Healthcare Technology & Distribution

4Q'23 Dental Preview: Some signs of stabilization, but some risks persist

Earnings Preview

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Dental outlook remains mixed ahead of 4Q prints

In this note, we frame our thoughts around the outlook, risks and readthroughs from recent earnings ahead of Henry Schein, Dentsply Sirona, and Patterson earnings this week. Broadly speaking, the dental market continues to be pressured by macro (rates, mix of procedures), distributor challenges in NA, and some geo-specific challenges (Germany). Expectations for FY24 are settling around LSD growth, and we expect FY24 guides to consider a healthy level of caution to reflect broader uncertainty. Dental manufacturers/distributors are trading at an historically large discount to the S&P 500 with the market embedding risks to EPS from slower growth and weaker margins. While the relative discount is appealing, concerns related to the trajectory of margins are warranted (especially after NVST's FY24 guide). We expect HSIC, XRAY, and PDCO commentary to reflect the challenging outlook noted by peers, with any optimism in FY24 outlooks likely reserved for the second half of the year.

North America macro stabilizing, but EU still challenged

Based on recent American Dental Association survey data and BofA's Global Economics outlook, the macro backdrop in North America may be stabilizing after weakness observed in 3Q. Moreover, consumer sentiment, which has historically been a good leading indicator of dental share performance has improved meaningfully since November (Exhibit 2). Meanwhile, Germany/EU look to still be challenged with BofA economists noting worse-than-expected early 2024 data in Germany.

FY24 guides likely to consider a healthy level of caution

While there are some signs of improvement in North America, a mix of temporary headwinds along with pockets of softness OUS is likely to keep FY24 outlooks tempered. Management will have to consider the impact of a lower mix of high-margin sales, distribution visibility concerns in NA, and any marginal impact from Red Sea disruptions. While Street expectations for FY24 have come down meaningfully through CY23, upside to FY24 outlooks seem limited until the mix of patient procedures normalize and/or rates pull back to support equipment spend. While Street growth expectations seem reasonable, there could be risks to the margin outlook. We expect margins to be a focus on the upcoming prints.

Discounted valuations consider risks to margins

Our dental coverage group continues to trade at historically large discount to the S&P 500 as shares have continued to underperform the S&P 500 and XLV healthcare index YTD. If we consider the 5-year average historical discount to the S&P 500 as an appropriate bar for valuation, the current discount embeds a ~20% downward revision to FY24 EPS. Given revenue growth expectations for FY24 have already come down post 3Q'23 earnings to LSDs, we think the market is likely embedding caution around the potential for margin degradation in FY24. While a 20% reduction in FY24 EPS estimates across the group seems unlikely, there are lurking margin risks from a lower mix of higher-margin products (lower mix of high-end capital/digital equipment sales and lower mix of high-end procedures driving less high-margin implant/ortho sales).

ALGN - Align Technology
DD – Double-digit
HSIC – Henry Schein
LSD – Low -single digit
MSD – Mid-single digit
NA – North America
NVST – Envista
OUS – Outside the U.S.
PDCO – Patterson Companies
STMN – Straumann Holding
XRAY – Dentsply Sirona
ZIMV – ZimVie

Refer to important disclosures on page 15 to 19. Analyst Certification on page 14. Price Objective Basis/Risk on page 13. **12663430**

Company summary

HSIC was pressured from a cybersecurity incident in November which resulted in a $500MM+ guide down to FY23 revenue. The follow through impact looks to be more one-time in nature (peer PDCO benefitted minimally from the event, suggesting customer erosion is unlikely), and concentrated in 4Q. However, subsequent interruptions in November have not been considered in the revised FY23 guidance. With NVST noting continued challenges to visibility in the NA distributor channel, there is some downside risk to HSIC's 4Q print. Meanwhile, discounts offered in 4Q may also have potential to manifest in a stocking effect which could offset some of the pressure based on the volume/price mix in 4Q. This could also be a potential volume headwind in 1H'24. Potential impacts to FY24 from the mitigation of the cybersecurity issues (e.g., salesforce focus on client engagement vs. driving new brand/product sales) and global macro exposure create a level of uncertainty that is likely to make FY24 guidance a moving target. We expect management to err on the side of caution. On the plus side, HSIC still remains a well-operated business with incremental contributions from its technology and value-added service businesses as well as the recent pickup of its traditional M&A strategy. We are reiterating our Underperform rating and $65 PO on ~9.5x CY24 EV/EBITDA.

XRAY: After a strong start in 2023, 3Q macro headwinds overwhelmed, resulting in a slower near-term growth and lower margin trajectory. On the positive side, XRAY saw solid growth in China (30% sequential growth in 3Q), momentum in the clear aligner business continued (DD growth over the last 5 quarters), and NA CAD/CAM volumes grew. However, NA implants and global equipment/imaging saw softening demand (Connected Technology is ~29% of sales). On macro, XRAY looks to be most exposed to the softness in EU, particular in Germany (~10% of sales). Overall, while the exposure to softer macro in EU remains a focus heading into 2024, the new management will be tasked with executing toward the $3 2026 EPS target reaffirmed at the recent Investor Day. Importantly, preliminary FY24 guidance for DD adj. EPS growth is mostly focused on cost reduction initiatives within management's control. However, the potential mix away from higher-margin products/solutions could be swing factor in 2024. While we view recent execution favorably, delivering on cost savings initiatives and progress on driving DS Core penetration will be key to gain investor confidence. 2024 is setup to be a meaningful year for XRAY, with execution against stated initiatives likely to be rewarded with Street expectations for <2% revenue growth and ~11% EPS growth. However, given the exposure to softer pockets of macro, a product suite focused on digitization that is more nice-to-have, and valuations already at a premium to the group, we view risks as being more balanced. We reiterate our Neutral rating and $38 PO on ~12.5x CY24E EV/EBITDA.

PDCO: Expectations were high heading into last quarter's print as the Street expected tangible benefits from peer Henry Schein's cyber security incident. Ultimately, PDCO netted a nearly negligible contribution in the quarter, but there could be some incremental contribution in the current quarter considering there were subsequent interruptions in November. PDCO's consumables growth last quarter showed resilience despite a lower-than-expected contribution from HSIC share losses. However, underperformance in segment margins and continued investments in ERP systems (in Canada) raised concerns on the trajectory of margin expansion which has remained a moving target for the company. Overall, we view PDCO as well positioned among the dental distributors due in large part to an almost entirely North America-based revenue exposure (w/ NA macro stabilizing ahead of OUS). PDCO is now trading at an historically large discount to its own average and its peer group, with risks more centered around equipment exposure (~28% of sales) which we view as more than priced in. We are reiterating our Buy rating and $35 PO on ~9.5x CY24E EV/EBITDA

Macro stabilizing, but pockets of softness to continue

The core growth drivers within dental (aligners, implants, equipment/digital capex) exhibit some cyclicality. This is largely due to the exposure to out-of-pocket consumer spend and interest rates. As such, while routine dental procedure provides a base of demand, the outlook for dental names in our coverage tend to trade on macro given the importance of these high-margin profit drivers. Notably, macro was an important driver of share performance in 2H'23. Heading into 2024, we see signs of macro stabilizing with some geo-specific differences. While we expect it to be less of a concern in 2024, it remains a critical swing factor given pockets of softness and the impact to the mix of patient procedures.

Broader NA patient volumes look to have stabilized into 4Q

Based on recent earnings commentary and the American Dental Association (ADA) survey data, U.S. patient volumes looks to have improved from late September into 4Q. The latest data from the December ADA survey suggests that practice appointment schedules have stabilized. Appointment fill rates were up for the 3rd consecutive month with December fill rates up 500bps y/y and 100 bps m/m (Link to survey). This is line with recent commentary from ALGN who noted that while macro remains broadly challenged, it improved in the latter part of 4Q. While this survey has been directionally aligned with broader historical macro trends, it provides limited color on pockets of strength/weakness across procedures. We note the latter is important given changes in procedure/product mix tend to skew margins. As such while macro looks to be broadly better in NA, pockets of weakness in higher-end procedures could impact margins.

