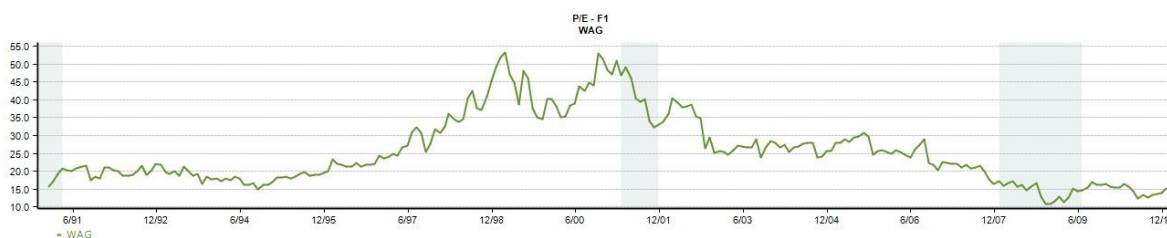


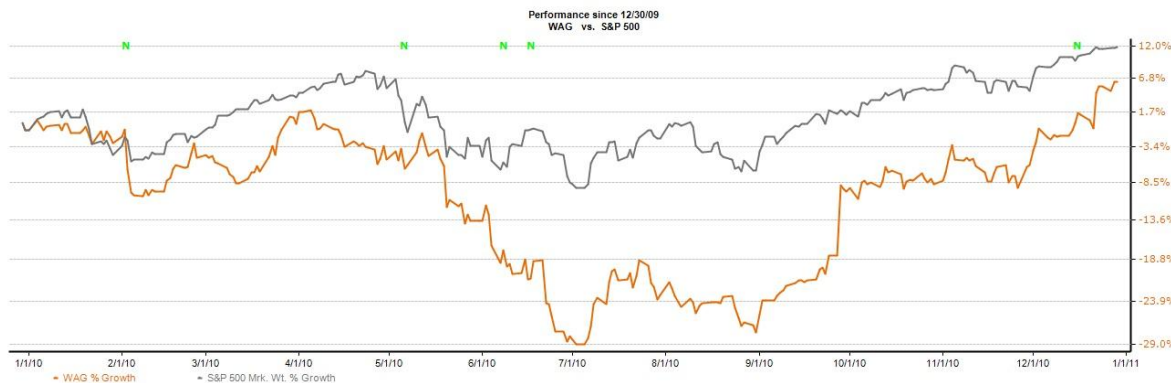
## Walgreens – A Prescription for Margin Recovery?

Walgreens is a national retail pharmacy chain and considered the leader in innovative drugstore retailing. Walgreens pioneered many store features that are becoming standards in the industry. Among those concepts are computerized pharmacies, point-of-sale scanning, freestanding stores with drive-thru pharmacies, and “Intercom Plus”, Walgreens advanced new operations logistics system.

Throughout the 1990’s Walgreens was the “fairy retail” growth story with new stores under construction on every street corner and investors bidding price earnings multiples in excess of 50X forward earnings. As the Zacks Research System (ZRS) graph below indicates, since 2001 Walgreens has been under increased forward P/E multiple contraction pressure.



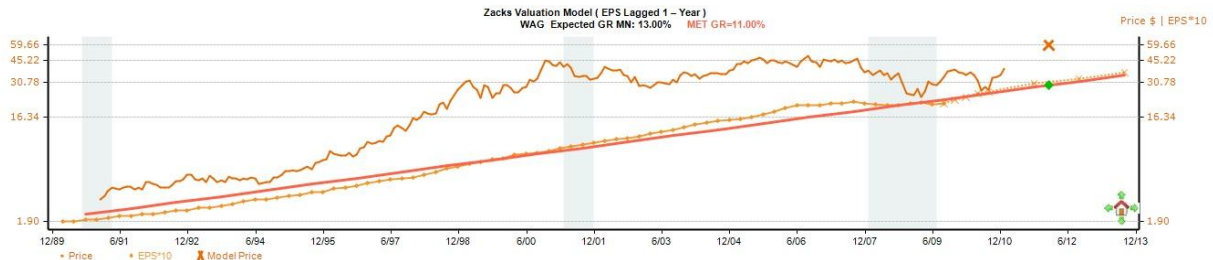
So where does the leader in retail drug store innovation stand today? This paper will illustrate how one can use the Zacks Valuation Model and the Zacks Research System (ZRS) to explore analytical issues facing the company.



As the graph above indicates, since January 2010 Walgreens price performance trails the S&P 500 composite by 5.5%.

