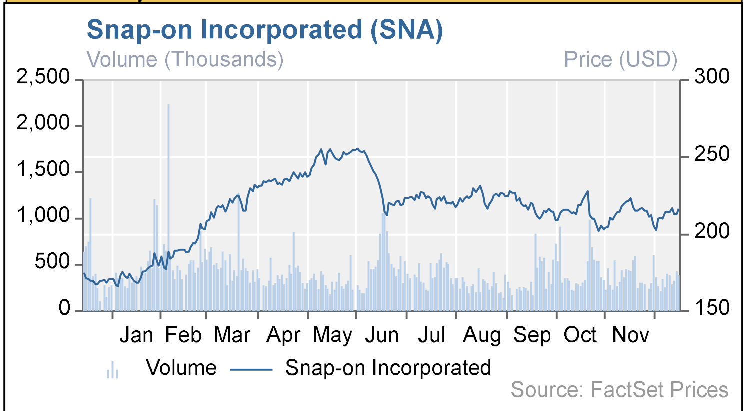
Recommendation: Hold				
Current Price	**$216.88**	---	Ticker	SNA
1 Year Bear	$189	*-12.9%*	Sh. Out. (M)	53.5
1 Year Base	**$227**	***4.5%***	M.Cap. ($M)	11.6
1 Year Bull	$311	*43%*	EV ($M)	12.4

Consumer Discretionary, Apparel Retail

Snap-On Inc.

Price History



	5Y	3Y	2Y	LTM	YTD	3M	1M
Return	25.1%	47.1%	27.2%	23.9%	26.6%	-2%	-2%

Summary

I recommend a neutral rating with a target of $227. Snap-On has extremely high margins and has a postive sales growth outlook going into the 2022 fiscal year. SNA has been capturing growth in international markets and critical markets, growing its Commercial & Industrial Group while maintaining current sales in its Tools Group. Relative valuation compared to peers shows that Snap-On is currently under-valued, but the firm has a solid growth plan that supports investors' hopes. Relative to the industry, SNA has a low P/E that should increase in the coming years.

Financials

	2017	2018	2019	2020	2021	2022F	2023F
Sales($M)	**4,000**	**4,070**	**4,068**	**3,942**	**4,242**	**4,458**	**4,641**
Gr. %	-7.2%	1.8%	0.1%	-3.1%	7.6%	5.1%	4.1%
v. Cons.	-	-	-	-	-	-0.5%	3.8%
Industry	7.9%	8.6%	4.7%	-4.1%	7.8%	5.9%	6.4%
EPS	**$9.86**	**$11.94**	**$12.40**	**$12.60**	**$14.47**	**$15.35**	**$16.81**
Gr. %	3.6%	21.1%	3.9%	4.3%	14.9%	6.1%	9.5%
v. Cons.	-	-	-	-	-	4.6%	4.8%
Industry	15.7%	3.7%	4.8%	6.9%	15.1%	6.3%	7.3%

Key Drivers

- Expansion into critical industries: Snap-On's Commercial & Industrial Group is penetrating many new markets. These new sales produce extremely high margins and have foreign growth opportunities.
- Increased automobile sales: As the re-opening has continued to flourish, many consumers have purchased used or new cars with their extra savings and stimulus money. More cars on the road means more repairs and sales for Snap-On's Tools Group.
- Electric vehicles: SNA may see lower sales if the EV crave continues forward at the same pace. Snap-On has the Repair Systems & Information Group, but it is not clear if it will be able to leverage that business unit enough to maintain the current sales levels.
- Economic trends: Snap-On is extremely susceptible to upward or downward swings in the market. With its high-priced tools and niche market, it can be seen following the macro-economic trends.

Ratios

	2017	2018	2019	2020	2021	2022F	2023F
NPM	**15.1%**	**18.2%**	**17.0%**	**15.9%**	**15.9%**	**18.6%**	**18.5%**
Industry	13.0%	12.4%	8.7%	8.9%	8.9%		
ROE	10.2%	22.4%	21.3%	17.3%	17.3%	18.6%	18.0%
Industry	14.3%	13.7%	15.1%	13.4%	13.4%		
ROA	11.2%	12.8%	12.5%	10.2%	10.2%	11.4%	11.9%
Industry	7.3%	7.4%	7.4%	6.8%	6.8%		
A T/O	0.75	0.73	0.74	0.64	0.64	0.61	0.64
A/E	1.79	1.75	1.78	1.73	1.68	1.65	1.64

Valuation

Using a relative valuation approach, Snap-On appears to be relatively under-valued in comparison to the industry. A combination of the approaches suggests that Snap-On's value is $227, with the shares currently trading at $212.30.

Valuation

	2017	2018	2019	2020	2021	2022F	2023F
P/E	17.2	12.3	13.9	16.0	14.8	14.3	13.7
Industry	18.7	18.6	17.9	26.9	27.4	17.1	15.7
P/S	2.55	1.43	1.67	2.46	2.60		
P/B	3.35	2.70	3.20	2.60	2.90		
P/CF	16.79	19.90	16.00	10.50	11.20		
V/EBITDAA	11.30	15.90	12.00	10.90	11.10		
D/P	30.4%	28.2%	29.7%	30.1%	30.8%		

Risks

- Electric vehicles causing Tools Group sales to decrease
- Economic downturns
- High prices may slow growth in critical industries and emerging markets

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Company Overview

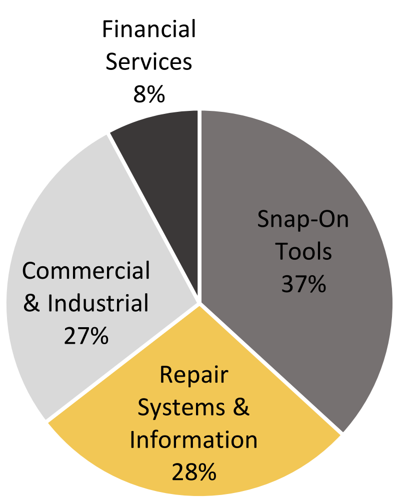
The Financial Services Group grew revenue by 24.6% since 2016, while the Repair Systems & Information Group grew 4.9%. The CAGR for net sales since 2016 is 1.21%.

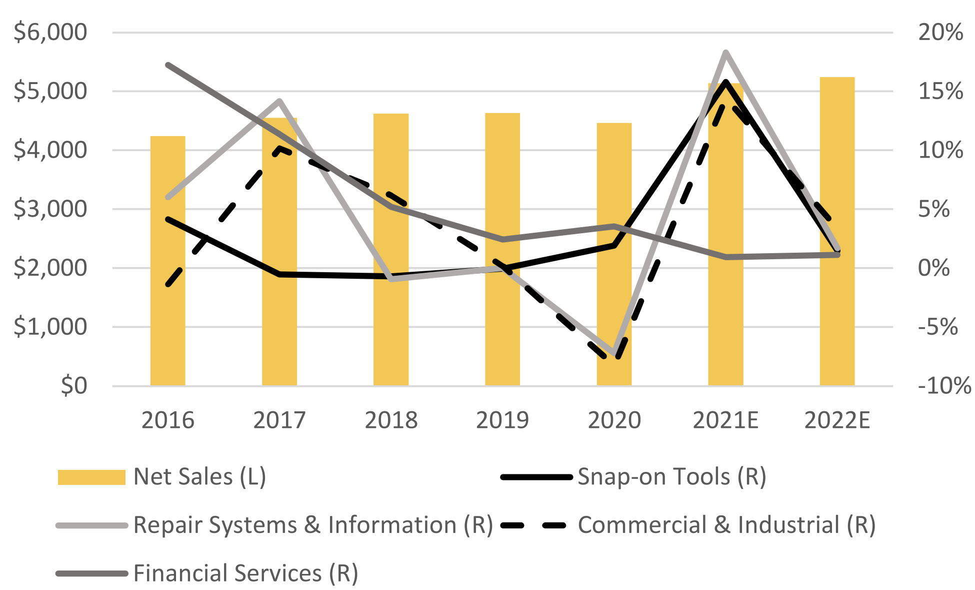
Snap-On is an innovator, manufacturer and marketer of tools, equipment, diagnostics, and repair information and systems solutions for professionals around the world. Snap-On offers a wide range of products and services such as hand and power tools, tool storage, diagnostics software, handheld and PC-based diagnostic products, information and management systems, and shop equipment and custom solutions for vehicle dealerships and repair centers. The firm has expanded its products and services into industries such as aviation, aerospace, agriculture, construction, government and military, mining, natural resources, power generation and technical education. Snap-On also produces income through its various financing programs that are designed to facilitate the sales of its products and support its franchise business. The firm undergoes business in the United States, Europe, Canada, and Asia Pacific. In these regions, SNA reaches its customers through the company's franchised, company-direct, distributor and internet channels. Snap-On was founded in 1920 with the development of its original Snap-on interchangeable socket set and is headquartered in Kenosha, Wisconsin.

