

## GSE Systems (GVP)

Price:	\$1.89
Market Cap:	\$34,681,500
Cash:	\$21,300,000
Debt:	\$0
Net Cash:	\$21,300,000
Enterprise Value:	\$13,381,500
Target Market Cap:	\$52,406,641
Target Enterprise Value:	\$31,106,641

Price/Book:	0.84
EV/FCF:	-2.62
<b>Net Tang. Asset/Share:</b>	<b>\$1.88</b>
Avg. Year 1-5 FCF/Share:	\$0.09
<b>5 Years of FCF:</b>	<b>\$0.46</b>
Net Tang. Asset+5 FCF:	\$2.34

Net Tang. Asset Yr. 5/Share:	\$2.12
Avg. Year FCF/Share:	\$0.09
Year 5 Disposition FCF Multipl:	3.0
Year 5 Disposition Price:	\$2.40
<b>Gain Year 5:</b>	<b>\$0.52</b>

<b>Net Tang. Asset+5 FCF+ Gain Disposition:</b>	<b>\$2.86</b>
<b>IRR:</b>	<b>8.61%</b>

Co. serves a highly specialized niche market as a provider of simulation software for power plants. With the recent accident in Japan, countries around the world are stepping up their safety and precautionary practices, and the co. is one of the beneficiaries. We don't expect a notable growth for the co., but we do expect steady reliable cash flow from the operations. \$40 MM in book value plus 8 years of \$2M each would justify a \$50-\$60MM equity value in 5 years. 75 customers, 200 simulation programs, one 10% customer and mostly foreign customers (Japan, UK, Germany, Slovak). 67% of revenue from nuclear power plants, so nuclear developments will affect the revenue.

<b>Company Name:</b>	<b>GSE Systems</b>
Ticker Symbol:	GVP
<b>Last Price:</b>	<b>\$1.89</b>
Net Cash/Share:	\$1.16
Net Cash to Last Price:	61.42%
Shares Outstanding:	18,350,000
Industry:	Error
Sector:	Error
Institutional Ownership:	#VALUE!
Mutual Fund Ownership:	#VALUE!
Insider Ownership:	#VALUE!
Retail Ownership:	#VALUE!
Float:	#VALUE!

<b>Technicals</b>	
52 week low:	Error
Today from 52 week low:	#VALUE!
52 week high:	Error
Today from 52 week high:	#VALUE!
50 day Moving Average:	Error
200 day Moving Average:	Error

<b>Analyst/Consensus</b>	
Analyst Sales Growth FY1:	3.90%
Analyst Sales Growth FY2:	6.90%
SN Valuation Estimate FY1:	2.00%
SN Valuation Estimate FY2:	2.00%

Analyst Earnings Estimate FY1:	\$0.10
Analyst Earnings Estimate FY2:	\$0.11
SN Valuation Earnings Est. FY1:	\$0.10
SN Valuation Earnings Est. FY2:	\$0.10

<b>Multiples</b>	
Market Value to Book:	0.84
EV to Book:	0.32
Market Value to Tangible Net Assets:	3.51
P/E Ratio:	12.94
Trailing P/E Ratio:	13.77
Forward P/E Ratio:	18.27
Beta:	Error
Dividend:	0
Dividend Yield:	0.00%
Dividend Date:	N/A
Ex-Dividend Date:	N/A

<b>Competitors</b>	
Average EV to EBITDA:	N/A
Company EV to EBITDA:	2.25
Average EV to EBIT:	N/A
Company EV to EBITA:	6.00

Market Capitalization:	\$34,681,500.00
Total Debt:	\$0.00
Total Cash:	\$21,300,000.00
Net Cash/(Debt):	\$21,300,000.00
Enterprise Value:	\$13,381,500.00
Current EV/Share:	\$0.73
EBITDA:	\$5,940,000.00
EV/EBITDA Multiple:	2.25
EV/EBITDA Multiple Average Year 1-5:	4.12
EV/FCF Multiple:	-2.62
EV/FCF Multiple Average Year 1-5:	5.00

**Upper Range**  
DCF: EV/EBITDA Terminal Value

Implied TV from 3 X EV/EBITDA Multiple	\$8,467,747.72
Enterprise Value	\$8,467,747.72
Cash at Year 5:	\$29,684,549.17
Debt at Year 5:	\$0.00
Equity Value Year 5:	\$38,152,296.89
<b>Equity/Share at Year 5:</b>	<b>\$2.08</b>
Annualized Return:	1.93%