## Zacks Valuation Model

The Zacks Valuation Model is an interactive present value model that quantifies theoretical equity valuation in both a current and 1-year time frame. In the default Zacks Valuation Model graph below all earnings related plots are lagged 1 year against price to visually illustrate the premise that current security pricing is indicative of estimated year forward earnings. Furthermore, the proprietary ZRS graph scaling algorithm portrays the appropriate multiple expansion/contraction relationship between price and forward earnings.



The above graph illustrates the price / year-forward multiple relationship on a component level. Careful analysis of the trending spread between the Walgreens price line and the “dotted” operating EPS line again illustrates the forward P/E multiple contraction pressure since 2001.

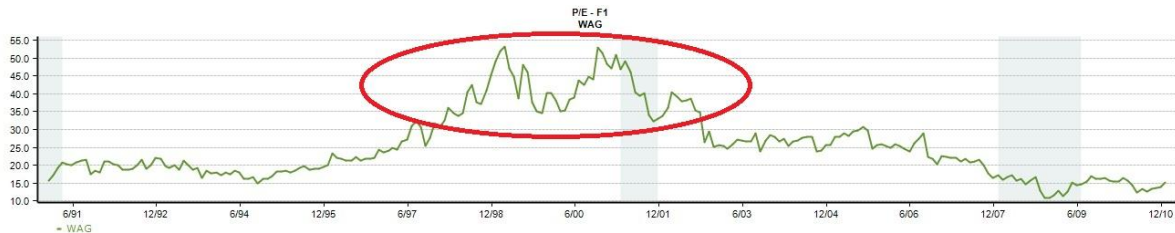
The default Model Inputs are derived exclusively from data contained within ZRS, no subjective adjustments to the data have been made by the Zacks analyst staff. Model output is expressed in terms of Model P/E, Model Price and Model Return rather than the traditional present value calculation of a predicted dividend stream. The model table below, based on default model inputs, indicates that Walgreens is significantly undervalued with a Current Model Return of 35.97% and a Model P/E warranted at 19.62.

Zacks Valuation Model				Zacks Consensus Estimates			Model Earnings Tendency	
	Current	User	1-Year		2011	2012	2013	FYE: August
RF – AAA Rate	5.01%	5.01 %	5.01%	Mean Estimate	2.60	3.01	3.27	2009 2.14
EQ Risk	4.27%	4.27 %	4.27%	Change Y/Y	23%	16%	9%	2010 2.37
CS Risk	0.00%	0.00 %	0.00%	High	2.72	3.91	3.58	2011 2.64
TED Rate	9.28%		9.28%	Low	2.41	2.71	2.94	2012 2.93
Actual PE – 12M	14.43		13.00	Total	26	26	10	2013 3.25
Model PE	19.62		19.62	#Up (4 weeks)	24	21	3	2014 3.60
Model Price	53.68		60.66	#Down (4 weeks)	0	0	0	2015 4.00
Model EPS F12M	2.74		3.04					2016 4.44
Model Return	35.97%	<a href="#">Update</a>	55.42%	PE Intraday	15.1	13.0	12.0	2017 4.93

Using default model inputs as a starting point for analysis one must determine if Walgreens has ever traded at a multiple of 19.62X forward earnings.

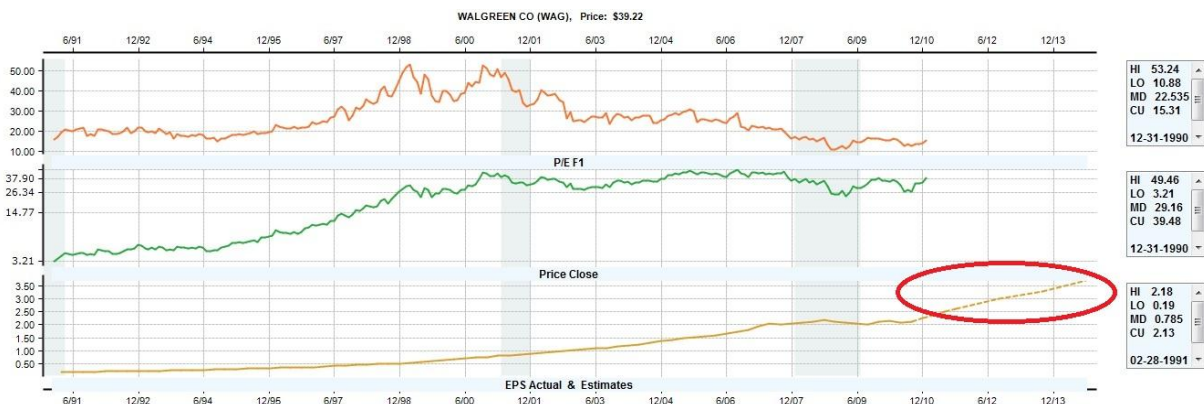
## Model P/E Analysis

Further analysis of the ZRS Price/F1 EPS history graphs below illustrates that Walgreens has in fact traded at multiples far in excess of 19.62X forward earnings. Excluding the period of extraordinarily inflated multiples from 1997 to 2001 it appears as though the median multiple is somewhere between 18X and 20X forward earnings.