Snap-On generates its revenue from four business segments. These four segments are primarily distributed through Snap-on's franchised fleet of vans that deliver directly to customers; the fleet undertook 4,775 routes in 2020, which included 3,425 routes in the United States. The four segments include:

1) **Commercial & Industrial Customers (27%):** Business operations serving a broad range of industrial and commercial customers, including customers in aerospace, natural resources, government, power generation, transportation, and technical education.
2) **Snap-on Tools (37%):** Serves vehicle service and repair technicians through the company's worldwide mobile tool distribution channel.
3) **Repair Systems & Information (28%):** Operations serve owners and managers of independent repair shops and OEM dealerships, through direct and distributor channels.
4) **Financial Services (8%):** Includes the Snap-On Credit LLC and other financial services subsidiaries in international markets where Snap-on has franchise operations.

Figures 1 & 2: Revenue (in millions) by brand in 2020 (left) and YoY revenue growth by segment (in millions) since 2016 (right)





Source: Company reports

Business/Industry Drivers

Though several factors may contribute to Snap-on's future success, the following are the most important business drivers:

1) Expansion into critical industries
2) Increased new/used automobile sales and vehicle age
3) Foreign market growth
4) Economic trends

Expansion into Critical Industries

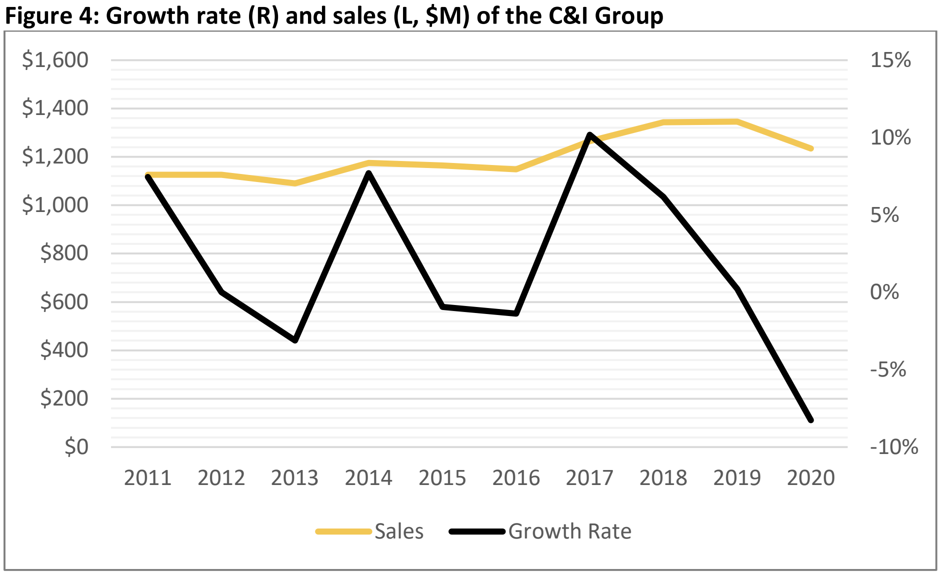
The C&I Group saw an operating income of $55.5 million in Q2.

Snap-On's Commercial & Industrial (C&I) group primarily operates through critical industries. The critical industries customers range from military, government entities, fire and rescue, emergency operations, and its recently acquired industries in oil, gas, and aviation in Southeast Asia and India. The C&I group is Snap-On's most international operation, and unfortunately, where customers have had the largest impact of the virus and seen slower economic recoveries. However, Snap-On has experienced growth in critical industries and expects substantial new entry opportunities. With power generation and continuous growth in critical industries, the C&I group has several upcoming tailwinds, even though we've seen sales in military markets decrease. With students back to campus, vehicle repair programs are purchasing more power generation tools. Clean energy has resulted in an escalated demand for the powerful, high-performance tools Snap-On provides.

Given the company's innovation and reliability, SNA has created a strong hold on mission critical tasks in such as aerospace, defense, agriculture, oil, and gas. Regulation and the need for products to be installed in a precise way makes Snap-On's tools a critical input in various end markets. Snap-On continues to create and innovate new products that help solve the most challenging tasks in critical industries which makes it very difficult for customers to switch to alternative products, resulting in high gross margins for SNA. Snap-On has a net profit margin of 18.3%, while the industry average is 11.8%.

Snap-On's sales and growth rate can be seen following similar trend lines to the ISM PMI.

Figure 4: Growth rate (R) and sales (L, $M) of the C&I Group



Source: Company reports

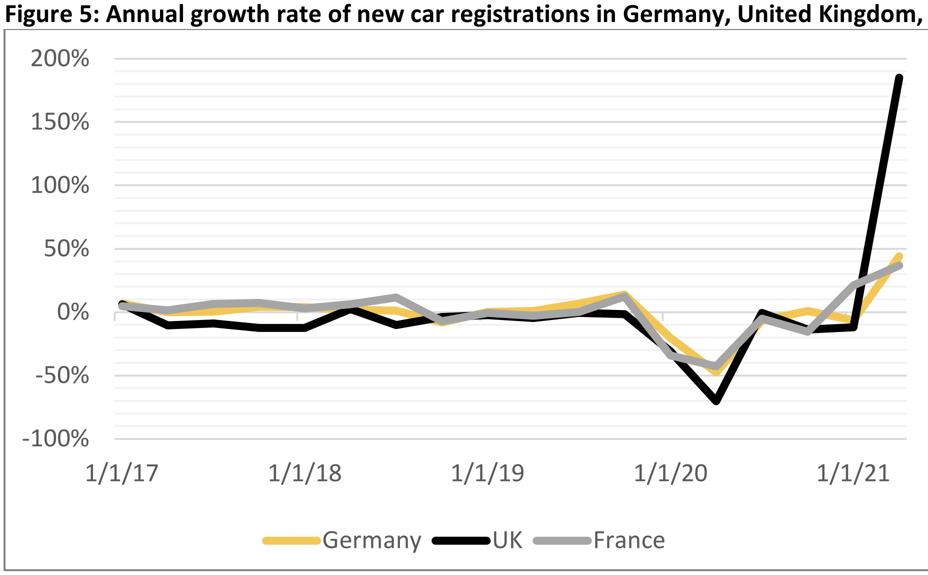
Snap-On also offers many package deals and custom tool kits that make the process in critical industries even more efficient and streamlined. While continuing to create more technologically advanced and precise tools, Snap-On's custom kits offer customers a tool kit that provides all the necessary tools for a specific task. Many critical industries are extremely time sensitive, and Snap-On offers a one-stop-shop solution for many of their needs. SNA has a clear path to grow in these critical industries, where the cost and penalties for failure may be high.

Increased New/Used Automobile Sales and Vehicle Age

With the gradual reopening post-pandemic, the U.S. has experienced a drastic increase in inflation, a booming economy, and bottlenecked supply chains. Vehicle sales initially fell but have made a strong recovery. With an increase in working from home and/or hybrid work, migration to suburban areas could spark further vehicle demand. Not only has buying increased, but the average age of vehicles in the U.S. is nearly 12 years and it's 11.5 years in Europe. With vehicle ages averaging about 8 years old 5-10 years ago, now nearing a near all-time high relative to the past two decades, an upturn in maintenance and repairs on older vehicles will prove to be a tailwind for the Tools Group.

Three of Snap-on's top five international regions have seen tremendous growth in new car registrations over the past year.

Figure 5: Annual growth rate of new car registrations in Germany, United Kingdom, and France



Source: Factset

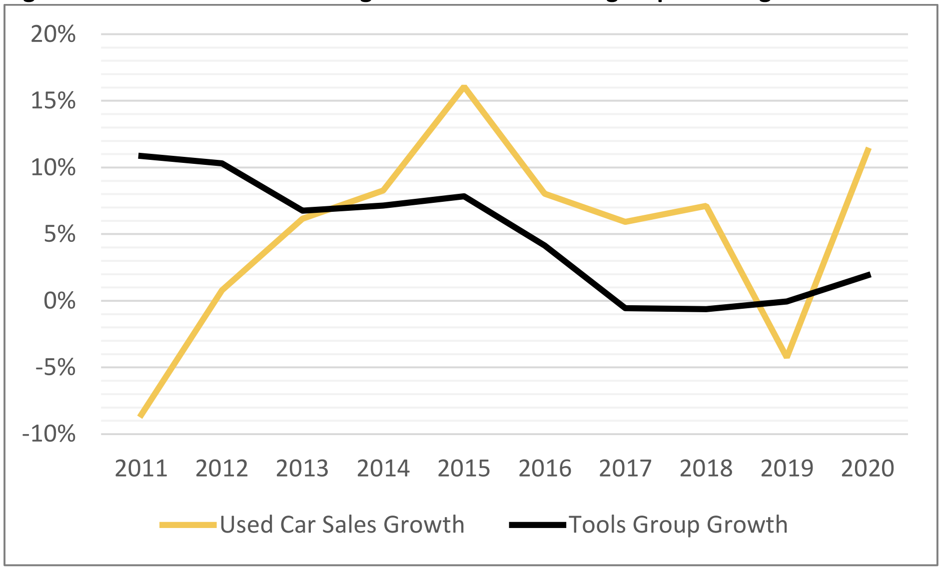
In April, U.S. new vehicle sales grew 110% YoY.