FY24 BofA macro forecasts have improved, EU still challenged

Overall, global macro showed resilience through 2023, with the dental market reflecting this strength through the first half of 2023. However, while the dental market was broadly weaker in 3Q'23, the wider economy remained resilient. BofA strategists have turned incrementally positive on the global economy and only forecast a mild deceleration in global growth in 2024 vs. 2023 (Exhibit 1).

In particular, the U.S. economy looks to be doing well (link to BofA Global Economic Weekly). Meanwhile, there seems to be a decoupling with weaker EU growth. BofA's Economics team noted Germany to be a particular soft spot for growth in EU (GDP decline anticipated in Germany for FY24) with worse-than-expected data in early 2024.

Within our coverage, we note XRAY has the highest EU exposure (~39% of FY24 consensus EBIT estimates), followed by HSIC at ~25%, NVST at ~22% and PDCO at ~10.5%. XRAY has noted that Germany accounts for ~10% of total sales.

In China, consumer sentiment is yet to fully rebound from pre-COVID levels according BofA's Global Economics team. Meanwhile, consumption expenditure growth has outpaced GDP growth in China from 2Q-4Q'23. We note dental growth in China has benefitted from market expansion driven by value-based pricing and while consumer sentiment is yet to rebound, we expect growth to remain resilient due to the still early stage of market expansion.

Exhibit 1: Global economic forecasts expect growth only slightly decelerating into 2024
Global GDP growth expected at 2.8% in 2024. U.S growth forecasts are strong, while EU growth is expected to lag.

	GDP growth, %				CPI inflation*, %				Short term interest rates**, %			
	2022F	2023F	2024F	2025F	2022F	2023F	2024F	2025F	Current	2023F	2024F	2025F
Global and regional aggregates												
Global	3.5	3.0	2.8	3.2	6.0	4.2	2.8	2.7	6.05	5.22	4.58	3.97
Global ex US	3.9	3.2	3.0	3.4	5.5	4.2	2.8	2.8	6.20	5.18	4.57	4.04
Global ex China	3.7	2.5	2.3	2.8	7.0	5.2	3.3	3.0	6.75	5.73	5.05	4.29
Developed Markets	2.6	1.5	1.2	1.5	7.4	4.7	2.5	2.0	4.21	4.27	3.65	2.71
Emerging Markets	4.2	4.1	4.0	4.3	4.8	3.8	3.0	3.2	7.49	5.95	5.28	4.89
Emerging Markets ex China	4.9	3.5	3.5	4.2	6.5	5.8	4.3	4.1	9.99	7.62	6.81	6.22
Europe, Middle East and Africa (EMEA)	3.9	1.0	1.1	2.1	8.0	7.0	4.0	3.3	9.10	5.91	5.29	4.23
European Union	3.0	0.6	0.8	1.6	9.2	6.5	2.6	1.8	4.36	4.39	3.60	2.35

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	2022F	2023F	2024F	2025F	2022F	2023F	2024F	2025F	Current	2023F	2024F	2025F
Emerging EMEA	4.6	2.1	2.5	4.0	7.6	9.4	7.0	6.4	18.54	10.17	9.66	8.83
Emerging Asia	4.2	5.0	4.8	4.8	3.6	2.3	1.9	2.4	4.28	4.38	3.98	3.77
ASEAN	5.8	4.3	4.8	4.9	4.6	3.6	1.6	2.7	4.89	4.92	4.47	3.90
Latin America	4.0	2.2	1.7	2.3	7.7	5.0	3.8	3.4	10.69	10.88	8.59	7.66

Source: BofA Global Research

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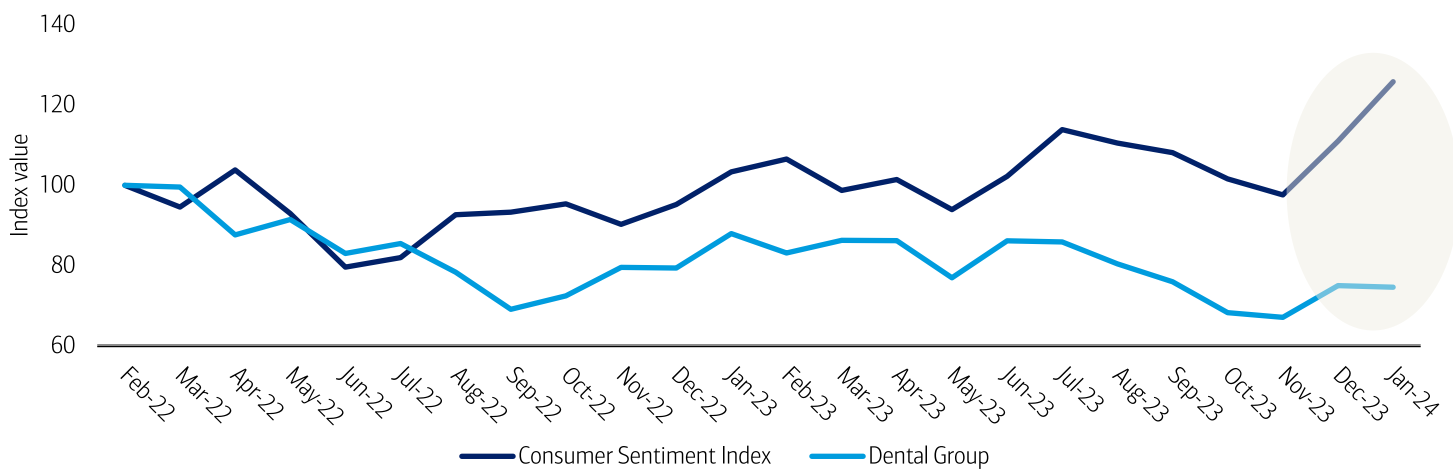
U.S. consumer sentiment a bright spot and directionally encouraging

Despite one of the fastest hiking cycles in history, the U.S. consumer was largely resilient in 2023. Interestingly, according to BofA's strategists, despite a strong labour market and strong consumer spending, consumer sentiment lagged through 2023. This has now started to change, with consumer sentiment up markedly over the last few months (Exhibit 2). Importantly, consumer sentiment has had a strong directional relationship to dental share performance. While this relationship has historically decoupled at times, positive inflections in consumer sentiment have been followed by upticks in share performance (Exhibit 3). We note that consumer sentiment has improved meaningfully starting in November while our dental group performance has remained relatively flat. If we consider historical trends, the inflection in consumer sentiment is directionally encouraging to dental shares.

Exhibit 2: U.S. consumer sentiment and dental group index
Consumer sentiment and dental group share performance have been directionally correlated, but this relationship decoupled in 4Q'23



Source: Bloomberg, University of Michigan Consumer Sentiment Survey
Dental group index is the equally weighted average of share prices for HSIC, NVST, XRAY, and PDCO