Our Model P/E appears to be reasonable, so what is it going to take to get Walgreens back to trading at its 18X-20X forward earnings multiple median? Why the period of extremely high forward multiples from 1997 to 2001? Let's explore these issues a bit more.

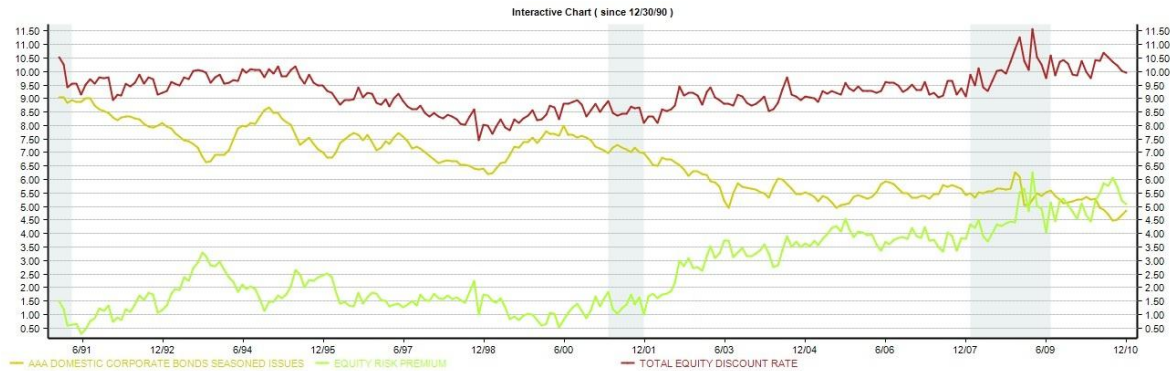
The ZRS 1-4 Panel Valuation Graphic below illustrates the decomposition of the P/E F1 multiple. Note that since 2001 Walgreens has experienced a "real" multiple contraction fueled by earnings growth and stagnated price and not simply a decline in price. Further note that the trending increase in Zacks EPS estimates circled in red indicates that multiples will continue to contract without an associated near-term increase in price.



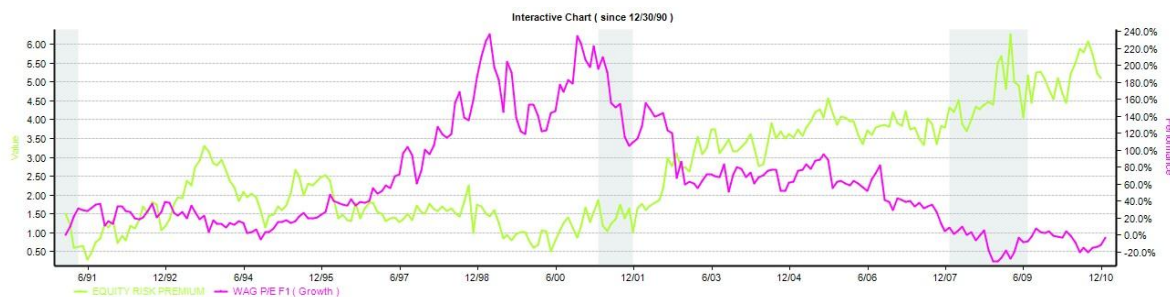
Note that from 1997 to 2001 Walgreens had stable earnings growth, without a sudden drop in EPS the only logical conclusion for multiples in excess of 50X forward earnings is an increase in the price of Walgreens. What would have caused investors to bid up Walgreens to such high forward earnings multiples? The answer exists in the Zacks Valuation Model macroeconomic inputs; the Risk Free Rate and Equity Risk Premium.

## Macroeconomic Valuation Model Inputs

The following ZRS “Interactive Chart” illustrates the relationship between the two macroeconomic model inputs; Risk Free Rate and Equity Risk Premium.