New car registrations have drastically increased in many international regions, due to fast growing economies and massive economic stimulus. With more vehicles being driven and miles logged returning to 2019 levels, Snap-On's Tools Group may get a boost in sales over the long term as more vehicles must be serviced.

Although new car sales play a key role in Snap-On's long-term growth, used car sales impacts near term growth as well. As used cars age, there is an exponential increase in the number of fixes and repairs that are needed to keep them on the road. The U.S. has also seen a substantial increase in used car sales in 2020 and even more significant in 2021. More repairs drive a rise in customer flow for the local technicians that the mobile van fleet caters to.

The sale of used cars has drastically increased in 2020 and I expect the same trend for 2021.

Figure 6: Used cars sales annual growth rate and tools group annual growth rate



Source: Company reports and BTS

Used car sales were up over 10% in 2020 and the Tools Group's growth bottomed in 2021. With the high demand for new vehicles and the shortage of semiconductors to manufacture new cars, I expect a further increase in growth for used cars through 2022. As the used cars accumulate more mileage, the Tools Group will organically inherit a growth in sales as well. While cars sat idle during the pandemic and this reduced wear and tear, an idle car can also develop issues.

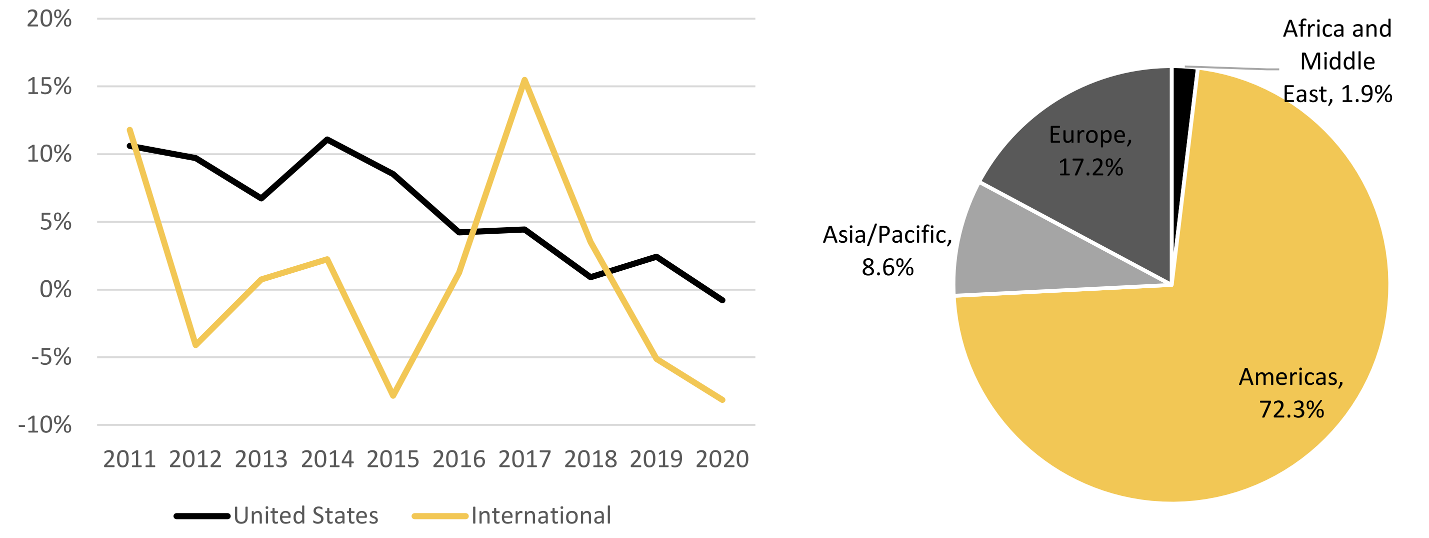
<u>Foreign Market Growth</u>

Snap-on expects capital expenditures to reach $90-100 million in 2021, showing an increase of 1.4% of total assets.

72.3% of Snap-on's revenue comes from the United States. The firm has experienced declines in foreign markets and slowed growth in the U.S. The Commercial & Industrial Group is the "golden ticket" to successfully penetrate these foreign markets. The markets for oil, gas, aviation, and aerospace are growing, versus U.S. autos which will slow in the coming years. Snap-On plans to develop specialty tools for the growing industries, securing a relatively large market share.

Snap-On has an opportunity to develop the Tools Group, as car fleets continue to rise in many of its top foreign markets. Europe saw an almost 14% increase in its car fleet since 2011, and China, Snap-On's second largest market, experienced an increase to 270 million automobiles as of June 2020. These large markets, with the potential to grow to 1.22 billion vehicles, are an open door to Snap-On's successful mobile van fleet if current production and distribution channels are maintained. Snap-On has seen a fairly stagnant number of routes the fleet tends to. However, with increased sales in used/new cars and its push to penetrate critical industries, SNA should see higher revenue in 2022 and 2023.

Figure 7: Annual growth rates of revenue in the U.S. and international markets (left) and revenue exposure by super-region (right)



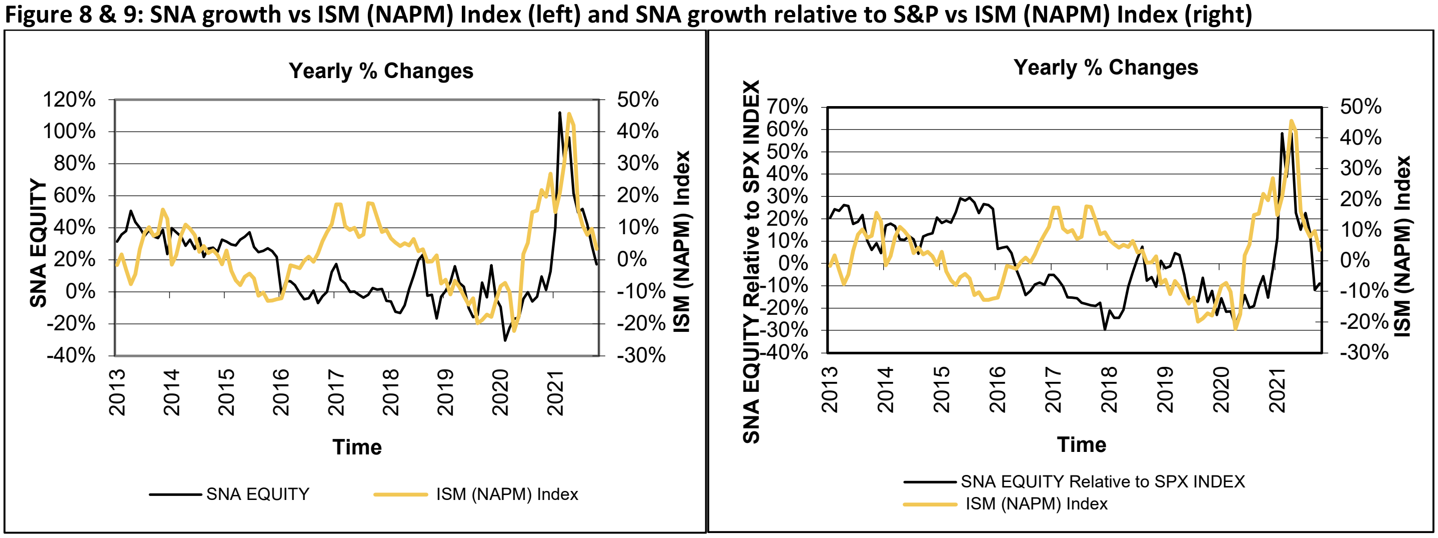
Source: Company reports and BTS

Source: Factset

<u>Economic Trends</u>

Snap-On is an industrial company that tends to follow the economic ups and downs. In 2020, the pandemic took its toll on SNA as sales fell in two of its primary groups and for total sales of the firm. Snap-On is susceptible to swings in the economy since most of its business relies on consumer spending and industrial behavior. A downturn may make consumers less willing to repair small vehicle fixes and purchase new or used vehicles. The gradual reopening of the U.S. and foreign countries has led to an increase in spending, vehicle purchases, and miles driven returning to the levels before the pandemic. These factors are a tailwind for Snap-On's Tools Group and its international markets. Although, during a recession, people keep their cars longer and older cars need more repairs. Economic stimulus in the United States has allowed consumers to increase their savings, giving them the ability to spend more on repairs, fixes, and vehicle purchases. Snap-On has a high correlation with the ups and downs of the economy (figure 8), but it has proven to be more resilient than the overall market when the economy turns for the worst (figure 9).

Figure 8 & 9: SNA growth vs ISM (NAPM) Index (left) and SNA growth relative to S&P vs ISM (NAPM) Index (right)



Snap-On has increased its cash and cash equivalents by over 400% to $923.4 million, allowing it to invest more back into the company.

