assets	146,811	238,837	241,225	243,638	246,074	248,535	251,020
Total Current Assets	**6,270,001**	**5,870,670**	**6,286,908**	**6,697,587**	**7,092,458**	**7,460,791**	**7,844,932**
PP&E	1,462,602	1,549,047	1,626,499	1,707,824	1,793,216	1,882,876	1,977,020
Right-of-use assets	2,379,987	2,715,620	2,851,401	2,993,971	3,143,670	3,300,853	3,465,896
Goodwill	993,590	1,471,584	1,545,163	1,622,421	1,703,542	1,788,720	1,878,156
Intangible assets, net	681,127	651,217	683,778	717,967	753,865	791,558	831,136
Other assets	52,329	75,839	76,597	77,363	78,137	78,918	79,708
Total Non-Current Assets	**5,569,635**	**6,463,307**	**6,783,439**	**7,119,547**	**7,472,430**	**7,842,926**	**8,231,915**
Total Assets	**11,839,636**	**12,333,977**	**13,070,346**	**13,817,134**	**14,564,887**	**15,303,717**	**16,076,847**
Accounts payable	3,640,639	3,989,379	4,170,059	4,317,321	4,426,714	4,494,719	4,563,673
Accrued expenses	606,804	794,568	802,514	810,539	818,644	826,831	835,099
Lease liabilities	0	7,154	7,226	7,298	7,371	7,444	7,519
Other current liabilities	496,472	486,000	490,860	495,769	500,726	505,734	510,791
Total Current Liabilities	**4,743,915**	**5,277,101**	**5,470,658**	**5,630,926**	**5,753,455**	**5,834,727**	**5,917,082**
Long-term debt	1,032,984	1,034,320	1,044,663	1,055,110	1,065,661	1,076,318	1,087,081
Lease liabilities	2,014,499	2,376,886	2,400,655	2,424,661	2,448,908	2,473,397	2,498,131
Deferred Income Taxes	342,445	410,606	414,712	418,859	423,048	427,278	431,551
Other Long-term liabilities	146,281	106,773	107,841	108,919	110,008	111,108	112,219
Contingencies & Commitments	0	0	0	0	0	0	0
Total Non-Current Liabilities	**3,536,209**	**3,928,585**	**3,967,871**	**4,007,550**	**4,047,625**	**4,088,101**	**4,128,982**
Total Liabilities	**8,280,124**	**9,205,686**	**9,438,529**	**9,638,476**	**9,801,080**	**9,922,829**	**10,046,064**
Shares issued	8	8	8	8	8	8	8
Paid-in capital	783,709	845,407	845,407	845,407	845,407	845,407	845,407
Treasury stock	(1,394,080)	(2,300,288)	(2,300,288)	(2,300,288)	(2,300,288)	(2,300,288)	(2,300,288)
Accumulated other comprehensive loss	(26,759)	(22,627)	(22,627)	(22,627)	(22,627)	(22,627)	(22,627)
Retained Earnings	4,196,634	4,605,791	5,109,317	5,656,158	6,241,307	6,858,388	7,508,283
Total Equity	**3,559,512**	**3,128,291**	**3,631,817**	**4,178,658**	**4,763,807**	**5,380,888**	**6,030,783**
Liab. + Equity	**11,839,636**	**12,333,977**	**13,070,346**	**13,817,134**	**14,564,887**	**15,303,717**	**16,076,847**
Check	0	0	0	0	0	0	0
Capital structure	6,606,995	6,546,651	7,084,361	7,665,727	8,285,747	8,938,048	9,623,513
Equity	53.9%	47.8%	51.3%	54.5%	57.5%	60.2%	62.7%
Debt	46.1%	52.2%	48.7%	45.5%	42.5%	39.8%	37.3%

Base Revenue Model (P&L)

