

VALUE FOCUS

Animal Health Industry



Year-End 2017

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Veterinary Trends

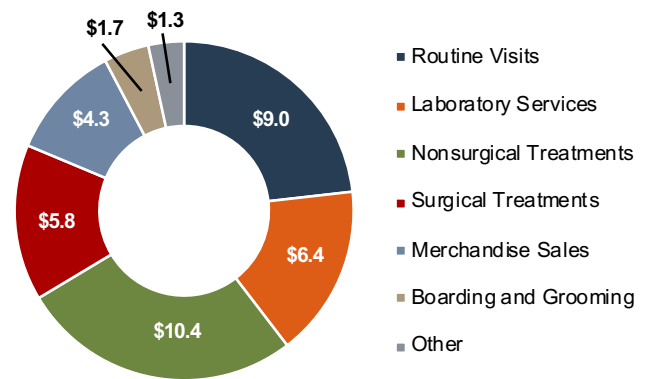
The demand for veterinary services continues to grow thanks to several key growth factors.

- Pet Ownership Trends.** The American Pet Products Association reports that 65% of U.S. households own a pet, up from 62% in 2012. IBISWorld indicates that the number of pets has grown to 172 million in 2017 from 164 million in 2012 and expects the number of pets to grow by 11% over the next five years.
- Pet Lifespan Trends.** Increasing pet lifespans raise the demand for chronic disease care.
- Technological Change.** Animal care treatments are becoming increasingly sophisticated. Diagnostic tests are allowing for more precise and accurate treatment, while drugs and equipment previously used only to treat humans are being applied to pet health issues.

Veterinary offices have historically offered pet food, medicines, grooming, boarding, and supplies; however, retailers focusing on pets have expanded their focus to include many of these services. Supermarkets, brick and mortar pet stores, and online stores are offering wider varieties of pet care products, including products traditionally sourced from veterinary practices.

Veterinary Products & Services

(Billions)



Source: IBISWorld

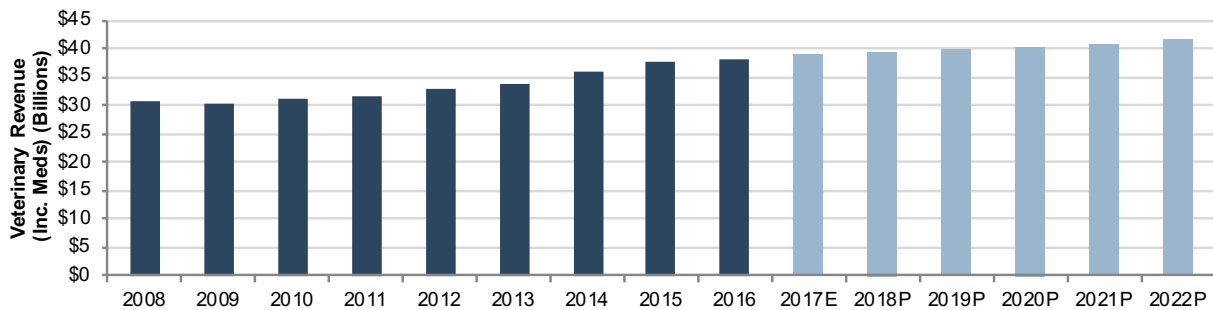
Veterinary Trends

As diagnostics and treatment plans improve, veterinarians are becoming increasingly specialized. As a result, consolidation of general veterinary practices and a variety of specialists have allowed clinics to treat broader swatches of patients and to reduce administrative costs. Private practices are also consolidating into chains, hoping to achieve the same effects. However, the industry remains highly fragmented. Almost 90% of veterinary practices are non-corporate practices, and many remain small with only a single office location.

