JCAP

Global
Short Ideas

November 15, 2016
Coverage Initiation

Susannah Krober
susannah@jcapitalresearch.com

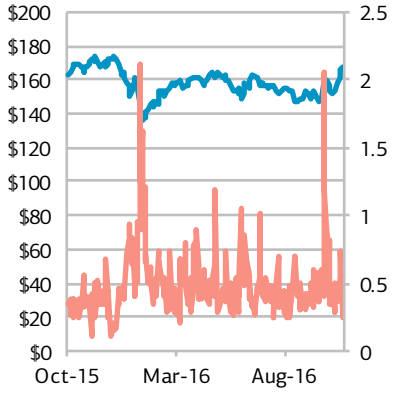
Melvin Glapion
melvin@jcapitalresearch.com

+852 2534 7405

Snap-on Inc. (SNA US)

Price	USD 167.61
Rating	**SELL**
Price Target	**USD 113.00**
Difference	33%
Short Interest	5.9%
Market Cap	USD 9.73 bln
P/E	18.69x

Snap-on Inc. (SNA US) last share price in USD (blue) and volume (pink, in mln shares)



Source: Bloomberg

Snap-on Inc. (SNA US)

Snap on Your Parachute

Propping up sales

Snap-on has seen poor growth in its core business over the last decade but has built a robust financing business, which has ballooned in recent years.

Interest increasingly risky

Snap-on has taken to financing both franchisees and end customers in order to accelerate revenues, and has had to seek out customers with lower and lower credit scores. This has increased the risk pool too quickly for investors to react to and makes SNA increasingly vulnerable to default, especially as interest rates rise.

Structural decline in end demand

Only the tools segment has seen meaningful revenue growth over the past few years. But end customers, primarily independent mechanics, told us that few people in the business of auto and truck repair are expanding their business and many are going out of business. The Great Recession temporarily buoyed auto repair, as used car sales soared, but since that effect lessened starting in 2014, SNA has lost its last source of expanding customer demand.

Rating: Sell

We initiate coverage of SNA with a price target of USD 113 based on our DCF model.

Responsible for this report:
Anne Stevenson-Yang anne@jcapitalresearch.com +852 2534 7405

Table of Contents

Our View

Aggressive financing has transformed SNA from a manufacturer to a risky lender.

Snap-on is a solid old company that can no longer find growth in its core business. As a result, the company has started offering financing at ever more aggressive levels to push inventory out to franchisees and accelerate sales. The financing has helped Snap-on pull future sales into 2015 and 2016 to satisfy the Street. As a result of its reliance on financing, Snap-on has seen its free cash flow from operations deteriorate, with more cash than ever provided by financing activities. With trade and finance receivables at 50% of total assets, SNA should be evaluated as a financing company as well as a manufacturer and direct sales company.

Substantial downside risks to the company emerge from the following:

- SNA will need to use capital markets to support the financing programs in order to goose revenue and maintain the company's earnings reputation on the Street.
- As Snap-on is already using the highest rates possible in each part of its market, we believe the company will be forced to absorb added costs as rates rise.
- SNA is also not properly accounting for non-performing loans. It is likely using 'recency' as a way of reporting that most customers are up to date on payments. This hides the true risk in the receivables portfolio.
- We expect that higher interest rates and higher delinquency rates will result in margin compression at SNA.
- Margins have increased from 18% in 2008 to nearly 25% in 2015. We expect that these levels will decline to at least 23% in the next two years once the company is forced to deal with non-performing loans and increased interest rates.

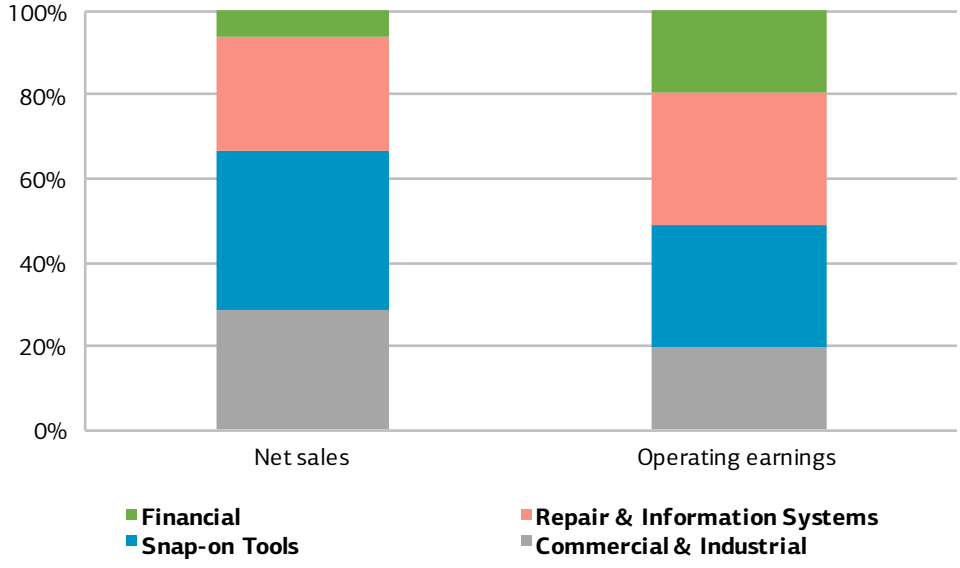
Overview

Snap-on has been around for nearly 100 years, and in that time has maintained a very stable business in the sale and services of tools, systems, diagnostics, and other solutions for vehicle repair centers, heavy industry, and government/military. Its core business, direct sales of tools to mechanics and dealers, in the last 30 years has become almost exclusively a franchise model. This segment, along with its financial service segment, Snap-on Credit, has provided all recent growth for the company.