**Lower Range**  
DCF: Net Tangible Asset excluding Cash/Debt Terminal Value

Year 5 Net Tangible Assets excluding cash and debt	\$9,870,000.00
Enterprise Value	\$9,870,000.00
Cash at Year 5:	\$29,684,549.17
Debt at Year 5:	\$0.00
Equity Value Year 5:	\$39,554,549.17
<b>Equity/Share at Year 5:</b>	<b>\$2.16</b>
Annualized Return:	2.66%

**EVA**

EVA today:	\$41,069,701.69
EVA in 5 Years:	\$30,048,156.24
EVA/Share:	\$1.64
Cash at Year 5:	\$29,684,549.17
Debt at Year 5:	\$0.00
Equity Value Year 5:	\$59,732,705.41
<b>Equity/Share at Year 5:</b>	<b>\$3.26</b>
<b>Annualized return</b>	<b>-6.06%</b>

**Current Net Tangible Asset**

<b>Net Tangible Asset/Share:</b>	<b>\$1.71</b>
<b>Net Tangible Asset/Share in Year 5:</b>	<b>\$2.29</b>
Annualized return	6.07%

Current Equity Price:	\$1.89
Selling at Discount?	Premium
Appreciation Potential:	-9.66%

**Dividend Model**

<b>Next Year Dividend</b>	<b>\$0.00</b>
<b>WACC:</b>	<b>11.00%</b>
Dividend:	\$0.00
Net Income:	\$2,680,000.00

**Income Statement**

Revenue:	\$54,580,000.00	100.0%
Cost of Goods Sold:	\$38,240,000.00	70.1%
Gross Profit:	\$16,340,000.00	29.9%
EBITDA:	\$4,110,000.00	7.5%
Net Income:	\$2,680,000.00	4.9%

**Balance Sheet**

Cash:	\$21,300,000.00
Short Term Investment:	\$0.00
A/R:	\$19,440,000.00
PP&E:	\$0.00
Assets:	\$58,650,000.00
A/P:	\$4,080,000.00
Deferred Tax:	\$0.00
Other Liabilities:	\$15,560,000.00
Short term Debt:	\$0.00
Long Term Debt:	\$0.00
Liabilities:	\$19,640,000.00
Retained Earnings:	-\$27,560,000.00
Paid-In Capital:	\$71,310,000.00
Treasury Stock:	-\$1,650,000.00
Stockholder's Equity:	\$41,240,000.00

**Cash Flow**

Net Income:	2,800,000.00
Depreciation/Amortization:	2,260,000.00
Change in Working capital:	-4,010,000.00
Cash from Operating Activities:	1,570,000.00
Capital Expenditures:	-1,360,000.00
Cash from Investing Activities:	-6,670,000.00
Total Cash Dividends Paid:	0.00
Issuance (Retirement) of Stock:	-1,510,000.00
Issuance (Retirement) of Debt:	0.00
Cash from Financing Activities:	-1,100,000.00

**Profitability Margins**

Debt to Equity:	0.00%
Return on Assets:	4.77%
Return on Capital:	6.79%
Return on Equity:	6.79%

# SN VALUATION

# LBO Analysis

WACC Terminal Value:	N/A	<b>Intrinsic Price in 5 Years:</b>	<b>2.47</b>	<b>Non-LBO Forecast</b>	<b>Non-LBO Forecast</b>	<b>Desired Return Rate</b>	<b>20.00%</b>
EV/EBITDA with 3X Multiple Terminal Value:	\$2.08	Market Price:	1.89	Year 1 Target	1.99	<b>Implied Today's Price</b>	<b>0.99</b>
Net Tangible Asset Terminal Value:	\$2.16	LBO Price:	<b>1.89</b>	Year 2 Target	2.10	Overvalued/(Undervalued)	90.47%
EV/EBITDA with Today's Multiple Terminal Value:	\$2.39	Premium to Market Price:	0.00%	Year 3 Target	2.22		
EVA Enterprise Value:	\$3.26	LBO Price/Intrinsic Price Target:	5.49%	Year 4 Target	2.34		
Dividend Discount Model:	N/A	LBO Price/EV/EBIT Exit Price:	4.78%	Year 5 Target	2.47		
Average (Excluding Dividend Discount):	<b>\$2.47</b>	Implied IRR at today's EV/EBITDA:	4.78%	<b>Implied IRR (Market Price):</b>	<b>5.49%</b>		
		5 Year Return:	30.64%				