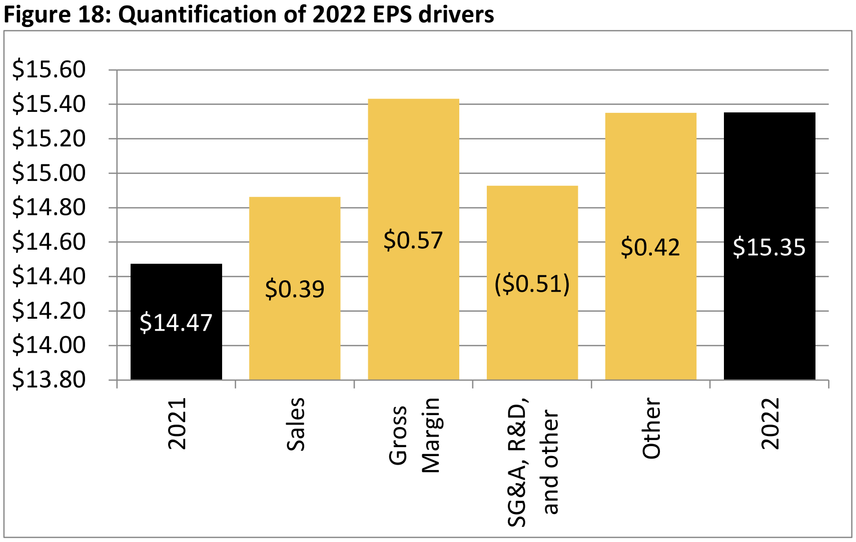
Right now, many of Snap-On customers such as technicians, repair professionals, and dealerships have extra cash to grow their businesses. Repair shops and technicians have seen an influx of customers after the reopening, enticing them to reinvest and purchase more or new tools for their businesses.

However, even in economic downturn, the Financial Services Group allows Snap-On's customers to make purchases. Even when Snap-On's customers don't have excess cash, SNA provides alternatives to finance their purchases. The Financial Services Group works as a "barrier" during economic turns, allowing Snap-On to be more stable than other firms.

Financial Analysis

I anticipate EPS to grow to $15.35 in FY 2022 from $14.47 in FY 2021, with solid sales growth estimated at 5.1% contributing $0.39. Gross margin is estimated to climb by 6.8% due to rising pricing power and increased sales in high margin product areas, raising EPS by $0.57. I expect to see a decrease in EPS by $0.51 due to the upsurge in labor costs and critical markets product development which will drive SG&A, R&D, and other to a higher percent of sales. I also estimate that $0.42 will be added by the added share buybacks, at $210 million in buybacks, due to the substantial increase in cash.

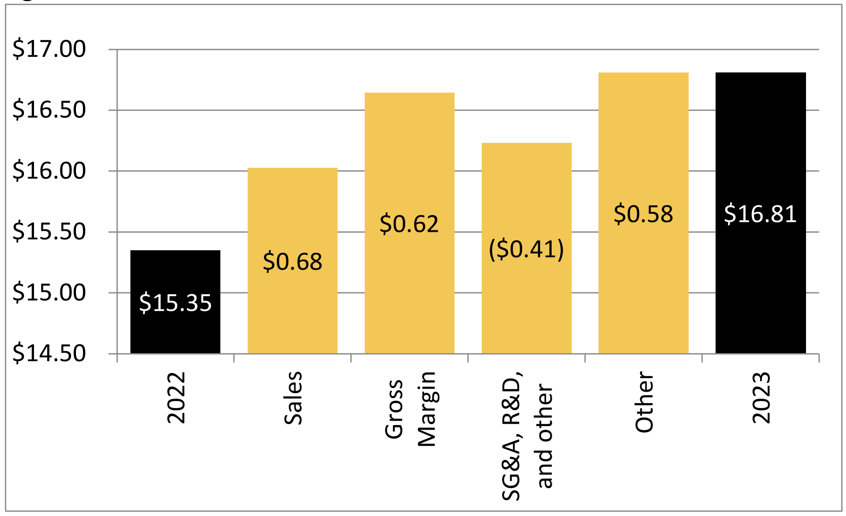
Figure 18: Quantification of 2022 EPS drivers



Source: Company Reports, IMCP

I expect 2023 EPS to increase $1.46 to $16.81. Snap-on will gain $0.68 based on the 4.1% sales increase expectation. Gross margin will contribute another hefty $0.62, based on the 5.8% increase due to a future decrease in input costs and continued pricing power. In 2023, I expect to see a decrease of $0.41 from continued development of its Tools Group and continued rising labor costs. Again, I expect a $0.58 increase from the increase in share buybacks of nearly 4%.

Figure 19: Quantification of 2023 EPS drivers



Source: Company Reports, IMCP

I am slightly more optimistic than consensus estimates for both 2022 and 2023, although, I'm not the highest estimate. However, I anticipate stronger growth in 2022 driven primarily by SNA's commitment to improving efficiency, particularly in its Commercial & Industrial Group and continued growth of its Tools Group.

Figure 20: EPS and YoY growth estimates by year

Items	2017	2018	2019	2020	2021	2022E	2023E
Sales	$4,000	$4,070	$4,068	$3,942	$4,242	**$4,458**	**$4,641**
Growth		1.8%	0.0%	-3.1%	7.6%	5.1%	4.1%
Sales - Consensus						**$4,381**	**$4,540**
Growth						3.3%	3.6%
EPS	$9.86	$11.94	$12.40	$12.60	$14.47	**$15.35**	**$16.81**
Growth		21.1%	3.9%	1.6%	14.8%	7.2%	12.6%
EPS - Consensus						**$15.14**	**$15.87**
Growth						4.6%	4.8%

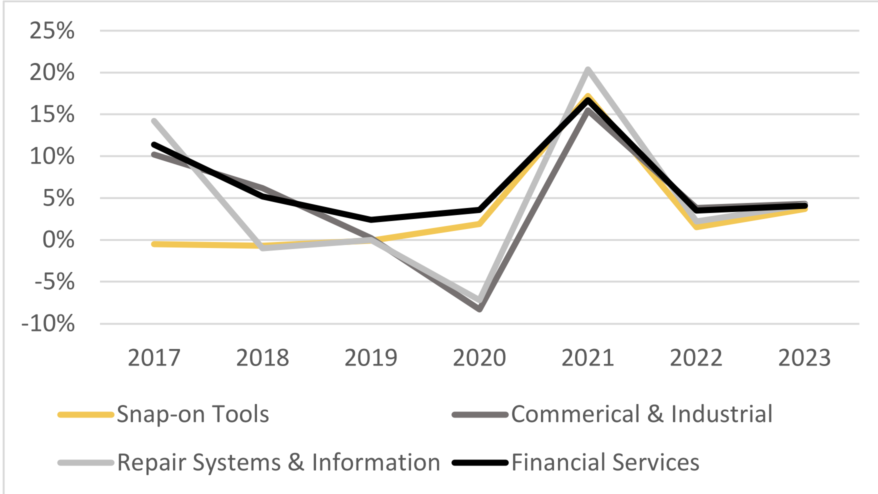
Source: Factset, IMCP

Revenues

SNA has showed consistent sales growth over the past 10 years, with the pandemic having a slight affect in the 2019 and 2020 sales. SNA is well-positioned to grow its Commercial and Industrial Group over the next two years. Due to the rapidly growing economy, infrastructure activity has increased in 2021. The Repair Systems and Information group will also prove to be beneficial due to the increased demand in EV repair and I expect to see growth of 4%. The Tools Group will experience an increase in sales due to people returning to work (commuting), overdue repairs, and an increase in new/used car sales. I expect Snap-on to increase sales in its international regions as well, with the Commercial and Industrial Group paving the way.

SNA follows macro-economic trends, as seen in the jump from 2020 to 2021.

Figure 21: Snap-on segment revenue growth (2022 and 2023 estimates)



Source: Company Reports

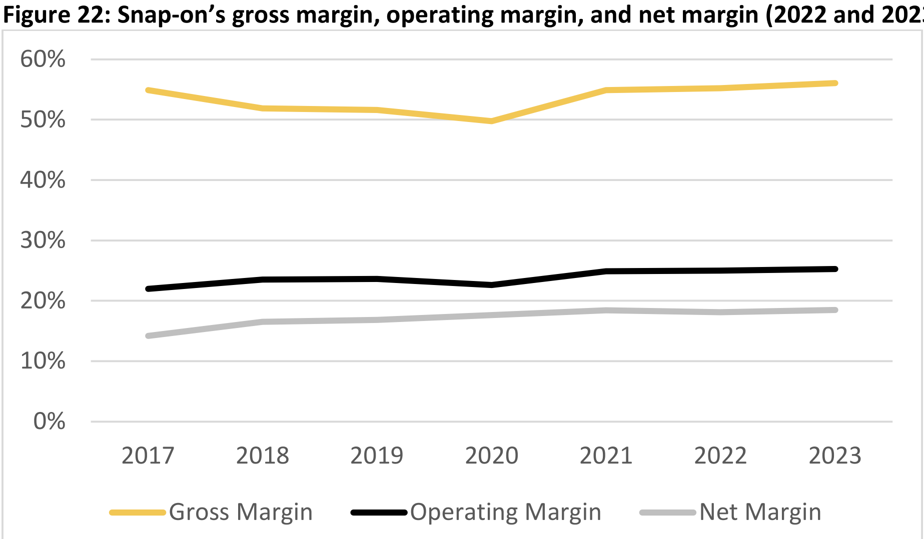
Operating Income and Margins

SNA's operating and net margins have been stable to rising even when gross margin dipped from 2014 to 2020. With rising labor costs, I expect to see SG&A to rise as a percent of sales. The operating expenses also include all the costs associated with the financial division as well.

