

## **ZOETIS (NYSE) - ZTS**

### **Company Description:**

Zoetis Inc. engages in the discovery, development, manufacture, and commercialization of animal health medicines and vaccines, focusing on livestock and companion animals. Markets its products across four regions: the U.S., Europe/Africa/Middle East, Canada/Latin America, and Asia/Pacific; eight core species: the livestock species of cattle, swine, poultry, sheep and fish, and the companion animal species of dogs, cats, and horses; and five major product categories: anti-infectives, vaccines, parasiticides, medicated feed additives and other pharm. products. Operated as a business unit of Pfizer before spinoff on 2/6/2013. Has 9,000 employees. 49% US, 51% Foreign; 63% Livestock, 37% Companion; CEO: Juan Ramon Alaix Addr. Florham Park, NJ [www.zoetis.com](http://www.zoetis.com).

### **Basic Description:**

The net profits have grown consistently for over a decade. ACM has followed this company through its PFE research. The stock price has not moved widely as the company communicated earnings and met expectations. Over time, these predictions may become more divergent. ZTS is likely to be a capital consumer at high rates. For that reason, the dividend is likely to be limited and buybacks are unlikely. A constraint on the ability to expand into new markets is the debt limit. ZTS was spun off with a significant debt load. However, given the high rates of capital, ZTS should be able to generate capital for expansion, increase earnings and thus, reduce the debt load.

### **Profitability Description:**

ZTS has global profitability with accelerating sales in emerging markets. 2/3 of its revenues come from livestock and 1/3 comes from companion animals. Both of these categories are increasing at a 5-6% rate. The profitability is the highest in developed markets. Operating margins are superior and likely to increase as emerging market corporate expenses settle and \$300 mln of costs are likely to be removed by 2017 by dropping skus and headcount. The topline should drop by \$300 mln and operating profit by \$90 mln. Of course, companion animal percentages are much higher in the developed world and a likely source of higher margins. Durability is high as top 25 brands average 27 years old. The debt level is fairly high, but ZTS has significant free cash flows to service and reduce that debt.

### **Core Advantage Description:**

ZTS competes in a business with strong brand loyalty. In addition, it is a "cash" business without third party payment systems. While insurance helps with large payments, third party payment systems can drive generic business away from brands. At this time, ZTS does not face this issue. In addition, development of drugs is much less difficult than the hurdles for humans. But the likelihood of drug development favors the largest players. Livestock health is critical and the increase of a middle class means that more demand will develop. However, it is constrained by the natural inefficiency of meat versus vegetarian approaches. Also the growth of companion animals is robust and likely to continue. But, removing drugs from "food chain" could hurt core value added.

### **Investment Thesis:**

ZTS is a powerful company in the animal health field with a global growth rate at 5-6% due to rapid emerging market growth, allowing for a bottom line growth rate of 10% due to some margin expansion, share repurchases and a slightly lower tax rate. In addition, a 1% dividend should continue to be paid.

### **Purchase Description:**

ACM considers ZTS a buy at \$38 per share as a Tier I (max. of 20X adj net earnings, currency adj. \$1.90) to 4.5% and \$41.75 to 3% with a sell at \$60 (over 30X earnings, high P/E historically, e.g.model sell at Tier I 6% and capl retention model average).

	FY End		Stock Price			Market Value (in mlns)															
	December		\$54.00			\$26,730															
	1996	1997	1999	2000		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net Profit (mln)																595.0	709.0	789.0	889.0	965.0	1,140.0
EPS																	\$1.42	\$1.57	\$1.79	\$1.95	\$2.30
Operating EPS																	\$1.42	\$1.57	\$1.79	\$1.95	\$2.30
CY. P/E Ratios																	22.6	21.8	26.0		
Yrly Price Low																	29.0	28.7	39.0	38.0	
Yrly Price High																	35.0	45.0	55.0	54.2	
Dividends Paid																	130.0	145.4	164.1	188.1	207.9
Dividends PS																	\$0.26	\$0.29	\$0.33	\$0.38	\$0.42
Ave. Div. Yld.																	0.81%	0.79%	0.70%	0.82%	
Shares Outstdg.																	500.0	501.3	497.4	495.0	495.0
Buyback \$ (mln)																	0.0	(49.0)	184.7	110.6	0.0
Shr. Equity (mln)																	940	1,311	1,068	1,500	2,300
Book Value PS																	\$1.88	\$2.62	\$2.15	\$3.03	\$4.65
LT Debt (mln)																	3,642	3,643	4,463	4,500	4,000
Return On Eq.																	75.43%	60.18%	83.24%	64.33%	49.57%
Return On Capl.																	15.47%	15.93%	16.07%	16.08%	18.10%