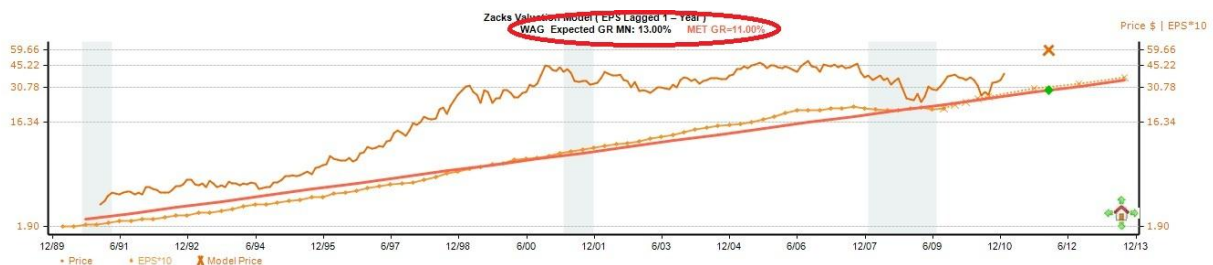
Note in the graph above that in 2001 the Equity Risk Premium began climbing steadily while the proxy for the risk free rate began falling at “nearly” the same rate. The slow rise in Total Equity Discount Rate is attributed to a net increase in the Equity Risk Premium relative to the decrease in the proxy for the Risk Free Rate since 2001. Recall that increasing the Total Equity Discount Rate has a negative effect on security valuations.



The graph above depicts Equity Risk Premium plotted against Walgreens P/E F1. Note that the extraordinary forward multiple being paid for Walgreens between 1997 and 2001 was likely caused by historically low Equity Risk Premium levels relative to history. Note that in general as Equity Risk Premium increases P/E multiples tend to contract and vice versa. Why does this relationship hold? Equity Risk Premium quantifies the amount of risk investors require relative to a “risk-free” alternative over the 1-year forecast period. A rise in Equity Risk Premium tends to indicate a net positive change in demand from equity securities to risk free securities. As the Equity Risk Premium rises, demand for the equity securities as an asset class decreases leading to a macro-economically induced contraction in P/E multiples. ***The Equity Risk Premium series is calculated by Zacks Investment Research and is the only macroeconomic indicator in existence today that can accurately quantify warranted price and earnings spreads for the equity asset class of securities.***

## Company Specific Valuation Model Inputs

Model Earnings Trend Growth Rate is the slope of the Model Earnings Trend Line. In default the rate is calculated from the Zacks 3-5 Year Consensus Growth Rate Estimate MINUS the Standard Deviation of the growth rate estimate. In the case of Walgreens the default growth rate of 11% is the 13% consensus earnings growth estimate minus a standard deviation of the estimate of 2%.



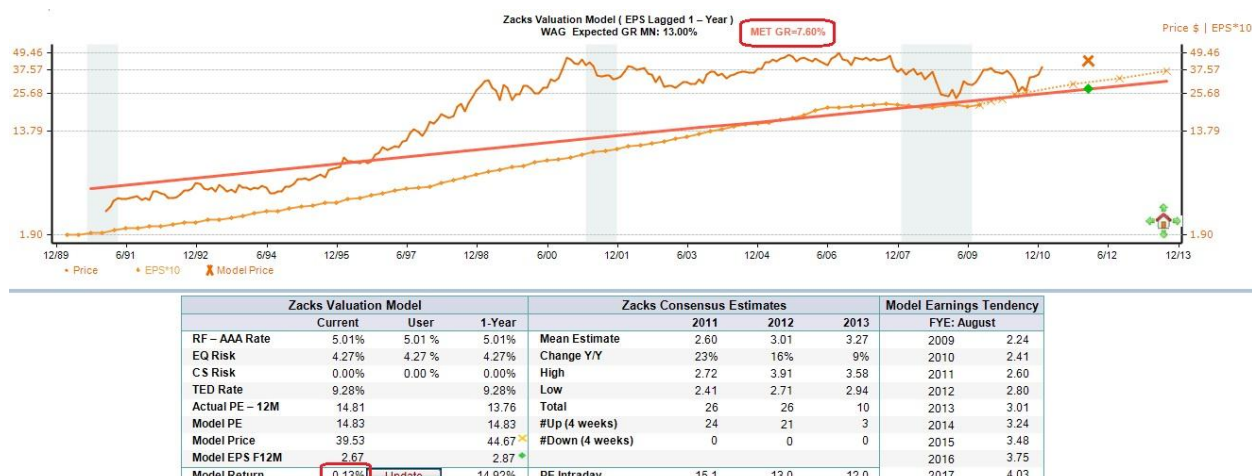
The default Current Model Return of 35.97% in the table below assumes the following company specific inputs: 11% forecast earnings growth, forward 12 month earnings of \$2.74 and a Company Specific Risk (CS Risk) adjustment to the Total Equity Discount Rate of zero. The next logical question is, if the Current Model Return forecast is 35.97%, at what level of forecast earnings growth are investors pricing Walgreens at today? This is known as the Market Implied Growth Rate and can be “backed into” using the Zacks Valuation Model.