In the past five years, Snap-on has seen an average gross margin of about 53% and an EBIT margin averaging about 23%. SNA is well positioned with its relatively high margins; I expect to see both stay fairly consistent in 2022 and 2023. With SNA's pricing power, I believe this will offset the increased labor costs that we are experiencing coming into 2022.

SNA's net profit margin is 18.3%, while the industry average lies at 11.8%

Figure 22: Snap-on's gross margin, operating margin, and net margin (2022 and 2023 estimates)



Source: Company Reports

Snap-On has had steady margins over the past few years, with gross margin rising significantly in 2021 as the economy recovered nicely. Operating margin and net margin have both seen slow, but steady growth and I expect that to continue into 2022 and 2023. As SNA moves into higher margin markets, such as critical industries, commercial, and industrial, the firm will reap the benefits through higher margins yet. Snap-on is also implementing its proven RCI (Rapid Continuous Improvement) strategies to increase efficiency, productivity, and to restrict the amount of waste. With a steady number of van routes, SNA can now focus on how to make the current routes more efficient to maintain margins in the face of rising labor costs.

Figures 23 & 24: Composition of 2014 operating expenses (left); Operating expenses vs YoY operating expense growth (right)

Items	2017	2018	2019	2020	2021	2022	2023
Sales	$4,000	$4,070	$4,068	$3,942	$4,242	$4,458	$4,641
Direct Costs	1,803	1,958	1,970	1,978	1,938	1,997	2,037
Gross Margin	2,197	2,112	2,098	1,964	2,304	2,461	2,604
Gross Margin %	54.9%	51.9%	51.6%	49.8%	54.9%	55.2%	56.1%
SG&A, R&D, D&A, and Other	1,316	1,154	1,139	1,072	1,248	1,346	1,429
Growth		-12.3%	-1.3%	-5.9%	11.5%	7.9%	6.2%
Operating Margin	22.0%	23.5%	23.6%	22.6%	24.9%	25.0%	25.3%

Source: Company Reports

Return on Equity

Snap-On is in line with the industry for ROE, with the average being 22.3%. Snap-On has had a stable ROE over the past four years, and I don't expect it to change considerably. The large rise in SNA's cash balance in 2020, caused SNA's sales to average assets to drop, pushing down ROE. This cash was likely raised with debt as a safety net during the worst of Covid. Snap-on has found ways to utilize the surplus of cash through share buybacks, expanding into critical markets, and extending into more emerging markets. I do expect to see a drop in ROE in 2022 and 2023, but this is a result of falling leverage which also reduces risk.

Figure 25: 3-Stage ROE breakdown (2022 and 2023 estimates)

3-Stage	2018	2019	2020	2021	2022	2023
Net income / sales	16.5%	16.8%	17.6%	18.4%	18.1%	18.5%
Sales / avg assets	0.77	0.74	0.64	0.63	0.64	0.65
ROA	12.7%	12.3%	12.5%	11.6%	11.6%	12.1%
Avg assets / avg equity	1.74	1.69	1.68	1.73	1.72	1.63
ROE	22.1%	20.9%	21.2%	20.2%	19.9%	19.6%

Source: Company Reports

Free Cash Flow

SNA has maintained an ROE that's in line with the industry average.

Figure 26: Free cash flow calculations

Items	2017	2018	2019	2020	2021	2022	2023
NOPAT	$613	$730	$735	$691	$821	$866	$915
Growth		*19.1%*	*0.6%*	*-5.9%*	*27.6%*	*5.5%*	*5.6%*
NWC*	1,270	1,313	1,473	1,286	1,306	1,311	1,364
Net fixed assets	3,130	3,156	3,313	3,474	3,598	3,877	4,144
Total net operating capital*	$4,400	$4,469	$4,786	$4,760	$4,904	$5,188	$5,508
Growth		*1.6%*	*7.1%*	*-0.5%*	*3.0%*	*5.8%*	*6.2%*
- Change in NWC*		43	160	(187)	20	5	54
- Change in NFA		26	157	161	124	279	267
FCFF*		$661	$418	$717	$677	$582	$594
Growth			*-36.9%*	*71.7%*	*2.9%*	*-13.9%*	*2.0%*
- After-tax interest expense	38	43	41	41	47	42	36
FCFE**		$618	$377	$676	$630	$541	$558
Growth			*-39.0%*	*79.3%*	*2.1%*	*-14.2%*	*3.2%*
+ Net new debt/other cap		(56)	72	296	172	-	(350)
Sources of cash		$562	$449	$972	$802	$541	$208
Uses of cash							
Other expense		15	11	(44)	16	18	19
Increase cash and mkt sec		49	44	738	80	33	(316)
Dividends		192	217	243	280	280	287
Change in other equity		334	153	165	459	210	218
		$590	$425	$382	$835	$541	$208
FCFF per share		$11.75	$7.58	$13.21	$12.57	$11.09	$11.61
Growth			*-35.5%*	*74.2%*	*3.8%*	*-11.8%*	*4.7%*
FCFE per share		$10.98	$6.84	$12.45	$11.71	$10.29	$10.91
Growth			*-37.7%*	*82.0%*	*3.0%*	*-12.1%*	*6.0%*

*Source: Company Reports, IMCP, * ex cash*

SNA's free cash flow saw a huge jump in 2020 despite the drop in NOPAT (-5.9%) as the firm reduced working capital ex cash. I expect modest increases in net working capital ex cash in 2022-2023 with a return to net fixed asset investments above prior levels as it grows in emerging markets and build distribution centers. However, NOPAT will also rise 5-6% so FCFF will be close to $600 million each year. I expect that Snap-on will use the cash for significant share buybacks and to increase its dividend to distribute the surplus of cash.

Valuation

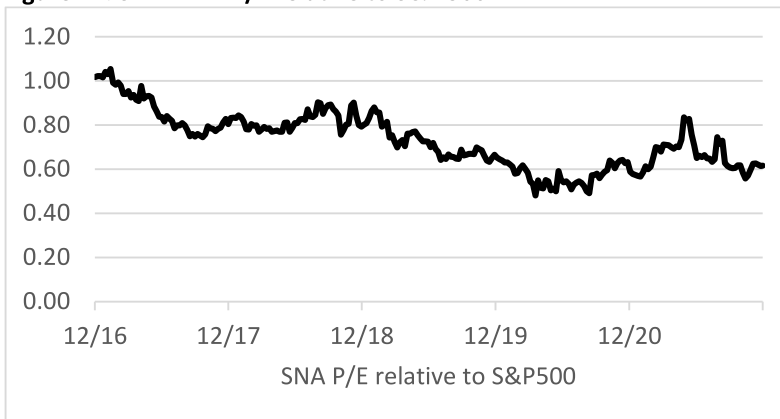
Based on a combination of 3-stage DCF, historic multiples, and relative valuation; Snap-On's value is $227.

SNA was valued using multiples and a 3-stage discounting cash flow model. Based on earnings multiples, the stock is fairly valued and is worth $225. Relative valuation shows SNA to be slightly undervalued based on its fundamentals versus those of its peers in the industry. A detailed DCF analysis values SNA at $227; I give this value a bit more weight because it incorporates the increased margins and critical industry growth. As a result of these valuations, I value the stock at $227.

Trading History

SNA is currently trading moderately lower relative to the S&P 500. This is the result of recent lockdown scares, the fact that another COVID-19 lockdown would stunt SNA's current growth, and concerns about SNA's sales growth slowing due to the rise in electric vehicles. SNA's current NTM P/E is at 14.1 compared to its five-year average of 15.5. As SNA continues to grow into new markets and expand its current product line, I expect SNA to move closer to a P/E closer to 15 in year-end 2022 or start of 2023.

Figure 27: SNA NTM P/E relative to S&P 500



Source: FactSet

Assuming the firm maintains a 15 NTM P/E at the end of 2022, it should trade at $252.15 by the end of the year:

- Price = P/E x EPS = 14.1 x $16.81 = $252.15.

Discounting $252.15 back to today at a 11.8% cost of equity (explained in Discounted Cash Flow section) yields a price of $225.54. Given SNA's potential for earnings growth and continued profitability during this unprecedented economic growth period, this seems to be an unusually low valuation.