Briefly, Snap-on categorizes its business into the following four segments:

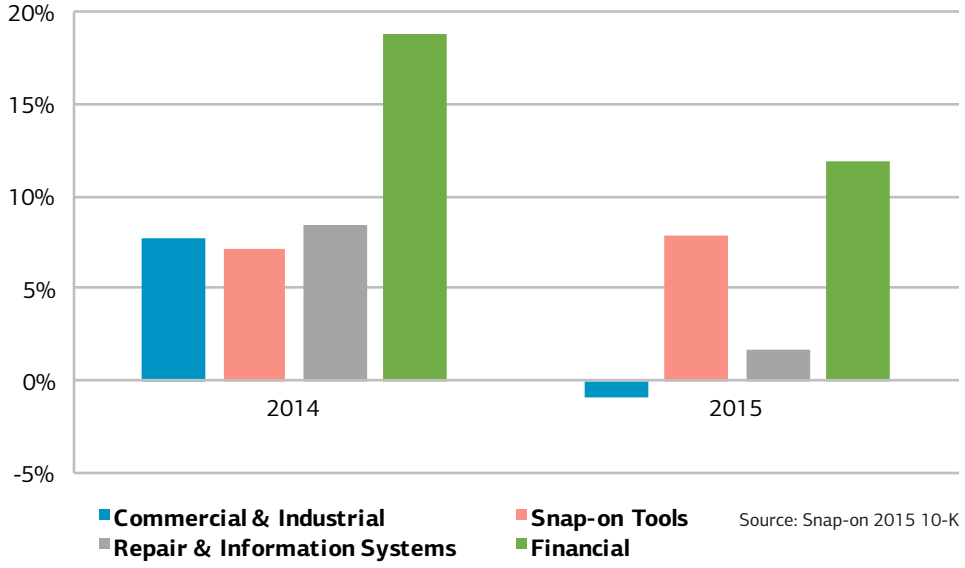
- **The Commercial & Industrial Group (C&I):** This group covers all industrial and commercial customers globally, including aerospace, natural resources, government and technical education. They are mainly sold to directly or through established distributor channels. This group has not seen any significant growth in recent years as contract values, particularly for military and natural resources, have declined.
- **The Snap-on Tools Group:** With the main customers of vehicle service and repair technicians, this group houses the franchise mobile tool distribution sales model, and is the main segment for sales of Snap-on tools. It has seen stable single-digit growth over the past several years.
- **The Repair Systems & Information Group (RS&I):** This segment sells tools, diagnostics and services into professional vehicle repair and OEM dealerships through direct and distributor channels. It has, like C&I, seen flat growth over the past several years.
- **Financial Services:** This segment is entirely attributed to the business of Snap-on Credit LLC (SOC). It provides installment sales and lease contracts to the customers of Snap-on franchisees, as well as industrial customers. Additionally, SOC provides business loans and vehicle leases to the franchisees. This is primarily available to US customers through franchisees, but is available in some international markets as well.

Chart 1. Snap-on Segments Net Sales and Operating Earnings Percentage Share



Source: Snap-on 2015 10-K

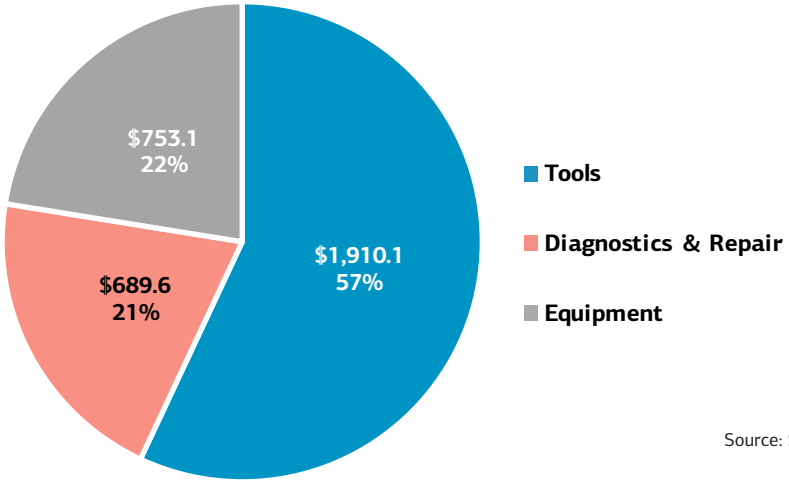
Chart 2. Segment YoY Growth



Source: Snap-on 2015 10-K

Disproportionate growth has been derived from the Snap-on Tools and Financial Services segments. The bulk of earnings is generated through the unique Snap-on franchise model, which involves direct sales by 3,800 franchisees to independent mechanics and other end customers of Snap-on tools and diagnostics. Financial services have become an increasingly important portion of Snap-on's business, now generating 4x as much earnings as its revenue share. We believe that the growth of financial services as a business segment is actually supporting sales and growth in the other segments, particularly Snap-on Tools, and that the company should be evaluated not as a pure manufacturer and distributor of tools but as a fi-

Chart 3. Product Sales Revenue 2015 (USD mln)



Source: Snap-on 2015 10-K

nancing company as well. The heavy reliance upon the financing segment has also led markets to underestimate the risk inherent in Snap-on's current operating model.

The vast majority of Snap-on's sales revenue (ex-financial services) comes from product sales and related support and training services. Product sales derive from the C&I, Snap-on Tools, and R&IS segments.

Franchise Business on the Ground

Direct sales have been the bread and butter of Snap-on's business since the company's founding in 1920. Tools and diagnostics for mechanics and dealers, sold from Snap-on's famous trucks by their independent operators, drive the business. Snap-on switched in the 1990s from directly owned mobile distribution to franchising, and this is Snap-on's distinguishing quality in tools and services for the autos sector. Would-be franchise operators lease their franchises from Snap-on on 10-year agreements. In some cases, new franchisees buy out previous franchisees, though in all cases, Snap-on Corporate controls who can and cannot purchase a franchise.

Over the past several years, the franchise business has reported top-line growth as the other sales segments have stagnated. Snap-on has 3,800 franchises operating primarily in North America. Franchisees are independent salespeople who operate in a designated route, moving their "store"—their truck—from customer to customer, offering the latest tools and upgrades, service and support for the mechanics and other autos business operators who are their customers. It's a remarkably personal business, and that quality has insulated it from the major impacts seen from online retail. Customers we spoke to were very positive about their Snap-on franchisee, and the bulk of customers reported buying all their tools from Snap-on.

We found customers to be loyal to the SNA brand, despite high prices.

The franchisees are typically single men or husband-and-wife teams, and a few have paid assistants. They lease their trucks from Snap-on and sign franchise agreements with Snap-on that require a capital outlay and continuing support from Snap-on in exchange for monthly and yearly fees. None of the franchisees we spoke to described the job as easy; a franchisee can expect a minimum of 60 hours a week of work, with the average range being closer to 80-100, but with margins in the 24-41% range. Most franchisees reported being pretty satisfied with the business. Each franchise sells a different blend of products, with some franchisees focusing primarily on the more specialized diagnostics business, but the majority sell tools, tool boxes and parts at a variety of price points.

Left: Snap-on franchisee's truck. Right: A Snap-on tool display. | Photos by J Capital, October 2016.