Zacks Valuation Model				Zacks Consensus Estimates			Model Earnings Tendency	
	Current	User	1-Year		2011	2012	2013	FYE: August
RF – AAA Rate	5.01%	5.01 %	5.01%	Mean Estimate	2.60	3.01	3.27	2009 2.14
EQ Risk	4.27%	4.27 %	4.27%	Change Y/Y	23%	16%	9%	2010 2.37
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TED Rate	9.28%		9.28%	Low	2.41	2.71	2.94	2012 2.93
Actual PE – 12M	14.43		13.00	Total	26	26	10	2013 3.25
Model PE	19.62		19.62	#Up (4 weeks)	24	21	3	2014 3.60
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Model EPS F12M	2.74		3.04					2016 4.44
Model Return	35.97%	<a href="#">Update</a>	55.42%	PE Intraday	15.1	13.0	12.0	2017 4.93

The Zacks Valuation Model can be used to quantify any one of its 5 model inputs: earnings level forecasts (Model EPS F12M), earnings growth forecasts (MET GR), Equity Risk Premium forecasts (EQ Risk), Risk Free Rate forecasts or Company Specific Risk (CS Risk) adjustments to the total Equity Discount Rate (TED Rate).

The Zacks Valuation Model can be used to solve for Walgreens Market Implied Growth Rate by simply holding constant the Equity Risk Premium, Risk Free Rate, Company Specific Risk, EPS F12M and solving for the MET Growth Rate that sets the Current Model Return equal to 0%.





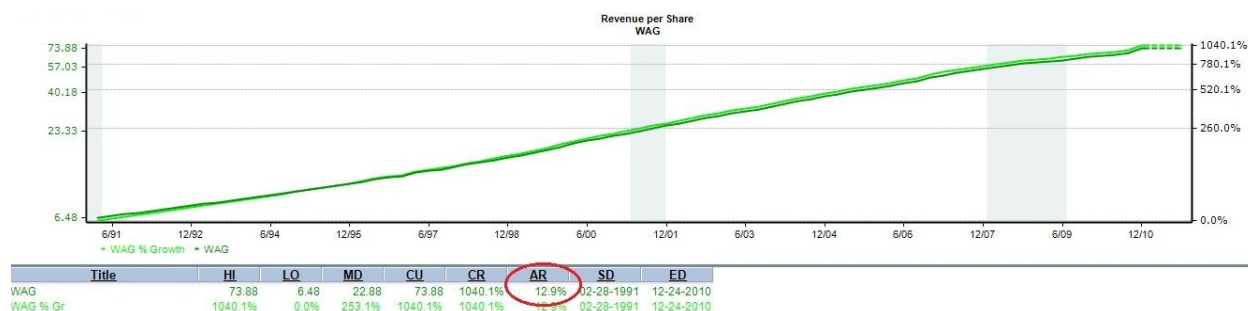
To solve for the Market Implied Growth Rate for Walgreens the slope of the MET Line must be brought down to the point at which Current Model Return is at or near zero. Note that when the Current Model Return is at or near zero the Model PE equals the Actual PE and Model Price equals the Actual Price. At this point, given the model input assumptions, one can assume that the broad market has placed a fair value on Walgreens at 7.4% 3-5 year forecast earnings growth.

Before making a buy or sell decision one must have answers to the following 2 questions at a minimum:

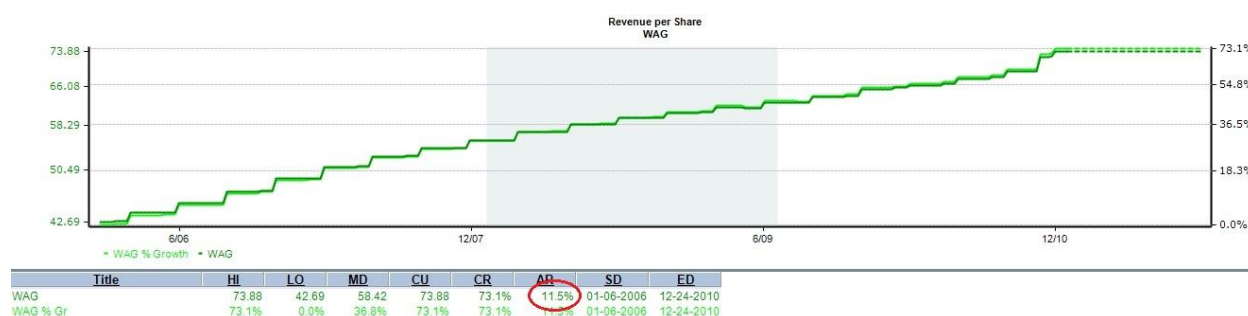
1. Can Walgreens **support** 7.4% earnings growth over the long term forecast period (3-5 years)?
2. Can Walgreens **sustain** 7.4% earnings growth over the long term forecast period (3-5 years)?

