Off Wall Street

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New Rec: Patterson Companies (PDCO: $48.09) August 7, 2016

Position: Sell **Target: $36**

$MM	Jul-16 F1Q17e	Oct-16 F2Q17e	Jan-17 F3Q17e	Apr-17 F4Q17e	F2017e	F2018e
Revs	1,343	1,423	1,433	1,475	5,675	5,779
Y/Y Gr	18%	2%	2%	1%	5%	2%
Adj EPS $*	0.49	0.58	0.59	0.75	2.40	2.50
Y/Y Gr	2%	3%	-12%	-2%	-3%	4%
PE	n/a	n/a	n/a	n/a	20.0	19.2
Consens Rev	1,320	1,440	1,450	1,520	5,750	6,100
Consens EPS	0.52	0.62	0.71	0.81	2.68	2.95

Shares Out: 94M **Market Cap: $4.6B** **FYE: April**

Concept:

1. PDCO appears to be losing share to HSIC in its high margin Dental business (46% of revenue/71% of segment operating profit). Expectations for a reacceleration in Dental revenue growth are unlikely to be met.
2. PDCO appears to be losing share to HSIC in its Animal Health business (53% of revenue/29% of segment operating profit). Share losses have been masked by an acquisition that has now lapped. Expectations for mid-single digit organic growth are unlikely to be met.
3. Capitalization of software expenses in F2015 and F2016 improved operating margins. Recognition of costs associated with the ERP rollout, beginning in F2017, reduce operating margins for several years.

Summary: Patterson Companies (PDCO) is a distributor of consumables and equipment to dental practices in the US and Canada, and to veterinary practices in the US, Canada, and the UK. In F2016, 46% of revenue and 71% of segment operating profit came from its Dental segment, and 53% of revenue and 29% of segment profit came from its Animal Health (veterinary) segment. Corporate revenue (equipment financing and other miscellaneous sales) was 1% of revenue in F2106. About 80% of PDCO sales come from the US, and 20% are international (UK, Canada).

PDCO has been rolling up dental distributors for decades, increasing its share of the North American market from 12% in 1987 to 33% in 2015. Competitor Henry Schein (HSIC) has also pursued a roll-up strategy, and now has about 40% of the market, with most of the remaining 27% of the market concentrated in three privately held distributors, Benco with 10%, Burkhart, and Darby. With 83% of the dental market controlled by PDCO, HSIC and Benco, antitrust concerns make further acquisitions by PDCO in the US dental distribution space unlikely.

PDCO entered the North American companion animal (i.e., household pet) veterinary distribution market in 2001 with its acquisition of J.A. Webster (11% market share). Additional acquisitions have increased its share of the companion animal market to 25% in 2015. Its August 2013 acquisition of National Veterinary Services (NVS) gave it a 40% share of the UK companion/production animal (i.e., swine, cattle) market, and its June 2015 acquisition of Animal Health International gave it a 40% share of the North American production animal market. HSIC has a 35% share of the North American companion animal market and negligible share of the production animal market, while MWI (now owned by Amerisource Bergen) has a 25% share of the companion animal market and about 40% of the production animal market. With 85% of the North American companion animal market and 80% of the North American production animal market now tied up by PDCO, HSIC and ABC, anti-trust concerns again limit opportunities for further growth by acquisition.

Low organic growth in the veterinary segment in F2016 has been masked by PDCO's $1.1B acquisition of AHI in June 2015. In addition, in early C2016, Zoetis shifted some drug sales to distributors rather than selling direct, creating a revenue bump that will begin to lap in PDCO's F3Q17. Removing AHI and the higher ZTS sales, PDCO's Animal Health segment revenue was flat y-y in F2016 versus 96.7% reported growth. Pro forma total revenue growth for FY2016 was just 2.3% y-y versus 37.7% reported.

PDCO's attempt to expand outside of the dental and vet distribution markets was not successful. In 2003, it acquired AbilityOne (renamed Patterson Medical), a distributor of rehab and physical therapy supplies, for $575M (2.6x 2003 sales of $220M). In July 2015, PDCO sold this business to private equity for $715M, or 1.5x F2015 sales. The medical distribution market includes numerous submarkets (primary care, extended care, alternate site, acute care) and distribution is highly fragmented. HSIC has about 20% of the primary care distribution market. Other players include OMI, MCK, and privately-held Medline.

With few acquisitions remaining the North American dental market or the North American/UK companion animal and production animal veterinary markets, and no presence in the medical distribution market, PDCO appears to be out of opportunities to grow through further acquisition of distributors. It also appears to be losing share to HSIC in both the dental and veterinary markets, with revenue growth for both consumables and equipment falling below HSIC's. Results in dental equipment have been particularly poor, with growth in the exclusive CEREC line falling short of internal goals, and with PDCO losing its semi-exclusive distribution agreement for A-dec chairs, which A-dec allowed HSIC to start distributing in 2015.

Industry sources think a key reason for PDCO's dental share losses is its focus on maintaining above-average margins by keeping expenses low. For example, PDCO appears to have fallen behind in IT and analytic systems that would allow management to better understand business trends, putting it at a disadvantage to more tech-savvy peers like HSIC and Benco, who seem to be winning share. Management appears to be finally addressing this issue with investments in a new enterprise resource planning (ERP) system to replace its homegrown system that began in F2014. As we discuss below, however, costs for this system appear to have ballooned well beyond original plans. PDCO has also controlled costs by shrinking its dental sales force. PDCO had 1,575 dental sales reps and equipment specialists at the end of F2014, and 1,300 at the end of F2015. In June 2016, it announced layoffs that industry sources pegged at about 20% of the total, which would mean it now has as few as 1,040 dental reps.

Faced with the same saturation of North American dental and vet distribution markets, HSIC is pursuing a very different strategy. It maintains a North American dental sales force we estimate at about 1,600 that it trains to help dentists build their practices and improve profitability. It has aggressively expanded into international markets, invested in information technology for its dental and veterinary customers, expanded its private label consumable lines, lined up exclusive diagnostics and equipment distribution agreements, purchased a vet diagnostics company, and expanded its dental lab business. As we discuss, these moves appear to be helping HSIC win share from PDCO in both the North American dental and North American veterinary markets.

PDCO's total adjusted EBITDA margins, restated for the sale of Patterson Medical, declined from 9.4% in F2014 to 8.4% in F2016. Reported operating margins in the dental and animal health segments each improved 25 bp y-y in F2016, so the reported decline was due to the higher mix of lower margin animal health sales with the acquisition of AHI. Management justified this low margin acquisition at 16x ttm EBITDA by saying it would provide better top line growth opportunities and increase ROIC, which has steadily deteriorated from 21% in F2007 to 8.3% in F2016. So far, neither higher top line growth nor increased ROIC have materialized.