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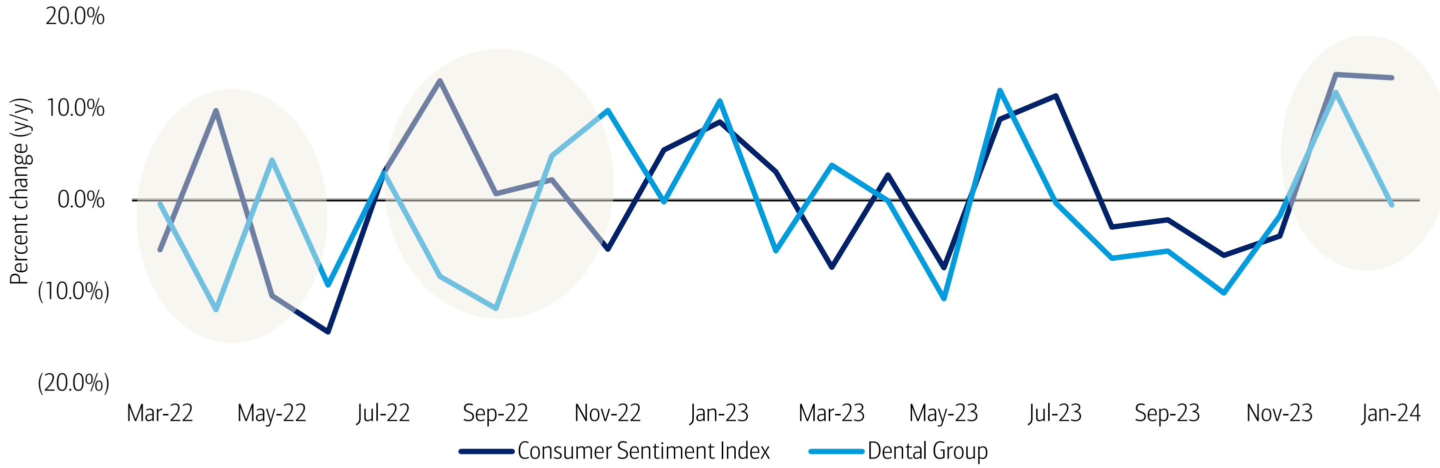
Exhibit 3: U.S. consumer sentiment and dental group price index, m/m percentage change
Consumer sentiment and dental group share performance have been directionally correlated. When sentiment grows, share performance usually follows.



Source: Bloomberg, University of Michigan Consumer Sentiment Survey
Dental group index is the equally weighted average of share prices for HSIC, NVST, XRAY, and PDCO

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4Q print full of swing factors, bias to the downside

There are a handful of swing factors that could drive 4Q performance. Overall, risks skew more to the downside. On macro, the extent of the recovery in 4Q dental volumes across geographies will be important for each company. For instance, while U.S. patient volumes/macro look to have improved into 4Q, softness in Germany appears to persist. As such, XRAY's print is likely to have limited upside from macro given XRAY has the highest EU exposure within our coverage. Separately, XRAY looks to be best positioned to benefit within the D2C Byte business from peer Smile Direct Club's bankruptcy (more on this below). Meanwhile, Henry Schein's cybersecurity issues may not be fully contemplated in the updated FY23 guide as there were subsequent disruptions in November. Patterson looks to be best positioned on macro given limited exposure outside of NA, but exposure to equipment (~29% of sales) could be a swing factor to the FY3Q'24 print.

HSIC cybersecurity issue may not be fully contemplated in the FY23 guide

Henry Schein reported a cybersecurity incident on October 15th which required the company to shut down its ecommerce website. The company later reduced its FY23 revenue guidance by ~$506MM at the midpoint with about 2.5 months left the year. We had initially expected a sizable windfall to PDCO in 2Q as a result of share gains (link to our 2Q PDCO preview), but the benefit was quite insignificant according to management (<$2MM). However, there were subsequent interruptions at HSIC (another system outage was noted in 11/22). Moreover, NVST's 4Q commentary suggests the visibility into stocking through the NA distributor channel is still hindered. While expectations for PDCO share gains were tempered by management commentary in FY2Q'24, PDCO's FY3Q'24 (ending January'24) could benefit from a couple of weeks of temporary share gains (not fully accounted for in guidance). Meanwhile, HSIC's updated FY23 guide did not include any impact from subsequent disruptions (11/22) and has potential to be a bigger drag on 4Q results than previously expected by management.

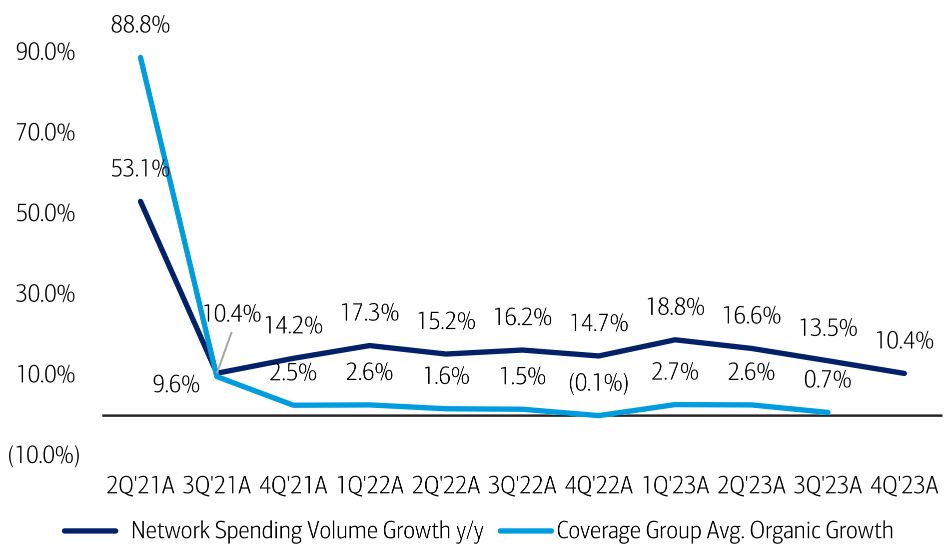
Readthroughs into 4Q prints mixed with some positive signs on utilization

- **ALGN, NVST and MMM prints suggests continued challenges in 4Q'23** Recent dental prints were mixed. NVST beat on revenue, but missed on EBITDA/EPS with significant margin pressure considered in the FY24 guide. 4Q revenue declined 2%

on an organic basis driven largely by a DD decline in Equipment and Consumables. While there are several unique factors impacting the margin degradation for NVST (Spark growth w/ below fleet margins, exiting certain geographies), part of the headwind is due to a mix shift away from higher margin products. Moreover, management noted continued challenges in the NA distributor channel and a still challenging macro with LSD core growth expected in FY24 (in-line with expectations on revenue, but the FY24 margin guide was meaningfully below expectations). 3M's oral care business also declined y/y in 4Q. Meanwhile, ALGN's print highlighted solid aligner growth up ~7% y/y with softer systems revenue. ALGN also noted that macro improved in the latter half of 4Q, with a MSD growth outlook for FY24. Overall, we see 4Q prints from XRAY, HSIC, and PDCO to reflect softness in equipment, with consumables and ortho segments to be driven by geo exposure (stronger NA, China growth to continue, and weaker EU).

- **Dental credit data point to a y/y deceleration in 4Q.** We analyzed Synchrony Financials' (Ticker SYF, parent organization for CareCredit a healthcare consumer financing solution) Health & Wellness segment data and found a high correlation (+0.96) to our dental coverage organic growth (Exhibit 4). Considering the historical correlation, a deceleration in SFY's network spending volume growth in 4Q points to a deceleration in y/y dental organic growth in 4Q. NVST's 4Q print highlighted a deceleration in-line with the historical correlation. We note that the consensus estimates already consider a CY4Q deceleration (y/y decline) for HSIC and XRAY (Exhibit 6), but an acceleration for PDCO.

Exhibit 4: SYF Health & Wellness Network Spending Volume growth vs. Dental group organic growth
Network spending volume points to a deceleration in y/y in 4Q'24