Getting Started

Compared to other franchise models, Snap-on has opted to be very involved in the operational side for the duration of the franchise relationship. In every case that we have found, through talking to franchisees, former managers in the franchisee program at Snap-on, and franchise disclosure documents (FDDs), franchisees depend on Snap-on to extend working capital and credit for the sale and operation of a franchise. Becoming a franchisee is a formal, and lengthy process (for more detail, see Appendix A), but briefly:

Franchisees incur a huge debt load to SNA on joining, not all of which is visible to investors.

- **Start up:** Franchisees go through an extensive vetting and approval process that includes a financials & a credit check, ride-alongs with current franchisees, training at SNA headquarters in Dallas, and up to six weeks of full-time ride-alongs with a business developer as the new franchisee gets established.
- **Cost:** Franchisees incur an average of about USD 250,000 in debt, excluding the initial payment of about USD 25,000. That's about USD 100,000 for the truck lease, USD 80-100,000 in inventory value, USD 30,000 in the "revolving account" (RA, or truck account) balances, and USD 20-50,000 in initial working capital.
- **Maintenance:** SNA provides ongoing support. Its business developers run through the franchisee's books (which are not on SNA's own balance sheet) quarterly, provide sales assistance, can provide more working capital over time—up to 4.5x weekly sales. Franchisees pay up to USD 7,000 a month in various fees to SNA, accounting for a 20-50% take on their gross monthly profit.

A Week's Pay...

Franchisees tell us the average revenue rate is approximately USD 11,000/week at a 24-41% gross margin; the range was anywhere from USD 8-20,000 a week in sales. This translates to roughly USD 45,000 a month with an average of USD 13,500 in gross profit. Franchisees told us that

sales volume was directly correlated to working hours, with the average franchisee pulling in USD 150-200 per working hour (this includes hours per person: often times franchisees have a spouse or assistant working with them). With franchise fees of up to USD 7,000 a month, as much as half of gross profit for franchisees is paid to Snap-on. On top of that, fuel and truck maintenance averages USD 500/week.

Table 1. An Average Franchisee's P&L

Monthly Revenue	USD 45,000
Average Gross Margin	30%
Gross Profit	13,500
Franchise fees	7,000
Fuel	350
Maintenance	150
Net Monthly Pre-tax Income to Franchisee	6,000
Net Annual Income to Franchisee	USD 72,000

Source: Interviews with Snap-on franchisees

On the face of it, a Snap-on Franchisee operating on his own can make a decent living. However, the above assumes that the franchisee is only moderately indebted to SNA, and we know many have much heavier debt burdens than SNA allows to be rolled over. We have heard that the average annual interest charged on outstanding debt is 14% blended, though highly variable. From our interviews, we found that franchisees might be paying as much as an additional USD 20,000 in interest annually than is factored in above. If they are paying back principal, they are taking home even less.

Effectively, through high debt burdens not actively discouraged by SNA, franchisees could be paying up to half their net pay back to SNA for debt servicing. Hence, the livelihood of most franchisees is highly dependent upon the degree to which they are indebted to SNA, their respective rates of interest, and the consistency at which their customers purchase new tools.

However, as we have learned, the ability to generate sales is highly dependent upon franchisees taking on more debt, initially interest-free, from SNA and extending larger amounts of credit to customers.

...From Two Different Sources

Franchisees sell in two different ways to their customers, with very few

straight-out cash sales, each with a different set of parameters and incentives.

The first, and bulk of sales (50-70% in our interviews) made by franchisees are on the Rotating Account (RA). RA sales are no-interest like-cash sales made by the franchisee. They typically have a total value of about USD 500, and are no greater than USD 1,000 in value. The franchisee would set up an informal agreement with the buyer for weekly payments of a set installment for a duration of no longer than 90 days. For example, a tool sale of USD 500 could be made with tools delivered on day of sale, and the buyer paying USD 50/week for 10 weeks to the franchisee.

50-70% of sales are financed through the franchisee's own working capital at no interest.

However, given that cash flow can be an inhibitor for a franchisee to make sales and maintain inventory, Snap-on will extend a line of credit at no cost to the franchisee. It is typically calculated at a 4x multiple of total weekly revenue. This includes all collections the franchisee has made off of previous RAs, the average total value of extended credit financing notes (ECs, as issued by Snap-on Credit) written, the cash sales booked, plus any 30-day accounts. So a franchisee pulling in the average USD 11,000/week in revenue would have access to a USD 44,000 zero-interest credit account from Snap-on to finance cash flow for RA sales or to purchase inventory. Snap-on has slowly ramped up its multiple: in 2011, Snap-on only allowed 3x the weekly average revenue in credit to franchisees. A regional manager "keeps this in check," said an SD we spoke with, by determining when the "store is closed," or when a franchisee cannot be extended more credit. The manager should therefore keep franchisees from accumulating too much inventory.

Franchisees typically operate on 60- to 90-day repayment plans for credit, and after 90 days can be charged a variable interest rate—these vary from 5.5-11.5%.

The second type of sale is made on credit issued through Snap-on Credit (SOC), the financial services division of SNA. While the targets for franchisees are officially to stay under 25% of sales through SOC, we found extensive evidence in our interviews that SNA franchisees have been incentivized to ramp up the percentage of sales made through interest-bearing credit lines simply in order to maintain sales volume. Twenty-five percent of the liability then becomes the franchisee's and 75% SOC's. Even more alluringly, the money for all sales made on credit via SOC is transferred to the franchisee on the day of sale, so the collection period is shorter than that for the RA. The franchisee is still responsible for ensuring collection on the debt, but the collections are not contributing to their own work-

ing capital, and since the average margin is above 25%, even if the loan becomes non-performing, they will almost certainly make a small profit, even as SOC absorbs a significant loss.

Exactly how much sales volume is on SOC credit lines mostly correlates with how long the franchisees have been in business. We found that the volume is often as high as 50%; most franchisees who have been operating for at least three years report higher than 30%. All franchisees we interviewed were actively attempting to increase their sales on credit rather than on RA. On average, they had increased sales volume on credit by 25% over the previous year, faster than the rate of overall sales growth.

The main incentive for customers to purchase on credit is that SOC offers discounts off the principal to the customers who purchase on credit. While a purchase of USD 1,500 in value might give you 10% off the principal, a purchase of USD 7,500 might give you closer to 20%, though the discounting varies. For customers with decent cash flow, they can pay off the value in 90 days at no interest. In practice, franchisees told us that less than 10% of customers pay off within the grace period, even though the interest rates far eclipse any savings they'll enjoy.