For the past two years, PDCO has been making significant investments in a new enterprise resource planning (ERP) system, which it says will allow it to be more efficient, expanding operating margins and reducing working capital. Industry sources tell us that this ERP investment was necessary because PDCO has chronically underinvested in IT and data analytics for years to maintain above-industry operating margins. Its homegrown ERP system and lack of staff to analyze data appears to have left management in the dark about aspects of its business. It is now reported to be playing catch-up to more IT-savvy competitors.

When it first began the ERP project in F2014, it estimated that it would capitalize \$35M of the estimated \$55M-\$65M in total expenses over five years. Just two years later, however, the tally of just the capitalized portion of expenses had ballooned \$88.7M.

PDCO expects to being implementing the ERP system in the fall of 2016, and has told investors to expect a \$25M step up in costs, including depreciation, rollout expenses, and infrastructure support, in the second half of F2017 (October 2016-April 2017). Management has said cost saving measures will offset the ERP step-up in F2017, and efficiencies will improve margins in later years. We expect the added ERP expenses in F2017 and beyond could make it difficult for the company to meet the "street's expectation for a flat to slightly down operating margins in F2017, and slightly improved margins in F2018.

The "street" expects revenue of $5.75B in F2017 and $6.2B in F2018, with adjusted EBITDA margins of 8.3% in F2017 and 8.4% in F2018. "Street" EPS estimates are $2.68 for F2017 and $2.95 for F2018. We model $5.68B in revenue for F2017 and $5.77B in F2018, with adjusted EBITDA margins of 7.8% in both years. Our EPS estimates are $2.40 for F2017 and $2.50 for F2018.

Most investors seem to value PDCO on a PE basis. At 18x F2017 earnings, PDCO trades at the midpoint of its five year PE range of 14x-22x, and at a discount to HSIC's 23x. Calendar year 2017 revenue and EPS growth expectations are higher for HSIC than for PDCO, even after HSIC's recently lowered 2016 guidance. Investors seem more confident that HSIC can beat consensus due to its ability to gain share in saturated North American markets, and due to international expansion efforts providing growth opportunities outside of North American markets. We think PDCO's business has more in common with drug distributors ABC, CAH, and MCK, who, like PDCO, derive 80%+ of their sales in saturated North American markets. ABC and CAH trade at 15x 2017 EPS, while MCK trades at 14x. We apply a 15x multiple to our F2017 EPS to arrive at our target of $36. At our target, PDCO's 2017 FCF yield would be 7.5%, compared to ABC's 10.7%, CAH's 8.2%, and MCK's 7.4%.

Borrow information: PDCO

Supply Quantity	Quantity On Loan	Available to Borrow	Date
33.7M	6.7M	28.1M	8.3.16

Source: Markit/Data Explorers

Background:

PDCO, based in St. Paul, Minnesota, started as the Patterson Dental Company in 1878. It began acquiring dental supply distributors in the 1980s, and went public in 1992. In 1993, it made its first acquisition in the Canadian dental supply distribution market. In 2001, it made its first acquisition in the veterinary supply distribution market, and in 2003 made its first and only acquisition in the medical supply distribution market (which it subsequently sold in 2015). In 2013, it acquired a National Veterinary Services (NVS), a UK veterinary supply company, and in 2015 it acquired Animal Health International (AHI), a US production animal veterinary supply distributor.

The recent acquisitions continue a long term shift in PDCO's revenue mix away from 12%+ margin dental toward 4%+ margin animal health. Dental revenue was 76% of total revenue in F2005, and reported operating margins peaked at 12.5%. In F2016, Dental revenue was 46% of total revenue, and reported operating margins were 7.3%. In the tables below, we show the changes in revenue mix and operating profit for F2014-F2016, restated for the sale of Patterson Medical in F2016. During this period, Dental declined from 65% of revenue to 46%, and adjusted operating margins declined from 8.5% to 7.6%. Comparisons to prior periods are difficult because following the sale of Patterson Medical it reclassified some revenue to "Other" (financing revenue and other miscellaneous sales), and it no longer includes corporate expenses in its Dental segment.

Table 1: PDCO Segment Revenue, F2013-F2016

	F2014a	F2015a	F2016a
Dental	2,348.0	2,415.0	2,476.2
Animal Health	1,203.0	1,456.6	2,862.2
Other	34.0	39.3	48.2
Total	3,585	3,911.0	5,386.7

*OWS estimate

% Total Revenue	F2014a	F2015a	F2016a
Dental	65.5%	61.8%	46.0%
Animal Health	33.6%	37.2%	53.1%
Other	0.9%	1.0%	0.9%
Total	100%	100%	100%

Table 2: Segment and Total Adj Operating Profit, F2014-F2016

	F2014a	F2015a	F2016a
Adj Dental Op Profit	301.5*	304.0	318.0
Adj Animal Health Op Profit	49.9	63.7	132.5
Adj corp Expense	-46.0*	-49.9	-41.5
Adj Total Op Profit	305.3	317.7	409.0

*OWS estimate

Table 3: Segment and Total Adj Operating Margins, F2014-F2016

	F2014a	F2015a	F2016a
Adj Dental Op Margin	12.8%*	12.6%	12.8%
Adj Animal Health Op Margin	4.1%	4.4%	4.6%
Adj corp Expense	-1.3%*	-1.3%	-0.8%
Adj Total Op Margin	8.5%	8.1%	7.6%

*OWS estimate

As we discuss below, PDCO faces several significant challenges to its growth, including limited opportunities for further growth by acquisition, slowing growth in its dental and veterinary markets, and market share losses in both the dental and veterinary markets. In addition, PDCO appears to have underinvested in its business operations, and is now trying to catch up by investing over $85M in a new enterprise resource planning (ERP system). The company capitalized these expenses, but with implementation beginning in Fall 2016, we think the project should reduce PDCO's margins. As shown in the table below, we think these factors should lead to lower revenue, operating income, and EPS than the "street" expects.

Table 4: "Street" vs. OWS Estimates F2017-F2018

	F2016a	"Street" F2017e	OWS F2017e	"Street" F2018e	OWS F2018e
Dental Revenue	2,476	2,559	2,482	2,653	2,518
Animal Health Revenue	2,862	3,177	3,144	3,330	3,210
Other Revenue	48	53	48	55	51
Total Revenue	5,387	5,788	5,675	6,038	5,779
Adj Operating Income	409	428	388	461	393
Adj Operating Margin	7.6%	7.4%	6.8%	7.6%	6.8%
Adj EPS	2.47	2.66	2.40	2.97	2.50

Discussion:

1. PDCO's Dental and Vet markets are highly concentrated, limiting further growth by acquisition

PDCO estimates it has a 33% market share in the North American dental distribution market. This makes it the second largest distributor in the US after HSIC, which as 40%. While PDCO argues it its 10-K that the dental market is still highly fragmented, with 15 "regional" and hundreds of small distributors, in reality, three privately held distributors (Benco, Burkhart, and Darby) control most of the remaining 27% of the market. Indeed Benco has become a bonafide national distributor, with operations in over 27 states.

