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BEHIND THE NUMBERS
Quality of Earnings Analysis

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Review of Industrial Inventory Trends

Covid-era chaos is still creating opportunities and risks among industrials
(Companies mentioned include SWK, TKR, TREX, and SNA)

One of the many things we learned during the pandemic was how vulnerable supply chains are to disruption. Lockdowns led to shuttered factory floors and crippled shipping capacity which laid bare the real risks of employing just-in-time inventory practices while simultaneously sourcing components from the other side of the world. Meanwhile, demand skyrocketed for some products while collapsing for others. Then just when the lockdowns lifted and life started to return to normal, inflation reared its ugly head throwing skyrocketing raw materials prices into the mix. Companies cited multiple challenges in this environment including:

- Shortages of key parts limit the ability to sell other inventory. Companies could not finish production on items that were already largely complete.

- Scarce inventory items had lead times of 2-4 months, causing companies to double order and plan for these delays. But the log jam broke and suddenly double orders and the 2-4 month order book all arrived in a matter of weeks.

- Strikes and closures suddenly halted demand – automakers dealt with strikes in 3Q23 which caused orders to be delayed.

- Customers throughout the product chain all experienced surges of inventory – causing order cancellations or simply less ordering overall as inventories were de-stocked throughout the channel.

- De-stocking caused production to be cut – and companies to operate less efficiently.

- Inflation surged into inventory with higher material costs, higher sourcing costs, and higher transportation costs – followed by much of that correcting and lowering inventory costs in 2023.

These events caused huge swings in inventory levels and gross margins and had big implications for cash flow and earnings. Many companies have benefited of late as conditions have normalized, but that situation may be close to playing out for some. At the same time, several others are still reporting weak results, but there may be the makings of a turn-around coming. We see this scenario creating both risks and opportunities for those willing to sift through the details to discern in what phase of the recovery each company is in.

We started looking at the industrial sector by examining each company's inventory days of sales (DSI) and gross margin for the last seven years comparing their current and pre-Covid levels. We found several where inventories remain much higher than normal and margins are impaired. Those could see improvement in both areas and enjoy rising guidance in 2024. Others appear to have already had their recovery and may not have the same catalysts working for them going forward such as customer orders rising after destocking. These companies already had their bump. While some may still beat guidance, higher valuations could limit any appreciation.

Below, we take a closer look at two companies that may have upside in the form of higher guidance as well as two that may have had their day in the sun.

Stanley Black & Decker, Inc. (SWK)

We believe Stanley Black & Decker (SWK) is a good example of a company that may see better-than-expected news regarding its inventories in 2024 following several quarters of negative inventory-related headlines. The company came into 2022 expecting a banner year with strong demand.

- In 2021, SWK reported adjusted EPS of $10.48 in EPS with guidance for 2022 of $12.00-$12.50.

- Supply chain shortages were still creating problems in fulfilling orders. SWK guided to supply chain inflation headwinds peaking in 1Q22 and becoming a tailwind.

- End-user demand was still strong following 2020's Covid-driven surge in home improvement spending. SWK was ADDING manufacturing capacity.

- Strong volume gains were seen until 4Q21 which SWK attributed to higher promotional shipments in 4Q20. SWK built inventory:

SWK	4Q21	3Q21	2Q21	1Q21	4Q20
Adj. Gross Margin	29.0%	32.8%	35.9%	37.4%	35.3%
Pricing	5%	2%	2%	2%	1%
Volume	-8%	8%	31%	29%	15%
Inventory	$5,446.8	$4,134.4	$3,679.5	$2,627.6	$2,589.2
Inv. DSI.	171.7	137.0	121.5	108.7	99.9

It didn't take long before SWK learned that its strong orders included double-ordering from retailers prompted by the long time to fulfill some orders. Also, inflation started hitting consumers who started buying less volume. Very quickly, SWK wasn't growing production, it was idling manufacturing and its customers found they already had too much inventory and weren't ordering at the same rates. Look at how fast the situation changed and guidance came down:

SWK	4Q22	3Q22	2Q22	1Q22	4Q21
Adj. Gross Margin	19.5%	24.7%	27.9%	31.3%	29.0%
Pricing	7%	8%	7%	5%	5%
Volume	-10%	-10%	-13%	-6%	-8%
Inventory	$5,861.1	$6,347.2	$6,635.5	$6,267.7	$5,446.8
Inv. DSI.	166.2	186.1	190.5	186.8	171.7
2022 EPS Guide	$4.62a	$4.15-4.65	$5-$6	$9.5-$10.5	$12-$12.5

- 1Q22 – SWK's inventory continued to build in both dollars and days as the company was hit with higher raw material costs and higher shipping costs while volumes fell.

