

Halliburton
CLIENT REPORT
SONTAG SOLUTIONS



Samuel Kaplan

Reece Denzel

Guy Sherzer

Professor Likens' Senior Seminar

Contents

Executive Summary.....	3
Company Background.....	3
General.....	3
Key Operational Drivers.....	5
Baker Hughes.....	7
Macondo	8
Current Industry Dynamics.....	9
Financial Analysis.....	13
Operations.....	13
Productivity.....	14
Liquidity & Solvency.....	15
Cash Flows.....	18
Competitive Analysis (Five Forces).....	21
Internal Rivalry.....	21
Buyer Power.....	22
Supplier Power.....	22
Threat of New Entrants.....	23
Threat of Substitutes.....	23
SWOT Analysis	24
Strengths.....	24
Weaknesses.....	25
Opportunities.....	26
Threats.....	27
Strategic Recommendations.....	29
Appendix	34

Executive Summary

Halliburton (the Company) is a leading player in the oil and gas services industry. The Company is a top performer among its peers with respect to growth, efficiency, profitability and balance sheet strength. Halliburton currently suffers from an industry cyclical downturn, as oil prices dropped nearly 50% between June 2014 and December 2014. The Company depends on the capital spending of oil and gas companies to sustain operations. Therefore, the Halliburton faces 1-2 years of poor cash flow performance, but even under severe circumstances, will likely meet its obligations. Halliburton and Baker Hughes have agreed on a merger agreement, which is expected to be executed in the second half of 2015. While the merger may create initial additional costs, most analysts expect significant long-term synergies that will put Halliburton in a strong position to compete with its largest competitor, Schlumberger. In order to make it through the next 1-2 years, Halliburton needs to focus on limiting counterparty risk, prioritize the most profitable business segments, restructure compensation structure and invest in innovative technologies

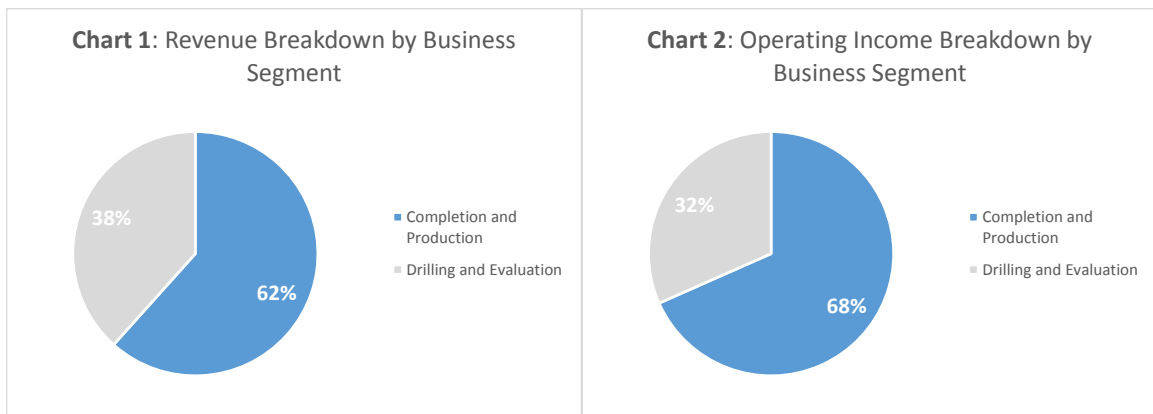
Background

General

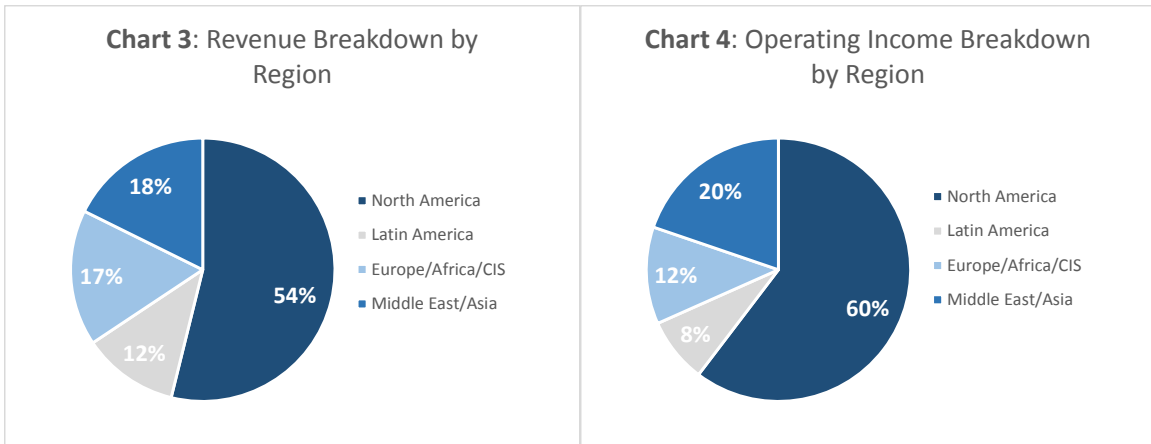
Halliburton is the world's second largest provider of products and services to the oil and gas industry. The Company was founded in 1919 and has over 75,000 employees in more than 80 countries representing 140 nationalities.¹ Halliburton operates 13 product service