We think it would be difficult for PDCO to make additional sizable acquisitions in dental, limiting growth. Recent antitrust lawsuits brought against PDCO, HSIC, and Benco supports our view. The complaints allege the companies have taken anti-competitive actions, including fixing prices and threatening to boycott trade shows if smaller competitors are allowed to exhibit.

PDCO has a 25% share of the North American companion animal vet distribution market, with HSIC and MWI (now owned by ABC) controlling 55%. Remaining regional distributors include Victor, Penn, Merritt, Nevsco, and Midwest. As in dental, with 80% of the market controlled by just three distributors, we think further sizable acquisitions are unlikely.

In F2016, PDCO moved into the production animal (e.g., cattle, swine) market with its acquisition of Animal Health International (AHI) for $1.1B in cash, or 16x ttm EBITDA of $68M. Industry sources with whom we spoke suggested there is very little overlap between the companion and production segments. The companion market is primarily small animal practices with 2-5 vets treating dogs, cats, and other household pets. The production animal market's customers are primarily veterinarians and purchasing officers at dairies, feed lots, and factory farms.

With the AHI acquisition by PDCO, 85% of the North American production animal market is controlled by just two distributors: PDCO with 40%, and MWI (now owned by ABC) with 45%. As in the dental and companion animal markets, it seems unlikely that PDCO can meaningfully grow its share in the production animal market with further acquisitions.

PDCO made an initial foray into the medical supply distribution market with its acquisition of AbilityOne in 2003, which it renamed Patterson Medical. Patterson Medical provided supplies to rehab facilities and orthopedic groups. Sales growth and profits were disappointing, however, and PDCO sold the company in F2016. This sale suggests PDCO does not plan to compete in the physician office medical supply market, which is dominated by MCK and HSIC.

2. Growth in the dental and vet supply markets is slowing

According to PDCO's filings as shown on the table below, growth in the US dental supply market has slowed from a 5.9% five year CAGR in F2007 to a 1%-2% five year CAGR in F2015/F2016. PDCO maintains that its market share during that period has remained steady at 32%-33%. As we discuss below, HSIC reports meaningfully higher growth than PDCO. This, along with our discussions with industry participants, suggests PDCO is losing share.

Table 5: North America Dental Supply Market, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Market Size ($B)	6.4	6.8	6.8	6.8	6.8	6.8	7.0	7.0	7.0	7.5
5 yr CAGR	5.9%	5.5%	4.0%	2.5%	1.2%	0.0%	0.6%	0.6%	0.6%	2.0%
PDCO Share	32%	32%	32%	32%	33%	33%	33%	33%	33%	33%

Source: PDCO 10-K filings

Growth in the US companion animal/equine animal health market also appears to have slowed, from a 3.1% CAGR in F2007 to 1%-2% in F2014 and F2015. While PDCO maintains it has held share steady at 21% since 2011 (25% after the acquisition of AHI), HSIC's US veterinary revenue is growing faster than

PDCO's, suggesting PDCO is losing share in the companion animal sector as well. We discuss this further below.

Table 6: US Companion/Equine Veterinary Supply Market, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mkt Size ($B)	2.8	2.8	2.9	3.0	3.2	3.2	3.3	3.3	3.4	n/d
5 yr CAGR	3.1%	2.3%	2.2%	1.4%	2.7%	2.7%	2.6%	1.9%	1.2%	n/d
PDCO Share	14%	14%	19%	20%	21%	21%	21%	21%	21%	25%*

*Includes companion animal sales of AHI
Source: PDCO 10-K filings

The June 2015 acquisition of AHI gave PDCO a 40% share of the $9B US production animal vet supply market, which third party market research groups estimate is growing 4%-5% per year. As we discuss below, growth seems to have slowed to about 2% y-y recently, raising questions about the wisdom of the AHI acquisition.

3. PDCO sales growth below HSIC in the North American dental market suggests share losses.

As shown in the tables below, during period June/July 2015-March/April 2016, PDCO's constant currency, ex-acquisition North American dental sales grew more slowly that HSIC's. HSIC had better growth in both consumables and equipment. HSIC's equipment sales growth was significantly higher, particularly in the Dec/Jan and Mar/April periods. This may be due in part to HSIC's 2Q15 addition of market-leading A-dec dental chairs (previously only distributed nationally by PDCO) to its product line, and to the slowing growth of CEREC in-office CAD/CAM milling equipment, which we discuss further below.

Table 7: PDCO North American Dental Sales (constant currency, ex-acquisitions)

	Jul-15 1Q16*	Oct-15 2Q16	Jan-16 3Q16	Apr-16 4Q16
Consumable dental supplies	3.8%	3.3%	5.1%	3.3%
Dental equipment	-1.9%	2.2%	6.8%	-6.9%
Other dental services/products	3.5%	4.2%	7.7%	3.6%
Total dental sales	2.2%	3.1%	5.9%	"slightly down"

Source: PDCO earnings releases
*Adjusted for extra week

Table 8: HSIC North American Dental Sales (constant currency, ex-acquisitions)

	Jun-15 2Q16	Sept-15 3Q15	Dec-15 4Q15	Mar-16 1Q16	Jun-16 2Q16
Consumable dental supplies	5.4%	3.8%	6.1%	4.6%	1.8%*
Dental equipment	-1.9%	6.4%	11.5%	13.5%	2.7%
Total dental sales	3.7%	4.4%	7.6%	6.4%	2.0%

*50 bp reduction from discontinuation of some low margin precious metal sales
Source: HSIC earnings releases

As shown above, HSIC reported slower North American dental growth in its quarter ending June 2016. It blamed unexpected softness beginning in June 2016. Results in equipment were particularly weak, up just 2.7% y-y versus an easy comp, slowing from double-digit gains in the prior two quarters.

June 2016 quarter results from XRAY seem to confirm the recent slowdown in North American dental growth reported by HSIC. As shown on the table below, XRAY's US dental sales growth slowed to 1.2% y-y versus 5.7% y-y last quarter and 2.6% y-y a year ago. XRAY does not break out US consumable and equipment sales, but blamed the weakness on lower shipments of its Schick intraoral cameras, which are sold by PDCO.