<u>Relative Valuation</u>

Snap-on is currently trading at a P/E much lower than its peers, with a 2021 P/E of 14.2 compared to an average of 21.9. Investors see SNA as a steady, low growth company and prefer the larger, more attractive companies such as Stanley Black & Decker and Makita which may be benefiting from the housing boom. While the S&P P/E has risen over the last 5-6 years with lower rates, SNA's has declined with its slowing growth and concerns about its transition away from a focus on the combustion automobile business. With its current growth plan, SNA is in a solid position to continue earnings growth in the double or high single digits and recover some of the lost P/E.

Figure 28: SNA comparable companies

						P/E						
Ticker	**Name**	**Price**	**Value**	**2021**	**TTM**	**NTM**	**2022**	**2023**	**P/S**	**ROE**	**NM**	**P/B**
SNA	SNAP-ON INC	$212.89	$11,397	15.0	14.5	14.2	14.1	13.4	2.69	20.1%	15.9%	2.83
SWK	STANLEY BLACK & DECKER INC	$191.38	$31,201	17.7	17.1	18.0	16.3	14.8	1.82	17.9%	8.5%	2.91
6586-JP	MAKITA CORP	$63.25	$77,082	19.4	17.9		18.3	17.1	2.16	11.0%	10.2%	2.01
LECO	LINCOLN ELECTRIC HLDGS INC	$132.74	$7,838	21.7	29.9	19.4	18.8	17.3	2.44	48.5%	7.8%	9.14
CFX	COLFAX CORP	$44.50	$6,888	21.1	56.6	18.1	17.5	15.5	1.80	8.6%	2.0%	1.50
Average			$24,415	22.6	28.9	20.5	20.7	18.3	9.58	22.5%	9.9%	4.95
Median			$11,741	20.3	23.9	18.1	17.9	16.3	2.30	19.0%	9.3%	2.87

Source: FactSet, IMCP

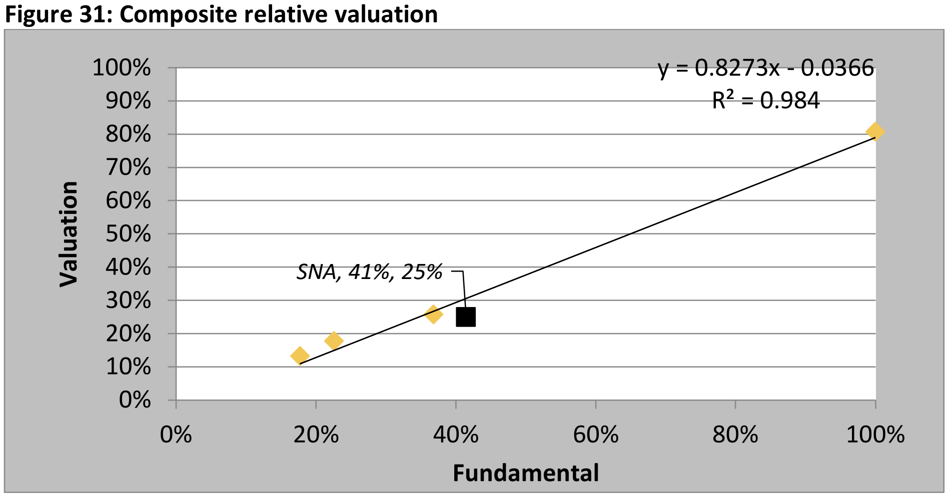
For a final comparison, I created a composite ranking of several valuation and fundamental metrics. Since the variables have different scales, each was converted to a percentile before calculating the composite score. For valuation, I gave 2022 ROE a 100% allocation. On fundamentals, I allocated 100% to P/B. The regression line had an R-squared of 0.984, with SNA below on the line, it shows that it is under-valued at this time.

Figure 30: Composite valuation, % of range

		Fundamental	Valuation
	Weight	100.0%	100.0%
		2022	
Ticker	Name	ROE	P/B
SNA	SNAP-ON INC	41%	25%
SWK	STANLEY BLACK & DECKER INC	37%	26%
6586-JP	MAKITA CORP	23%	18%
LECO	LINCOLN ELECTRIC HLDGS INC	100%	81%
CFX	COLFAX CORP	18%	13%

Source: IMCP

Figure 31: Composite relative valuation



Source: IMCP

Discounted Cash Flow Analysis

A three-stage discounted cash flow model was also used to value SNA.

For the purpose of this analysis, the company's cost of equity was calculated to be 11.8% using the Capital Asset Pricing Model. The underlying assumptions used in calculating this rate are as follows:

- The risk-free rate, as represented by the ten-year Treasury bond yield, is 1.49%.
- A ten-year beta of 1.37 was utilized since the company has higher risk than the market.
- A long-term market rate of return of 10% was assumed, since historically, the market has generated an annual return of about 10%.

Given the above assumptions, the cost of equity is 11.8% (1.49 + 1.37 (10.0 – 1.49)).

Stage One - The model's first stage simply discounts fiscal years 2022 and 2023 free cash flow to equity (FCFE). These per share cash flows are forecasted to be $10.29 and $10.91, respectively. Discounting these cash flows, using the cost of equity calculated above, results in a value of $17.94 per share. Thus, stage one of this discounted cash flow analysis contributes $17.94 to value.

Stage Two - Stage two of the model focuses on fiscal years 2024 to 2028. During this period, FCFE is calculated based on revenue growth, NOPAT margin, and capital growth assumptions. The resulting cash flows are then discounted using the company's 11.8% cost of equity. I assume 6.5% sales growth in 2024, rising to 7.3% through 2028. The ratio of NWC to sales will remain at 2023 levels, as well as NFA turnover. Also, the NOPAT margin is expected to rise 0.9% to 20.6% in 2028 from 19.7% in 2023. Finally, after-tax interest is expected to rise 6-7% per year as the result of moderate increases in borrowing at the same rate of sales.

Figure 32: FCFE and discounted FCFE, 2022 – 2028

	2022	2023	2024	2025	2026	2027	2028
FCFE	$10.29	$10.91	$10.99	$11.82	$12.84	$13.62	$14.86
Discounted FCFE	$9.21	$8.73	$7.86	$7.57	$7.35	$6.97	$6.80

Added together, these discounted cash flows total $54.49, and the second stage is $36.56.

Stage Three – Net income for the years 2024 – 2028 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. EPS is expected to grow from $16.81 in 2023 to $25.07 in 2028.

Figure 33: EPS estimates for 2021 – 2028

	2021	2022	2023	2024	2025	2026	2027	2028
EPS	$14.47	$15.35	$16.81	$18.00	$19.39	$21.15	$22.89	$25.07

Stage three of the model requires an assumption regarding the company's terminal price-to-earnings ratio. A P/E ratio of 15 is assumed at the end of SNA's terminal year, which is also closer to the industry average P/E. While this may be a low multiple at the end of 2028, given the accelerating growth, one must consider what the market may price in today. A higher multiple may be better to calculate a fair value, but the stock will likely trade below this value because the market will be moderately slow to price in SNA's higher growth.

The 3-stage DCF model returned the highest present value of all the valuations at $226.72

Given the assumed terminal earnings per share of $25.07 and a price to earnings ratio of 15, a terminal value of $376.01 per share is calculated. Using the 11.8% cost of equity, this number is discounted back to a present value of $172.23.

Total Present Value – given the above assumptions and utilizing a three-stage discounted cash flow model, an intrinsic value of $226.72 is calculated (17.94 + 36.56 + 172.23). Given SNA's current price of $216.23, this model indicates that the stock is slightly undervalued.

<u>Scenario Analysis</u>

On top of the three-stage analysis above, I conducted a bull and bear case below. I increased and decreased the margins, sales, and the terminal P/E to reflect positive business flows or negative business risks.

Bull Case: In this case, I increased the margin to 22%-23.6% through years 2024 and 2028. I also increased the P/E to 18 to reflect a positive jump towards the S&P 500 average and industry average, and increased sales by 1% each year to reflect an increase in growth for international business groups and critical markets.

The new current valuation based on a 3-stage DCF model is $310.66.

Bear Case: In this case, I decreased the margin to 18.1%-18.5% through years 2024 and 2028 if we assume the firm is unsuccessful in emerging markets and moving away from auto. I also decreased the P/E to 14 for the decrease in earnings. Lastly, I lowered sales by 1% each year to reflect slower than expected growth.

The new current valuation based on a 3-stage DCF model is $188.81.

Business Risks

Although the market may not be as optimistic as I am about Snap-On, there are a few factors that could lower growth over the next few years.

<u>Economic risks:</u>

SNA is heavily dependent on a healthy, stable, and growing economy. A great example is when Covid-19 struck the world's economies. Snap-On struggled to find new ways to continue growth and relied on the substantial recovery that ensued.

<u>EV adaption:</u>

Although Snap-On has the Repair Systems & Information group, it is still susceptible to the growing adaption of electric vehicles. Electric vehicles require fewer tools and repair shop maintenance than regular combustion engines. Snap-On may lose substantial sales in its Tools group if this trend continues to grow exponentially.

<u>Labor issues:</u>

With Snap-On relying on manufacturing plants and its fleet of mobile vans, lower labor supply or increase in labor costs could negatively affect growth opportunities.

<u>Commodity risk:</u>

SNA purchases large amounts of steel, natural gas, and electricity, so it is susceptible to increases in prices that could dent margins.