Current Evaluation				Exit Evaluation			
Current Market Price:	1.89	LBO Price:	1.89	Exit Price:	2.47	Exit Price:	2.39
Outstanding Shares:	18,350,000	Outstanding Shares:	18,350,000	Outstanding Shares:	18,350,000	Outstanding Shares:	18,350,000
<b>Market Capitalization:</b>	<b>34,681,500</b>	<b>Market Capitalization:</b>	<b>34,681,500</b>	<b>Market Capitalization:</b>	<b>45,309,253</b>	<b>Market Capitalization:</b>	<b>43,797,462</b>
Available Cash:	21,300,000	Available Cash:	21,300,000	Available Cash:	29,684,549	Available Cash:	29,684,549
Debt:	0	Debt:	0	Debt:	0	Debt:	0
Net Cash:	21,300,000	Net Cash:	21,300,000	Net Cash:	29,684,549	Net Cash:	29,684,549
<b>Enterprise Value:</b>	<b>13,381,500</b>	<b>Enterprise Value:</b>	<b>13,381,500</b>	<b>Enterprise Value:</b>	<b>15,624,704</b>	<b>Enterprise Value:</b>	<b>14,112,913</b>
Original EV/EBITDA:	6.00	EV/EBITDA:	6.00	EV/EBITDA at 5 Years:	5.54	EV/EBITDA at 5 Years:	<b>5.00</b>
Original EV/EBITDA:	2.25	EV/EBITDA:	3.20	EV/EBITDA at 5 Years:	6.20	EV/EBITDA at 5 Years:	4.18
Competitor Average EV/EBIT:	N/A						
Competitor Average EV/EBITDA:	N/A						

Enterprise Valuation Calculation During Holding Period							
Time Period	0	Adjusted for LBO	1	2	3	4	5
Annualized Price Targets based off LBO Price:	1.89	2.36	2.49	2.63	2.78	2.93	3.09
Shares Outstanding:	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000
<b>Market Capitalization:</b>	<b>34,681,500</b>	<b>43,382,475</b>	<b>45,764,860</b>	<b>48,278,075</b>	<b>50,929,305</b>	<b>53,726,130</b>	<b>56,676,544</b>
Available Cash:	21,300,000	21,300,000	22,661,785	24,225,639	25,997,168	27,868,023	29,684,549
Debt:	0	0	0	0	0	0	0
Net Cash:	21,300,000	21,300,000	22,661,785	24,225,639	25,997,168	27,868,023	29,684,549
<b>Enterprise Value:</b>	<b>13,381,500</b>	<b>22,082,475</b>	<b>23,103,075</b>	<b>24,052,436</b>	<b>24,932,137</b>	<b>25,858,106</b>	<b>26,991,995</b>
EBIT	3,680,000	3,680,000	2,607,630	2,659,783	5	2,767,238	2,822,583
EV/EBIT:	3.64	6.00	8.86	9.04	4,986,427.41	9.34	9.56
EBITDA	4,180,000	4,180,000	3,117,630	3,179,983	3,243,582	3,308,454	3,374,623
EV/EBITDA:	3.20	3.20	7.41	7.56	7.69	7.82	8.00

Enterprise Valuation Calculation During Holding Period							
Time Period	0	Adjusted for LBO	1	2	3	4	5
Annualized Price Targets based off LBO Price:	1.89	2.36	2.09	2.19	1.42	2.42	2.54
Shares Outstanding:	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000	18,350,000
<b>Market Capitalization:</b>	<b>34,681,500</b>	<b>43,382,475</b>	<b>38,309,319</b>	<b>40,186,124</b>	<b>25,997,198</b>	<b>44,473,312</b>	<b>46,621,943</b>
Available Cash:	21,300,000	21,300,000	22,661,785	24,225,639	25,997,168	27,868,023	29,684,549
Debt:	0	0	0	0	0	0	0
Net Cash:	21,300,000	21,300,000	22,661,785	24,225,639	25,997,168	27,868,023	29,684,549
<b>Enterprise Value:</b>	<b>13,381,500</b>	<b>22,082,475</b>	<b>15,647,534</b>	<b>15,960,485</b>	<b>30</b>	<b>16,605,288</b>	<b>16,937,394</b>
EBIT	3,680,000	3,680,000	2,607,630	2,659,783	5	2,767,238	2,822,583
EV/EBIT:	3.64	6.00	6.00	6.00	6.00	6.00	6.00
EBITDA	4,180,000	4,180,000	3,117,630	3,179,983	3,243,582	3,308,454	3,374,623
EV/EBITDA:	3.20	3.20	5.02	5.02	0.00	5.02	5.02