Source: BofA Global Research, Bloomberg, Company Reports

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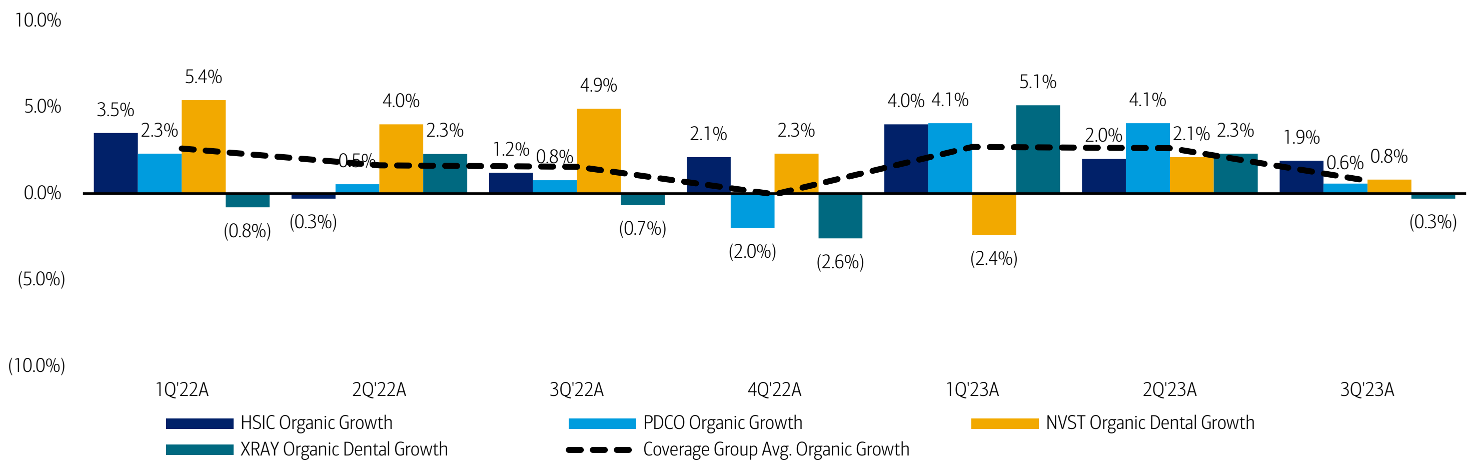
- **Payor commentary suggests stronger utilization trends**. Recent payor commentary from CVS and HUM have noted elevated utilization trends in supplemental benefits such as dental. in the 4Q'23 earnings call, CVS noted higher than expected utilization trends within Medicare Advantage supplemental benefits, including dental. CVS' FY24 guide also reflects continued pressure on utilization from supplemental benefits. Likewise, at an investor conference in November 2023, Humana noted that dental benefits were being utilized at a higher rate than assumed with these trends continuing post 3Q'23. While payor commentary on utilization is worthwhile to consider, given the significant exposure to out-of-pocket spend within dental, we view it to be a more of a relevant readthrough to general routine dentistry volumes and related consumables.

Easier y/y comps, but growth decelerating in 2H'23

Organic growth across our dental coverage began to decelerate in 3Q after a resilient 1H'23. While 4Q'23 has an easier y/y comp given challenging dynamics in the wider dental market in 4Q'22, the expectations are XRAY and HSIC growth to decelerate in 4Q (HISC mostly cybersecurity incident driven). Meanwhile, calendarized Street estimates for PDCO point to an acceleration in growth from 3Q'23 (Exhibit 6). Given PDCO primarily has exposure to NA with macro/consumer sentiment showing signs of stabilization, we think PDCO growth has potential to accelerate into CY4Q'23.

Exhibit 5: Calendarized organic growth (dental revenue)
Organic growth decelerated in 3Q



Source: Company reports, BofA Global Research

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Exhibit 6: Calendarized organic dental revenue growth
4Q'23 y/y growth is expected to decelerate from 3Q for most companies. PDCO growth is expected to accelerate in 4Q on an easier y/y comp.

	1Q'23	2Q'23	3Q'23	4Q'23 Actuals or Est.
NVST	(2.4%)	2.1%	0.8%	(2.0%)
XRAY	5.1%	2.3%	(0.3%)	(0.8%)
HSIC	4.0%	2.0%	1.9%	(12.2%)
PDCO*	4.1%	4.1%	0.6%	1.7%
STMN	3.4%	11.7%	11.4%	
MMM	(2.0%)	0.3%	7.5%	(4.7%)
ZIMV (cc growth %)	1.8%	0.4%	(1.2%)	
ALGN (cc growth %)	(6.7%)	1.5%	7.4%	4.7%
Average	**0.9%**	**3.0%**	**3.5%**	**(2.2%)**
Median	**2.6%**	**2.1%**	**1.4%**	**(1.4%)**

Source: BofA Global Research, Company Reports, Visible Alpha
*PDCO calendarized actuals and estimates
NVST, ZIMV, and ALGN reported actuals for 4Q'23

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Exhibit 7: Quarterly growth and segment commentary across the dental space

Early commentary in 4Q'23 earnings calls echo some caution on growth prospects for FY24

Company	1Q'23	2Q'23	3Q'23	4Q'23	FY24 Commentary
NVST	- Patient demand in China very soft in early Q1, accelerated in March - General weakness in demand for capital equipment - DD emerging market growth, HSD EU growth, and NA MSD decline - high exposure to traditional imaging business - Traditional imaging declined DD - lower volumes across most geos - Consumables LSD decline - weakness in restorative and endo	- EU HSD growth, NA LSD decline, Emerging markets grew MSD - Russia weighed down on growth - China grew q/q - volume rebound offsetting VBP price declines - Orthodontics grew HSD. Traditional wires/brackets saw LSD decline. Pockets of weakness in NA - China MSD growth in ortho - Equipment grew LSD - strong IOS - Consumables MSD growth - restorative and endodontic strong	- 0.8% core sales growth y/y - Western EU DD growth, NA LSD growth. - Russia declined on difficult y/y comp and sanctions - Orthodontic DD growth - Spark 50%+ - Implants declined LSD (above market performance outside NA, offset by NA decline) - LSD consumables growth (emerging markets strength) - HSD decline in equipment- solid growth in Western EU -IOS strong y/y unit growth, ASPs down	- LSD decline in implant business for FY23 (underperformance in NA) - Dexis IOS core growth of 30% - DD decline in Equipment and Consumables (E&C) - China sales up 15% y/y - In E&C, while sales through distribution channel as down - sell out to end customers performed well	- LSD core sales growth in 2024 - Expect caution on large investments - Expect to return to market level growth in NA by end of 2024
XRAY	-U.S. growth of ~15%- consumables/aligners - T&E 1.7% growth - 25% y/y aligner growth, strong CAD/CAM in U.S. - Lower volume in implants, imaging, instruments - Consumables 9.8% growth -SureSmile benefiting from expansion in EU - CAD/CAM MSD - wholesale demand in U.S. - Implants down HSD - China headwinds - EU sales grew 1.1%, U.S.14.6% growth in U.S.	- Equipment and instruments grew HSD (improvement in EU imaging) - ESD grew 0.7% - U.S. offset by softer EU demand - Ortho/Implants grew 3.7%. Aligner DD Growth with SureSmile 20%+ - Byte growth HSD (improved conversion) -Implants returned to growth - value implant growth China VBP - U.S. implants declined	- China cc growth of 20% y/y, improved sequentially - Equipment and instrument HSD decline y/y - softening demand in U.S. and EU (rate concerns) - EDS - decline of 1% - Ortho/implant grew 3.7% - SureSmile 13% y/y growth -Implants/Prosthetic LSD growth - driven by China. China implants grew 30% q/q - EU sales declined 2.8% y/y (Germany) - U.S decline 1% (lower imaging/implants, resto offset by growth in aligners CAD/CAM)	N/A	- DD adj. EPS growth - 100bps+ adj. EBITDA margin expansion y/y - Not expecting growth in the LT target range of 4-6% - Expect a gradual increase in the organic growth rate through FY26 - $200MM of annualized restructuring savings by mid-2024 ($100MM incremental over 2023) - Invest half-of savings in 2024
HSIC	- IOS unit sales increased, but ASPs decreased - Good growth in general equipment in EU - Equipment sales supported by backlog - Implant growth driven by Premium in EU (Germany, Austria, Switzerland) - DD growth in value implant line - In NA, increase in specialty practice acquisitions by DSO's - Endodontics grew nicely (Brasseler and Edge in NA) - Cloud growth of 30% y/y	- NA dental equipment up DD. Traditional equipment remained strong, digital back to growth - Implant demand increasing in NA - MSD Premium implant growth in NA - Implant demand continues to favor value priced products -DD growth in Medentis value brand - Global implant/Bone regeneration business $800MM and Specialty ~$1.2Bn -Technology and VAS business $900MM annualized rate	-International equipment slowdown outside NA - Global implants grew 40% (acquisitions) - Value implants had slower growth in NA - Clear aligners DD growth - HS One growth remains strong - Dentrix Ascend and Dentally. Cloud based solutions increased 40% y/y - EU implants did okay	N/A	- Expect growth toward the lower-end of the 2-4% long-term range for dental
PDCO	FY4Q'23 - Equipment sales up 19% y/y - strength across all equipment categories - Consumables internal sales growth of 0.3% y/y. (4.4% growth ex-infection). Expect price deflation to stabilize in FY2H'24 - VAS 13.4% y/y growth - technical services strong - Steady patient traffic - Combination of utilization and price supporting growth	FY1Q'24 - Dental consumables internal growth of 5% y/y (7% ex-infection) -Equipment internal sales decline of 6% y/y. Growth in CAD/CAM and core offset by digital technology X-Ray - Software and VAS up 6% y/y - Consumable pricing at historical norms	FY2Q'24 - Dental sales growth above market growth - High-tech dental equipment impacted - Consumables internal sales growth of 3% (5% ex-infection) - Equipment decline 6% y/y. Core equipment grew even on tough comp but offset by high-tech slowdown (digital x-ray and CAD/CAM). Slowdown right at the end of the quarter - $2M benefit from competitor cybersecurity disruption - CAD/CAM unit price declines (trade ups vs. new unit sales)	N/A	
STMN	- EMEA grew 9.2% - NA grew 7.2% - Virtua Vivo IOS scanner penetration drove growth (low base still) -China volume accelerated from VBP change (lower prices) + pent-up demand	- large volume growth in China a highlight (easier comp y/y due to COVID lockdowns) - NA growth of 7% - EMEA growth of 8.8% - DD growth in ClearCorrect - Dr. Smile D2C slower growth (Core target group prioritized spend on vacations)	-Implant volume growth in China a highlight - Allied Star new entry point IOS in China - Some softness in demand in NA -GalvoSurge FDA approval 2H24 -EMEA solid growth ex-D2C business - 5.5% growth in NA despite headwinds -6.6% growth in EMEA	N/A	
MMM	Oral elective procedure volumes at ~90% of pre-COVID. Expect improvement through year	-	-	-	
ZIMV	- Met or beat implants relative to peers in premium	- Global dental market relatively soft - U.S. implant market weaker - Exited China due to VBP - Good growth in EMEA region	- Dental market in aggregate was relatively soft - Flat y/y global implant sales - U.S. - slightly weaker implant market -EMEA dental grew 4% cc - Softness not evident in EMEA or Asia-Pac	N/A	
ALGN	- Teens outpaced adult starts -Large increase in patient no shows - Seeing stability in the U.S. macro - Total revs (-3.1) % y/y - Systems (6.2) % y/y - Aligners (2.5) % y/y	- Highest y/y growth in teen segment since 2021 - Scanner volumes up - NA ortho utilization up sequentially - Improving trends in China - Total revs up 3.4% y/y - Systems (1.0%) y/y - Aligners 4.3% y/y	-Macro more difficult than 1H'23- deteriorating trends - Longer sales cycle for capital equipment - Teen wires/brackets continue to go down, competitive aligners going down, ALGN up - Total revs up 7.8 y/y - Systems 4.9% y/y - Aligners 8.5% y/y	- Macro improved in latter half of 4Q - Expect teen ortho to grow faster than adults - Introduced 50% cases to support SDC customers finish cases - Total revs up 6.1% y/y - Systems 2.9% y/y - Aligners 6.9% y/y	- Guidance assumes stable economy in 2024 - MSD total revenue, aligner, and systems revenue growth in 2024