Accelerating Sales

Easy credit does not hide the fact that customer demand for SNA's products is falling significantly. New customers are proving elusive: in our interviews, half of the franchisees reported declining numbers of new customers over the past three years, with the other half reporting a small increase or no net increase. For those with declining or no net new customers, franchisees reported being able to keep sales flat, sentiment is reasonably positive. As one franchisee told us, "Most of my customers have what they need. I make a decent amount, but it hasn't grown in a couple years. I'm keeping my gross sales up with more credit sales, but there aren't new mechanics in my area."

Franchisees like credit sales as they get paid same-day by Snap-on Credit.

By pushing more of their customers into credit sales, Snap-on franchisees, enabled by SNA itself, have successfully and dramatically pulled sales from future years, by their own account, into the current year, a pattern that is expanding and accelerating. But how long can SNA rely upon easy credit to buttress sagging sales and stagnant demand? Despite the significant expansion of the credit facilities, revenues excluding financial services at SNA have grown a modest 4.5% 3 year CAGR to 2015. Were it not for easy credit, revenue and margins at SNA would be significantly less impressive.

Susannah Kroeber susannah@jcapitalresearch.com **Anne Stevenson-Yang** anne@jcapitalresearch.com +852 5223 8703

Table 2. "Ideal" Targets for Franchisee's Sales, and Structure of Sales

	Rotating Account (RA)	Sales on credit through SOC
Percentage of sales volume	65-80%	20-35%
Value of sale	USD 250-1,000	USD 1,000+
Interest bearing?	No	Yes
No-interest grace period	n/a	90 days
Payment period	1-10 weeks	1-5 years
Franchisee receives payment:	From customer in installments	From SOC, in full, day of sale
Customer qualifies for bulk discounts from Snap-on?	No	Yes

Source: Interviews with former Snap-on management and former franchisees

In our interviews, we found two key reasons for variability in sales volume, and also higher levels of SOC-issued credit sales than the company claims to target:

- Snap-on routinely offers internal sales and discounts to its franchisees, and franchisees can approach that 41% gross margin level if they successfully take advantage. This comes with greater inventory risk, so the ability to hold inventory cheaply is more important than salesmanship here.
- Large sales using Snap-on Credit (SOC) provided credit lines is key—75% of the franchisees we spoke to called this a crucial part of their business and said they would not have grown sales volume since 2014 without this sales method. When sales are made on credit, a customer opens a line of credit with SOC, and the franchisee gets paid in full immediately, allowing the franchisee to book that revenue in full for that year or quarter. Franchisees say that the vast majority of sales on credit would not have occurred in cash or would have been delayed purchases of one to two years.

The key to Snap-on's Inc.'s revenue stream is that it books sales when franchisees buy inventory from the company, not when end-customers buy from the franchisees, which is more normal in accounting for franchise operations. But SNA seems to be goosing the model with its credit policies. In other words, Snap-on can use internal sales to franchisees to incentivize purchasing that will be recorded as revenue for the quarter. This is true even of sales by franchisees using SOC credit lines, and the liability is then

moved to a financial receivable. Snap-on franchisees we interviewed all reported increasing inventory at 2-3x their rate of sales increase over the past few years—all of that inventory build has been counted as sales by Snap-on. Snap-on has therefore had to increase the working capital lines of credit to its franchisees, and franchisees have been more eager to push sales on SOC credit rather than the RA

Heavy Inventories

Franchisees also absorb all inventorying costs and return costs for merchandise. The low net margin for franchisee operators would leave many with need for fast credit regularly, which Snap-on is happy to provide. Inventory practices vary widely: we found that, while new franchisees typically operate with 3-5 months of inventory in the first year of operation, the largest franchisees will hold as much as 24 months of inventory. This is due to Snap-on Tool's practice of using buy-one, get-one sales and rebates to encourage franchises to take more product off Snap-on's balance sheet. A former Sales Developer (SD) told us that Snap-on management felt under pressure from Street analysts in the 2000s to hold less inventory, and as a result, franchisees have been incentivized to carry more. We found that established Snap-on franchisees report holding twice as much inventory relative to cash flow as they did in 2008-2011. In our interviews, all franchisees reported holding more inventory than at any point in the past. There's been a 15% growth in inventory by value in the last 18 months among franchisees who have been in business at least three years, and 20% of franchisees think they are holding double the amount of inventory compared to 2011, though sales have grown by about 30-35%. While inventory growth has slowed in the last year or two, most reported a pattern from 2011-2014 of inventory growing at a 2:1 or 3:1 rate compared to sales. We have heard from franchisees that SNA's inventory does not deteriorate or go obsolete quickly: even electronics like diagnostics have a 10-12-year salability period.

Most franchisees' inventories have grown far faster than sales.

In the Financials

Receivables and Inventory—Snap-on has Accelerated Revenue Recognition

Receivables have been far outpacing revenue growth for the last eight years. As a group, trade, contract and finance receivables grew 21.4% between 2008-2011, while revenues barely increased over the period, only 0.5% CAGR. While the pace slowed substantially, the pattern still holds for 2012-2015, where receivables grew at 6.6% while revenues trailed at only 5.5% growth. This aligns with our primary findings that credit sales to customers have far outpaced growth in overall sales, and the fact that

Snap-on books sales to franchisees as final when they take on inventory has allowed them to increase revenue simply by increasing the inventory burden of their franchisees, and providing them with financing to do so.

This has become starkly visible in Snap-on's financials: the company has increasingly relied on consumer and franchisee financials, and it is now taking longer to clear both the receivables balances and inventory, as it has saturated those markets. Days Sales Outstanding CAGR grew 18.1% from 2008-2015, while Days Inventory Outstanding also grew 2.1% over the period.

Table 3. Snap-on CAGR

	2008	2009	2010	2011	2012	2013	2014	2015
Day Sales Outstanding	71.4	120.9	153.2	171.9	190.7	200.6	204.5	228.5
Days Inventory Outstanding	89.2	72.2	79.5	88.0	92.0	94.7	97.3	103.5
DSO CAGR 2008-15								18.1%
DIO CAGR 2008-2015								2.1%

Source: Company filings, J Capital calculations

SNA does not seem to be making allowances for the possibility that these debts will not be paid. The company claims that it has very low default rates. However, we have heard that interest rates for most franchisees are at sub-prime levels. Any increases in the rates of interest charged to SNA will either have to be passed on to franchisees in the form of higher interest rates on RA and SOC or assumed as lower margin to SNA. Moreover, the challenges faced by franchisees, given stagnant to declining customer demand, suggests that delinquency and write-offs of non-performing loans are risks not evident in the company's financials and not priced into the company's shares.