### Supportability of Forecast EPS Growth

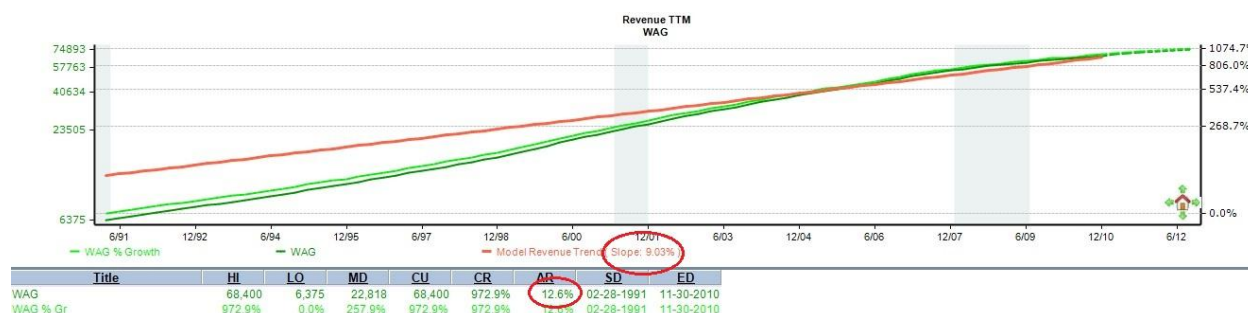
Historically speaking, the 20 year ZRS chart below illustrates that Walgreens has easily supported 7.4% forecast earnings growth with an annualized 12.9% growth in revenues-per-share.



Further historical analysis of a 5 year ZRS chart below illustrates that Walgreens has again supported 7.4% forecast earnings growth with an annualized 11.5% growth in revenues-per-share.



Shifting focus to revenues on an aggregate basis over the same 20 year time frame Walgreens has again supported 7.4% forecast earnings growth with an annualized 12.6% growth in revenues. In ZRS the Revenue TTM graph allows for the modeling of revenue growth for any time period. By visualizing a least squares fit of revenues over the past 5 years one can see that on an aggregate basis Walgreens has only grown revenues by 9.03% annually, far less than the revenue per-share-growth of 11.5% for the same time period but still able to support 7.4% long term growth in earnings.



The difference between Walgreens 5 year annualized revenue-per-share growth of 11.5% and aggregate revenue growth of 9.03% can be easily explained in ZRS financial statements as a share buyback initiative that has been in existence for each of the prior 5 years as illustrated below:

WALGREEN CO FYE=8 (August)							
Annual - Income Statement - Company Specific							
Fiscal period	2010	2009	2008	2007	2006	2005	2004
Period End Date	8/31/2010	8/31/2009	8/31/2008	8/31/2007	8/31/2006	8/31/2005	8/31/2004
Net sales	67,420.00	63,335.00	59,034.00	53,762.00	47,409.00	42,201.60	37,508.20
Cost of sales	48,444.00	45,722.00	42,391.00	38,518.10	34,240.40	30,413.80	27,310.40
Selling, occupancy and administration	15,518.00	14,366.00	13,202.00	12,093.20	10,467.10	9,363.80	8,055.10
Interest expense	85.00	--	--	--	--	--	--
Interest income	--	(83.00)	(11.00)	38.40	52.60	31.60	17.30
Other income	--	--	--	--	--	--	16.30
Earnings before income tax provision	3,373.00	3,164.00	3,430.00	3,189.10	2,754.10	2,455.60	2,176.30
Income tax provision	1,282.00	1,158.00	1,273.00	1,147.80	1,003.50	896.10	816.10
Current provision - Federal	1,129.00	807.00	1,201.00	1,027.90	970.10	841.40	632.50
Current provision - State	90.00	91.00	133.00	96.70	137.40	125.50	111.40
Deferred provision - Federal	62.00	243.00	(59.00)	18.30	(88.80)	(57.80)	71.10
Deferred provision - State	1.00	17.00	(2.00)	4.90	(15.20)	(13.00)	1.10
Net earnings	2,091.00	2,006.00	2,157.00	2,041.30	1,750.60	1,559.50	1,360.20
Net Earnings per Common Share: Basic	2.13	2.03	2.18	2.04	1.73	1.53	1.33
Net Earnings per Common Share: Diluted	2.12	2.02	2.17	2.03	1.72	1.52	1.32
Average shares outstanding	981.70	989.98	990.61	998.63	1,010.25	1,019.67	1,024.51
Average shares outstanding assuming dilution	987.90	991.33	995.54	1,006.34	1,019.40	1,028.33	1,031.80