Source: BofA Global Research, Company Reports

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Thoughts on the 2024 outlook and guidance

Overall, we expect performance in 2024 to continue to hinge on the level of strength in macro across geographies, with idiosyncratic nuances that differentiate the upside/downside risks across companies. FY24 guides are likely to consider a healthy level of caution given macro remains relatively shifty along with temporary near-term headwinds (distro challenges in NA, margin volatility driven by mix-shift in products, and potential Red Sea exposure (link to note here)). On a category basis, equipment is likely to remain challenged, with rates unlikely to materially come down until the latter part of 2024. On a geographic basis, macro looks to be better in NA, with pockets of softness in higher-end adult ortho procedures. Meanwhile, EU weakness is likely to continue with German macro still showing limited signs of improvement.

Unique swing factors for 2024

Aside from the macroeconomic environment, the 2024 outlook will require consideration of a few unique swing factors. This includes the ongoing impact to visibility from the HSIC cybersecurity incident and potential follow through impact to the distributor channel, potential market share gains from the SDC bankruptcy, and any impact from the Red Sea exposure.

- While the HSIC cybersecurity incident is likely to have a more potent impact in 4Q'23, NVST noted that visibility within the channel is still hampered. Related to this, as HSIC focuses on re-engaging the customer base to retain business and improve customer touchpoints, it could divert the salesforce's attention away from aggressively driving new product introductions and sales (something NVST management acknowledged as a possibility).

- Smile Direct Club, one of the largest D2C aligner brands (~$471MM in revenue in 2022) filed for Chapter 11 bankruptcy protection in September 2023 and subsequently closed global operations. While commentary around a potential windfall from share gains to names within our coverage have been limited, we see XRAY as best positioned to capture share. XRAY's value oriented D2C aligner offering, Byte is the most directly comparable option within our coverage to SDC's value proposition. XRAY management has previously noted that they are "extremely competitive from a product as a well as customer experience offering" vs. D2C offerings such as SDC and Candid. While we have not quantified the potential benefit from any share gains, it could be meaningful given SDC shipped 232K+ aligners in 2022. However, there is competition to capture SDC's customer base. In the 4Q'23 earnings call, ALGN noted that they have started a program offering 50% off case prices for dentists to help SDC members finish pending cases. We look for further commentary from XRAY in the upcoming earnings call regarding any potential benefit from SDC. If it isn't embedded in the guide, share gains could drive upside to FY24 numbers.

- Red Sea disruptions could add to the level of caution in FY24 guide. As of February, sustained Red Sea Houthi attacks continue to disrupt shipping costs and supply chains according BofA's Global Economics team. We discussed the potential impact from this and the Panama Canal disruption in our recent note (link to note). While commentary on the subject has been limited within the dental market, there is potential for names with exposure to the Asia-EU freight chain (namely XRAY, HSIC, and NVST) to feel some impact from higher freight costs/supply chain issues. Overall, we expect the impact to be limited given XRAY, HSIC, and NVST have manufacturing and distribution facilities within the EU with exposure limited to raw-material sourcing from China. However, this could be another factor that embeds caution into FY24 guidance.

Equipment exposure an important consideration given headwinds

Headwinds from macro were particularly potent on equipment sales in 2H'23 (refer to commentary in Exhibit 7). While higher rates have been a headwind throughout 2023, a slowdown in high-margin patient procedures add to the capex headwinds from rates given dentists tend to be more cautious on equipment spend when practice profitability suffers. Given rates are unlikely to come down materially until that later part of 2024 per BofA economists, we expect equipment headwinds to broadly continue through 2024. Equipment sales make up meaningful portions of revenue across our coverage. Based on what we can gather from disclosures, we estimate the following breakdown of equipment related dental sales for XRAY, PDCO, HSIC, and NVST:

- XRAY's equipment revenue accounts for ~29% of YTD-3Q'23 revenue using Connected Technology Solutions as the proxy
- PDCO dental equipment revenue accounts for ~28% of YTD-FY2Q'24 total dental revenue (Almost entirely NA)
- HSIC global dental equipment revenue accounts for ~22% of YTD-3Q'23 total dental revenue (~60% of which is NA sales)
- NVST's equipment revenue is ~15% of total revenue and 40% of Equipment and Consumables revenue based on the disclosed breakdown of FY22 revenue noting Imaging and Diagnostics account for >15% of total revenue

In the Intraoral scanner category (IOS), ALGN's new iTero Scanner, Lumina will begin shipping later in 1Q'24, and could potentially capture mind share away from XRAY and NVST.