LBO Price	1.89	Equity Partners:	34,681,500	Weighting	<b>100.00%</b>	<b>Annualized Return for Equity Partners:</b>	<b>4.78%</b>
Shares Outstanding	18,350,000	Debt Partners:	0		0.00%		
<b>Market Capitalization</b>	<b>34,681,500</b>	<b>Total Funds for LBO:</b>	<b>34,681,500</b>		100.00%		
Debt	0						
Cash	21,300,000						
<b>Enterprise Value</b>	<b>13,381,500</b>						
<b>Capital Investment</b>	<b>34,681,500</b>						

Book Value	Enterprise Value	Stock Valuation	Debt Reduction				
Beginning Book Value	41.24	Beginning Enterprise Value	13.38	Current Market Price	\$1.89	Starting Debt	0.00
Year 5 Book Value	45.72	Year 5 Enterprise Value	14.11	Year 5 Market Price	\$2.39	Debt Repayment	0.00
<b>Annualized Return</b>	<b>2.08%</b>	<b>Annualized Return</b>	<b>1.07%</b>	<b>Annualized Return</b>	<b>4.78%</b>	Year 5 Ending Debt	0.00
						% of Starting Debt	#DIV/0!

SN VALUATION

LBO Pro Forma Income Statement

Name:

GSE Systems

Ticker:

GVP

	Historical				Forecasted				
	52 weeks ending 2008-12-31	52 weeks ending 2009-12-31	52 weeks ending 2010-12-31	52 weeks ending 2011-12-31	2013	2014	2015	2016	2017
Revenue	29.00	40.06	47.21	51.13	52.15	53.20	54.26	55.34	56.45
COGS	21.19	29.74	36.08	34.78	36.51	37.24	37.98	38.74	39.52
Gross margin	7.81	10.32	11.13	16.35	15.65	15.96	16.28	16.60	16.94
SG&A	7.38	7.75	11.68	12.67	13.04	13.30	13.56	13.84	14.11
R&D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unusual expense	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other operating expense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation is: Excluded from COGS					0.00	0.00	0.00	0.00	0.00
Operating Income (EBITA)	0.43	1.06	-0.55	3.68	2.61	2.66	2.71	2.77	2.82
Interest income/(expense)	-0.32	-0.04	-0.89	0.06	0.20	0.20	0.20	0.20	0.20
Gain (loss) on sale of asset	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	-0.23	-0.40	0.08	0.07	0.00	0.00	0.00	0.00	0.00
Income before tax	-0.56	0.12	-2.04	2.36	2.81	2.86	2.92	2.97	3.03
Tax	0.13	0.92	0.21	-0.44	0.98	1.00	1.02	1.04	1.06
Income after tax	-0.69	-0.80	-2.25	2.80	1.83	1.86	1.90	1.93	1.97
Minority Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity in affiliates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net income	-0.69	-0.80	-2.25	2.80	1.83	1.86	1.90	1.93	1.97
*Figures are in millions (\$)									
EPS (based off today's share count)	-\$0.04	-\$0.04	-\$0.12	\$0.15	\$0.10	\$0.10	\$0.10	\$0.11	\$0.11
P/E (historical today's price; forecasted intrinsic price)	-50.26	-43.35	-15.41	12.39	20.02	20.74	21.48	22.24	23.04
Revenue Growth	N/A	38.14%	17.85%	8.30%	2.00%	2.00%	2.00%	2.00%	2.00%
Tax Rate	-23.21%	76.67%	-10.29%	-18.64%	35.00%	35.00%	35.00%	35.00%	35.00%
Implied Debt Interest Rate	0.00%	0.00%	0.00%	0.00%	NA	NA	NA	NA	NA
Margins									
COGS	73.07%	74.24%	76.42%	68.02%	70.00%	70.00%	70.00%	70.00%	70.00%
Gross margin	26.93%	25.76%	23.58%	31.98%	30.00%	30.00%	30.00%	30.00%	30.00%
SG&A	25.45%	19.35%	24.74%	24.78%	25.00%	25.00%	25.00%	25.00%	25.00%
R&D	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Unusual expense	0.00%	3.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other operating expense	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation is: Excluded from COGS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating Income (EBITA)	1.48%	2.65%	-1.17%	7.20%	5.00%	5.00%	5.00%	5.00%	5.00%
Interest income/(expense)	-1.10%	-0.10%	-1.89%	0.12%	0.39%	0.38%	0.37%	0.37%	0.36%
Gain (loss) on sale of asset	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	-0.79%	-1.00%	0.17%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%
Income before tax	-1.93%	0.30%	-4.32%	4.62%	5.39%	5.38%	5.37%	5.37%	5.36%
Tax	0.45%	2.30%	0.44%	-0.86%	1.89%	1.88%	1.88%	1.88%	1.88%
Income after tax	-2.38%	-2.00%	-4.77%	5.48%	3.50%	3.57%	3.63%	3.70%	3.77%
Minority Interest	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equity in affiliates	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net income	-2.38%	-2.00%	-4.77%	5.48%	3.50%	3.50%	3.49%	3.49%	3.48%