Innovations in technology and pharmaceuticals also drive veterinary growth. The application of GMO practices to animals will result in new areas of application for animal pharmaceuti-

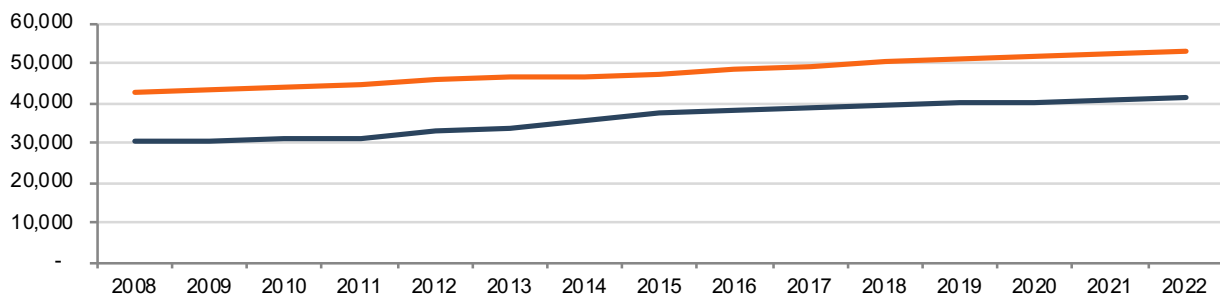
cals and biotechnology. Increasing use of human equipment (including MRIs, ultrasounds, and radiation therapy) and medicine for pet treatment will also expand the reaches of the animal pharmaceutical and biotechnology industry. Advances in MRI and ultrasound imaging will allow improved diagnostic abilities. The use of linear accelerators for animal cancer treatment has enabled the treatment of new cancers. Advancements in 3-D printers allow for the manufacture of custom bone, blood vessel, muscle, and organ implants, in addition to the manufacture of animal prosthetics. Such innovations also drive the growth of specialist practices. Technological and pharmaceutical changes are expected to continue.

Veterinary Revenue



Source: IBISWorld

Revenue vs. Number of Enterprises



Source: IBISWorld

Retail and Pet Services Trends

The rising economy, particularly increases in disposable income, has helped spur retail growth. IBIS World estimates that pet retail revenue increased 2.4% in the past five years. The focus on pets as full members of the family has continued to grow, spurring demand for premium pet services,

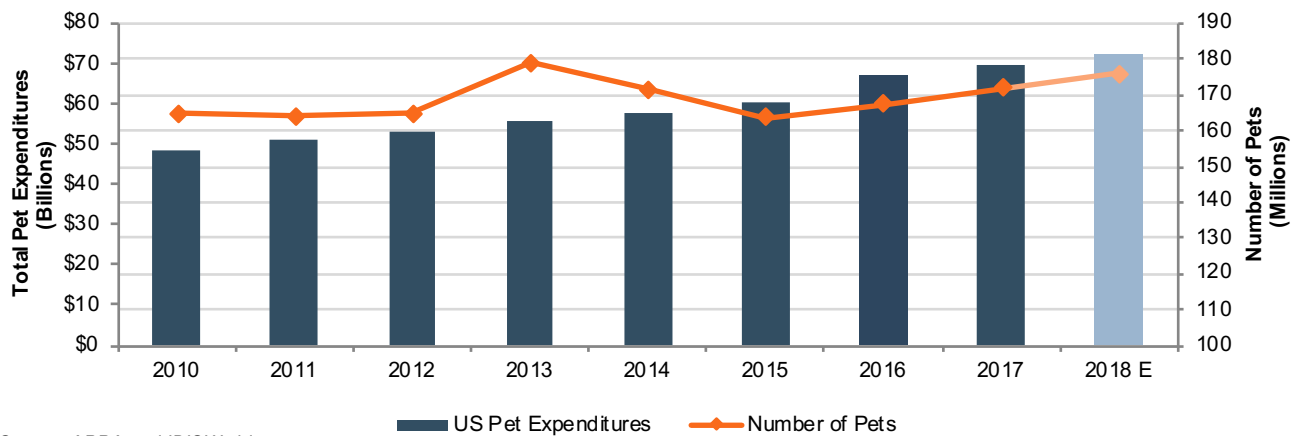
including grooming, luxury boarding, and pet therapy. However, retail pet stores are also being hit by online business and the diversification of mass retailers. Future growth is expected to slow to 1.3% over the next five years.

Industry Specific Trends

While the animal health industry is sensitive to changes in the overall economy, it is also impacted by the level of pet ownership, disposable income, and continued technological changes. Pet ownership has grown 5.8% in 2017, reaching

69.5 million pets. Pet ownership is expected to grow 6.1% in 2018 and reach 184 million pets. According to American Pet Products Association (APPA), pet expenditures has increased every year since 2010.