USD in 000	2021, Consolidated	2022	2023	2024	2025	2026
Net Sales	11,580,429	12,159,450	12,645,828	13,025,203	13,285,707	13,551,422
Cost of Sales, including Purchasing and warehousing cost	(6,454,398)	(6,746,719)	(6,984,973)	(7,161,960)	(7,271,985)	(7,383,546)
Gross Profit	**5,126,031**	**5,412,731**	**5,660,855**	**5,863,244**	**6,013,723**	**6,167,876**
SG&A	(4,296,425)	(4,480,848)	(4,628,467)	(4,734,758)	(4,796,239)	(4,858,285)
EBITDA	1,098,650	1,183,981	1,262,955	1,333,407	1,393,289	1,455,033
Operaing Income (EBIT)	**829,606**	**901,485**	**969,159**	**1,030,797**	**1,084,627**	**1,140,198**
Other, net	238	240	243	245	248	250
Interest Expense	(41,013)	(41,423)	(41,837)	(42,256)	(42,678)	(43,105)
Loss on early redemptions of senior unsecured notes	0	0	0	0	0	0
Other Income, net	11,220	11,332	11,446	11,560	11,676	11,792
Total Other, net	**(29,555)**	**(29,851)**	**(30,149)**	**(30,451)**	**(30,755)**	**(31,063)**
Income before provision for Income Taxes	**800,051**	**871,634**	**939,010**	**1,000,346**	**1,053,872**	**1,109,135**
Provision for Income Taxes	(190,168)	(207,183)	(223,198)	(237,777)	(250,500)	(263,636)
Net Income	**609,883**	**664,451**	**715,812**	**762,569**	**803,372**	**845,500**
Basic EPS	9.53	10.38	11.18	11.91	12.55	13.21
No. of Share Outstanding (000s)	64,028	64,028	64,028	64,028	64,028	64,028
Diluted EPS	9.53	10.38	11.18	11.91	12.55	13.21
Weighted No. of Shares outstanding	64,028	64,028	64,028	64,028	64,028	64,028
Depreciation	(269,044)	(282,496)	(293,796)	(302,610)	(308,662)	(314,835)
Assumptions						
Growth in revenue		5.0%	4.0%	3.0%	2.0%	2.0%
GPM	44.3%	44.5%	44.8%	45.0%	45.3%	45.5%
SG&A % sales	-37.1%	-36.9%	-36.6%	-36.4%	-36.1%	-35.9%
EBITDAR margin	9.5%	9.7%	10.0%	10.2%	10.5%	10.7%
Operatig margin	7.2%	7.4%	7.7%	7.9%	8.2%	8.4%
Effective tax %	-23.8%	-23.8%	-23.8%	-23.8%	-23.8%	-23.8%

- Assumptions have been kept conservative in-line with GDP growth rates but can be changed in attached model to suit the tech sector growth.
- Post-Merger EBITDA Margin has been kept in consistent with Advance Auto Parts Historical numbers.
- Gross margin has been increased by 20 bps over 4 year period
- Tax rate has also been maintained at 23.8% recorded for the year 2021.