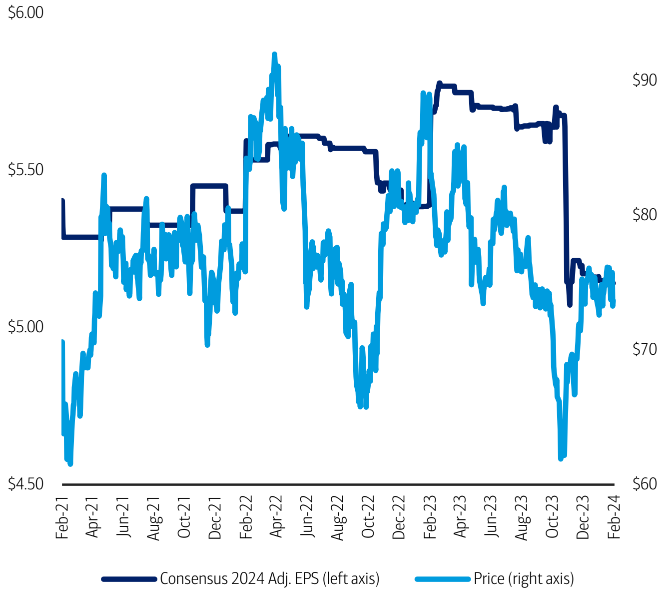
Margins may exhibit more volatility in 2024

We expect margins to be a focal point through 2024 with some volatility likely given a change in the product mix driven by macro (lower mix of higher-end procedures, lower mix of higher-end capital equipment, value vs. premium), balancing of China VBP volume, and potential pricing calibrations by market participants to buoy demand in implant/aligner markets. On the plus side, IOS pricing headwinds look to be moderating, but will continue to be a slight headwind in 1H'24.

FY24 EPS estimates have trended down, especially for manufacturers

Over last three years FY24 EPS estimates for manufactures (XRAY, NVST) have trended down (Exhibit 10 and Exhibit 11). Meanwhile, distributor EPS estimates, while exhibiting some volatility have averaged out to be relatively flat aside from the significant downward revision spurred by HSIC's cybersecurity incident in 3Q'23 (Exhibit 8 and Exhibit 9). From the end of 2022 through February 2024, NVST saw the largest revision to FY24 EPS estimates (down 37.5%, a large portion of the reduction was after 3Q and 4Q'23 results), followed by XRAY (down 5.8%), HSIC (down 4.6%), and PDCO (down 1.2%).

Exhibit 8: HSIC Historical Consensus FY24 EPS estimates
HSIC has had relatively steady EPS estimates until 3Q'23



Source: BofA Global Research, Bloomberg

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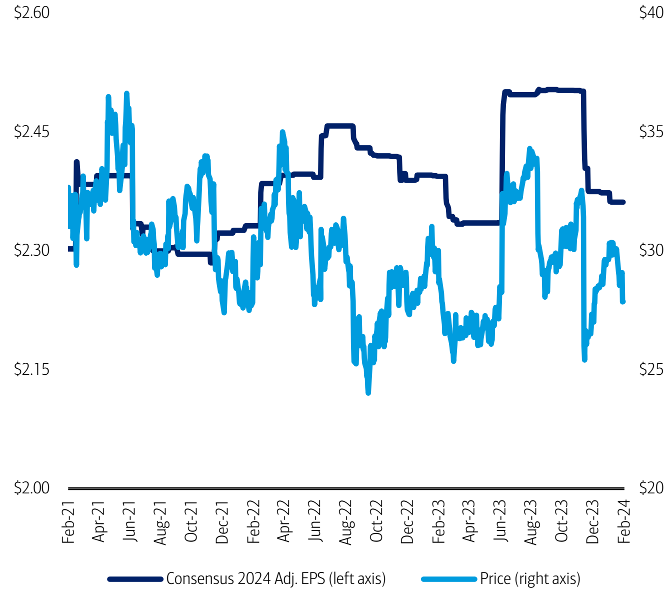
Exhibit 9: PDCO Historical Consensus FY24 EPS estimates
PDCO EPS estimates have been the steadiest across our group



Source: BofA Global Research, Bloomberg

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Exhibit 10: XRAY Historical Consensus FY24 EPS estimates
XRAY has seen downward EPS revisions since 2021

Source: BofA Global Research, Bloomberg

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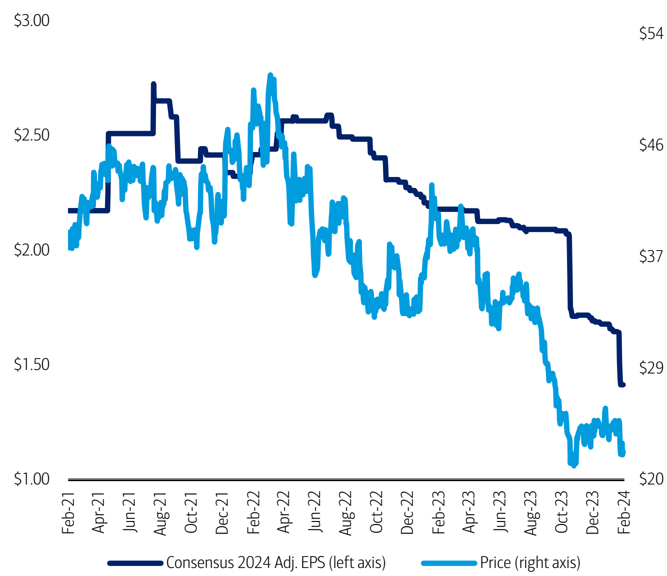
Exhibit 11: NVST Historical Consensus FY24 EPS estimates
NVST has seen downward EPS revisions since 2022



Source: BofA Global Research, Bloomberg

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Discounted valuations consider lurking risks to EPS

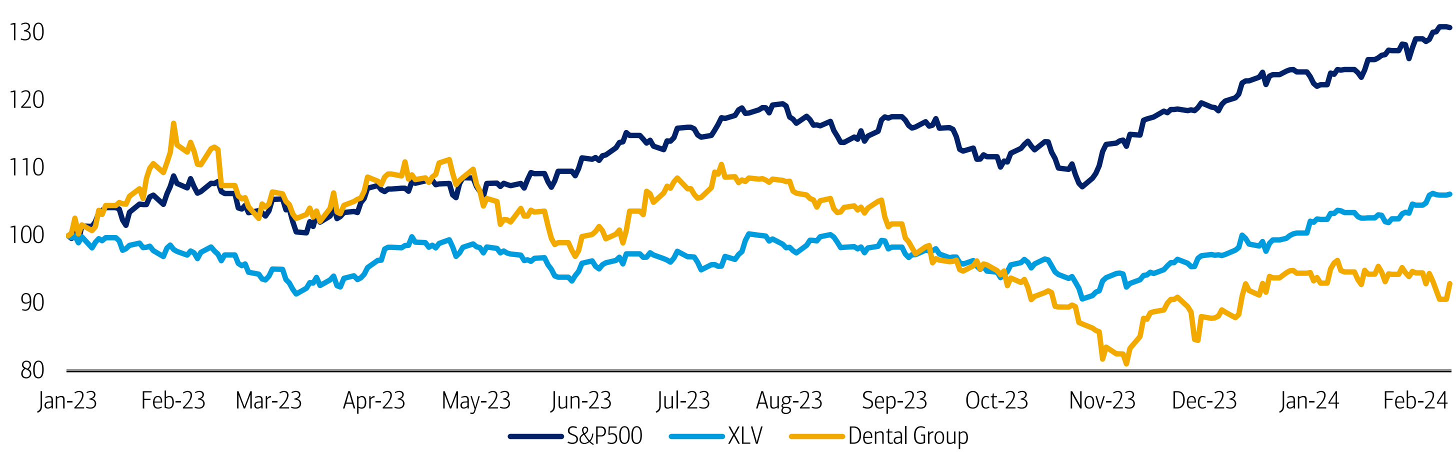
Heading into 2024, we noted that the wider dental group was trading at the highest 20-year discount to the S&P 500 on a forward P/E multiple (2024 YA note link). While dental shares have firmed up in the first few months of 2024, the group continues to underperform the S&P 500 and the XLV healthcare index YTD (Exhibit 12), and still trades at a historically high discount to the S&P 500 (Exhibit 13).