"Recency"

To add insult to the fact that the company is not addressing the significant risk in the receivables balances, we have heard that the company accounts for its non-performing loans on a 'recency' basis, meaning that some nominal amount paid on an account renders the account 'performing.' For example, if a customer has agreed to pay USD 500 per month for the next two years for a tool and finds he is unable to continue with that payment level, he can renegotiate a payment plan with the franchisee and SNA to pay, say USD 100 a month. Because the customer is paying something on the account, SNA considers the loan up to date.

Susannah Kroeber susannah@jcapitalresearch.com **Anne Stevenson-Yang** anne@jcapitalresearch.com +852 5223 8703
See final page for disclaimers.

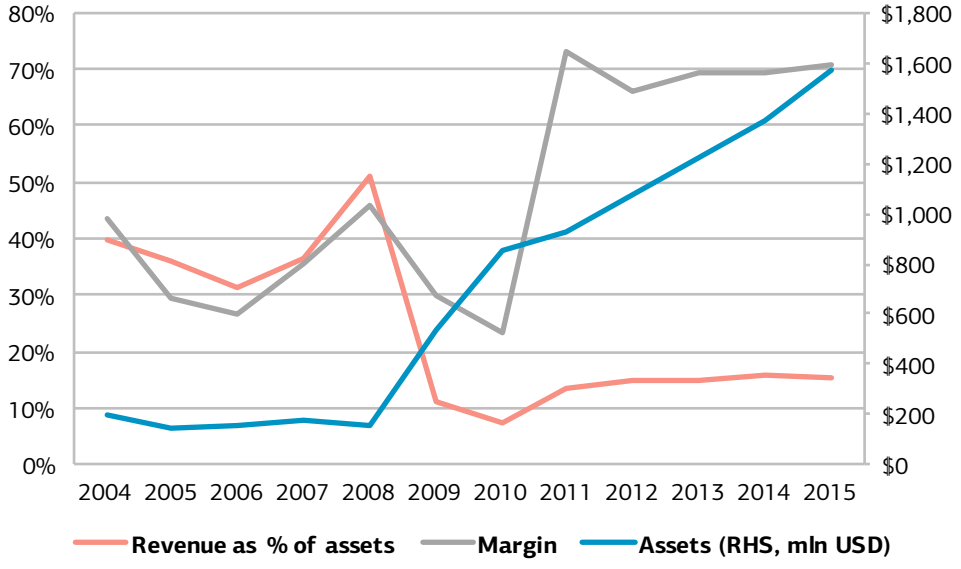
By hiding the true risk in what is a significant component of total assets, SNA is sitting on a land mine. Interest rates are likely to rise and customer demand fall, and franchisees sit on months worth of inventory.

At some point in the very near future, SNA will need to account for non-performing loans at a cost to its profitability.

Credit Sales Propping Up the Retail Business, Even as the Industry Sags

In 2004, Snap-on formalized its financial services segment in the form of Snap-on Credit. This began EC sales, facilitated through Snap-on itself, for those with average or better credit. Starting in 2007, and rolling out slowly for the next several years, Snap-on launched the Platinum program, which formalized a process of subprime lending. Financial assets, followed by margins and segment revenues, started growing with the addition of a rebate program to incentivize more sales being conducted through an interest-yielding sales channel.

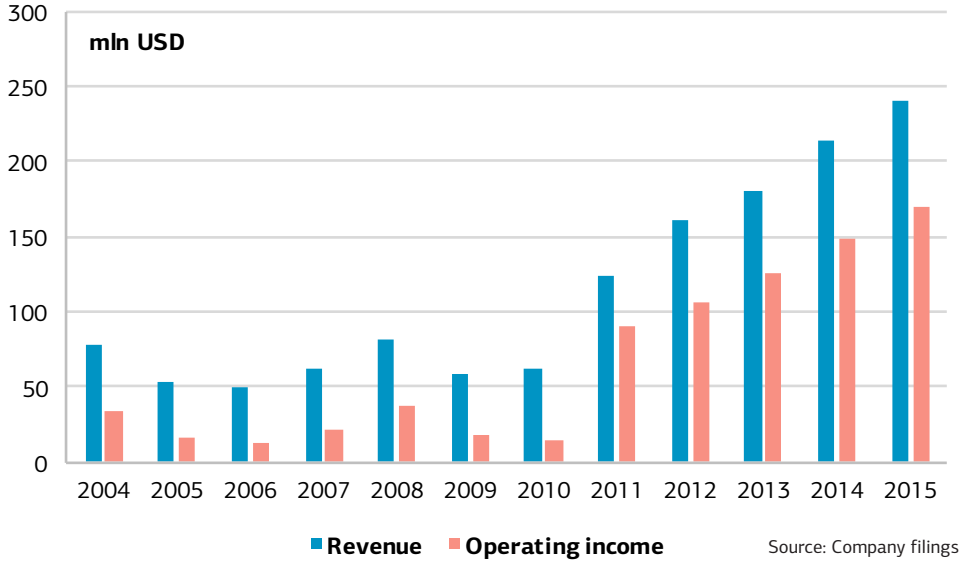
Chart 4. Financial Services Revenue as a % of Total Assets vs. Financial Services Margin vs. Total Segment Assets



Source: Company filings

In our interviews with franchisees, the rate of increase for sales on credit is palpable. In 2010-2012, many franchisees weren't even conducting 5% of sales on credit, though now even new franchisees do 20%. The large uptick in volume for credit issued began in 2011, and with a vast majority of lines of credit being issued at three- to five-year terms, we have not begun to see what the default rates may look like over the long run—we expect that it

Chart 5. Financial Services Revenue and Operating Profit



Source: Company filings

won't be until 2017 or early 2018 that the default rates will start to reflect the reality of the business. We see some early signs that default rates will begin to rise: while Snap-on is reporting a blended rate, franchisees, who are in charge of collections, told us that 3.5-6% were currently 30-days delinquent, while Snap-on does not report delinquencies until 90-days.

For any location, SOC charges two basic interest rates based on credit bracket: a low, typically 9.9%, rate for customers with excellent credit, and a high, the highest allowable prime interest rate under state law, rate for customers with middling credit. Franchisees can also lend to customers who do not pass a credit check through the "Platinum" program, in which case customers are lent to at the highest allowable sub-prime rate for their state. There are no gradations for interest rates. Snap-on's disclosure of a 17.8% blended rate looks plausible based on our interviews.