SN VALUATION

LBO Adjusted Proforma Balance Sheet

						Adjustment		Adjusted Proforma	2011	2012	2013	2014	2015
	As of 2008-12-31	As of 2009-12-31	As of 2010-12-31	As of 2011-12-31	As of 2012-09-30	+	-						
Cash	8.27	25.27	26.58	20.33	21.30			21.30	22.66	24.23	26.00	27.87	29.68
Short term investment	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
<b>Cash and Short term</b>	<b>8.27</b>	<b>25.27</b>	<b>26.58</b>	<b>20.33</b>	<b>21.30</b>			<b>21.30</b>	<b>22.66</b>	<b>24.23</b>	<b>26.00</b>	<b>27.87</b>	<b>29.68</b>
Accounts Receivable	10.95	15.94	17.20	20.36	19.44			19.44	19.44	19.44	19.44	19.44	19.44
Other receivables	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Receivables</b>	<b>10.95</b>	<b>15.94</b>	<b>17.20</b>	<b>20.36</b>	<b>19.44</b>			<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>	<b>19.44</b>
Total Inventory	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Prepaid Expenses	0.72	0.35	1.99	3.73	3.31			3.31	3.31	3.31	3.31	3.31	3.31
Other Current Assets	3.35	2.08	0.18	3.50	3.76			3.76	3.76	3.76	3.76	3.76	3.76
<b>Current Assets</b>	<b>23.29</b>	<b>43.64</b>	<b>45.95</b>	<b>47.92</b>	<b>47.81</b>	<b>0.00</b>	<b>0.00</b>	<b>47.81</b>	<b>49.17</b>	<b>50.74</b>	<b>52.51</b>	<b>54.38</b>	<b>56.19</b>
PP&E, Gross	3.99	4.06	4.73	5.00	5.00			5.00	6.00	7.00	8.00	9.00	10.00
Change in Depreciation		0.50	0.58	0.50	0.50			0.50	0.51	0.52	0.53	0.54	0.55
Accumulated Depreciation	2.86	3.08	3.67	5.00	5.00			5.00	5.51	6.03	6.56	7.10	7.65
<b>PP&amp;E, Net</b>	<b>1.13</b>	<b>0.98</b>	<b>1.06</b>	<b>0.00</b>	<b>0.00</b>			<b>0.00</b>	<b>0.49</b>	<b>0.97</b>	<b>1.44</b>	<b>1.90</b>	<b>2.35</b>
Goodwill	1.74	1.74	2.61	4.46	4.50	0.00		4.50	4.50	4.50	4.50	4.50	4.50
Intangibles	1.49	1.86	2.43	3.02	3.18			3.18	2.16	0.97	-0.37	-1.77	-3.07
Long term investments	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Other long term assets	3.36	1.29	1.57	2.31	3.16			3.16	3.16	3.16	3.16	3.16	3.16
<b>Long Term Assets</b>	<b>7.72</b>	<b>5.87</b>	<b>7.67</b>	<b>9.79</b>	<b>10.84</b>			<b>10.84</b>	<b>10.31</b>	<b>9.60</b>	<b>8.73</b>	<b>7.79</b>	<b>6.94</b>
<b>Total Assets</b>	<b>31.01</b>	<b>49.51</b>	<b>53.62</b>	<b>57.71</b>	<b>58.65</b>	<b>0.00</b>	<b>0.00</b>	<b>58.65</b>	<b>59.48</b>	<b>60.34</b>	<b>61.23</b>	<b>62.16</b>	<b>63.13</b>
Accounts Payable	1.66	5.01	4.95	4.08	4.08			4.08	4.08	4.08	4.08	4.08	4.08
Accrued Expense	2.98	3.87	5.49	6.63	6.63			6.63	6.63	6.63	6.63	6.63	6.63
Other current Liabilities	4.77	3.29	5.48	6.97	7.26			7.26	7.26	7.26	7.26	7.26	7.26
<b>Total Current Liabilities</b>	<b>9.41</b>	<b>12.17</b>	<b>15.92</b>	<b>17.68</b>	<b>17.97</b>	<b>0.00</b>	<b>0.00</b>	<b>17.97</b>	<b>17.97</b>	<b>17.97</b>	<b>17.97</b>	<b>17.97</b>	<b>17.97</b>