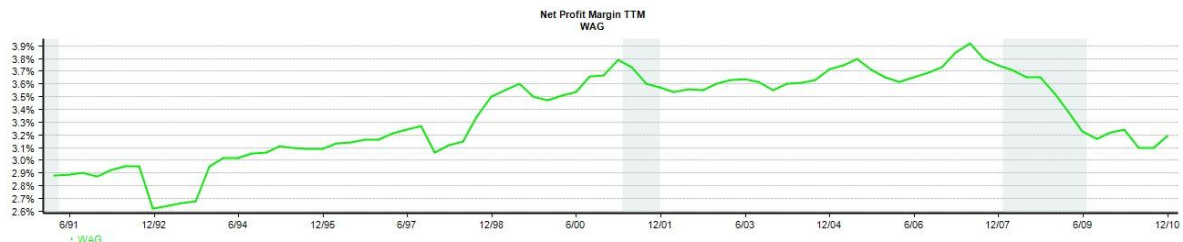
A closer look at 2010 actual revenues above versus Zacks FY1 and FY2 consensus revenue estimates below indicates uncertainty in Walgreens ability to support future earnings growth of 7.4% over the 3-5 year forecast period. In the "Most Recently Revised" ZRS Sales Estimate Detail table below, FY1 Revenues 71.591 represents 6.18% growth over 2010 actual revenues of 67.420. Amongst sell side brokers recently polled, FY2 to FY3 revenue growth is currently forecast at only 4.75%. In the short-term, the decline in Walgreens forecast revenues and associated growth cannot effectively support 7.4% forecast earnings growth without significant margin improvement. Longer term, Walgreens must return to revenue growth in excess of 7.4% to effectively support forecast earnings growth.

Company Information											
Ticker: <b>WAG</b>											
Company: <b>Walgreen Co</b>											
ANALYSTS		PRICE TARGET (\$)		ANNUAL ESTIMATES (\$ Mil)				QUARTERLY ESTIMATES (\$ Mil)			
Analyst	Broker	Target	Date	08/2011	Date	08/2012	Date	02/2011	Date	05/2011	Date
<b>Analyst Consensus</b>											
<b>Most Recent Consensus:</b>		43		71591 ↑		74994 ↑		18303 ↑		18222 ↑	
<b>Zacks Consensus:</b>		43		71489 ↑		74893 ↑		18252 ↑		18173 ↑	
<b>Custom Consensus:</b>		43		71489		74939 ↑		18252 ↓		18173	
<b>Analyst Details</b>											
<input checked="" type="checkbox"/> Not Ident.	Not Ident.	50	12/27/2010	70687 ↑	12/27/2010	74026	12/27/2010	17919 ↑	12/27/2010	17866	12/27/2010
<input checked="" type="checkbox"/> S Mushkin	Jefferies &	48	12/23/2010	72022 ↑	12/23/2010	74767 ↑	12/23/2010	18381	12/23/2010	18443	12/23/2010
<input checked="" type="checkbox"/> A Wolf	Bb & T Capi	46 ↑	12/23/2010	71996 ↑	12/23/2010	76070 ↓	12/23/2010	18464 ↑	12/23/2010	18390 ↑	12/23/2010
<input checked="" type="checkbox"/> D Leckow	Barrington	46	12/23/2010	71838 ↑	12/27/2010	75753 ↑	12/27/2010	18227 ↑	12/27/2010	18317 ↑	12/27/2010