Description:

Instructions:

Analysis:

Observations:

## Investment Characteristics

### Earnings Analysis:

### Use Of Earnings Analysis:

Growth Rate %: 12.85%

Avg Div Payout %: 18.73%

Quality %: 100.00%

Avg Stk Buyback %: 9.32%

	1995	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenues (mln)																	4,302.0	4,561.0	4,785.0	4,765.0	4,890.0	5,200.0
SPS																		\$9.12	\$9.54	\$9.58	\$9.88	\$10.51
Adj. Sales (mln)																						

### Sales Analysis:

### Sales Analysis (last 5 yrs.):

Growth Rate %: 3.25%

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Growth Rate PS: #NUM!

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	1995	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Oper. Margin																		37.70%	29.00%	32.00%	33.00%	35.00%
Tax Rate																		29.20%	26.80%	26.00%	32.00%	30.00%
Deprec. (mln)																		209.0	204.0	199.0	200.0	200.0
Depreciation %																		29.48%	25.86%	22.38%	20.73%	17.54%

### Description:

### Instructions:

The operating margin is presented as VL does; 2013 does not seem correct.

### Analysis:

### Observations:

## Description & Analysis of Profitability (in mlns):

			2013		2014		2015		2016
<b>Revenues:</b>	<b>2.2%</b>	<b>4,561</b>			<b>4,785</b>		<b>4,765</b>		
U.S		1,902	41.7%		2,059	43.0%	2,328	48.9%	
EurAfrME/Intl		1,168	25.6%		1,191	24.9%	2,386	50.1%	
Canada/Latam/Contract manuf		778	17.1%		815	17.0%	51		
AsiaPacific		713	15.6%		720	15.0%			
<b>Expenses</b>	<b>-1.4%</b>	<b>3,562</b>			<b>3,634</b>		<b>3,465</b>		
Cost of sales		1,669	36.6%		1,717	35.9%	1,738	36.5%	
Research and development		399	8.7%		396	8.3%	364	7.6%	
2% Selling G&A expenses		1,613	35.4%		1,643	34.3%	1,532	32.2%	
Stuff		86			85		381		
Net of tax costs for ANI (see be.		205			207		550		
<b>EBITDA:</b>	<b>11.4%</b>	<b>1,208</b>	26.5%		<b>1,355</b>	28.3%	<b>1,499</b>	31.5%	
Amortization/Dep.		209			204		199		
<b>"Free" Cash Flow</b>	<b>11.6%</b>	<b>1,024</b>	22.5%		<b>1,175</b>	24.6%	<b>1,275</b>	26.8%	
Capital Expenditures		184			180		224		
<b>Operating Margin:% of revenue</b>	<b>14.1%</b>	<b>999</b>	21.9%		<b>1,151</b>	24.1%	<b>1,300</b>	27.3%	
U.S		1,045	54.9%		1,176	57.1%	1,390	59.7%	
EurAfrME/Intl		420	36.0%		437	36.7%	941	39.4%	
Canada/Latam		266	34.2%		310	38.0%			
AsiaPacific		271	38.0%		278	38.6%			
Other		(887)			(1,117)		(899)		
<b>External Costs:</b>		<b>291</b>			<b>357</b>		<b>411</b>		
Taxes:% of EBT		187	21.1%		233	22.5%	206		
Interest exp., net		113			117		124		
Income from disc. Oper.		(9)			7		81		
<b>Earnings:</b>	<b>12.1%</b>	<b>708</b>	15.5%		<b>794</b>	16.6%	<b>889</b>	18.7%	
<b>Dividend Paid/% of FCF:</b>		<b>130</b>	12.7%		<b>145</b>	12.4%	<b>164</b>	12.9%	
<b>Common Stock/% of FCF:</b>		<b>0</b>	0.0%		<b>(49)</b>	-4.2%	<b>185</b>		
Share buybacks: Stmt of C. F.					(33)		192		
<b>Net Bness Acquisitions:</b>		<b>0</b>			<b>0</b>		<b>1,002</b>		
Purchases							1,002		
Dispositions									

**Description:** Companion moving up faster than livestock - partly emerging market issue; partly companion pet growth

**Instructions:** This page uses ZTS's adj. net income presentation - not a GAAP figure. VL uses this number as well.  
The impact causes distortion on depreciation and taxes. Dep should be adjusted lower; taxes higher.