Consolidated Cash Flows

USD in 000	2021, Consolidated	2022	2023	2024	2025	2026
Net income	609,883	664,451	715,812	762,569	803,372	845,500
Depreciation	269,044	282,496	293,796	302,610	308,662	314,835
Other, net	(238)	(240)	(243)	(245)	(248)	(250)
Interest Expense	41,013	41,423	41,837	42,256	42,678	43,105
Loss on early redemptions	0	0	0	0	0	0
Other Income, net	(11,220)	(11,332)	(11,446)	(11,560)	(11,676)	(11,792)
Operating CFs	**908,482**	**976,798**	**1,039,757**	**1,095,629**	**1,142,789**	**1,191,398**
Change in NWC	**136,535**	**(88,186)**	**(76,815)**	**(62,967)**	**(46,913)**	**(48,369)**
Receiveables, net	(37,801)	(39,390)	(33,088)	(25,808)	(17,722)	(18,076)
Inventories	(259,670)	(239,893)	(201,510)	(157,178)	(107,929)	(110,088)
Other current assets	(92,026)	(2,388)	(2,412)	(2,436)	(2,461)	(2,485)
Accounts payable	348,740	180,680	147,262	109,393	68,005	68,954
Accrued expenses	187,764	7,946	8,025	8,105	8,186	8,268
Other current liabilities	(10,472)	4,860	4,909	4,958	5,007	5,057
CAPEX	**(870,162)**	**(319,373)**	**(335,342)**	**(352,109)**	**(369,715)**	**(388,200)**
Free cash flow	**174,855**	**569,239**	**627,600**	**680,553**	**726,162**	**754,828**
Other cash flow	**(694,639)**	**(152,177)**	**(160,135)**	**(168,496)**	**(177,277)**	**(186,502)**
Other assets	(23,510)	(758)	(766)	(774)	(781)	(789)
Lease liabilities	7,154	72	72	73	74	74
Long-term debt	1,336	10,343	10,447	10,551	10,657	10,763
Lease liabilities	362,387	23,769	24,007	24,247	24,489	24,734
Deferred Income Taxes	68,161	4,106	4,147	4,189	4,230	4,273
Other Long-term liabilities	(39,508)	1,068	1,078	1,089	1,100	1,111
Contingencies & Commitments	0	0	0	0	0	0
Other, net	238	240	243	245	248	250
Interest Expense	(41,013)	(41,423)	(41,837)	(42,256)	(42,678)	(43,105)
Loss on early redemptions	0	0	0	0	0	0
Other Income, net	11,220	11,332	11,446	11,560	11,676	11,792
Treasury shares	(906,208)	0	0	0	0	0
Other comprehensive income/(loss)	4,132	0	0	0	0	0
Dividend paid	(160,925)	(160,925)	(168,971)	(177,420)	(186,291)	(195,605)
Additional paid-in capital	595,305	0	0	0	0	0
Payment for acquisition	(573,408)	0	0	0	0	0
Total cash flow	**(519,784)**	**417,062**	**467,465**	**512,058**	**548,884**	**568,327**
Change in cash from balance sheet	(788,828)	134,566	173,669	209,448	240,222	253,491
Check	0	0	0	0	0	0

Valuation

Factors	Explanation				
Beta	*Sensitivity of stock price relative to a 1bps change in market*				
Risk free rate (Rf)	*10-Yr US yield*				
Market risk (Rm)	*Market return*				
Equity risk premium	Risk free - Market risk				
CAPM	Rf + (Beta *(Rm-Rf))				
Beta	1.26				
Risk free rate	3.90%				
Market risk	10.0%				
Equity risk premium	6.1%				
CAPM	**11.6%**				
Equity weight	55.7%				
Debt weight	44.3%				
Cost of debt	4.9%				
Tax rate	-23.8%				
Cost of debt, after tax	**3.7%**				
WACC	**8.1%**				
Terminal growth	3%				
	0.3	1.3	2.3	3.3	4.3
	2022	**2023**	**2024**	**2025**	**2026**
Free cash flow	569,239	627,600	680,553	726,162	754,828
Disc. FCF	558,256	569,349	571,102	563,690	542,015
Terminal value					15,231,051
Disc. TV	**10,936,879**				
Enterprise value	**13,741,291**				
Cash + Other investment & equiv	46,164				
Debt	(3,418,360)				
Equity value	**10,369,095**				
# of shares	64,028				
Equity value per share	162				

Conclusion

Based on our research to develop correlation between Real estate expansion and Topline we have established that Advance Auto Parts should purse a digital sales channel by setting up an Online Market-place of Auto Parts. Such Market-place needs to be aligned to develop an eco-system involving all stake-holders from dealer-ships, Mom & Pop stores and Auto repair or maintenance shops.

Based on strategy on Customer Acquisition we have developed a based revenue model which can be adopted for a spin-off of Logistics operations regarded as commercial sales from Core in-store sales. Likewise SaaS, Advance can structure new segment post spin-off as Logistics as Service (LaaS). To achieve profitability of such a platform with economies of Scale we have presumed a take rate of 10% and 15% of Logistics services incurred by Carparts.com for year 2021. On the revenue side we have assumed fulfillment fees of 30% against Amazon's 40% of GMV. (Table 4)

Future Initiatives

Future initiatives could also include setting up EV charging stations or utilizing Store location yards as market places for used car market-place to match buyers and sellers like Facebook market-place.