- At the end of 2Q22, SWK announced it would begin cutting production to allow inventory levels to decline amid falling volumes as inflation was sapping consumer spending.

- 3Q22 – SWK had production cuts in place and announced that retailers were de-stocking their high inventory levels. Now the goal was to lower inventory levels with customers reducing their inventory at the same time.

- In 4Q22, SWK announced actual adjusted EPS of $4.62 vs. initial forecasts of $12.00-$12.50. Destocking continued while production cuts deleveraged margins and cost 600-700bp.

However, now there are several signs the situation is improving after a disastrous start to 2023.

SWK	3Q23	2Q23	1Q23	4Q22
Adj. Gross Margin	19.5%	24.7%	23.1%	19.5%
Pricing	-1%	1%	2%	7%
Volume	-3%	-5%	-11%	-10%
Inventory	$4,977.7	$5,282.9	$5,659.5	$5,861.1
Inv. DSI.	158.3	154.4	166.3	166.2
2023 EPS Guide	$1-$1.40	$0.70-$1	$0-$2	$0-$2

- Gross margin has continued to suffer so far in 2023 from lower volumes, higher-cost inventories, and retail destocking, along with production curtailments. In 1Q and 2Q, production cuts were costing SWK about 400-500bp of gross margin.

- By 3Q, volume was improving, yet a big headwind in 3Q was coming from the auto strikes which hurt volume. This has since been resolved. SWK also noted that destocking had less impact and it expects most destocking to be over in calendar 2023.

- Plus, SWK noted that many supply chain savings have been achieved and it has sold off much of the higher-cost inventory it acquired/built during 2022. It even boosted EPS guidance for the year.

- Rome cannot be rebuilt in a day – but SWK is still a company that has had a 35% gross margin vs the 19.5% it just posted. It was forecasting $12 in EPS only two years ago. It's been on a wild ride- but production cuts that were hurting margins by 400-700bp in some quarters are now expected to be over. Volume is recovering. SWK has restructured its supply chain to reduce costs and has worked down higher-cost inventory. Forecasts for 2023 are only $1.00-$1.40 right now. It still plans to reduce inventory further and lower shipping costs are helping margins by over 100bp. SWK is calling for more gross margin recovery in 4Q23 and is hinting that 2024 EPS could be $4-$5 as operations continue to normalize.

- Our opinion is that SWK may be able to report stronger earnings than forecast with rising guidance for several quarters to come. Plus, the company's goals are not that outlandish compared to what it was already achieving only two years ago.

The Timken Company (TKR)

Timken makes ball bearings and many parts for various types of machinery. This is an area that was hard hit by shortages of parts as TKR's products may be one of hundreds of parts in a completed item. Even if TKR could deliver necessary goods, its customers couldn't sell the machine if it lacked a hydraulic pump from another supplier. If we look at the inventory situation before and after Covid – TKR has seen times when events looked solid before inventory started backing up on them and margins were pressured:

TKR	2022	2021	2020	2019	2018	2017
Gross Margin	28.7%	26.7%	28.8%	30.1%	29.1%	27.0%
Inventory	$1,191	$1,043	$841	$842	$836	$739
DSI	133.7	123.9	121.0	114.5	118.4	121.4

What makes TKR a bit different from SWK is it deals with parts distributors, other manufacturers of larger machines/units that use TKR parts, plus it has some aerospace and military parts where the ultimate customer is the government. TKR may be another quarter or two behind SWK as it reduced guidance after both 2Q23 and 3Q23. However, it has a similar story:

	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21
Gross Margin	31.1%	31.9%	33.0%	27.4%	29.4%	30.6%	30.1%	23.1%
Inventory	$1,202.4	$1,251.7	$1,209.4	$1,191.3	$1,132.6	$1,158.0	$1,112.6	$1,042.7
DSI	139.4	131.8	130.4	132.9	128.7	131.9	129.1	122.9
EPS Guide	$6.85-6.95	$6.90-7.30	$7-7.50	$6.50-$7.10	$5.80-5.95	$5.50-5.80	$5-$5.40	$5-$5.40
Org. Growth Guide	0.25%	2.50%	4.00%	3.00%	11.50%	9.00%	10.00%	11.00%

Coming out of Covid, demand was soaring and was out-pacing the supply capacity to keep up. Volume was growing through 3Q22:

- 2021 quarters experienced a huge increase in demand that was exceeding supply capabilities. Backlog was growing despite record revenues.

- 2021 also saw labor shortages, freight delays, supply delays, and a lack of computer chips delaying product completion. With costs rising, inventory in dollar terms was rising. Keep in mind that much of this inventory was not completed units ready to be sold, but rather partially completed units that could not be sold until other parts arrived.

