# Stock valuation at ragan, inc case study 

Business, Company

## ASSIGN BUSTER


#### Abstract

: This report is intended to examine Ragan Inc's current financial position and to identify any possible shortcomings and future threats. The report provides an analysis of the present stock price, dividend pay out ratio, Earnings per share, Price earning ratio and growth rate of the company and a comparison with industry averages. The method used to examine these indicators is stock valuation.

\section*{Company Brief:}

Ragan Inc, formed by brother and sister Carrington and Genevieve Ragan, has been earning healthy profits for past nine years. The reason behind this was a unique technology being used by the company. The company is in the business of providing heating and air conditioning solutions. It manufactures and installs commercial HVAC (heating, ventilation and cooling) units.


## Stock Valuation of Ragan Inc:

According to the provided data, the total dividend paid by the company was \$ 140, 000. Since there were 100, 000 shares outstanding and each sibling was given $\$ 70,000$. The company's total earnings were $100,000(5.32)=\$$ 532,000 . Hence the payout ratio for Ragan Inc was $(140,000 / 532,000)=$ 0.26 , therefore the retention ratio $=1-0.26=0.74$.

## Using this retention ratio, company's growth rate can be calculated;

Since $g=$ ROE $\times b$ (retention rate)
$=0.18 \times 0.74$
= 0.1332 or $13.32 \%$

As discussed earlier the company is earning handsome profits and with a growth rate of 13.32 \% it can be initially assumed that the company is doing well especially when compare to the industry average of $12.67 \%$.

## The per share value of the company's stock can therefore be calculated using the entire dividend payment.

Dividend per share paid $=70,000 / 50,000=\$ 1.4$

## Using the above calculations, determining the stock price; P0 = D1 / (R - g)

$\mathrm{PO}=[1.4(1.1332)] /(0.18-0.1332)=1.5865 / 0.0468$
$=\$ 33.99$
According to Josh Schlessman, though the company is enjoying a technological advantage, yet other companies in the industry are devising methods in order to improve efficiency and to gain more market share. In this situation this technological advantage will last no longer than five years. Also as per Josh's analysis, the required ROE of the company is much higher and the industry average ROE is more appropriate. With these assumptions the stock price of Ragan Inc today would be different form $\$ 33$. 99. In order to determine the current stock price, the industry EPS needs to be recalculated as industry average EPS of $\$-0.54$ was a result of Expert HVAC Corporation's negative EPS, due to an accounting write-off last year. Without that write-off, EPS for Expert HVAC Corporation would have been \$0. 49. Industry EPS $=(0.79+1.27+0.49) / 3=0.85$

## Using this industry EPS we will determine Industry payout ratio;

$0.38 / 0.85=0.45$
Industry Retention Ratio $=1-0.45=0.55$
Therefore $g=0.15 \times 0.55=0.0825$ or $8.25 \%$
The company is expected to grow at its current rate for five years, so the dividends for next six years will be;
$\mathrm{D} 1=1.4 \times 1.1332=1.59, \mathrm{D} 2=1.59 \times 1.1332=1.802, \mathrm{D} 3=1.802 \times$

1. $1332=2.04$
$\mathrm{D} 4=2.04 \times 1.1332=2.31, \mathrm{D} 5=2.31 \times 1.1332=2.62, \mathrm{D} 6=2.62 \times 1$. $0825=2.84$

## The stock price with the industry required return in year 5 will be:

$2.84 /(0.1267-0.0825)=\$ 64.25$

## Total value of the stock today is;

$\mathrm{PO}=(1.59 / 1.1267)+(1.802 / 1.12672)+(2.04 / 1.12673)+(2.31 / 1$.
$12674)+((2.62+67.25) / 1.12675)$
$=\$ 42.52$
In order to determine, whether the shares of the company are fairly valued or not, Price earning ratio is the best tool to serve the purpose.

P/E ratio of Ragan based on above calculations is:
P/ER = Price of stock / EPS
$=42.52 / 5.32$
=8. 303

## The Industry EPS however is

P/EI = 18. $40 / 0.85$
$=21.65$
The industry P/E ratio of 21.65 is too high as compared to the Ragan's 8. 303; this is unexpected as Ragan's growth rate is higher than the industry average. The problem is with the dividend payments. The company is paying much higher dividend. Although there exists a positive correlation between the two ratios and as the Industry P/E increase there will be an increase in the Ragan's P/E, yet the difference is quite big. The higher industry P/E implies that the industry has more growth opportunities than Ragan Inc. The company undoubtedly is in a sound financial position today but a low P/E figure is alarming. If the situation prevails the company may face growth deficit in the coming years. A simple solution to this situation is to retain more of the company's earnings and make investments in profitable projects. The strategy will only work if the investment is higher than the company's required return on the stock.

## Works Cited

Stephen A. Ross, Randolph Westerfield, Bradford D. Jordan. Fundamentals of Corporate Finance. Tata McGraw-Hill Education, 2008 - Corporations