TABLES

- **Table (1)**

IMF Estimtaes

	Projections						
	2020	2021	2022	2023	2024	2025	2026
Real GDP (annual growth)	-3.4	5.7	2.9	1.7	0.8	1.7	2.1
Real GDP (Q4/Q4)	-2.3	5.5	2.2	0.7	1.2	1.9	2.1
Unemployment rate (Q4 average)	6.8	4.2	3.2	4.4	4.8	4.4	4.0
Current account balance (% of GDP)	-2.9	-3.6	-3.7	-3.1	-2.6	-2.4	-2.2
Fed funds rate (end of period)	0.1	0.1	3.4	3.9	3.4	2.4	2.4
Ten-year government bond rate (Q4 average)	0.9	1.5	3.6	4.2	3.6	3.4	3.1

- **Table (2)**

Carparts.com P&L

(In Thousands)	CY19	CY20	CY21
Net Sales	280,657	443,884	582,440
Cost of Sales	196,434	288,518	385,157
Gross Profit	84,223	155,366	197,283
%GM	30%	35%	34%
G&A	92,473	155,071	206,394
(EBIT)	(8,250)	295	(9,111)

Advance Auto P&L

(In Thousands)	CY2019	CY2020	CY2021
Net Sales	9,709,003	10,106,321	10,997,989
Cost of Sales,	5,454,257	5,624,707	6,069,241
Gross Profit	4,254,746	4,481,614	4,928,748
%GM	43.82%	44.34%	44.81%
SG&A	3,577,566	3,731,707	4,090,031
(EBIT)	**677,180**	**749,907**	**838,717**

- **Table (3)**

Advance Auto Retail Space	2021		
Properties Sq ft (000s)	No. of Locations	Owned	Leased
Distribution Centers	51	4401	7,825
Corporate Offices	1 (Raleigh)	-	550
Stores & Branches	4972	6300	35001
	Total	10701	43,376