Discount embeds risks to EPS. To our knowledge, investors aren't embedding a structurally higher discount to the dental group relative to the S&P 500. Instead, we believe the higher discount is largely embedding near-term downside risks to EPS. The dental group has traded at a ~10% discount to the S&P 500 on average over the last 5 years on a forward P/E basis. The group currently trades at a ~30% discount to the S&P 500. If we consider the 10% historical discount to the S&P 500 as an appropriate bar for valuation, the market is embedding a 20%+ downward revision to forward earnings estimates.

Downside risks to EPS likely to come from margins. While we consider the embedded revision risk to be on the high-end, it looks to be within reason given the historical downward EPS revisions and NVST's FY24 guide. For instance, NVST, the only dental name within our coverage to report 4Q results and provide a FY24 guide saw FY24 consensus EPS estimates revised down 15%+. Notably, NVST's FY24 outlook considered a meaningful degradation in margins. While we find it unlikely that forward EPS estimates come down 20% across the group, there are some lurking risks to margins. The shift away from high-margin premium procedures, incremental pricing pressure from China VBP (as China sales make up a higher % of sales given it is growing faster than other geos), lower mix of large dollar capital equipment sales, and competitive pricing pressure in the global implant/aligner market (potentially elevated price competition as firms look to offset lower demand) could all be headwinds to margins in FY24. Management teams are likely to embed a higher level of caution in the FY24 guides given the recent macro volatility, hampered visibility, and the unique risks discussed above. On the plus side, this sets up potential for numbers to revise upwards through FY24 if the macro/rate environment improves ahead of expectations and near-term margin risks alleviate.

Exhibit 12: Price chart for S&P 500, XLV, and Dental group rebased to 100

Dental group has underperformed the S&P 500 and XLV from 2023 through February 2024



Source: FactSet, BofA Global Research

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Exhibit 13: P/E (next-year consensus) multiples for Dental coverage vs. the S&P 500

The dental group is trading at one of the highest discounts to the S&P 500 over the last 20 years

	Dental Group	S&P500	Group Premium/Discount to S&P500	PDCO	HSIC	XRAY	NVST
Current	14.2x	20.6x	(31.1%)	11.5x	14.8x	16.5x	14.2x
Since June 2020	16.2x	18.7x	(13.5%)	13.3x	15.8x	17.5x	18.3x
Vs. Current	*(12.3%)*	*10.1%*		*(13.8%)*	*(6.3%)*	*(5.7%)*	*(22.6%)*

Exhibit 13: P/E (next-year consensus) multiples for Dental coverage vs. the S&P 500
The dental group is trading at one of the highest discounts to the S&P 500 over the last 20 years

	Dental Group	S&P500	Group Premium/Discount to S&P500	PDCO	HSIC	XRAY	NVST
5yr avg (or since IPO)	16.3x	18.1x	(10.1%)	13.4x	16.2x	18.0x	17.8x
Vs. Current	*(12.8%)*	*13.8%*		*(14.5%)*	*(8.7%)*	*(8.6%)*	*(20.1%)*
10yr avg	17.5x	17.0x	2.9%	14.9x	18.4x	18.4x	17.8x
Vs. Current	*(18.5%)*	*21.6%*		*(23.0%)*	*(19.7%)*	*(10.5%)*	*(20.1%)*
Earnings growth y/y FY24*	6.1%	12.7%	(52.0%)	7.5%	12.8%	11.6%	(7.5%)
Revenue growth y/y FY24*	2.7%	5.7%	(51.8%)	3.1%	4.8%	1.7%	1.4%
Adj. EBITDA margin FY24*	12.3%			5.6%	8.2%	18.6%	16.8%
Net Debt/EBITDA*	1.02	1.10	(7.1%)	0.96	0.45	1.97	0.71

Source: FactSet, Bloomberg, BofA Global Research
* S&P 500 estimates per Bloomberg as February 2024, PDCO estimates for FY24

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BofA vs. Consensus

Exhibit 14: BofA vs. Consensus estimates for 4Q'23 and FY24
BofA is ahead on consensus on revs for FY24, but behind consensus on EPS for HSIC/PDCO

Quarter	Revenue			EPS		
	BofA	VA Consensus	Delta %	BofA	VA Consensus	Delta %
XRAY (4Q'24)	962.7	967.7	(0.5%)	$0.43	$0.43	(1.9%)
HSIC (4Q'24)	3,102.2	3,029.8	2.4%	$0.72	$0.70	2.3%
PDCO (FY3Q'24)	1,634.2	1,629.8	0.3%	$0.58	$0.60	(2.9%)
FY24	**Revenue**			**EPS**		
	BofA	VA Consensus	Delta %	BofA	VA Consensus	Delta %
XRAY	4,102.7	3,983.0	3.0%	$2.08	$2.02	2.8%
HSIC	13,371.8	13,003.1	2.8%	$5.14	$5.21	(1.5%)
PDCO	6,633.4	6,596.5	0.6%	$2.36	$2.37	(0.2%)

Source: BofA Global Research, Visible Alpha

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Exhibit 15: Stocks mentioned
Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
XRAY	XRAY US	Dentsply Sirona	US$ 33.91	B-2-7
HSIC	HSIC US	Henry Schein	US$ 79.86	B-3-9
PDCO	PDCO US	Patterson Companies	US$ 28.8	B-1-7

Source: BofA Global Research

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Price objective basis & risk

Dentsply Sirona, Inc. (XRAY)

Our $38 price objective is based on about 12.5x our CY24E EBITDA estimate. We note that this multiple is about 0.5x below its five-year average, due to a slower total growth rate (vs. peak) and the uncertainty around profit progression.

Downside risks are a slowdown in total demand tied to lagging equipment sales (either from failure to reignite growth or continued distribution channel challenges), as well as a slowdown in the consumables market, a recovery in Byte growth, an inability to achieve the company's margin targets (including the successful completion of the targeted restructuring plan).

Upside risks to our PO are better-than-expected equipment sales from successful sales force and marketing efforts and the penetration of Primescan and affiliated products, as well as strong consumables sales driven by a faster rebound in the consumables market, and heavy investment in margin expansion from cost savings benefits that drive overachievement of the initial savings targets that are critical to the FY26 EPS target.

Henry Schein (HSIC)
Our $65 PO is based on about 9.5x CY24E EV/EBITDA. This is close to the company's historical trading range and accounts for a less visible growth/margin opportunity offset by demographically-positive end markets and incremental contribution from increased technology revenue.

Upside risks to our PO are stronger than expected dental consumable/equipment sales (from either new relationships or ongoing equipment upgrade cycles), faster growth acceleration from specialty dental products and technology services, and cost rationalization leading to margin upside.

Downside risks incremental pressure from a slowdown in dental consumables/equipment growth tied to macro conditions, any supply constraints related to worldwide shortages, slowdown in overall demand tied to the Covid outbreak, new competition from Amazon creating significant growth, and margin pressures in both segments.

Patterson Companies (PDCO)
Our $35 PO equates to about 9.5x our CY24E EV/EBITDA. We are using EV/EBITDA to align PDCO's valuation with the rest of the peer group. This multiple is about 1x below the five-year average and accounts for the challenged end market dynamics. We also view the increased risk of competition on animal health and consumer risk as warranting a discount relative to historical valuation.

Upside risks to our PO are improvement in core Dental growth, incremental equipment sales, and cost rationalization, particularly within Animal Health. An improved margin profile would also warrant a higher multiple for PDOC given it trades at a discount to peers.

Downside risks are a slowdown in total demand with broader macro concerns, worse-than-expected ramping in consumables, animal health market pressures, incremental OpEx spend that hampers EPS growth, and new competition from Amazon and other non-traditional players creating both growth and margin pressures.