Notes Payables/Short Term Debt	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Current port. Of LT Debt/Capital Leases	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Long term Debt	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
Capital Lease Obligations	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Interest Earning Debt</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Deferred Income tax	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Other liabilities	0.91	0.21	0.80	2.35	1.67			1.67	1.67	1.67	1.67	1.67	1.67
<b>Total Liabilities</b>	<b>10.32</b>	<b>12.38</b>	<b>16.72</b>	<b>20.03</b>	<b>19.64</b>	<b>0.00</b>	<b>0.00</b>	<b>19.64</b>	<b>19.64</b>	<b>19.64</b>	<b>19.64</b>	<b>19.64</b>	<b>19.64</b>
Redeemable Preferred Stock	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Non-redeemable Preferred Stock	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Common Stock	0.16	0.19	0.19	0.19	0.19		0.00	0.19	0.19	0.19	0.19	0.19	0.19
Additional Paid-in capital	50.57	67.56	69.30	70.17	71.12	0.00	0.00	71.12	71.12	71.12	71.12	71.12	71.12
Dividends Paid	0.00	0.00	0.00	0.00	0.00			0.00	-1.00	-2.00	-3.00	-4.00	-5.00
Retained Earnings	-28.82	-29.61	-31.86	-29.06	-27.56		0.00	-27.56	-25.73	-23.87	-21.98	-20.05	-18.08
Treasury Stock	0.00	0.00	0.00	-1.65	-1.65			-1.65	-1.65	-1.65	-1.65	-1.65	-1.65
Other Equity	-1.21	-0.99	-0.72	-0.86	-0.86		0.00	-0.86	-0.86	-0.86	-0.86	-0.86	-0.86
<b>Total Equity</b>	<b>20.70</b>	<b>37.15</b>	<b>36.91</b>	<b>38.79</b>	<b>41.24</b>	<b>0.00</b>	<b>0.00</b>	<b>41.24</b>	<b>42.07</b>	<b>42.93</b>	<b>43.82</b>	<b>44.75</b>	<b>45.72</b>
<b>Liability + Equity</b>	<b>31.02</b>	<b>49.53</b>	<b>53.63</b>	<b>58.82</b>	<b>60.88</b>	<b>0.00</b>	<b>0.00</b>	<b>60.88</b>	<b>61.71</b>	<b>62.57</b>	<b>63.46</b>	<b>64.39</b>	<b>65.36</b>
<b>Variance</b>	-0.01	-0.02	-0.01	-1.11	-2.23			-2.23	-2.23	-2.23	-2.23	-2.23	-2.23
<b>Debt/Equity</b>	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Inventory Turnover	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Inventory Turnover Days	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Days Inventory Outstanding	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00
Accounts Receivable Turnover	2.65	2.51	2.74	2.51	2.68			2.63	2.68	2.74	2.79	2.85	2.90
Accounts Receivable Turnover Days	137.82	145.23	132.98	145.34	136.05			138.78	136.05	133.39	130.77	128.21	125.69
Days Payable Outstanding	28.59	61.49	50.08	42.82	40.79			42.82	40.79	39.99	39.21	38.44	37.69
Days Sales Outstanding	137.82	145.23	132.98	145.34	136.05			145.34	138.78	136.05	133.39	130.77	128.21
Cash Conversion Cycle	109.23	83.75	82.90	102.53	95.26			102.53	97.98	96.06	94.18	92.33	90.52
Net tangible assets/share	\$1.03	\$1.93	\$1.87	\$1.81	\$1.88				\$1.93	\$1.97	\$2.02	\$2.07	\$2.12