**Analysis:**

**Observations:**

## Balance Sheet (in millions):

	2013	2014	2015	
<b>Assets:</b>	<b>9.8%</b>	<b>6,558</b>	<b>6,607</b>	<b>7,913</b>
Cash	610	882	1,154	
Accts rec. less allow.	1,138	980	937	
Inventories	1,293	1,289	1,467	
Other current assets inc.def.taxes	97	109	71	
Investments	219	205	201	
Def tax, charges and assets	63	54	131	
Prop. Plant & Equipt., Net	1,295	1,318	1,307	
Goodwill and Other Intangibles	982	976	1,455	
Other Intangibles, Net	861	794	1,190	
<b>Liabilities:</b>	<b>10.4%</b>	<b>5,596</b>	<b>5,270</b>	<b>6,822</b>
Short term debt	15	7	5	
Accrued compensation	229	238	234	
Accounts Payable	506	290	293	
Other current liabilities	665	551	849	
Long-term debt	3,642	3,643	4,863	
Deferred Inc Taxes and Nonc Liabilities	322	277	264	
Other payables	217	264	314	
<b>Shareholder's Equity:</b>	<b>6.5%</b>	<b>962</b>	<b>1,337</b>	<b>1,091</b>
Common Stock	5	5	5	
Other paid-in capital	878	958	1,012	
Retained income	276	709	876	
Accumulated other comprehensive inc	-219	-361	-622	
Less treasury stock, at cost				

**Description:**

**Instructions:**

**Analysis:**

**Observations:**

Description & Analysis of Debt Levels (in mlns):	
Summary:	Debt is a four-letter word. Debt causes the years of repayment of capital to equity shareholders to stretch out into the more distant future. Even worse, debt can cause the best business model to become the property of bondholders in a rough economic environment.
Total Debt-Capital:	The measure of total debt to total capital is useful when book value is a good measure of a firm's worth. This is particularly true of traditional businesses where property, plant and equipment are important. Further, it helps to have this ratio in capital intensive businesses with cyclical earnings. <div><div>Total Deb6,822</div><div>Total Cap7,913</div><div>Ratio:86.21%</div><div>Here, deferred income taxes have been excluded.</div><div>Here, deferred income taxes have been excluded.</div></div>
Long Term Debt-Cap:	The measure of long term debt to total capital is useful when total debt is distorted by the high presence of current assets being financed by current liabilities. Again, the measure works best within a traditional industry setting. The ratio helps position the equity shareholders. <div><div>L. T. Debt4,863</div><div>L. T. Capi5,954</div><div>Ratio:81.68%</div><div>Here, the current liabilities have been excluded.</div><div>Here, the current liabilities have been excluded.</div></div>
Net Income Payback:	The measure of how quickly total debt is repaid by net income is a conservative measure, as it includes debt such as current liabilities, that are financed by current assets and excludes some sources of cash, such as noncash amortization numbers. <div><div>Total Deb6,822</div><div>Net Incomr339</div><div>Years Pay20.1</div><div>L.T. Debt:4,863</div><div>Net Incomr339</div><div>Years Pay14.3</div></div>
Addback Net Inc. Pay:	The measure of how quickly debt is repaid by addback net income is a good measure, as it starts with GAAP net income and adds back expenses on an after-tax basis that are clearly discretionary, such as business acquisitions to better analyze the strength of the repayment stream. <div><div>L.T. Debt:4,063</div><div>Net Incomr339</div><div>Addback:550</div><div>Years Pay4.6</div><div>Merger charges, writedowns above the line, dep. Amort below the line less capex</div></div>
Interpretations:	Debt needs to be monitored.