Table 4. Typical Snap-on Rate Scheme

Lending Bracket	Credit Score	Rate*	Customer %
Excellent	650+	9.9%	10%
Average (max prime rate)	570-650	19.8%	50%
Poor (max non-prime rate allowed, Platinum program only)	Below 570	27.9%	40%

* Note that some states have restricted maximum lending rates below these rates, in which case customers with average credit will be lent at the maximum allowed prime interest rate, which can lead to the same rate as customers with excellent credit. | Source: J Capital interviews, September-October 2016

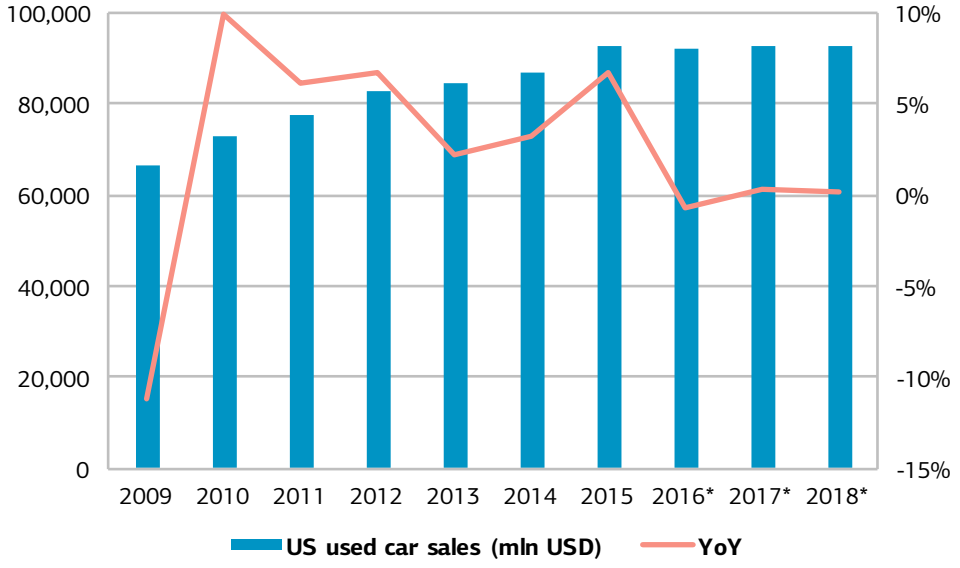
Franchisees repeatedly told us that the tool business was particularly good

in the aftermath of the U.S. financial crisis, when used car sales were on the rise. This boost lasted longer than in many industries, because of the expansion in SOC's low-credit score (high-risk) borrower program, the Platinum program, continued into 2015. One franchisee told us that there was a lot of low hanging fruit even as late as 2014, because a lot of his customers couldn't get a line from SOC until then. Because he has kept the delinquency rate just below 3%, he has the power to "override" SOC eight times a month through the Platinum program for his low-credit rating customers. This translates to a likely range of 20-35% of his weekly sales coming from low credit customers—this would have been less than 5% in 2012.

The compounding effect if loans were to become delinquent would be very high at Snap-on, where most customers who take out a line of credit once become repeat customers. The average per customer is 1.5 lines of credit per year.

The Structural Decline

Chart 6. U.S. Used Car Sales Flat-Lining

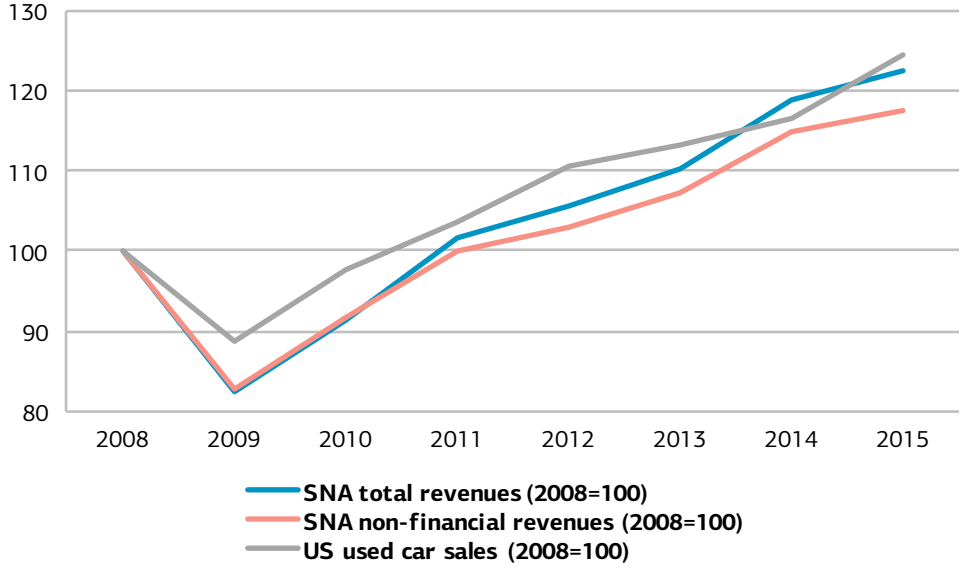


Source: US Census Bureau

SNA's revenues have almost exactly tracked US used car sales data over the past eight years. If anything, SNA has lagged the industry, and financial revenues have bridged that gap.

Our interviews with Snap-on customers revealed a very loyal customer base, but as primarily independent mechanics, most are reporting stable to

Chart 7. SNA Revenues (Total and Non-Financial) vs. US Used Car Sales Indexed (2008=100)



Source: US Census Bureau, company filings

declining business for themselves. This is most troubling because most of SNA's credit customers have middling to low credit scores, and any impact to their ability to pay may result in a higher NPL rate than with a more diverse cross section of customers. Most reported that the credit program was a boon, with several noting how it had allowed them to buy more tools faster—one told us he had increased his purchasing by 50% over the last three years based on buying on credit. For these mechanics, about half the purchases by value that they had made over the past year had been on credit, and though most planned on continuing to purchase, some felt saturated, or that with the declining business environment they were unable to continue maintaining their level of purchase. As one said, "the tool quality is good, so now that I've been able to buy tools earlier than expected, I can probably buy fewer for the next few years." Franchisees we spoke with were more likely to report default rates in their areas in the 3-5% range than sub-1%, as SNA claims. We believe this risk will increase with time and, if interest rates increase, the underlying costs will grow for SOC.