SN VALUATION

LBO Adjusted Proforma Cash Flow

	52 weeks ending 2008-12-31	52 weeks ending 2009-12-31	52 weeks ending 2010-12-31	52 weeks ending 2011-12-31	2011	2012	2013	2014	2015
Net Income	-0.69	-0.80	-2.25	2.80	1.83	1.86	1.90	1.93	1.97
Depreciation	0.45	0.50	0.58	0.50	0.51	0.52	0.53	0.54	0.55
<b>Net Income + Depreciation</b>	<b>-0.24</b>	<b>-0.30</b>	<b>-1.67</b>	<b>3.30</b>	<b>2.34</b>	<b>2.38</b>	<b>2.43</b>	<b>2.47</b>	<b>2.52</b>
Amortization	0.27	0.48	1.08	1.76	1.02	1.18	1.35	1.40	1.30
Deferred Taxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non Cash Items	1.62	1.60	2.05	0.52	0.00	0.00	0.00	0.00	0.00
Change in Working capital	0.61	-1.47	0.97	-4.01	0.00	0.00	0.00	0.00	0.00
Accounts Receivable	0.00	-4.99	-1.25	-3.16	0.00	0.00	0.00	0.00	0.00
Other Receivables	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inventory	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prepaid Expenses	0.00	0.37	-1.64	-1.74	0.00	0.00	0.00	0.00	0.00
Accounts Payable	0.00	3.35	-0.06	-0.87	0.00	0.00	0.00	0.00	0.00
<b>Cash from Operating Activities</b>	<b>2.26</b>	<b>0.31</b>	<b>2.43</b>	<b>1.57</b>	<b>3.36</b>	<b>3.56</b>	<b>3.77</b>	<b>3.87</b>	<b>3.82</b>
Capital Expenditures Expenditures	-1.30	-1.22	-1.42	-1.36	-1.00	-1.00	-1.00	-1.00	-1.00
Long term investment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Investing Activities	-1.32	2.47	0.08	-5.32	0.00	0.00	0.00	0.00	0.00
<b>Cash from Investing Activities</b>	<b>-2.62</b>	<b>1.25</b>	<b>-1.34</b>	<b>-6.68</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>
Financing Cash flow items	-0.09	-0.62	-0.08	0.41	0.00	0.00	0.00	0.00	0.00
Total Cash Dividends Paid	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
Issuance (Retirement) of Stock	0.57	16.00	0.18	-1.51	0.00	0.00	0.00	0.00	0.00
Issuance (Retirement) of Current Portion Debt	-	-	-	-	0.00	0.00	0.00	0.00	0.00
Issuance (Retirement) of Long Term Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cash from Financing Activities</b>	<b>0.48</b>	<b>15.38</b>	<b>0.10</b>	<b>-1.10</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>	<b>-1.00</b>
Foreign Exchange effect	-0.02	0.04	0.12	-0.05	0.00	0.00	0.00	0.00	0.00
Beginning Cash Balance	8.17	8.27	25.27	26.58	21.30	22.66	24.23	26.00	27.87
<b>Net Change in Cash</b>	<b>0.10</b>	<b>17.00</b>	<b>1.31</b>	<b>-6.25</b>	<b>1.36</b>	<b>1.56</b>	<b>1.77</b>	<b>1.87</b>	<b>1.82</b>
Ending Cash Balance	8.27	25.27	26.58	20.33	22.66	24.23	26.00	27.87	29.68
Capex to Revenue	4.48%	3.05%	3.01%	2.66%	1.92%	1.88%	1.84%	1.81%	1.77%
Depreciation to Sales	1.55%	1.25%	1.23%	0.98%	0.98%	0.98%	0.98%	0.98%	0.98%
Amortization to Sales	0.93%	1.20%	2.29%	3.44%	1.96%	2.22%	2.48%	2.53%	2.30%
A/R to Sales	37.76%	39.79%	36.43%	39.82%	39.04%	38.27%	37.52%	36.79%	36.07%
Distributable FCF Yield	-2.69%	11.66%	8.15%	-38.19%	17.65%	19.16%	20.71%	21.45%	21.05%
Dividend Yield	0.00%	0.00%	0.00%	0.00%	2.88%	2.88%	2.88%	2.88%	2.88%
<b>FCF (Ops-Investing-Dividends)</b>	<b>-0.36</b>	<b>1.56</b>	<b>1.09</b>	<b>-5.11</b>	<b>1.36</b>	<b>1.56</b>	<b>1.77</b>	<b>1.87</b>	<b>1.82</b>