Description & Analysis of Pension Issues(in mlns):	
Summary:	Corporate defined benefit or "pension" plans are a major obligation of companies. Because of the actuarial changes involved, obligations can move significantly. As a result, corporations have steadily moved toward defined contribution plans as they froze or terminated pension plans. These obligations are measured in two ways: accumulated and projected. As the name implies, projected is what is likely and a greater number than accumulated. This obligation is typically in three categories: US, non-US and post-retirement. There are assets which are set up to fund these plans. The difference is the funded status. This number provides an indication of the additional potential obligation of the company and is included in the balance sheet - typically in "other assets" and "other liabilities." That may not be the accurate value of the obligation in the event that assumptions are unreasonable. Because pensions are funded over time, it is less likely to have an immediate funding need that cripples the company or its earnings. Rather than focus on these assumptions, we estimate the size of plan's underfunding relative to the market value of the company. The greatest financial risk involves companies which are small relative to these funding requirements. For our purposes, we set this limit at 25% for the total underfunded as a percentage of market capitalization.
Year	2014201520162017201820192020202120222023
Pension Pl	YesYes
Frozen:	YesYes
Top-Barred	NoNo
Underfund	YesYes
Amount:	66.0055.00
Market Cap	23,377.8022,819.50
Ratio:	0.28%0.24%

Description & Analysis of Stock Options (in mlns):	
Summary:	Stock options are a difficult form of compensation to assess. Heavy use of stock options creates stock issuance and a demand for stock repurchasing in some industries. This can be dilutive to shareholders if no repurchasing occurs or can absorb cash flows in the event that repurchasing occurs to offset issuance.

FASB ASC 718	2014201520162017201820192020202120222023
After tax E	32.0043.00
Net profits:	789.00889.00
%	4.06%4.84%
Cash net of	-33.00192.00
Net share x	-49.01184.71
Difference:	-18.017.29
% of Net p	2.03%0.82%

## Industry Overview

Drugs are a wonderful business, with pricing power, high margins and consistent demand. Further the economy does not directly affect it. However, there are significant risks in the legislative area because of the importance of the products. Further, there are distribution threats - internet and retail. Also, the issue of product liability can be huge in this area. Drug testing is much easier for animals than for humans.

## Industry Comparisons

### Operating Statistics:

Company	Yrs.Paybk	Sales	ROC	Operating Margin
ZTS	4.57	4,890	16.08%	33.00%
IDXX	1.70	1,600	30.00%	23.00%

### Market Statistics:

Company	P/B	P/E	Divd. Yld.	EV/Sales
ZTS	17.82	27.7	0.82%	638.65%
IDXX	64.20	38.0	0.00%	475.00%

## Qualitative Characteristics

### Positives:

### Negatives:

#### Product/Service:

<b>Pricing Power:</b>	good; generics have 10-40% drop
<b>Durability:</b>	continually renew
<b>Brand Appeal:</b>	important
<b>Unique:</b>	
<b>Role Of Media:</b>	
<b>Toll Bridge:</b>	
<b>Global Opportunity</b>	Yes
<b>Competition</b>	
<b>Economic Risk:</b>	Low
<b>Government Role</b>	High; sets better barriers to entry
<b>Role Of Technology:</b>	
<b>Supply/Demand:</b>	

competition with Merck and Lilly
not a "consumer" brand
no
Yes
Low
Other companies

#### Financial:

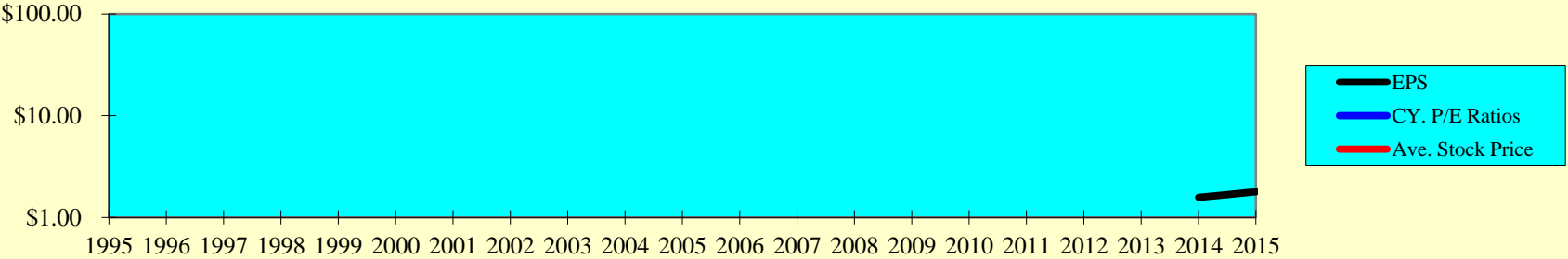
<b>Business Model:</b>	Big Pharma
<b>High Capital Reinv.:</b>	Yes for growth
<b>Effective As Public:</b>	Yes
<b>Ownership:</b>	
<b>Growth:</b>	Yes in emerging markets
<b>Concentration:</b>	