Table 5. Snap-on Credit Platinum Program for Franchisees

Tier	90-Day Delinquency Rate
Platinum	8%
Platinum Plus	5%
Platinum Elite	3%

Source: J Capital interviews, September-October 2016

Table 6. Default Rate Stress Test, Blended

		Default Rate		
	Sales Volume	Bull (Company Implied)	Median	Bear
Excellent	10%	0.05%	0.50%	1.00%
Average	50%	0.05%	2.00%	3.50%
Poor (platinum)	40%	2.90%	6.50%	9.00%
Average		1.19%	3.65%	5.45%

Source: J Capital estimates

According to our interviews, the rebate program, launched in 2009, was instrumental to kick-starting the Platinum program, and the EC program more generally. Snap-on Credit set up tiers for rebates based on total purchase price when products were purchased using EC. The customer would get a certain amount off the principle, and SOC would pay the franchisee the difference up front. This incentivized customers to purchase on credit—any repayments within 90 days through the rebate program accrued no interest—and franchisees to push large EC purchases. According to our interviews, the tiers are as follows, with rebate amounts adjusted every 17 weeks by SOC:

Table 7. Snap-on Credit Issued Rebates for EC Sales

Purchase Price	Rebate
USD 3,000-USD 4,999	10%
USD 5,000-USD 7,499	12%
USD 7,500-USD 9,999	15%
USD 10,000+	20%

Source: J Capital interviews

In our interviews, franchisees and SDs were positive about Snap-on's claims that this system incentivizes franchisees to act responsibly, interpreting these factors as safe-guards:

- Platinum program membership is contingent on maintaining low default rates. Platinum allows franchisees to expand large-ticket item customer base, so franchisees will use discretion and, as they share in losses in all scenarios, will seek to recoup losses.
- Rebates lower principal, thus making it easier for customers to pay off
- Ability to pay off ECs in 90 days with no interest, but those sales count as EC sales, lowers default rate.

- Mechanics are not mobile, it's easy to find people who stop making payments. Therefore, default rates are legitimately low. Snap-on Inc. claims it to be, blended, under 1%.

Cash Flow—The CFO Bait and Switch

Snap-on has maintained reasonably healthy cash flow from operations—the trouble is, the company has become increasingly a hybrid of a financing company and a manufacturing company, not a pure-play manufacturing company. Our checks bore this out: even when sales aren't increasing overall, the percentage done on credit, thus granting SNA an interest-based revenue, is sky-rocketing. SNA now derives 6% of net revenues and 20% of profits from interest payments, and its product sales thereby driven by huge medium and long-term receivable balances—the balance of total receivables grew from 19.3% of total assets in 2008 to 50% in 1H 2016. As a result, we believe it is more reasonable to assess SNA's true free cash flow generating abilities after netting out both capex and financing activities. Using this measure, we see that Adjusted FCF was actually negative in 2010-2011, and that as a percentage of net income, it has declined by a third between 2008-2015, delivering just USD 0.40 of adjusted FCF for every dollar of net income in 2015, down from USD 0.60 in 2008.

Table 8. Snap-on Cash Flow

	2008	2009	2010	2011	2012	2013	2014	2015
Net Income	236.7	143.7	193.0	238.8	314.6	359.7	432.1	490.6
Cash Flow from Operations	215.0	347.1	140.4	128.5	329.3	392.6	397.9	496.5
CFO/NI	*0.91*	*2.42*	*0.73*	*0.45*	*1.05*	*1.09*	*0.92*	*1.01*
Cash Flow from Operations	215.0	347.1	140.4	128.5	329.3	392.6	397.9	496.5
less Capex	(73.9)	(64.4)	(51.1)	(61.2)	(79.4)	(70.6)	(80.6)	(80.4)
Free Cash Flow	141.1	282.7	89.3	67.3	249.9	322.0	317.3	416.1
less Net Financing Impact	-	(183.5)	(252.0)	(162.0)	(124.0)	(70.6)	(154.8)	(219.4)
Adjusted Free Cash Flow	141.1	99.2	(162.7)	(94.7)	125.9	179.5	162.5	196.7
Adjusted FCF as % of Net Income	*59.6%*	*69.0%*	*-84.3%*	*-33.4%*	*40.0%*	*49.9%*	*37.6%*	*40.1%*

Source: Company filings, J Capital calculations

Susannah Kroeber susannah@jcapitalresearch.com **Anne Stevenson-Yang** anne@jcapitalresearch.com +852 5223 8703
See final page for disclaimers.

SNA's core business is in fact generating declining FCF, and so SNA will become increasingly dependent financial gimmicks to improve the look of its financials. We expect the company to continue accessing capital markets to support its share repurchase program and fund its attractive dividend payout (which has nearly doubled from 2008 to 2015 from USD 70 to USD 130 million). We further expect the company to place a greater reliance upon easy credit, but, given the saturation levels of product held by franchisees and customers, we see limited opportunity for further leverage of this revenue acceleration trick.

The company is already mindful of its precarious cash situation. Over the last several years, SNA has adjusted its capex spend down in poor cash years. It those years where operating cash flows were particularly poor, SNA made up for some of the cash deficit by dialing down capex spend--historical rates for capex as a percentage of revenue were typically in excess of 10.5% in years where SNA had healthy adjusted FCF (2008, 2009 and 2012), and much lower in 2010 and 2011 when FCF was negative:

Valuation

Based upon our DCF model, SNA shares are worth USD 113 per share vs the current trading level of USD 160 per share; this analysis assumes:

- WACC of 7.6%
- Terminal growth of 2%
- A decline in EBIT in 2016, 2017 and 2018, as a result of increased costs of non-performing loans

WACC	7.6%					
DEBT	35.0%					
EQUITY	65.0%					
Cost of debt	4.0%					
Cost of equity	9.5%					
Terminial growth rate	2.50%					
	2016	2017	2018	2019	2020	TERMINAL
Firm						
Revenue	3489.2	3628.768	3773.91872	3887.136282	4003.75037	
EBIT Margin--existing	25%	25%	25%	25%	25%	
EBIT--assuming existing rates	872.3	907.192	943.47968	971.7840704	1000.937593	
add costs of additional write-offs a % of AR	-67.518	-112.53	-45.012	0	0	
EBIT	805	795	898	972	1,001	
+ D&A	58	61	64	67	70	
- Tax	(282)	(278)	(314)	(340)	(350)	
- Change in WC	0	0	0	0	0	
- Capex	(349)	(363)	(377)	(389)	(400)	
FCF	232	214	270	310	320	6,473
Discount factor	0.0	1.0	2.0	3.0	4.0	4.0
	232	209	257	288	290	5,864
Sum of discounted cash flows	7,141					
- Gross Debt	715					
+ Cash	120					
Equity value	6,546					
Diluted share count (mln)	58.0	(as of 1H 2016)				
Price per share (USD)	112.86					
Current share price	160.00					
Upside	-29.46%					

Appendix A. The Franchise Model

1. **Initial vetting:** A Sales Developer (SD) from Snap-on would vet and train the applicant by

   - **Financials review.** To get an interview, the applicant would need a solid credit score.
   - **Interview in the applicant's home.** Snap-on prefers strong home environments, husband/wife teams, and strong family units overall with buy-in from everyone. The SD wants to ensure that they are prepared to put the requisite 60-80 hours a week into the job of running a franchise.