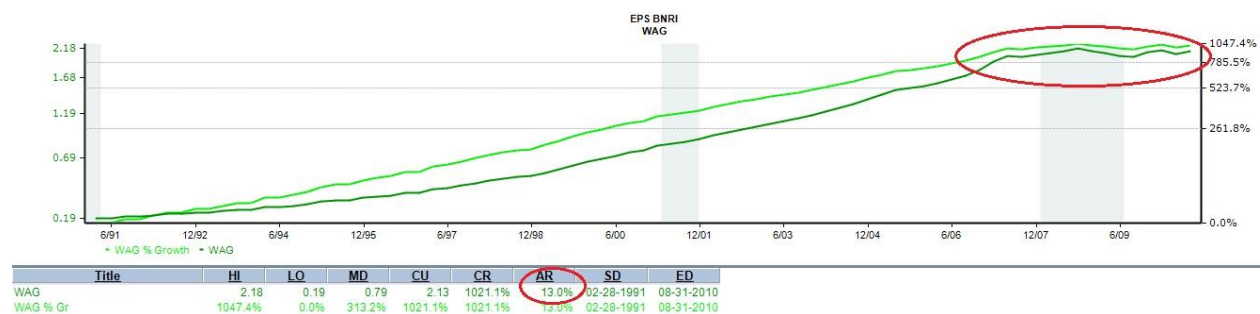


## Sustainability of Forecast EPS Growth

The ZRS Net Profit Margin chart below confirms that Walgreens has experienced a 25% decrease in net margins since 2007. Has the latest quarter signaled a bottom and is a margin recovery on the way?



Margin erosion has negatively impacted the bottom line EPS growth, but to what extent? Using ZRS one can see that over 20 years EPS growth has been sustained at an annualized rate of 13%. The most recent 5 years circled in red tells a far different story, one of significant growth decline that the market is likely pricing into the share value of Walgreens as previously indicated by the Zacks Valuation Model.



Recall the Zacks Valuation Model Market Implied Growth Rate for Walgreens of 7.4%. Note if we focus in on the latest 5 years of EPS the annualized growth rate has only been 7.4% which is directly in line with the market implied pricing for Walgreens according to the Zacks Valuation Model.



Shifting our attention to forecast earnings growth, note in the default Zacks Valuation Model view below that sell-side analysts polled by Zacks forecast FY1 EPS growth of 23% and FY2 EPS growth of 16% on revenue growth of 6.18% and 4.75% for the same periods. In the absence of significant forecast revenue growth, double digit forecast EPS growth appears highly unlikely without successful cost containment measures being put in place to restore net margins.

Zacks Valuation Model				Zacks Consensus Estimates			Model Earnings Tendency	
	Current	User	1-Year		2011	2012	2013	FYE: August
RF – AAA Rate	5.01%	5.01 %	5.01%	Mean Estimate	2.60	3.01	3.27	2009 2.14
EQ Risk	4.27%	4.27 %	4.27%	Change Y/Y	23%	16%	9%	2010 2.37
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Model Return	35.97%	<a href="#">Update</a>	55.42%	PE Intraday	15.1	13.0	12.0	2017 4.93

## Conclusions

In the case of Walgreens, the Zacks Valuation Model “Market Implied Growth Rate” of 7.4% is both “sustained” by historical earnings growth as well as “supported” by historical revenue growth. Double digit forecast EPS growth estimates appear highly unlikely without some combination of margin recovery and top line revenue growth. Forward EPS estimates relative to forward revenue estimates indicate a significant margin recovery is forecast at Walgreens while revenue growth continues its descent. ***The ability for Walgreens to improve their margins presents an opportunity for investors however the forecast decline in revenues has investors questioning how long forecast earnings growth can continue to rise at double digit rates with forecast revenue growth approaching only 5% in FY2.***

A Zacks Valuation Model default 3-5 year consensus earnings growth rate of 11% appears to be achievable only with a sustained margin recovery coupled with revenue growth in excess of 11%. Any continued increase in net profit margin and revenue growth will have a positive impact on the price of Walgreens as investors become more confident of Walgreens ability to produce “supportable” and “sustainable” growth.

Walgreens stock price will benefit from a decline in the Equity Risk Premium. Likewise, overall valuations for Walgreens would be expected to improve with any decline in the Total Equity Discount Rate.

Tim Nyland, CFA  
Managing Director  
Zacks Investment Research

## More Information

For more information about the Zacks Valuation Model, Zacks Research System (ZRS) or any other Zacks Investment Research services, please contact Zacks Sales or your help desk representative at (312) 265-9199 or [ZRSSales@Zacks.com](mailto:ZRSSales@Zacks.com)

*The Zacks Valuation Model is not a "Black Box" value generating tool rather it is an exploratory tool through which historical and forward looking analytical issues should be raised, researched and evaluated. The model will provide valuable results only when all default criteria has been analyzed, evaluated and overridden where necessary.*