Table 9: XRAY US Dental Sales (constant currency, ex-acquisitions)

	Jun-15 2Q16	Sept-15 3Q15	Dec-15 4Q15	Mar-16 1Q16	Jun-16 2Q16
US Dental Sales	2.6%	6.1%	6.7%	5.7%	1.2%

Source: XRAY earnings releases

Given the 1.2%-2.0% US/North America dental growth seen this quarter by XRAY and HSIC, "street" estimates for PDCO's F1Q17 may be too high. The "street" expects PDCO's dental revenue to increase 0.2% y-y constant currency in F1Q17, but the quarter's 13 weeks compares to 14 weeks a year ago. Adjusting for the extra week, the "street" expects dental revenue growth of 3.4% y-y in F1Q17. Expectations for the rest of F2017 also appear to be high, with y-y growth in F2017 expected to be 3.3%, or 4.2% y-y without the extra week. We expect dental growth of 0.2% y-y, or 1.1% y-y without the extra week.

Notably, PDCO has responded to slower growth by laying off about 250 dental representatives, or about 20% of its 1,300 reps. Message boards used by dental representatives and discussions with industry participants suggests this move was sudden and unexpected. Benco, HSIC, and Burkhart appear to have quickly hired many of these laid off PDCO reps. Our search of a well-known business social networking site shows that, so far in 2016, Benco Dental has hired 14 PDCO sales reps, four equipment reps, and one service technician who left

PDCO in 2016, while HSIC hired seven sales reps and five equipment specialists, all of whom left PDCO in 2016. Finally, competitor Burkhart hired three sales reps and two equipment specialists who left PDCO in 2016. The average tenure at PDCO for these 36 representatives was 9.4 years, suggesting either that PDCO let go representatives with very deep customer relationships that are now benefiting the competition, or that PDCO management was carrying unproductive reps for an extended period of time. We suspect the former.

To confirm that representative churn is happening disproportionately at PDCO, we also searched the networking site for representatives that had moved from Benco, HSIC, or Burkhart to PDCO in 2016. We found just one equipment specialist who left Benco for PDCO, one telesales rep who left HSIC to be a "practice growth advisor" at PDCO, and one sales rep who left Burkhart for PDCO, each with 11-12 years of tenure.

4. PDCO appears to be losing its dominance in dental equipment distribution.

PDCO's equipment sales include both core equipment, such as chairs, lights, and dental supply cabinets, and high tech equipment including digital x-ray, digital impression, CAD/CAM devices for in-office manufacturing of crowns and inlays, and cone beam 3D imaging devices. This equipment generates significant revenue at the time of the sale, in addition to service revenue, office design service revenue, and, in some cases, a stream of related consumables. Equipment sales can also help to solidify the distributor's relationship with the dentist.

For many years, PDCO was the dominant equipment supplier in the North American dental market. In F2013, it had a 33% share of the overall US dental supply market, but a 49% share of the large equipment market, including 42% share in chairs, 56% share in cone beam 3D imaging equipment, and 93% share in CAD/CAM. It was able to use its exclusive distribution of Sirona CAD/CAM and digital x-ray equipment, along with its position as the only national distributor of top-rated A-dec dental chairs, to win equipment supply contracts that it could leverage into consumable supply contracts.

Strong growth in PDCO's high tech equipment offerings increased these products from 46% of equipment revenue in F2011 to 56% in F2015. At the same time, however, sales growth of these products slowed from 30% y-y in F2011 to -2.8% y-y in F2015, leading to lower growth of PDCO's overall dental equipment revenue. In the April 2016 quarter, total equipment sales fell -6.9% y-y. Low-to-mid single digit growth of CEREC CAD/CAM equipment in the quarter was offset by lower digital x-ray sales.

Table 10: PDCO Dental Equipment Sales and Mix, F2011-F2016

	F2011	F2012	F2013	F2014	F2015	F2016
Core equipment	450.0	380.0	380.0	325.0	354.0	n/d
CAD/CAM, Digital, Software	250.0	325.0	429.7	470.1	464.3	n/d
Total	700.0	705.0	809.7	795.1	818.3	807.0

Source: PDCO Investor Day Presentations

Y-Y change	F2011	F2012	F2013	F2014	F2015	F2016
Core equipment	-15.6%	-1.3%	1.3%	-14.5%	8.9%	n/d
CAD/CAM, Digital, Software	30.0%	13.7%	16.2%	9.4%	-2.8%	n/d
Total	0.7%	5.6%	8.7%	-1.8%	2.9%	-1.4%

% Total Dental Equipment Rev	F2011	F2012	F2013	F2014	F2015	F2016
Core equipment	54%	50%	47%	41%	43%	n/d
CAD/CAM, Digital, Software	46%	50%	53%	59%	56%	n/d
Total	100%	100%	100%	100%	100%	100%

Core equipment revenue growth has been highly variable, but declined at a 4.7% CAGR from F2011-F2015. Industry sources tell us that PDCO has failed to win contracts with the growing group dental practices, which are instead going to Benco and HSIC. This may account for some of the core equipment revenue deterioration. In addition, in January 2015 PDCO lost its position as the sole national distributor of top-of-the-line A-dec dental chairs when A-dec signed HSIC as a distributor. In the same month, PDCO began distributing entry-level and mid-range chairs from other manufacturers (e.g., Pelton & Crane, Belmont), perhaps cannibalizing its own higher-end A-dec sales.

5. PDCO is growing more slowly than HSIC in the North American animal health market, again suggesting share losses.

The North American animal health supply distribution market has undergone a number of changes over the past 24 months. In October 2014, PDCO and HSIC began selling Abaxis veterinary diagnostic equipment and consumables for the first time. In January 2015, PDCO, HSIC, and MWI lost distribution of IDXX consumables when IDXX took those sales in-house. In February 2015, Amerisource Bergen bought MWI. In June 2015, PDCO bought AHI, and in January 2016, Zoetis (ZTS) began selling to distributors, rather than using them as only agents to collect orders for commission. This change increased the distributors' revenue, since they are now shipping product and recognizing the final product sale.

PDCO and HSIC provide top line Animal Health growth rates adjusted for currency, acquisitions, the ABAX/IDXX changes, and ZTS' distribution change. As shown in the tables below, during the period June/July 2015-March/April 2016, PDCO's animal health revenue (North America and UK) grew more slowly than HSIC's North American animal health revenue.