Number of Pets and Pet Expenditures



Source: APPA and IBISWorld

Publicly Traded Animal Health Companies

Company Name	Ticker	Market Values		LTM Financial Performance				Current Per Share Amounts			Est. Forward Performance			
		Stock Price 12/31/17	Ent. Value	Rev.	EBITDA	EBIT	EPS	Book Value	Tang. Book	Annldz Div.	Rev.	EBITDA	EBIT	EPS
PetMed Express, Inc.	PETS	\$45.50	\$846	\$270	\$52	\$50	\$1.70	\$5.40	\$5.36	\$1.08	\$281	\$49	\$51	\$1.76
Heska Corporation	HSKA	\$80.21	577	129	23	18	\$1.30	\$13.75	\$9.83	\$0.00	151	26	21	\$1.95
Zoetis Inc.	ZTS	\$72.04	38,509	5,307	1,976	1,736	\$1.75	\$3.64	(\$2.08)	\$0.50	5,527	2,187	1,992	\$2.62
IDEXX Laboratories, Inc.	IDXX	\$156.38	14,429	1,969	496	413	\$2.94	(\$0.62)	(\$3.42)	\$0.00	2,109	551	458	\$3.45
Abaxis, Inc.	ABAX	\$0.00	(161)	235	45	37	\$1.08	\$12.38	\$12.34	\$0.00	247	55	39	\$0.00
Aratana Therapeutics, Inc.	PETX	\$5.26	195	26	(36)	(37)	(\$1.17)	\$1.88	\$0.76	\$0.00	29	(19)	(32)	(\$0.70)
Parnell Pharmaceuticals Holdings Ltd	PARN	\$0.00	23	15	(2)	(3)	\$0.00	\$0.00	\$0.00	\$0.00	0	0	0	\$0.00
Phibro Animal Health Corporation	PAHC	\$33.50	1,595	784	119	95	\$1.54	\$4.19	\$2.05	\$0.40	792	128	104	\$1.58
Jaguar Health, Inc.	JAGX	\$2.10	31	4	(11)	(12)	(\$7.59)	\$2.46	(\$3.04)	\$0.00	10	0	(13)	(\$0.16)
Kindred Biosciences, Inc.	KIN	\$9.45	185	0	(31)	(32)	(\$1.23)	\$3.00	\$3.00	\$0.00	5	(30)	(35)	(\$1.21)

Company Name	Ticker	Comparative Ratios		LTM Valuation Multiples				Other Valuation Metrics			Forward Valuation Multiples			
		EBITDA Margin	Beta (5 Year)	EV / Rev.	EV / EBITDA	EV / EBIT	Price / EPS	Price / BVPS	Price / TBVPS	Div. Yield	Rev.	EBITDA	EBIT	EPS
PetMed Express, Inc.	PETS	19.3%	1.10	3.1x	16.3x	17.0x	26.8x	8.4x	8.5x	2.4%	3.0x	17.2x	16.5x	25.9x
Heska Corporation	HSKA	17.8%	0.74	4.5x	25.1x	31.7x	61.7x	5.8x	8.2x	0.0%	3.8x	22.0x	27.0x	41.2x
Zoetis Inc.	ZTS	37.2%	1.06	7.3x	19.5x	22.2x	41.2x	19.8x	nm	0.7%	7.0x	17.6x	19.3x	27.5x
IDEXX Laboratories, Inc.	IDXX	25.2%	0.42	7.3x	29.1x	34.9x	53.2x	nm	nm	0.0%	6.8x	26.2x	31.5x	45.3x
Abaxis, Inc.	ABAX	19.3%	0.00	(0.7)	(3.6)	(4.3)	0.0x	0.0x	0.0x	nm	(0.7)	(2.9)	(4.1)	nm
Aratana Therapeutics, Inc.	PETX	-140.2%	3.39	7.6x	nm	nm	nm	2.8x	6.9x	0.0%	6.7x	nm	nm	nm
Parnell Pharmaceuticals Holdings Ltd	PARN	-16.5%	0.00	1.6x	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Phibro Animal Health Corporation	PAHC	15.2%	1.26	2.0x	13.4x	16.8x	21.8x	8.0x	16.4x	1.2%	2.0x	12.5x	15.4x	21.2x
Jaguar Health, Inc.	JAGX	-255.7%	0.00	7.0x	nm	nm	nm	0.9x	nm	0.0%	3.1x	nm	nm	nm
Kindred Biosciences, Inc.	KIN	nm	0.20	nm	nm	nm	nm	3.1x	3.1x	0.0%	34.8x	nm	nm	nm
Average		-30.9%	0.82	4.4x	16.6x	19.7x	34.1x	6.1x	7.2x	0.5%	7.4x	15.4x	17.6x	32.2x
Median		17.8%	0.58	4.5x	17.9x	19.6x	34.0x	4.5x	7.6x	0.0%	3.8x	17.4x	17.9x	27.5x