Appendix 1: Porter's 5 Forces

Threat of New Entrants – Moderate

With Snap-On tools being a premium brand and established business, it would be difficult for new companies to gain sufficient capital and market share to compete with such a company. However, existing businesses that have such qualities could encroach on Snap-On's customer base.

Threat of Substitutes – Moderate

Snap-On is known for its quality and reliability in the tools industry. Snap-On tools are hard to substitute in the critical industries it currently serves. However, if other established businesses develop similar tools, SNA could find it hard to justify its premium prices.

Supplier Power - Low

Most of Snap-On's tools are made in its own manufacturing facilities and require the purchasing of raw materials. In SNA's favor, there are multiple sources of raw materials that would be adequate.

Buyer Power – High

Snap-On has done a good job justifying its higher prices to its current customer base, but it would be simple for repair shops and other end markets to switch to competitors if the prices are too steep. End markets are constantly being marketed to, so SNA must find a way to keep its current customers pleased while maintaining a path for solid growth rate.

Intensity of Competition – High

SNA's competition is full of established companies that have a high market share. They have an established niche with their current offerings, but as competitors continue to innovate, it would be easy for consumers to switch.

Appendix 2: SWOT Analysis

Strengths	Weaknesses
High brand recognition High margins Financial services group	Slowing growth of mobile van fleet Highly competitive market
Opportunities	**Threats**
International markets Critical industries	Electric vehicles Economic downturns

Appendix 3: Income Statement

Items	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Sales	$4,000	$4,070	$4,068	$3,942	$4,242	$4,458	$4,641
Direct costs	1,803	1,958	1,970	1,978	1,938	1,997	2,037
Gross Margin	2,197	2,112	2,098	1,964	2,304	2,461	2,604
SG&A, R&D, D&A, and other	1,316	1,154	1,139	1,072	1,248	1,346	1,429
EBIT	881	958	959	892	1,056	1,115	1,174
Interest	55	57	53	53	60	54	46
EBT	826	901	906	839	996	1,061	1,128
Taxes	251	214	212	189	215	237	249
Income	575	687	694	650	781	824	879
Other	9	15	11	(44)	16	18	19
Net income	566	672	683	694	779	806	860
Basic Shares	57.4	56.3	55.1	54.3	53.8	52.5	51.1
Fully Diluted Shares	58.6	57.3	55.9	54.8	54.9	53.6	52.2
EPS	$9.86	$11.94	$12.40	$12.60	$14.47	$15.35	$16.81
EPS Fully Diluted	$9.66	$11.73	$12.22	$12.42	$14.19	$15.05	$16.47
DPS	$2.95	$3.41	$3.93	$4.48	$5.20	$5.33	$5.61

Appendix 4: Balance Sheets

Items	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Cash	92	141	185	923	1,003	1,036	719
Operating assets ex cash	2,027	2,076	2,196	2,160	2,230	2,189	2,288
Operating assets	2,119	2,217	2,381	3,083	3,233	3,225	3,008
Operating liabilities	757	763	723	874	924	878	924
NOWC	1,362	1,454	1,658	2,209	2,309	2,346	2,084
NOWC ex cash (NWC)	1,270	1,313	1,473	1,286	1,306	1,311	1,364
NFA	3,130	3,156	3,313	3,474	3,598	3,877	4,144
Invested capital	*$4,492*	*$4,610*	*$4,971*	*$5,683*	*$5,907*	*$6,223*	*$6,228*
Marketable securities	-	-	-	-	-	-	-
Total assets	*$5,249*	*$5,373*	*$5,694*	*$6,557*	*$6,831*	*$7,101*	*$7,151*
S-T and L-T debt and financing leases	$1,203	$1,147	$1,219	$1,515	$1,687	$1,687	$1,337
Other liabilities	317	345	321	322	334	334	334
Debt/equity-like securities	-	-	-	-	-	-	-
Equity	2,972	3,118	3,431	3,846	3,886	4,202	4,557
Total supplied capital	*$4,492*	*$4,610*	*$4,971*	*$5,683*	*$5,907*	*$6,223*	*$6,228*
Total liabilities and equity	*$5,249*	*$5,373*	*$5,694*	*$6,557*	*$6,831*	*$7,101*	*$7,151*

Appendix 5: Sales Forecast

Items	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Sales	4,243	$4,550	4,621	$4,632	$4,467	$4,685	$4,933
Growth		*7.2%*	*1.6%*	*0.2%*	*-3.6%*	*4.9%*	*5.3%*
Snap-on Tools	1,634	1,625	1,614	1,613	1,644	1,703	1,768
Growth		*-0.6%*	*-0.7%*	*-0.1%*	*1.9%*	*3.6%*	*3.8%*
% of sales	*38.5%*	*35.7%*	*34.9%*	*34.8%*	*36.8%*	*36.4%*	*35.8%*
Repair Systems and Information	1,180	1,347	1,334	1,335	1,238	1,279	1,329
Growth		*14.2%*	*-1.0%*	*0.1%*	*-7.3%*	*3.3%*	*3.9%*
% of sales	*27.8%*	*29.6%*	*28.9%*	*28.8%*	*27.7%*	*2.0%*	*26.9%*
Commercial and Industrial	1,148	1,265	1,343	1,346	1,235	1,339	1,455
Growth		*10.2%*	*6.2%*	*0.2%*	*-8.2%*	*8.4%*	*8.7%*
% of sales	*27.1%*	*27.8%*	*29.1%*	*29.1%*	*27.6%*	*28.6%*	*6.0%*
Financial Services	281	313	330	338	350	365	381
Growth		*11.4%*	*5.4%*	*2.4%*	*3.6%*	*4.2%*	*4.4%*
% of sales	*6.6%*	*6.9%*	*7.1%*	*7.3%*	*7.8%*	*7.8%*	*7.7%*
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
United States	2,589	2,703	2,592	2,655	2,596	2,694	2,807
Growth		*4.4%*	*-4.1%*	*2.4%*	*-2.2%*	*3.8%*	*4.2%*
% of sales	*61.0%*	*59.4%*	*56.1%*	*57.3%*	*58.1%*	*57.5%*	*56.9%*
Europe	654	749	718	665	617	661	715
Growth		*14.5%*	*-4.1%*	*-7.4%*	*-7.2%*	*7.1%*	*8.3%*
% of sales	*15.4%*	*16.5%*	*15.5%*	*14.4%*	*13.8%*	*14.1%*	*14.5%*
All Other (Intersegment and Financial Services Revenue)	1,000	1,098	1,311	1,312	1,254	1,331	1,411
Growth		*9.8%*	*19.4%*	*0.1%*	*-4.4%*	*6.1%*	*6.0%*
% of sales	*23.6%*	*24.1%*	*28.4%*	*28.3%*	*28.1%*	*28.4%*	*28.6%*