Table 11: PDCO North American/UK Animal Health Sales (constant currency, ex-acquisitions, adjusted for loss of IDXX/gain of ABAX distribution)

	Jul-15 1Q16*	Oct-15 2Q16	Jan-16 3Q16	Apr-16 4Q16
Total Animal Health	~flat	3.2%	6.2%	4.5%**

*Excludes extra week
**Disclosed $8.9M benefit from ZTS change, or 3.5% y-y normalized growth ex-AHI. OWS adds back an estimated 1% negative currency impact

Table 12: HSIC North American Animal Health Sales (constant currency, ex-acquisitions, adjusted for loss of IDXX/gain of ABAX distribution, ZTS distribution change)

	Jun-15 2Q16	Sept-15 3Q15	Dec-15 4Q15	Mar-16 1Q16	Jun-16 2Q16
N. America Animal Health	5.2%	4.2%	8.4%	7.4%	11.4%

On its F4Q16 call, PDCO blamed its disappointing animal health sales on slow growth in the production animal market, which it estimates is growing about 2%. This should be disappointing to bulls, since the rationale for the AHI acquisition was expanding into a market growing at 5% per year.

6. PDCO has limited offerings of exclusive veterinary equipment, unlike HSIC.

PDCO and other veterinary distributors were dealt a blow in August 2014 when Idexx (IDXX) announced that, beginning January 1, 2015, it would sell its popular SNAP heartworm tests and consumables for its diagnostic equipment direct, totally bypassing distributors. At that time, distributors predicted that IDXX' strategy would fail, and that they would soon return. Two years later, IDXX appears to be stronger than ever as a direct distributor. HSIC, MWI, and PDCO each pursued a different strategy to deal with the loss of IDXX.

HSIC chose an aggressive strategy to remain relevant in the companion animal diagnostics segment. It became an exclusive distributor for Heska's (HSKA) diagnostics equipment, which competes directly with IDXX. It also began marketing a private label heartworm test manufactured by HSKA that it priced at a discount to IDXX tests. In addition, HSIC bought scil, a small veterinary equipment manufacturer with diagnostics equipment that competes with both IDXX and HSKA, as well as veterinary ultrasound and digital x-ray equipment. We think this broadened product offering is helping HSIC gain share versus PDCO and MWI in the more profitable companion animal market.

MWI pursued a different path, selling itself to drug distributor Amerisource Bergen (ABC) in January 2015. This move seemed designed to increase ABC's leverage with pharmaceutical manufacturers, who were themselves merging (e.g., Novartis sold its animal health unit to Lily in January 2015).

Rather than pursue growth in companion veterinary diagnostics like HSIC, or gain distribution leverage by joining a larger player, PDCO chose to enter the production animal veterinary supply distribution market via its June 2015 acquisition of Animal Health International. This strikes us as an odd acquisition, because the companion and production animal markets have very little overlap in terms of call points or products. Management pitched the deal at the time as a way to enter a market growing 5% per year, faster than the companion animal market's 4%-5% growth. As mentioned above, however, now management puts production animal growth at 2%, and blames it on softness in the livestock industry.

7. PDCO has underinvested in information systems for years, and is now catching up with significant investments in a new ERP system.

Industry sources tell us that for many years PDCO has been maintaining a low-cost, home grown computer system to manage its business. While this approach helped PDCO keep its operating expenses low, management appears to be at a disadvantage to competitors who have invested in sophisticated enterprise resource planning (ERP) systems to help identify problems and opportunities.

In June 2011, PDCO hired a new Chief Information Officer. In a profile posted on a well-known business social networking site, she describes her role leading the shift from a "traditional in house developed solution" for enterprise management to a purchased solution from SAP. By April 2014, PDCO had invested $10M in the project, capitalized as software expenses, and estimated it would capitalize a total of $35M of the project's $55M-$65M in total expenses over five years. In June 2014, it signed CapGemini to a $25M implementation contract for the project. By April 2015, total capitalized expenses for the project had ballooned to $43.6M. In September 2015, PDCO's CIO left the company, and no replacement has been named. By April 2016, about three years after the project's start, the total of just the capitalized expenses for the ERP had reached $88.7M, 2.5x the original five year budget.

On its most recent earnings call, PDCO said it would begin implementing the ERP system in the fall of 2016, and has told investors to expect a $25M step up in costs, including depreciation, rollout expenses, and infrastructure support in F2017. Management has said cost saving measures will offset the ERP step-up in F2017, and efficiencies will improve margins in later years. Nevertheless, we expect the added ERP expenses in F2017 and beyond could make it difficult for the company to meet the "street's expectation for a flat to slightly down operating margins in F2017, and slightly improved margins in F2018.

8. By our calculation, return on invested capital been in decline, and, by our estimate, has not shown improvement following the AHI acquisition

PDCO's ROIC has been on a steady downward trajectory, declining from 21% in F2007 to 10.4% in F2015, coinciding with the shift in its mix from high margin dental to lower margin veterinary sales. Since at least June 2014, PDCO has told investors one of its goals was to increase ROIC. Indeed, one rationale for selling Patterson Medical and buying Animal Health International was to achieve higher ROIC.

We calculated ROIC as ttm NOPAT/(Total Assets less Non-Interest Bearing Liabilities) for PDCO, adding back one-time expenses, from F2012-F2016. As shown on the table below, in F2016 ROIC was 9.6%, below the 10.4% reported in F2015 before the Patterson Medical sale and AHI acquisition.

Table 13: PDCO ROIC, F2012-F2016

	F2012	F2013	F2014	F2015	F2016
Operating Income as reported	358.0	354.5	345.8	373.4	347.7
One time expenses	0.0	0.0	0.0	1.4	27.6
Operating income plus one time exp	358.0	354.5	345.8	374.9	375.3
Tax rate	34.5%	34.5%	34.5%	34.5%	34.5%
NOPAT	230.9	232.2	226.5	245.5	245.8
Total Cap Invested eop	2,334.7	2,233.3	2,321.2	2,406.9	2,727.9
Total Cap Invested avg	2,266.1	2,284.0	2,277.2	2,364.0	2,567.4
ROIC	10.3%	10.2%	9.9%	10.4%	9.6%

Source: PDCO 10-K filings, earnings releases

We note that in its October 2015 investor day slides, PDCO says its F2015 ROIC was 12.8%, above our calculation of 10.4%. There are several ways to calculate ROIC, and we get closer to PDOC's number if we exclude goodwill from total invested capital, as is sometimes done for acquisitive companies. As shown below, this method yields an ROIC of 13.7% in F2015, closer to PDCO's reported 12.8%.

Table 14: PDCO ROIC excluding goodwill from Total Capital Invested, F2012-F2016

	F2012	F2013	F2014	F2015	F2016
NOPAT	230.9	232.2	226.5	245.5	245.8
Total Cap Invested excl goodwill eop	1,524.5	1,409.5	1,476.8	2,109.4	1,911.3
Total Cap Invested excl goodwill avg	1,463.2	1,467.0	1,443.1	1,793.1	2,010.4
ROIC	15.4%	16.5%	15.3%	13.7%	12.2%

Source: PDCO 10-K filings, earnings releases

Either way, the trend of ROIC matters more than the exact number. In both calculations above, ROIC continued its downward trend in F2016 following the AHI acquisition and sale of Patterson Medical.