Source: Capital IQ

M&A Activity

The majority of M&A activity in the veterinary services industry revolves around the consolidation of smaller veterinary practices. Information concerning pricing and multiples for these transactions is not often available. Additionally, specialists will often combine resources with many specialists (either in the same specialty or across a variety of specialties) in order combine market bases or purchasing power. These consolidation trends are expected to continue through at least

the next five years, resulting in potential cost efficiencies that may increase profits at the surviving companies.

In January 2017, Mars, Inc. announced plans to acquire VCA (Woof) for total consideration of \$7.7 billion at a price of \$93 per share. Prior to the announcement, VCA traded at \$71.77. The Mars price represented a 21% premium to its previous trading price. The transaction closed in September 2017.

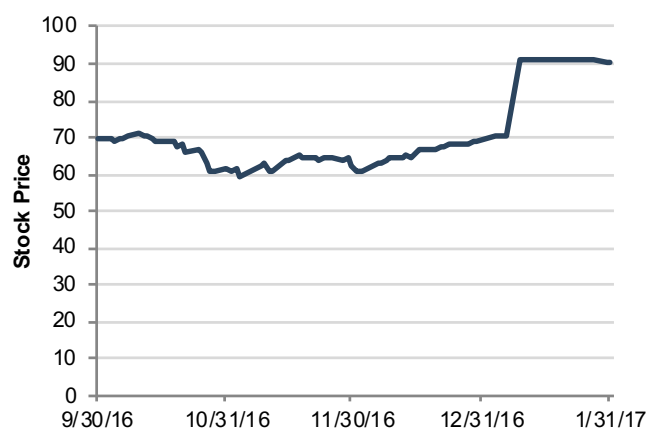
Trends in EBITDA Pricing Multiples

	1Q 2017	2Q 2017	3Q 2017	4Q 2017
VCA, Inc. (WOOF)	17.23	16.69	nm	nm
PetMed Express (PETS)	8.99	17.48	12.63	16.29
Heska, Inc. (HСКА)	33.27	31.67	28.47	25.13
Zoetis, Inc. (ZTS)	17.68	20.19	20.32	19.49
IDEXX Laboratories (IDXX)	32.68	32.83	30.55	29.65
Abaxis, Inc. (ABAX)	19.34	22.29	20.03	23.10
Phibro Animal Health (PAHC)	11.78	14.90	14.87	13.59

Source: Capital IQ

Presented pricing multiples represent enterprise value relative to EBITDA from the prior twelve months
EBITDA: Earnings before interest, taxes, depreciation, and amortization

VCA Stock Price



Source: Bloomberg

Mars/VCA Deal Valuation

Total Consideration to Shareholders	7,681.8
Implied Equity Value	7,681.8
Implied Enterprise Value/LTM Revenue	3.6x
Implied Enterprise Value/LTM EBITDA	18.5x
Implied Enterprise Value/LTM EBIT	23.4x
Implied Equity Value/LTM Net Income	36.7x
Implied Equity Value/Book Value	5.2x

Source: Bloomberg

Macroeconomic Outlook

Macroeconomic trends can impact the industry. In general, rising GDP and rising personal consumption will have positive impacts on animal health spending. The Great Recession reached its official end in mid-2009. The subsequent period of expansion was initially characterized by slow gains. A period of stronger and more consistent growth followed, although overall economic performance remained muted for several years. Equity markets have experienced significant growth over the past several months. The unemployment rate has remained stable for several months near long-term lows and payroll gains continue to be strong. Labor force participation remains low but has been stable for several months. Economic growth is expected to remain positive, though rising interest rates may dampen future growth. Inflation rates remain lower than expected and may interfere