- By 3Q21, TKR was noting that the channel inventory was also growing as inventory levels were expanding not only at TKR but at the supplier, distributor, and customer levels.

- In 4Q21, TKR said it was boosting production and staffing and could see channel restocking and the capital equipment cycle both working in its favor.

- Organic growth (pricing + volume change before FX or acquisitions) was not keeping up with inflation as pricing was lagging. In 1Q22, TKR noted pricing was finally high enough to offset inflation.

- By 2Q22, backlog still grew slightly, but nothing like 2021.

- In 3Q22, TKR was starting to manage inventories and saying OEMs were doing the same.

- In 4Q22, TKR said overordering was done. The backlog was 3-4 months. Volume growth turned negative, and results were being hurt by lower production not leveraging fixed costs.

- So far, 2023 has seen reduced guidance. Note that the 2023 organic growth forecast has fallen to 0.25% and EPS forecasts are also falling. Inventory DSIs are setting new highs. Production volume is still down. However, OEMs and distributors are both starting to restock.

TKR has only recently started to see inventory levels decline in dollar terms. It is still reporting negative volume growth and no longer talks about a backlog. Unlike SWK, TKR's margins are not getting crushed at this point, and that may not happen. It does have some end markets that are still growing. The inventory overhang should work itself out with time, but even 4Q guidance doesn't call for a big change from 3Q. We believe the negative trends may end by the summer of 2024, at which point, guidance increases could very well start surprising to the upside.

Trex Company, Inc. (TREX)

TREX makes composite wood decking material and also sells outdoor furniture, stairs, fencing, and LED lights. The company may have some growth potential but at 38x 2024's estimated EPS, it looks expensive on the surface. More importantly for this exercise, it appears that it has already seen bloated inventory levels come down and margins have recovered. Thus, it may not have much more tailwind coming in this area.

Consider inventory levels and gross margins over the last six years:

year ended Dec.	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**
Gross Margin	36.5%	38.5%	40.8%	41.1%	43.1%	43.1%
Inventory	$141	$84	$68	$56	$57	$35
DSI	101.9	41.1	46.2	55.2	66.4	44.5

	3Q23	**2Q23**	**1Q23**	**4Q22**	**3Q22**	**2Q22**	**1Q22**	**4Q21**
Gross Margin	43.1%	43.9%	39.6%	27.4%	29.4%	30.6%	30.1%	23.1%
Inventory	$60.4	$74.0	$127.8	$141.4	$132.1	$100.9	$98.2	$88.8
DSI	31.9	33.8	80.8	101.9	94.7	40.2	43.8	41.1

Here's how the company described the conditions of 2021-2023:

- 1Q21 – Expanding production with strong demand, new price hike for August.
- 2Q21 – Strong volume demand – pricing helped but gross margin was pressured by labor, raw material, and transportation costs.

- 3Q21 – Strong volume – but held back from further gains by labor shortage. Gross margin pressured by inflation.

- 4Q21 – Strong volume continues, and gross margin pressures. Took impairment on commercial unit as commercial projects are being delayed.

- 1Q22 – Double-digit volume growth, pricing was high enough to offset the three sources of inflation and boost gross margin.

- 2Q22 – Volume growth still very strong. TREX announced that the channel inventory is up $200 million in the last four quarters. Also, it has added new product lines and the channel had to add initial stocking in that area too.

- 3Q22 – Volume collapses. Channel looks to work off inventory. Sales drop from $386 million in 2Q22 to $188 million in 3Q22. TREX cuts production levels.

- 4Q22 – Volume still collapsing. Sales only $192 million. Inventory needs to be worked off in channel and at TREX. Production cuts squeezing gross margin as few units are spread over fixed costs. TREX divests its commercial unit.

- 1Q23 – Volume still falling, margins still dealing with lower capacity utilization. Price of wood is falling which pressures TREX to stay competitive on pricing.

- 2Q23 – Much of the inventory correction is completed. TREX sees gross margin recover as production restarts. TREX boosts guidance.

- 3Q23 – Volume growth returns and TREX boosts guidance.

TREX's story is similar to SWK but TREX is further along in the timeline. Both saw steady growth coming into the COVID challenges followed by falling inventories and margin pressure and then suddenly inventory DSIs exploded upward. However, in the last three quarters, TREX has seen inventory levels fall back to to $60 million from $141 million at the close of 2023 which is in line with the typical pre-Covid inventory level of about $50-$60 million. Gross margins are also back to peak levels of 43%-44% again after a solid rebound. It has even raised guidance in the last two quarters.