Interestingly, the only other mention of the company's ROIC we found is in its recently released proxy for its upcoming Shareholder's Meeting (September 12). In the document, it reports that its F2014-F2016 ROIC was 14.9%, close to our F2014-F2016 average ROIC of 13.9% in Table 14. Perhaps the downward trend that yields this average is why in F2016 management changed its long term incentive compensation structure from goals for three year operating income growth and ROIC to three year total shareholder return versus the S&P 400.

9. Exclusive distribution deal with Sirona expires in F2018, but seems unlikely to end immediately.

PDCO is the exclusive distributor of Sirona products in North America, including the company's CEREC CAD/CAM in-office dental restoration (e.g., crowns, inlays) system and its Schick imaging equipment. Its 20 year agreement with Sirona ends in September 2017. Industry sources suggest that the agreement is unlikely to end suddenly, since PDCO has met certain performance goals that extend the life of the agreement.

However, these sources suggest that Sirona's recent acquisition by XRAY, along with PDCO's share losses and representative layoffs, could eventually cause the terms of this agreement to change. Distribution could open up to HSIC, Benco, and others. Alternatively, XRAY may pursue a strategy like IDXX, and take sales of the CEREC and its consumables in house. We note that XRAY said on its recent earnings call that it is expanding its specialty sales force. Perhaps this foreshadows changes to come.

10. Anti-competition lawsuits against PDCO, HSIC, and Benco

In September 2015, a start-up web-based dental supply company called SourceOne Dental filed a complaint against PDCO, HSIC and Benco, alleging that the companies conspired to eliminate SourceOne as a competitor. Then, in January 2016, a number of class action lawsuits were filed by dentists alleging that the companies agreed not to compete on price, forcing dentists to pay higher prices for the supplies they use for their businesses. All of these suits remain outstanding. While any outcome could be years away, we think the suits represent a distraction for management, and may lead to more price competition in both the dental and veterinary distribution markets as the companies seek to prove they are not misbehaving.

11. Recent results and guidance

PDCO reported F4Q16 revenue of $1.454B, below expectations of $1.465B, and EPS of $0.77, above estimates of $0.75 on lower administrative expenses. It guided to F2017 adjusted EPS of $2.60-$2.70. Consolidated operating margins guidance is "flat to down slightly" versus F2016's 7.6% after absorbing the $25M step-up in operating expenses related to the ERP implementation in F2H17, most of which is being allocated to the business segments. The company guided for F2017 dental operating margins of 13%-13.5% (versus 12.8% in F2016) and animal health operating margins flat with F2016 at 4.6%.

12. Financial assumptions

Dental Segment: For F2017, the "street" expects 2.1% y-y growth in consumables, 5.7% y-y growth in equipment, and 3.0% y-y growth in other dental, for total segment growth of 3.3% y-y. Recall that F2016 included an extra week of sales, so the "street" expects 4.2% y-y growth from adjusted F2016 sales. We expect 1.1% y-y growth in consumables, -1.2% growth in equipment, and 0.6% y-y growth in other dental, for total segment growth of 0.2% y-y, or 1.1% y-y without the extra week.

For F2018, the "street" expects 3.0% y-y growth in consumables, 5.0% y-y growth in equipment, and 3.0% y-y growth in other dental, for total segment growth of 3.7% y-y. We expect 2.9% growth in consumables, -0.6% y-y growth in equipment, flat y-y other dental revenue, for total segment growth of 1.4% y-y.

The "street" expects adjusted dental margins of 13.1% in F2017 and 13.4% in F2018 versus our 12.4% and 12.2%. Our lower margin reflects higher operating costs related to the ERP roll-out in F2017, with higher operating costs continuing in F2018 as the company continues to spend to improve its operating capabilities.

Animal Health Segment: For F2017, the "street" expects 11.1% y-y growth in consumables, 8.6% y-y growth in equipment, and 6.1% y-y growth in other, for total segment growth of 11% y-y. We expect 10.0% y-y growth in consumables, 6.0% y-y growth in equipment, and 7.5% y-y growth in other, for total segment growth of 9.9% y-y.

For F2018, the "street" expects 4.7% y-y growth in consumables, 9.9% y-y growth in equipment, and 4.8% y-y growth in other, for total segment growth of 4.8% y-y. We expect 2.0% y-y growth in consumables on continued share losses and the lapping of the benefit to sales from the change to direct sales of ZTS products. We expect 7.5% y-y growth in equipment, and flat other revenue, for total segment growth of 2.1% y-y.

The "street" expects adjusted animal health margins of 4.6% y-y in F2017 and 4.8% y-y in F2018 versus our 4.3% in both years. Our lower margin reflects higher operating costs related to the ERP roll-out in both years, and negative forex impacts related to PDCO's UK business (NVS).

13. Valuation

PDCO shares currently trade at 18x F2017 earnings, at the midpoint of its five-year PE range of 14x-22x. This multiple is a discount to HSIC (23x), which recently saw multiple compression from a lofty 27x F2017 on disappointing C2Q16 results and C2016 guidance. Nonetheless, investors seem confident that HSIC can continue to expand in international markets and win more share in the US. We think PDCO is more like drug distributors CAH, ABC, and MCK, who, like PDCO, derive 80%+ of their sales in saturated North American markets. ABC and CAH trade at 15x C2017 EPS, and MCK trades at 14x C2017 EPS. We apply a 15x multiple to our F2017 EPS estimate to arrive at our target of $36. At our target, PDCO's 2017 FCF yield (where free cash equals cash from operations less capex) would be 7.5%, compared to ABC's 10.7%, CAH's 8.2%, and in line with MCK's 7.4%.

14. Risks

Risks to achieving our target include a large acquisition in dental, veterinary, or medical distribution. As discussed, high concentration in the dental and veterinary distribution markets are likely to preclude additional large acquisitions, which could trigger anti-trust concerns (above those already raised in the dental market through recent lawsuits). PDCO's recent exit from the medical distribution segment suggests moves into this market are unlikely.

A drug distributor, such as CAH or MCK, could acquire PDCO but its technology oriented, high touch dental business seems quite different from their businesses. Uncertainties about the fate of PDCO's Sirona exclusivity in future years may also dampen the enthusiasm of potential acquirers.

Changes in the distribution of production animal antibiotics could benefit PDCO and other animal health distributors. By December 2016, medically important antibiotics can no longer be used in feed as growth promoters (i.e., prophylactic against disease), and will require authorization from a licensed veterinarian to be used for prevention, control, or treatment of an identified disease. If lower use of feed additives (12% of F2014 AHI revenue) results in higher use of antibiotics (23% of F2014 AHI revenue), the change could benefit PDCO's animal health revenue. However, industry sources with whom we have spoken, and PDCO itself, expect the change to have minimal revenue implications for PDCO.