- **Table (4)**

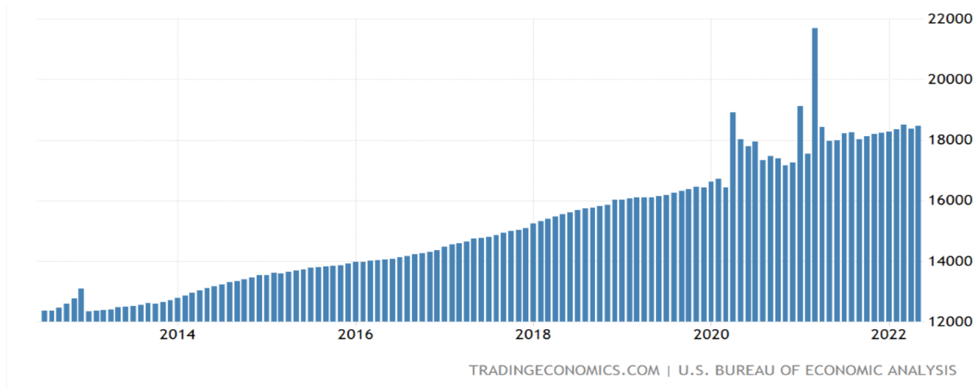
LaaS Revenue Model

	Market Share			Addressable Market $m	200,000				
	DFIM	60%		Fullfillment Fees	30%				
P&L (mn)	2022	2023	2024	2025	2026	2027	2028	2029	2030
Market Share	1%	2%	3%	4%	5%	6%	7%	8%	9%
GMV	$ 2,000	$ 4,000	$ 6,000	$ 8,000	$ 10,000	$ 12,000	$ 14,000	$ 16,000	$ 18,000
Net Sales	600	1,200	1,800	2,400	3,000	3,600	4,200	4,800	5,400
Technology, Advertising, Data Center @ 10%	10.00%	9.50%	9.00%	8.50%	8.00%	7.50%	7.00%	6.50%	6.00%
Shipping & Transportation @ 15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Cost of Sales % (10% + 15%)	500	980	1440	1880	2300	2700	3080	3440	3780
Operating profit	**100**	**220**	**360**	**520**	**700**	**900**	**1,120**	**1,360**	**1,620**
Fullfillment Model (B2B)									
P&L (mn)	2022	2023	2024	2025	2026	2027	2028	2029	2030
Market Share	1%	2%	3%	4%	5%	6%	7%	8%	9%
GMV	$ 2,000	$ 4,000	$ 6,000	$ 8,000	$ 10,000	$ 12,000	$ 14,000	$ 16,000	$ 18,000
Cost of Sales 70%	1,400	2,800	4,200	5,600	7,000	8,400	9,800	11,200	12,600
Gross Profit	$ 600	$ 1,200	$ 1,800	$ 2,400	$ 3,000	$ 3,600	$ 4,200	$ 4,800	$ 5,400
Operating expenses @ 15%	300	600	900	1200	1500	1800	2100	2400	2700
Operating profit	**300**	**600**	**900**	**1,200**	**1,500**	**1,800**	**2,100**	**2,400**	**2,700**

FIGURES

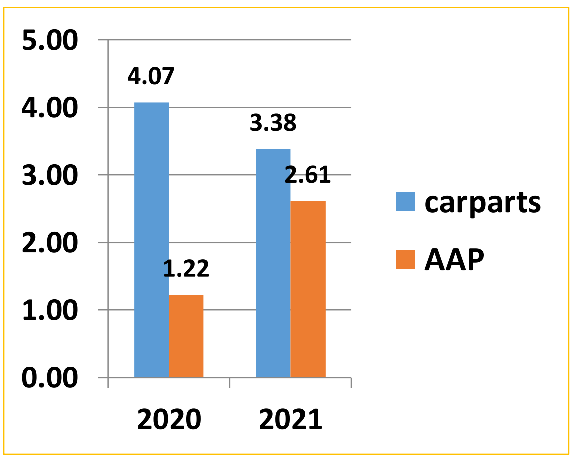
- **Fig 1**

(Disposable Income)