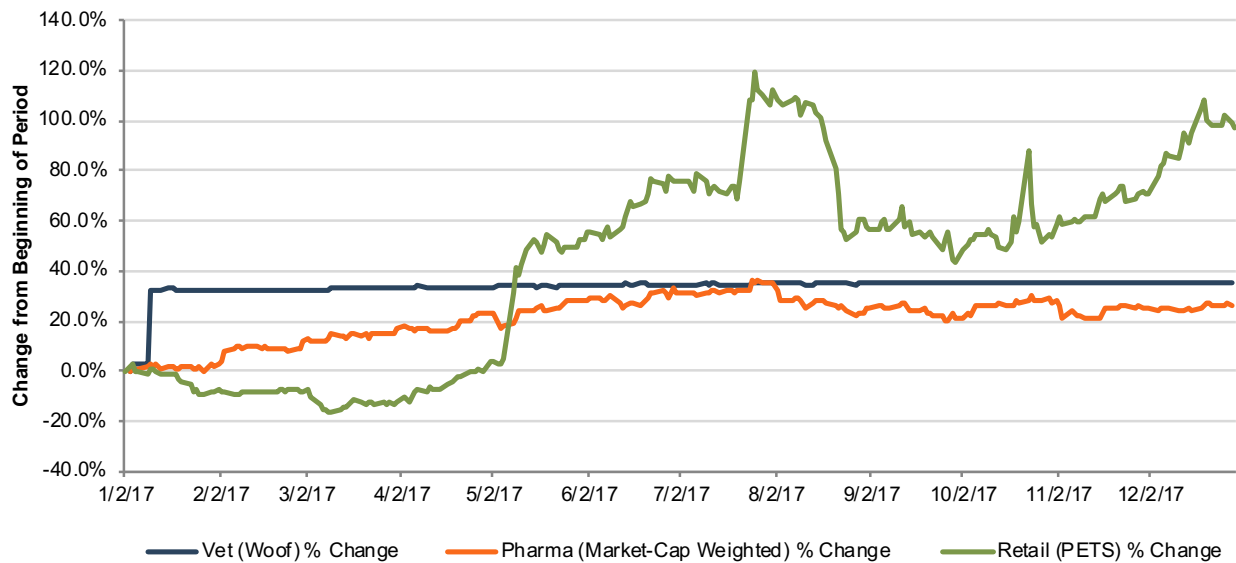
with the Federal Reserve's plans to increase interest rates. Hurricanes and adverse weather disrupted many economic activities in the third quarter, and some of the performance in the fourth quarter is attributable to recovery from the weather events. GDP growth expectations from private economists surveyed by *The Wall Street Journal* are on the order of 2.5% and 2.7% for the first and second quarters of 2018, respectively, and 2.6% for all of 2018. This compares to annual GDP growth of 2.9%, 1.5%, and 2.3% in 2015, 2016, and 2017, respectively. The Federal Reserve is planning to reduce its balance sheet at a steady and predictable rate. Many aspects of the future economy remain uncertain, including future inflation, GDP performance and the impact of the Tax Cuts and Jobs Act of 2017.

Industry Outlook

The traditional care veterinary industry faces competition from retail stores such as PetSmart, which are increasingly offering full-service veterinary hospitals in existing storefronts. As traditional vets expand their practices to compete with in store clinics, emergency and specialty vets face increasing competition. Increasing specialization and further developments in pet care are expected to drive prices higher, although competition is expected to remain strong. Pet ownership is expected to increase, resulting in

continual increases in demand for services. Increased pet insurance coverage could increase demand for high-cost procedures. Based on industry reports, veterinary service revenue is expected to grow at an annualized rate of 1.3% over the five-year period ending in 2022. However, the industry remains sensitive to overall economic trends, and an economic recession could result in lower discretionary income and subsequently lower demand for pet-related services and products.

Median Percent Change in LTM Stock Prices by Industry Segment



Source: Bloomberg

Mercer Capital

Animal Health Industry Services

Mercer Capital has expertise providing business valuation and financial advisory services to companies in the animal health industry.

Industry Segments

Mercer Capital serves the following industry segments:

- General, Specialty, and Emergency Care
- Pharmaceutical & Biotechnology
- Retail and Pet Services

Services Provided

- Valuation of animal health companies and veterinary practices
- Transaction advisory for mergers and acquisitions
- Valuations for purchase accounting and impairment testing
- Fairness and solvency opinions
- Litigation support for economic damages and valuation and shareholder disputes

Contact a Mercer Capital professional to discuss your needs in confidence.

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