PDCO has been buying back shares and paying investors a dividend (at present a 2% yield). We model continued declines in shares outstanding in line with "street" expectations, but increased share buybacks or a hike in dividends could make it more difficult to achieve our target price.

15. Financial projections

a. Quarterly projections

Income Statement	Jul-16 14 Weeks 1Q17e	Oct-16 13 Weeks 2Q17e	Jan-17 13 Weeks 3Q17e	Apr-17 13 Weeks 4Q17e	Jul-17 13 Weeks 1Q18e	Oct-17 13 Weeks 2Q18e	Jan-18 13 Weeks 3Q18e	Apr-18 13 Weeks 4Q18e
Dental Consum	344.4	343.0	343.0	363.0	355.0	353.0	353.0	373.0
Dental Equipment	140.0	195.0	230.0	232.0	139.0	194.0	229.0	230.0
Dental Other	73.0	73.0	72.0	74.0	73.0	73.0	72.0	74.0
Total Dental	557.4	611.0	645.0	669.0	567.0	620.0	654.0	677.0
An Health Consum	753.9	777.3	748.0	772.0	769.0	791.4	764.1	788.1
An Health Equip	11.0	12.0	17.0	13.0	12.0	13.0	18.0	14.0
An Health Other	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Animal Health	774.9	799.3	775.0	795.0	791.0	814.4	792.1	812.1
Other	11.0	13.0	13.0	11.0	12.0	13.5	13.5	12.0
Total Revenue	1,343.3	1,423.3	1,433.0	1,475.0	1,370.0	1,447.9	1,459.6	1,501.1
Cost of Sales	1,015.0	1,080.0	1,085.0	1,100.0	1,030.0	1,100.0	1,110.0	1,120.0
Adj Op Exp ex D&A	235.0	236.0	238.0	243.0	240.0	241.0	242.0	243.0
D&A ex deal amort	12.0	13.5	14.6	14.6	14.8	14.9	15.0	15.1
Adj Op Income	81.3	93.8	95.4	117.4	85.2	92.0	92.6	123.0
Adj EBITDA	93.3	107.3	110.0	132.0	100.0	106.9	107.6	138.1
Interest income	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Interest expense	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
Other inc/(expense)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adj Pretax income	71.8	84.3	85.9	107.9	75.7	82.5	83.1	113.5
Adj Income Tax	25.1	29.5	30.1	37.8	26.5	28.9	29.1	39.7
Adj Net Income	46.7	54.8	55.9	70.2	49.2	53.6	54.0	73.8
Adj EPS contin ops	0.49	0.58	0.59	0.75	0.53	0.58	0.59	0.81
S/O	95.5	94.9	94.4	93.8	93.2	92.6	92.0	91.4

	Jul-16	Oct-16	Jan-17	Apr-17	Jul-17	Oct-17	Jan-18	Apr-18
	14 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks
Y-Y change	1Q17e	2Q17e	3Q17e	4Q17e	1Q18e	2Q18e	3Q18e	4Q18e
Dental Consum	-3.8%	3.2%	2.7%	2.4%	3.1%	2.9%	2.9%	2.8%
Dental Equipment	-2.6%	-0.9%	-1.0%	-0.9%	-0.7%	-0.5%	-0.4%	-0.9%
Dental Other	-0.5%	1.2%	0.7%	0.9%	0.0%	0.0%	0.0%	0.0%
Total Dental	-3.1%	1.6%	1.2%	1.0%	1.7%	1.5%	1.4%	1.2%
An Health Consum	40.3%	2.9%	3.0%	2.0%	2.0%	1.8%	2.2%	2.1%
An Health Equip	12.1%	8.7%	3.4%	2.3%	9.1%	8.3%	5.9%	7.7%
An Health Other	-2.2%	19.6%	37.6%	-11.9%	0.0%	0.0%	0.0%	0.0%
Total Animal Health	39.0%	3.2%	3.4%	1.8%	2.1%	1.9%	2.2%	2.2%
Other	5.2%	-3.2%	-3.6%	1.5%	9.1%	3.8%	3.8%	9.1%
Total Revenue	17.5%	2.5%	2.3%	1.5%	2.0%	1.7%	1.9%	1.8%
Cost of Sales	18.8%	2.0%	2.3%	0.9%	1.5%	1.9%	2.3%	1.8%
Adj Op Exp ex D&A	20.3%	6.7%	7.1%	5.0%	2.1%	2.1%	1.7%	0.0%
D&A ex deal amort	46.0%	10.2%	46.1%	10.3%	23.3%	10.2%	3.0%	3.7%
Adj Op Income	-4.0%	-3.8%	-11.4%	-1.4%	4.8%	-1.9%	-3.0%	4.7%
Adj EBITDA	0.4%	-2.3%	-6.5%	-0.2%	7.2%	-0.4%	-2.2%	4.6%
Interest income	-36.6%	-20.5%	0.8%	-45.4%	0.0%	0.0%	0.0%	0.0%
Interest expense	-17.6%	-17.7%	-5.9%	-1.3%	0.0%	0.0%	0.0%	0.0%
Other inc/(expense)	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m
Adj Pretax income	-2.0%	-2.4%	-12.2%	-2.4%	5.4%	-2.1%	-3.3%	5.2%
Adj Income Tax	-0.2%	-4.8%	-9.1%	2.5%	5.4%	-2.1%	-3.3%	5.2%
Adj Net Income	-2.9%	-1.0%	-13.8%	-4.8%	5.4%	-2.1%	-3.3%	5.2%
Adj EPS contin ops	1.9%	3.5%	-12.4%	-2.4%	8.0%	0.3%	-0.8%	7.9%
S/O	-4.7%	-4.3%	-1.6%	-2.4%	-2.4%	-2.4%	-2.5%	-2.6%