We are not forecasting a crash for TREX, but we are saying that recent growth was driven by sales growth, likely some channel restocking growth, and margin expansion. The latter two may be difficult to keep producing.

We also want to note that much like SWK, TREX took the opportunity in 2022 to streamline some of its operating model, introduce new products, reduce costs, and focus on larger channel partners. They were also very quick to turn to production cuts to resolve the inventory problem quickly. That's all positive too and helping margins even more now. Our concern is are all these margin and sales catalysts now played out where the rate of growth will be more subdued?

Snap-on Incorporated (SNA)

SNA caught our eye because inventories have increased considerably. DSI's were about 125 before Covid and now stand at 162. What is unique about SNA is its margins fell only slightly during Covid and are now rising again. But at the same time, organic growth has clearly slowed. This could lead to some sales and margin pressure at the same time inventory may need to decline more.

SNA reports organic sales growth but does not quantify volume and pricing.

Consider the trend in DSIs and gross margins over the last six years:

SNA	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22
Gross Margin	53.7%	54.3%	53.5%	52.1%	52.3%	52.5%	51.9%
Inventory	$1,032.9	$1,046.1	$1,049.1	$1,033.1	$955.1	$893.3	$864.1
DSI	162.2	165.5	161.3	158.3	152.9	139.8	139.9
Organic Growth	3.7%	1.1%	6.3%	9.6%	7.4%	9.3%	7.7%

SNA	2022	2021	2020	2019	2018	2017
Gross Margin	52.3%	53.5%	53.3%	53.6%	54.0%	54.1%
Inventory	$1,033	$804	$747	$760	$674	$639
DSI	160.9	135.1	145.7	145.7	129.7	125.9

We believe it is important to note that inventory turn is falling at SNA:

SNA	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21
Inventory turn	2.4	2.4	2.4	2.5	2.6	2.7	2.8	2.8	2.7	2.7	2.6

Here is SNA's description of conditions impacting inventory levels and margins since 2021:

- 1Q21 started with SNA reporting that franchisees were low on inventory.
- 2Q21 saw inventory turn rise even with inventory levels rising and the higher volumes drove gross margin up.
- 3Q21 SNA started building buffer stocks of inventory and had higher in-transit inventory resulting from supply chain issues. Gross margin still rose with higher volume sales.
- 4Q21 inventory increased and inventory turn rose again. SNA was still building buffer and in-transit inventories.
- 1Q22 gross margin rose with price hikes and volume increases. Inventory levels rose again as more buffer was built.
- 2Q22 saw flat gross margin as raw material inflation outpaced pricing and volume gains. Inventory grew more but the turnover started to drop.
- 3Q22 saw more margin pressure from the same impacts as 2Q. Inventory rose further and the turnover dropped again.
- 4Q22 turnover dropped to 2.5x, inventory was now rising to support new products and buffer supplies. Gross margin rose as SNA boosted prices enough to offset raw material inflation.

- 1Q23 turnover dropped to 2.4x as inventory rose. SNA still sees buffer inventory and efforts to support new products and now calls out higher raw materials flowing into inventory. Gross margin rose as pricing exceeded inflation.

- 2Q23 saw flat inventory. Pricing helped gross margin and now raw material costs were down y/y.

- 3Q23 saw a small drop in inventory, pricing continued to help gross margin with lower raw material costs.

Margins are already back at peak levels, but inventory is still rising. Now, organic growth is running much lower than in recent times as inventory remains very high. Before Covid, SNA was beating forecasts by 0-3 cents on about $3 in total quarterly EPS. During Covid and after, the smallest beat was 18 cents, and several times SNA beat by 30-40 cents on quarterly EPS of $4.00-$4.50. Last quarter, the beat was only 7 cents. Forecasts are calling for low-single-digit growth rates on EPS.

We believe it is important to note that there is a lag between pricing and raw materials. In late 2022, SNA suffered from pricing not keeping up with inflation which pressured margins. In 2023, the reverse was true and pricing matched up against falling material costs. That issue may not have more than one or two more quarters to go. That would be a lost tailwind for SNA.

We also see that SNA never talked about bringing down its level of buffer/safety inventory to prevent out-of-stock situations. The falling inventory turn and the weaker organic growth figures in 2023 are red flags that inventory could be at least 20 days too high. Gross margin benefited from higher volume growth allowing manufacturing efficiency to rise. How could margins respond to lower pricing, lower volumes, and the need to sell off higher-cost inventory?

On the positive side, there is not a big channel of inventory to destock. SNA may be get through this quickly. But in our view, it has not reconciled Covid inventory levels yet to reflect the current situation.

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