# SN VALUATION

# LBO Debt Schedule

	Proforma	2013	2014	2015	2016	2017
<b>Net Change in Cash</b>	<b>-6.25</b>	<b>1.36</b>	<b>1.56</b>	<b>1.77</b>	<b>1.87</b>	<b>1.82</b>
Current Portion Debt Repayment						
Long Term Debt Repayment						
<b>Outstanding Debt</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Current Portion Debt Balance	0.00	0.00	0.00	0.00	0.00	0.00
Long Term Debt Balance	0.00	0.00	0.00	0.00	0.00	0.00
Forward Libor Curve		1.00%	1.00%	1.00%	1.00%	1.00%
Spread		4.00%	4.00%	4.00%	4.00%	4.00%
<b>Interest Rate</b>		<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>
<b>Interest Expense</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Cash Balance		20.33				
Interest @ 1.0%		0.20	0.20	0.20	0.20	0.20
<b>Net Interest Expense/(Income)</b>		<b>(0.20)</b>	<b>(0.20)</b>	<b>(0.20)</b>	<b>(0.20)</b>	<b>(0.20)</b>
<b>Net Interest Rate</b>		<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>
EBITDA		2.61	2.66	2.71	2.77	2.82
<b>EBITDA/Interest Expense Coverage</b>		<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

## Interest Rate Coverage Table

Debt Rating	2013	2014	2015	2016	2017
AAA	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
AA	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
A+	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
A	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
A-	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
BBB	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
BB+	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
BB	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
B+	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
B-	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CCC	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CC	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
C	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
D	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

\*Source: NYU; Professor Damodaran

# Altman Z Score

Company Name:

GSE Systems

Ticker:

GVP

Period	2009	2010	2011	2012	2013	2014	2015	2016	2017
Working Capital	13.88	31.47	30.03	29.84	31.20	32.77	34.54	36.41	38.22
Total Assets	31.01	49.51	53.62	58.65	59.48	60.34	61.23	62.16	63.13
<b>X1</b>	<b>0.45</b>	<b>0.64</b>	<b>0.56</b>	<b>0.51</b>	<b>0.52</b>	<b>0.54</b>	<b>0.56</b>	<b>0.59</b>	<b>0.61</b>
Retained Earnings	-28.82	-29.61	-31.86	-27.56	-25.73	-23.87	-21.98	-20.05	-18.08
Total Assets	31.01	49.51	53.62	58.65	59.48	60.34	61.23	62.16	63.13
<b>X2</b>	<b>-0.93</b>	<b>-0.60</b>	<b>-0.59</b>	<b>-0.47</b>	<b>-0.43</b>	<b>-0.40</b>	<b>-0.36</b>	<b>-0.32</b>	<b>-0.29</b>
EBITDA	0.43	1.06	-0.55	3.68	2.61	2.66	2.71	2.77	2.82
Total Assets	31.01	49.51	53.62	58.65	59.48	60.34	61.23	62.16	63.13
<b>X3</b>	<b>0.01</b>	<b>0.02</b>	<b>-0.01</b>	<b>0.06</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>
Market Value of Equity	34.68	34.68	34.68	34.68	36.59	38.60	40.71	42.95	45.31
Total Liabilities	10.32	12.38	16.72	19.64	19.64	19.64	19.64	19.64	19.64
<b>X4</b>	<b>3.36</b>	<b>2.80</b>	<b>2.07</b>	<b>1.77</b>	<b>1.86</b>	<b>1.97</b>	<b>2.07</b>	<b>2.19</b>	<b>2.31</b>
Net Sales	29.00	40.06	47.21	51.13	52.15	53.20	54.26	55.34	56.45
Total Assets	31.01	49.51	53.62	58.65	59.48	60.34	61.23	62.16	63.13
<b>X5</b>	<b>0.94</b>	<b>0.81</b>	<b>0.88</b>	<b>0.87</b>	<b>0.88</b>	<b>0.88</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>
<b>Altman Z Score</b>	<b>2.23</b>	<b>2.49</b>	<b>1.93</b>	<b>2.09</b>	<b>2.16</b>	<b>2.30</b>	<b>2.45</b>	<b>2.60</b>	<b>2.75</b>

$$Z = 1.2 \times X1 + 1.4 \times X2 + 3.3 \times X3 + 0.6 \times X4 + 1.0 \times X5$$

Z-SCORE ABOVE 3.0 –The company is considered 'Safe' based on the financial figures only.

Blue

Z-SCORE BETWEEN 2.7 and 2.99 – 'On Alert'. This zone is an area where one should 'Exercise Caution'.

Green

Z-SCORE BETWEEN 1.8 and 2.7 – Good chance of the company going bankrupt within 2 years.

Yellow

Z-SCORE BELOW 1.80- Probability of Financial Catastrophe is Very High.

Red