	Jul-16	Oct-16	Jan-17	Apr-17	Jul-17	Oct-17	Jan-18	Apr-18
	14 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks	13 Weeks
% Total Sales	1Q17e	2Q17e	3Q17e	4Q17e	1Q18e	2Q18e	3Q18e	4Q18e
Dental Consum	25.6%	24.1%	23.9%	24.6%	25.9%	24.4%	24.2%	24.8%
Dental Equipment	10.4%	13.7%	16.1%	15.7%	10.1%	13.4%	15.7%	15.3%
Dental Other	5.4%	5.1%	5.0%	5.0%	5.3%	5.0%	4.9%	4.9%
Total Dental	41.5%	42.9%	45.0%	45.4%	41.4%	42.8%	44.8%	45.1%
An Health Consum	56.1%	54.6%	52.2%	52.3%	56.1%	54.7%	52.3%	52.5%
An Health Equip	0.8%	0.8%	1.2%	0.9%	0.9%	0.9%	1.2%	0.9%
An Health Other	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Total Animal Health	57.7%	56.2%	54.1%	53.9%	57.7%	56.2%	54.3%	54.1%
Other	0.8%	0.9%	0.9%	0.7%	0.9%	0.9%	0.9%	0.8%
Total Revenue	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Cost of Sales	75.6%	75.9%	75.7%	74.6%	75.2%	76.0%	76.0%	74.6%
Adj Op Exp ex D&A	17.5%	16.6%	16.6%	16.5%	17.5%	16.6%	16.6%	16.2%
D&A ex deal amort	0.9%	0.9%	1.0%	1.0%	1.1%	1.0%	1.0%	1.0%
Adj Op Income	6.1%	6.6%	6.7%	8.0%	6.2%	6.4%	6.3%	8.2%
Adj EBITDA	6.9%	7.5%	7.7%	8.9%	7.3%	7.4%	7.4%	9.2%
Interest income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest expense	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%
Other inc/(expense)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adj Pretax income	5.3%	5.9%	6.0%	7.3%	5.5%	5.7%	5.7%	7.6%
Adj Income Tax	1.9%	2.1%	2.1%	2.6%	1.9%	2.0%	2.0%	2.6%
Adj Net Income	3.5%	3.8%	3.9%	4.8%	3.6%	3.7%	3.7%	4.9%

b. Annual projections

	Restated F2015a	F2016a	F2017e	F2018e
Dental Consum	1,319.4	1,378.9	1,393.4	1,434.0
Dental Equipment	818.3	807.0	797.0	792.0
Dental Other	277.3	290.4	292.0	292.0
Total Dental	2,415.0	2,476.2	2,482.4	2,518.0
An Health Consum	1,378.2	2,775.0	3,051.2	3,112.6
An Health Equip	46.7	50.0	53.0	57.0
An Health Other	31.7	37.2	40.0	40.0
Total Animal Health	1,456.6	2,862.2	3,144.2	3,209.6
Other	39.3	48.2	48.0	51.0
Total Revenue	3,910.9	5,386.7	5,674.6	5,778.6
Cost of Sales	2,850.3	4,063.9	4,280.0	4,360.0
Adj Op Exp ex D&A	703.2	870.1	952.0	966.0
D&A ex deal amort	32.8	43.7	54.6	59.8
Adj Op Income	324.6	409.0	388.0	392.8
Adj EBITDA	357.3	452.7	442.6	452.6
Interest income	3.1	2.8	2.0	2.0
Interest expense	(33.7)	(45.1)	(40.0)	(40.0)
Other inc/(expense)	0.3	1.2	0.0	0.0
Adj Pretax income	294.3	368.0	350.0	354.8
Adj Income Tax	100.9	126.1	122.5	124.2
Adj Net Income	193.4	241.9	227.5	230.6
Adj EPS contin ops	1.94	2.47	2.40	2.50
S/O	99.7	97.9	94.6	92.3

Y-Y change	Restated F2015	F2016a	F2017e	F2018e
Dental Consum	2.6%	4.5%	1.1%	2.9%
Dental Equipment	2.9%	-1.4%	-1.2%	-0.6%
Dental Other	3.5%	4.7%	0.6%	0.0%
Total Dental	2.9%	2.5%	0.2%	1.4%
An Health Consum	22.2%	101.4%	10.0%	2.0%
An Health Equip	5.5%	7.2%	6.0%	7.5%
An Health Other	1.5%	17.3%	7.5%	0.0%
Total Animal Health	21.1%	96.5%	9.9%	2.1%
Other	15.6%	22.7%	-0.5%	6.3%
Total Revenue	9.1%	37.7%	5.3%	1.8%
Cost of Sales	11.1%	42.6%	5.3%	1.9%
Adj Op Exp ex D&A	-1.4%	23.7%	9.4%	1.5%
D&A ex deal amort	6.3%	33.2%	25.2%	9.4%
Adj Op Income	6.3%	26.0%	-5.2%	1.2%
Adj EBITDA	6.3%	26.7%	-2.2%	2.3%
Interest income	n/m	-7.9%	-29.3%	0.0%
Interest expense	-5.7%	33.7%	-11.2%	0.0%
Other inc/(expense)	n/m	n/m	n/m	n/m
Adj Pretax income	7.8%	25.1%	-4.9%	1.4%
Adj Income Tax	6.2%	25.0%	-2.9%	1.4%
Adj Net Income	8.7%	25.1%	-6.0%	1.4%
Adj EPS contin ops	10.8%	27.4%	-2.7%	3.9%
S/O	-1.9%	-1.9%	-3.3%	-2.4%

% Total Sales	Restated F2015	F2016a	F2017e	F2018e
Dental Consum	33.7%	25.6%	24.6%	24.8%
Dental Equipment	20.9%	15.0%	14.0%	13.7%
Dental Other	7.1%	5.4%	5.1%	5.1%
Total Dental	61.8%	46.0%	43.7%	43.6%
An Health Consum	35.2%	51.5%	53.8%	53.9%
An Health Equip	1.2%	0.9%	0.9%	1.0%
An Health Other	0.8%	0.7%	0.7%	0.7%
Total Animal Health	37.2%	53.1%	55.4%	55.5%
Other	1.0%	0.9%	0.8%	0.9%
Total Revenue	100.0%	100.0%	100.0%	100.0%
Cost of Sales	72.9%	75.4%	75.4%	75.5%
Adj Op Exp ex D&A	18.0%	16.2%	16.8%	16.7%
D&A ex deal amort	0.8%	0.8%	1.0%	1.0%
Adj Op Income	8.3%	7.6%	6.8%	6.8%
Adj EBITDA	9.1%	8.4%	7.8%	7.8%
Interest income	0.1%	0.1%	0.0%	0.0%
Interest expense	-0.9%	-0.8%	-0.7%	-0.7%
Other inc/(expense)	0.0%	0.0%	0.0%	0.0%
Adj Pretax income	7.5%	6.8%	6.2%	6.1%
Adj Income Tax	2.6%	2.3%	2.2%	2.1%
Adj Net Income	4.9%	4.5%	4.0%	4.0%

16. Financial metrics

	4/30/16
Debt	1,038.7
Equity	1,441.7
Tangible book	625.1
Market value	4,622
Cash	137.5
EV	5,523.7

	F2015a	F2016a	F2017e	F2018e
EBITDA	357.3	452.7	449.0	459.6
Capex	-60.7	-79.4	-60.0	-60.0
Surplus FCF (Net income + depr/amort - capex)	164	189	231	233
EV/EBITDA	15.5	12.2	12.5	12.2