#### Management:

<b>Proxy Information:</b>	
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Average Stock Price vs. Average P/E vs. EPS



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EPS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.42	\$1.57	\$1.79
CY. P/E Ratios	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.57	21.80	26.00
Ave. Stock Price	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.00	36.85	47.00

Price/Earnings Ratio: used -	\$1.95	Price/Sales Ratio: used -	\$9.88
Three year average low	20.2	Three year average low P/S is	3.06
Three year average high	28.0	Three year average high P/S is	4.42
If we set the purchase at the ave. Three year low P/E,		If we set the purchase at the ave. Three year low P/S,	
the price implied is:	\$39.32	the price implied is:	\$30.27
If we set the sell at the ave. Three year high P/E,		If we set the sell at the ave. Three year high P/S,	
the price implied is:	\$54.62	the price implied is:	\$43.68
Price/Book Ratio: used -	\$3.03	Price/Cash Flow Ratio: used -	\$2.35
Three year average low	14.85	Three year average low P/CF is	16.0
Three year average high	20.48	Three year average high P/CF is	22.3
If we set the purchase at the ave. Three year low P/B,		If we set the purchase at the ave. Three year low P/CF,	
the price implied is:	\$45.01	the price implied is:	\$37.75
If we set the sell at the ave. Three year high P/B,		If we set the sell at the ave. Three year high P/CF,	
the price implied is:	\$62.06	the price implied is:	\$52.50

Initial Rate of Investment		
	Current Price	\$54.00
	Current EPS	\$1.95
	Initial ROI	3.61%

Relative Value to Investment In T-Bonds		
	Current EPS	\$1.95
	T-Bond Rate	4.00%
	Relative Value	\$48.74

Valuation as an Equity Bond:		
	Current BV	\$3.03
	Current ROE	64.33%
	Retained %	21.27%
	Net BV Growth	13.69%
	BV in Year 10	\$10.93
	EPS in Year 10	\$7.03
	Valueat20.P/E	\$140.62
	Total Dividends	\$8.75
	Total F.Value	\$149.37
	Purchaseat14%	\$40.29

Valuation on Earnings Growth:		
	Current EPS	\$1.95
	EPS in Year 10	\$5.06
	Ave. P/E Ratio	22.57
	Valueat20.P/E	\$109.88
	Price Return	6.48%
	Dividend Return	0.82%
	Total Return	7.30%
	Purchaseat14%	\$29.64
	Sellat6%	\$61.36

Capital "charge" approach

1,709 ebitda

0.12 required return

0.08 growth rate (not on EPS) (due to acquisition and synergies)

0.8 % not required (inc.paydown in debt)

0.056 denominator

30,518 ev

4,063 debt

26,455 equity value

495 shares

53.44 share value

32.07 buy at 60%

64.13 sell at 120%

Purchase of Novartis Animal Health by Elanco, the animal health subsidiary of Lilly, was at 5X sales.

History of Buys/Sells

by Zoetis 3/24/2014 410.00 11,901 29.03 1.50%

Discussion of Buys/Sells

What: The return of ZTS was 45% and SP 10% for an outperformance of 35%.

So what: It appears that we ended up purchasing an "equity bond" which we had researched for years prior to purchase as part of another company (PFE). On our purchase, we had ZTS as a Tier III and purchased 1.5% at a P/E of 20X (pricing and actual purchase) with a debt violation. We raised our buy price and raised ZTS to a Tier II and then to a Tier I.

Now what:

[illegible]