Analyst Certification

I, Allen Lutz, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

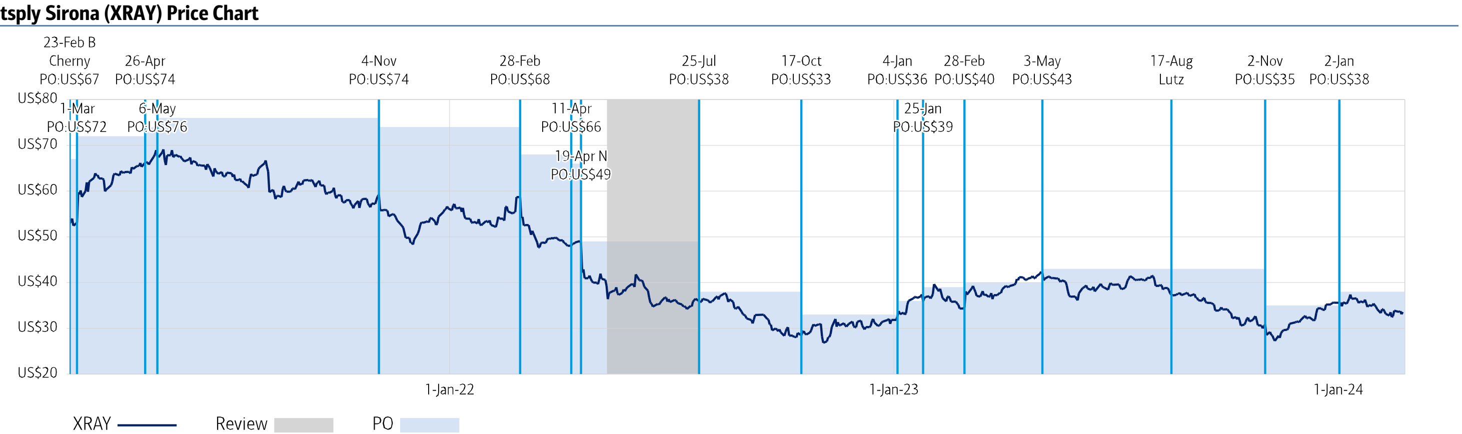
US - Healthcare Technology & Distribution Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Accolade	ACCD	ACCD US	Allen Lutz, CFA
	American Well Corp	AMWL	AMWL US	Allen Lutz, CFA
	Cencora Inc	COR	COR US	Allen Lutz, CFA
	CVS Health	CVS	CVS US	Allen Lutz, CFA
	Definitive Healthcare Corp	DH	DH US	Allen Lutz, CFA
	dentalcorp	YDNTL	DNTL CN	Allen Lutz, CFA
	Envista	NVST	NVST US	Allen Lutz, CFA
	HealthEquity Inc	HQY	HQY US	Allen Lutz, CFA
	Hims & Hers	HIMS	HIMS US	Allen Lutz, CFA
	McKesson	MCK	MCK US	Allen Lutz, CFA
	Omnicell Inc.	OMCL	OMCL US	Allen Lutz, CFA
	Patterson Companies	PDCO	PDCO US	Allen Lutz, CFA
	Progyny	PGNY	PGNY US	Allen Lutz, CFA
	R1 RCM	RCM	RCM US	Allen Lutz, CFA
NEUTRAL				
	Cardinal Health	CAH	CAH US	Allen Lutz, CFA
	Dentsply Sirona, Inc.	XRAY	XRAY US	Allen Lutz, CFA
	Doximity Inc	DOCS	DOCS US	Allen Lutz, CFA
	Teladoc Health	TDOC	TDOC US	Allen Lutz, CFA
UNDERPERFORM				
	GoodRx	GDRX	GDRX US	Allen Lutz, CFA
	Henry Schein	HSIC	HSIC US	Allen Lutz, CFA
	Owens & Minor	OMI	OMI US	Allen Lutz, CFA
	Premier, Inc.	PINC	PINC US	Allen Lutz, CFA
	Walgreens Boots Alliance	WBA	WBA US	Allen Lutz, CFA

Disclosures

Important Disclosures

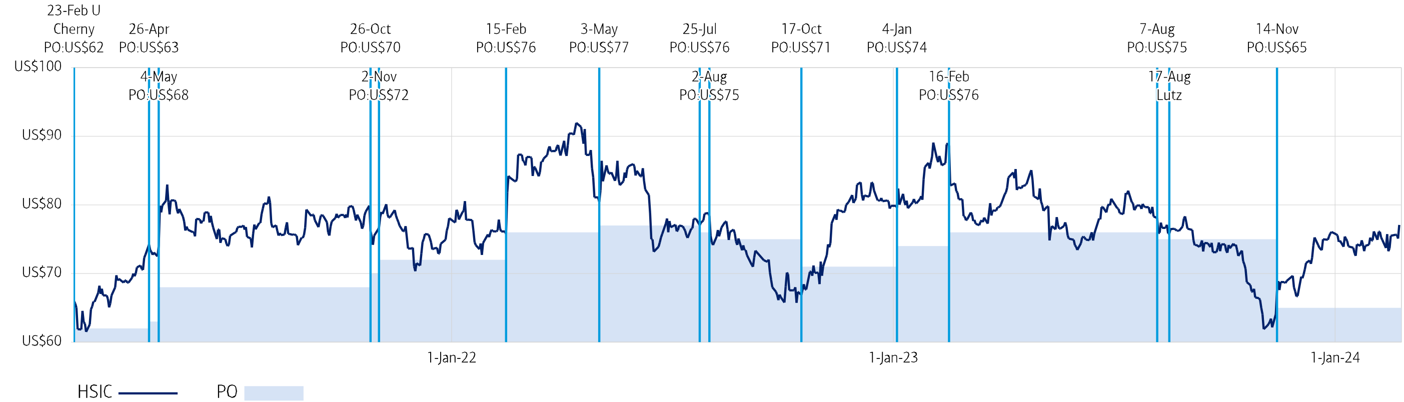
Dentsply Sirona (XRAY) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Henry Schein (HSIC) Price Chart



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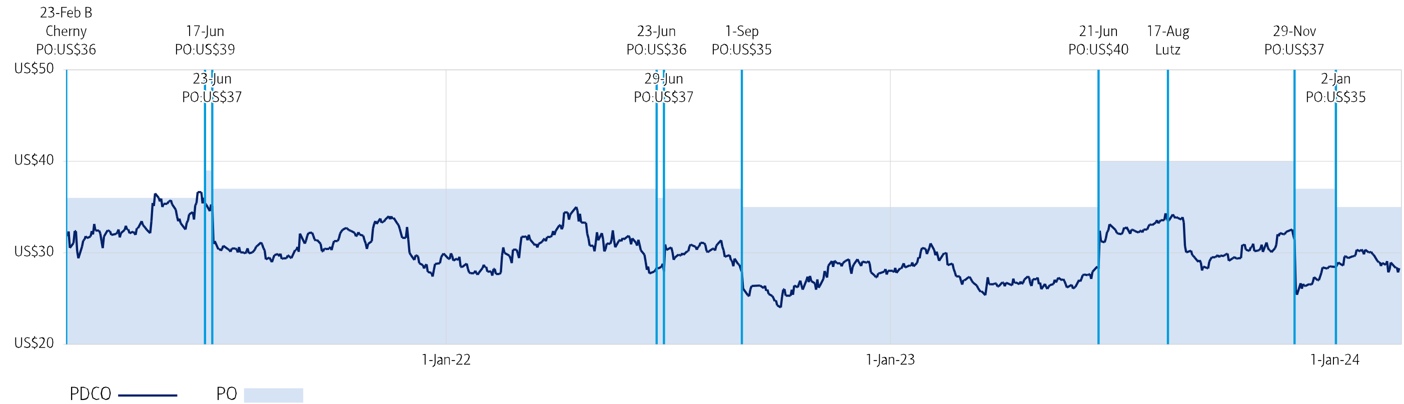
Patterson Companies (PDCO) Price Chart



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Equity Investment Rating Distribution: Health Care Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R2]Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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