Appendix 6: Ratios

Items	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Profitability							
Gross margin	54.9%	51.9%	51.6%	49.8%	54.3%	55.2%	56.1%
Operating (EBIT) margin	22.0%	23.5%	23.6%	22.6%	24.9%	25.0%	25.3%
Net profit margin	14.2%	16.5%	16.8%	17.6%	18.4%	18.1%	18.5%
Activity							
NFA (gross) turnover		1.29	1.26	1.16	1.20	1.19	1.16
Total asset turnover		0.77	0.74	0.64	0.63	0.64	0.65
Liquidity							
Op asset / op liab	2.80	2.91	3.29	3.53	3.50	3.67	3.26
NOWC Percent of sales		34.6%	38.2%	49.0%	53.3%	52.2%	47.7%
Solvency							
Debt to assets	22.9%	21.3%	21.4%	23.1%	24.7%	23.8%	18.7%
Debt to equity	40.5%	36.8%	35.5%	39.4%	43.4%	40.1%	29.3%
Other liab to assets	6.0%	6.4%	5.6%	4.9%	4.9%	4.7%	4.7%
Total debt to assets	29.0%	27.8%	27.0%	28.0%	29.6%	28.5%	23.4%
Total liabilities to assets	43.4%	42.0%	39.7%	41.3%	43.1%	40.8%	36.3%
Debt to EBIT	1.37	1.20	1.27	1.70	1.60	1.51	1.14
EBIT/interest	16.02	16.81	18.09	16.83	17.60	20.65	25.44
Debt to total net op capital	26.8%	24.9%	24.5%	26.7%	28.6%	27.1%	21.5%
ROIC							
NOPAT to sales	15.3%	17.9%	18.1%	17.5%	19.3%	19.4%	19.7%
Sales to NWC		3.15	2.92	2.86	3.27	3.41	3.47
Sales to NFA		1.29	1.26	1.16	1.20	1.19	1.16
Sales to IC ex cash		0.92	0.88	0.83	0.88	0.88	0.87
Total ROIC ex cash		16.5%	15.9%	14.5%	17.0%	17.2%	17.1%
NOPAT to sales	15.3%	17.9%	18.1%	17.5%	19.3%	19.4%	19.7%
Sales to NOWC		2.89	2.61	2.04	1.88	1.92	2.10
Sales to NFA		1.29	1.26	1.16	1.20	1.19	1.16
Sales to IC		0.89	0.85	0.74	0.73	0.74	0.75
Total ROIC		16.1%	15.3%	13.0%	14.2%	14.3%	14.7%
NOPAT to sales	15.3%	17.9%	18.1%	17.5%	19.3%	19.4%	19.7%
Sales to EOY NWC	3.15	3.10	2.76	3.07	3.25	3.40	3.40
Sales to EOY NFA	1.28	1.29	1.23	1.13	1.18	1.15	1.12
Sales to EOY IC ex cash	0.91	0.91	0.85	0.83	0.87	0.86	0.84
Total ROIC using EOY IC ex cas	13.9%	16.3%	15.3%	14.5%	16.7%	16.7%	16.6%
NOPAT to sales	15.3%	17.9%	18.1%	17.5%	19.3%	19.4%	19.7%
Sales to EOY NOWC	2.94	2.80	2.45	1.78	1.84	1.90	2.23
Sales to EOY NFA	1.28	1.29	1.23	1.13	1.18	1.15	1.12
Sales to EOY IC	0.89	0.88	0.82	0.69	0.72	0.72	0.75
Total ROIC using EOY IC	13.7%	15.8%	14.8%	12.2%	13.9%	13.9%	14.7%
ROE							
5-stage							
EBIT / sales		23.5%	23.6%	22.6%	24.9%	25.0%	25.3%
Sales / avg assets		0.77	0.74	0.64	0.63	0.64	0.65
EBT / EBIT		94.1%	94.5%	94.1%	94.3%	95.2%	96.1%
Net income /EBT		74.6%	75.4%	82.7%	78.2%	76.0%	76.2%
ROA		12.7%	12.3%	12.5%	11.6%	11.6%	12.1%
Avg assets / avg equity		1.74	1.69	1.68	1.73	1.72	1.63
ROE		22.1%	20.9%	21.2%	20.2%	19.9%	19.6%
3-stage							
Net income / sales		16.5%	16.8%	17.6%	18.4%	18.1%	18.5%
Sales / avg assets		0.77	0.74	0.64	0.63	0.64	0.65
ROA		12.7%	12.3%	12.5%	11.6%	11.6%	12.1%
Avg assets / avg equity		1.74	1.69	1.68	1.73	1.72	1.63
ROE		22.1%	20.9%	21.2%	20.2%	19.9%	19.6%
Payout Ratio		28.6%	31.7%	31.2%	35.9%	34.7%	33.4%
Retention Ratio		71.4%	68.3%	68.8%	64.1%	65.3%	66.6%
Sustainable Growth Rate		15.8%	14.2%	14.6%	12.9%	13.0%	13.1%

Appendix 7: Cash Flow Statement

Cash Flow Statement						
Note: This is not the actual cash flow statement. It is created using the indirect method and various simplifying assumptions.					Base Case	
Items	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Cash from Operatings (understated - depr'n added to net assets)						
Net income	$672	$683	$694	$779	$806	$860
Change in Net Working Capital ex cash	(43)	(160)	187	(20)	(5)	(54)
Cash from operations	$629	$523	$534	$759	$801	$806
Cash from Investing (understated - depr'n added to net assets)						
Change in NFA	($26)	($157)	($161)	($124)	($279)	($267)
Change in Marketable Securities	$0	$0	$0	$0	$0	$0
Cash from investing	($26)	($157)	($161)	($124)	($279)	($267)
Cash from Financing						
Change in Short-Term and Long-Term Debt	($56)	$72	$296	$172	$0	($350)
Change in Other liabilities	28	(24)	1	12	0	0
Change in Debt/Equity-Like Securities	0	0	0	0	0	0
Dividends	(192)	(217)	(243)	(280)	(280)	(287)
Change in Equity ex NI and Dividends	(334)	(153)	(165)	(459)	(210)	(218)
Cash from financing	($554)	($322)	($334)	($555)	($490)	($855)
Change in Cash	49	44	43	80	33	(316)
Beginning Cash	92	141	185	923	1003	1036
Ending Cash	$141	$185	$184	$1,003	$1,036	$719

Appendix 8: 3-stage DCF Model

			Year						
			1	2	3	4	5	6	7
			First Stage			Second Stage			
Year ending January		2021	2022	2023	2024	2025	2026	2027	2028
Sales Growth		*7.6%*	*5.1%*	*4.1%*	*6.5%*	*6.6%*	*6.8%*	*7.1%*	*7.3%*
NOPAT / S		*19.3%*	*19.4%*	*19.7%*	*19.4%*	*19.6%*	*20.0%*	*20.2%*	*20.6%*
S / NWC		*3.25*	*3.40*	*3.40*	*3.40*	*3.40*	*3.40*	*3.40*	*3.40*
S / NFA (EOY)		*1.18*	*1.15*	*1.12*	*1.12*	*1.12*	*1.12*	*1.12*	*1.12*
S / IC (EOY)		*0.87*	*0.86*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*
ROIC (EOY)		*16.7%*	*16.7%*	*16.6%*	*16.3%*	*16.5%*	*16.8%*	*17.0%*	*17.4%*
ROIC (BOY)			*17.7%*	*17.6%*	*17.4%*	*17.6%*	*18.0%*	*18.2%*	*18.6%*
Share Growth		*-0.9%*	*-2.4%*	*-2.6%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Sales	$3,942	$4,242	$4,458	$4,641	$4,943	$5,269	$5,627	$6,027	$6,467
NOPAT	$691	$821	$866	$915	$959	$1,033	$1,125	$1,217	$1,332
Growth		*27.6%*	*5.5%*	*5.6%*	*4.8%*	*7.7%*	*9.0%*	*8.2%*	*9.4%*
- Change in NWC		20	5	54	89	96	105	118	129
NWC EOY	*1286*	*1306*	*1311*	*1364*	*1454*	*1550*	*1655*	*1773*	*1902*
Growth NWC		*1.6%*	*0.4%*	*4.1%*	*6.5%*	*6.6%*	*6.8%*	*7.1%*	*7.3%*
- Chg NFA		124	279	267	269	291	320	357	393
NFA EOY	*3,474*	*3,598*	*3,877*	*4,144*	*4,413*	*4,704*	*5,024*	*5,381*	*5,774*
Growth NFA		*3.6%*	*7.7%*	*6.9%*	*6.5%*	*6.6%*	*6.8%*	*7.1%*	*7.3%*
Total inv in op cap		144	284	321	359	387	425	474	522
Total net op cap		4904	5188	5508	5867	6254	6679	7154	7676
FCFF		$677	$582	$594	$600	$646	$700	$743	$810
% of sales		*16.0%*	*13.1%*	*12.8%*	*12.1%*	*12.3%*	*12.4%*	*12.3%*	*12.5%*
Growth			*-13.9%*	*2.0%*	*1.1%*	*7.5%*	*8.5%*	*6.1%*	*9.0%*
- Interest (1-tax rate)		47	42	36	38	41	44	47	50
Growth		*16.2%*	*-10.0%*	*-14.3%*	*6.5%*	*6.6%*	*6.8%*	*7.1%*	*7.3%*
FCFE w/o debt		$630	$541	$558	$562	$605	$657	$696	$760
% of sales		*14.9%*	*12.1%*	*12.0%*	*11.4%*	*11.5%*	*11.7%*	*11.6%*	*11.7%*
Growth			*-14.2%*	*3.2%*	*0.7%*	*7.6%*	*8.6%*	*6.1%*	*9.1%*
/ No Shares	54.3	53.8	52.5	51.1	51.1	51.1	51.1	51.1	51.1
FCFE		$11.71	$10.29	$10.91	$10.99	$11.82	$12.84	$13.62	$14.86
Growth			*-12.1%*	*6.0%*	*0.7%*	*7.6%*	*8.6%*	*6.1%*	*9.1%*
* Discount factor			0.89	0.80	0.72	0.64	0.57	0.51	0.46
Discounted FCFE			$9.21	$8.73	$7.86	$7.57	$7.35	$6.97	$6.80
Terminal value P/E									
Net income		$779	$806	$860	$921	$992	$1,082	$1,171	$1,282
% of sales		*18.4%*	*18.1%*	*18.5%*	*18.6%*	*18.8%*	*19.2%*	*19.4%*	*19.8%*
EPS		$14.47	$15.35	$16.81	$18.00	$19.39	$21.15	$22.89	$25.07
Growth		*-8.3%*	*6.1%*	*9.5%*	*7.1%*	*7.7%*	*9.1%*	*8.2%*	*9.5%*
Terminal P/E									15.00
* Terminal EPS									$25.07
Terminal value									$376.01
* Discount factor									0.46
Discounted terminal value									$172.23
Summary (using P/E multiple for terminal value)									
	First stage	$17.94	Present value of first 2 year cash flow						
	Second stage	$36.56	Present value of year 3-7 cash flow						
	Third stage	$172.23	Present value of terminal value P/E						
	Value (P/E)	**$226.72**							