2. **Ride alongs:** The prospective franchisee would then have to do ride-alongs with both a senior and novice franchisee in different locations.

3. **Pre-acquisition training:** The applicant would then have to pass a physical and go to Dallas, TX for franchisee training.

4. **Post-acquisition training:** Upon returning to their region to start work as a franchisee, a Snap-on SD or franchisee trainer would join them, and work with them for the first 4-5 weeks daily to facilitate early growth in the business. The SD or trainer stays in contact with the franchisee for the duration of their time affiliated with Snap-on.

This is an enormously costly process for Snap-on, though the company does not put a price tag on it, even internally, according to a former SD. Franchisees represent the main way that Snap-on sells product, and Snap-on has thus build in systems of dependency and accountability for the franchisees. However, this comes with a high financial cost to the franchisee. The structures of the deals currently are as follows:

1. **Down payment:** For purchasing, Snap-on currently requires an average of USD 25,000 down, most of which goes to initial licensing, training, workwear and other one-off expenses, as well as monthly fees for the first few months of operation. Snap-on allows for franchisees to take out loans (most commonly new lines of home equity) to pay the down payment. Typically, none of the down payment counts towards loan repayment for the following costs.

2. **Inventory:** Snap-on finances the initial stock for new franchisees, typically USD 80-100,000 in net value, translating to USD 120-145,000 gross.

3. **Revolving Account:** Most sales are conducted on the Revolving Account (RA, also known as the truck account). These are 0% installment payments for low value tools that the franchisee covers through their operating cash flows. New franchisees need to acquire the RA value from the previous franchisee, which Snap-on purchases from the old franchisee for USD 0.75 on the dollar. This is an average of USD 40,000 in value, for which the franchisee will owe Snap-on USD 30,000.

4. **Working capital escrow:** Snap-on provides the initial working capital of USD 20-25,000 to be able to extend new sales on the RA initially. Access to this account is cut off at six months after operations commence, but payment is tied to the 10-year franchise agreement.

5. **Truck:** Most new franchisees require leasing a truck, at an average cost of USD 102,000.

The debt burden for the new franchisee on average is therefore approximately USD 250,000, to be paid off over the 10-year agreement. Interest rates vary by state, but the average rate we found from our interviews and analysis of FDDs was 9.9%. Some components, such as continued borrowing for the RA, are available to franchisees interest-free for 90-day or 180-day terms, so payment can vary widely. Total costs due to Snap-on for franchisees often run at USD 4,500-7,000 averaged monthly according to our analysis of franchisee fees in FDDs (see below for an example fee schedule) and interviews.

(See the fee schedule from a 2015 Snap-on issue FDD on the following page.)

ITEM 6
OTHER FEES

Except as otherwise described below, the fees in this Item apply to all franchises. The notes following this table are an integral part of this Item, and you and your financial adviser should read this carefully.

Name of Fee	Amount	Due Date
Weekly remittance for Products and services purchased from Snap-on[1]	The minimum amount is 100% of miscellaneous charges less miscellaneous credits, plus any amount necessary to be $1.00 under your credit limit.	Payable weekly upon receipt of an invoice from us. Receipt means a statement including this invoice is displayed electronically which you must access.
Monthly License Fee[2]	$110.00	Payable monthly upon receipt of an invoice from us.
Computer Software Maintenance Fee[3]	$26.00	Payable monthly upon receipt of an invoice from us.
Franchise Finance Program Loan Payment[4]	No payment for the first 90 days (interest accrues from inception of loan); thereafter, the estimated payment is $1,216/month–$1,391/month.	Payable weekly.
RA Loan Payment[5]	$739/month–$835/month	Payable weekly beginning six months after the time you become a franchisee.
Credit Program and Open Account Payments[6]	To be determined.	To be determined.
Transfer Fee[7]	50% of the Initial License Fee at the time of the transfer. This fee is currently $7,500.	Upon transfer.
Renewal Fee	50% of our then-current Initial License Fee, which is currently $7,500.	Upon renewal.
Insurance and Other Coverage[8]	$3,500–$10,700	Payable annually, quarterly or monthly.
Indemnification[9]	To be determined.	To be determined.
Administrative Handling Charge[10]	To be determined.	To be determined.
Van Lease and Maintenance Fee Payment[11]	$1,656–$1,892/month van lease payment plus $325/month maintenance fee.	Payable weekly in advance (under the Snap-on Credit Van Lease Program) of each month's lease payment due date.
Van Lease Termination (under Snap-on Credit Van Lease Program)	Unless you purchase your van, you must return the van to a location designated by Snap-on Credit (estimated cost to you between $180–$4,100, depending on your location) and you are responsible for damage in excess of ordinary wear and tear. Up to one month's lease payment for early termination will be due (*See* Item 10 for a further discussion).	Upon termination.

Name of Fee	Amount	Due Date
Late charges (under Snap-on Credit Franchise Finance and Credit Programs)	Under the Franchise Finance Loan 4% over the regular rate (subject to the maximum permitted by law). Under the Snap-on Credit Van Lease Program 5% of the amount due (plus interest at 10%) for a payment delayed more than 10 days or $10.00, whichever is greater (subject to the maximum permitted by law).	Upon failing to make timely payment.
Charges for insufficient funds or dishonor of payment under Snap-on Credit Franchise Finance and Credit Programs or for payment to Snap-on	Up to $25.00, which may increase during the term of your Franchise Agreement.	Upon dishonor of payment by check, ACH or similar instrument.
Audit	Cost of audit	Payable 15 days after receipt of report if audit shows breach and resulted from your failure to provide information on time.
Manual Check Processing Fee[12]	$50.00 per month if you fail to pay Snap-on electronically.	Monthly
Training[13]	$0–$1,850	At time of training.
Merchandising Program[14]	$70-$100 per month.	Monthly upon invoice.
New Product Purchases[15]	Up to $1,000 per month.	Upon invoice.

The fee schedule from a 2015 Snap-on issue FDD

Disclaimer