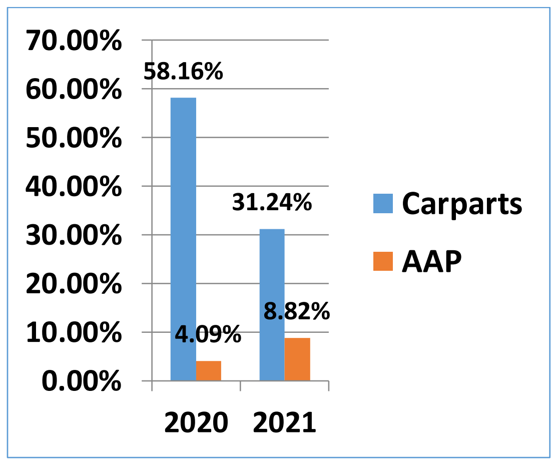


- **Fig 2 & 3**

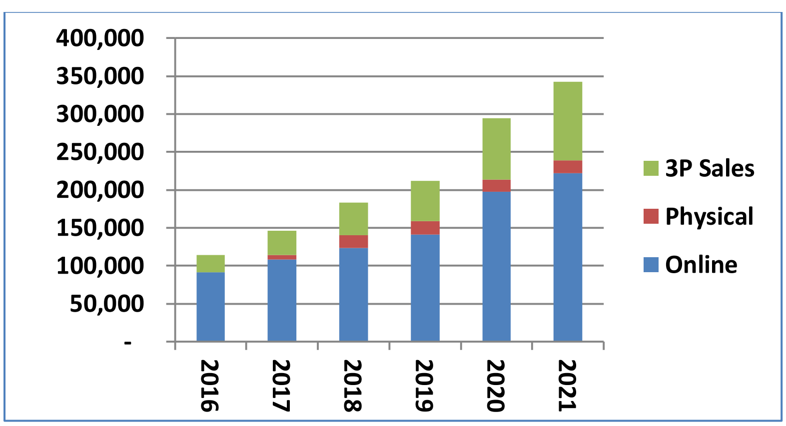
Inventory Turnover



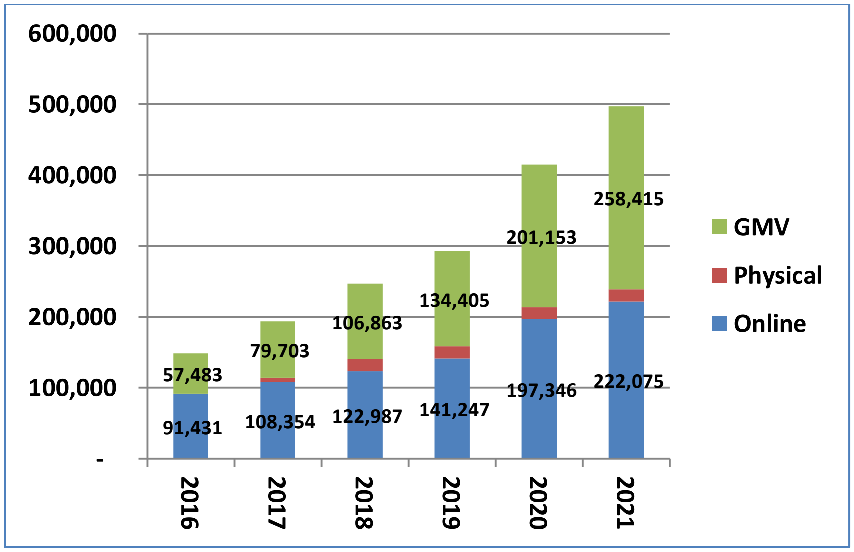
Revenue Growth



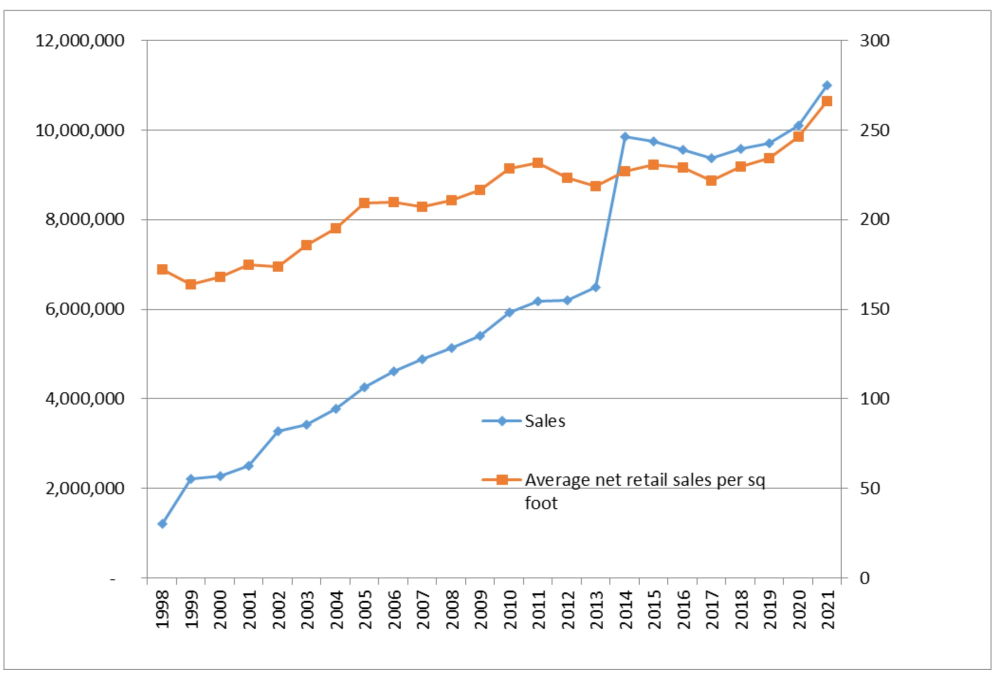
- **Fig 4 (Amzaon annual revenues)**



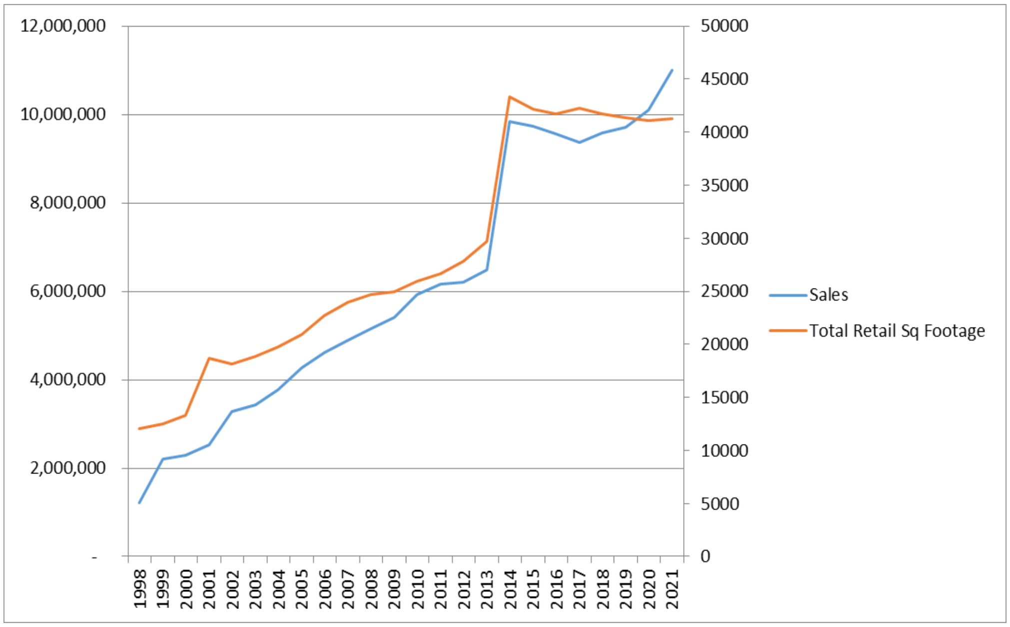
- **Fig 5 (Amazon 3P GMV)**



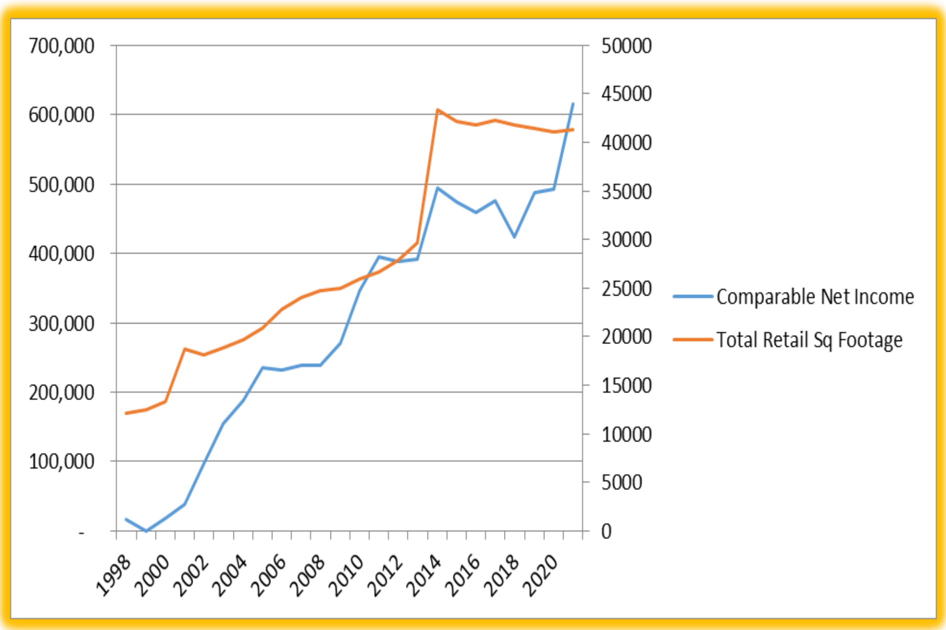
- <u>**Fig 6 (Topline vs Rev Sq ft)**</u>



- **Fig 7 (Topline vs Retail Sq footage)**



- **Fig 8 (Net Income vs Total Sq footage)**



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