¹ Halliburton 10k 2014 page 1

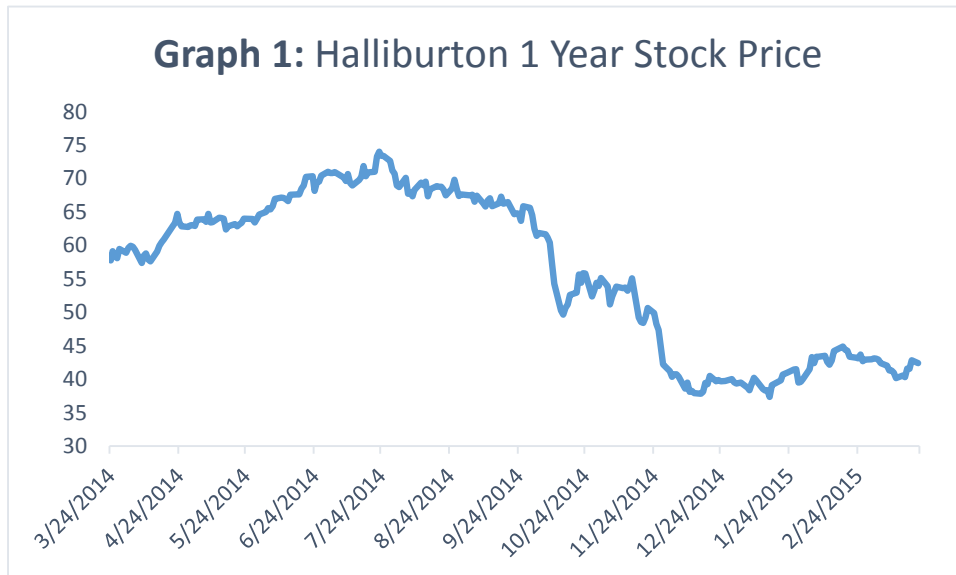
lines, which are divided into two divisions: Drilling and Evaluation (D&E) and Completion and Production (C&P). Each product service line is responsible assisting clients with strategy, technology development, process development, human capital development and financial capital allocation. More specifically, the D&E division provides field and reservoir modeling, drilling, evaluation and precise well-bore placement solutions that enable customers to model, measure, and optimize their well construction activities. The C&P division provides cementing, stimulation, well intervention, pressure control, completion, and pipeline and process services. While Halliburton operates worldwide, its primary market is the United States and has recently focused growth opportunities in the Middle East and Asia. Please find a breakdown of Halliburton’s revenues and operating income by business segment and geographic region in Charts 1-4 below.²



² All operational data found in the Halliburton 10k 2014



Over the past year, Halliburton’s equity has performed poorly, primarily due to the crash of oil prices in the second half of 2014. Graph 1 (below) illustrates this trend.³



Key Operational Drivers

Given current suppressed oil and gas prices and the distressed environment within the energy industry, there are three key drivers that will significantly impact the Company’s operational performance and cash flows.

³ Stock information found on Yahoo! Finance

- 1) *Customer Capital Expenditures*- Halliburton business relies heavily on customer capital expenditure efforts. In particular, demand for the Company's products and services are sensitive to the level of exploration, development and production activity of oil natural gas companies. The level of capital spending of Halliburton's customers depends on market commodity prices. Simplistically, if oil and natural gas prices are high enough to cover variable costs, companies will produce. Moreover, customer expansion is more reliant the belief oil and gas companies have about oil prices in the future rather than what actually happens. Due to market dynamics out of Halliburton's control, management has indicated that "2015 will be a challenging year" (10k 13). The primary concern for the company going forward must be to cut costs in order to deal with lower capital spending in the industry.

- 2) *Accounts Receivable*- Halliburton depends on a limited number of influential customers. None of these customers account for more than 10% of the Company's business, but the loss of one customer due to bankruptcy or bad relations would severely impact Halliburton's performance. The Company bills customers in arrear, which leaves the possibility of delayed or unpaid invoices. Due to the depressed oil and gas prices, customers will likely be liquidity constrained, which may lead to more delayed invoice payments. Halliburton may have its own liquidity issues and must limit customers stretching receivable days as much as possible without tarnishing valuable relationships.

3) *Raw Material Vendors*- Many of Halliburton's product lines are dependent on timely delivery of raw materials such as, proppants, hydrochloric acid and gels. In some cases the Company has a relationship with a single provider of these materials. If vendors become distressed in the current depressed market, Halliburton could face issues delivering products and services to clients in a timely manner. The Company must consistently monitor high value vendors to be certain that these concerns are never realized.

Baker Hughes

On November 16th, 2014 Halliburton and Baker Hughes entered into a merger agreement in which the Company will acquire all of the outstanding shares of Baker Hughes in a stock and cash transaction. Baker Hughes is a leading supplier of oilfield services, products, technology and systems to the worldwide oil and natural gas industry. The acquisition is intended to boost Halliburton's market share and technological capabilities and drive cost synergies between the two industry giants. The merger agreement states that, "Baker Hughes common stock will be converted into the right to receive 1.12 shares of [Halliburton] common stock and \$19.00 in cash".⁴

Halliburton has estimated that approximately 490 million shares of its common stock and approximately \$8.3 billion to be paid in cash. In order to finance the transaction, the Company has already obtained a commitment for a senior unsecured bridge facility worth

⁴ Halliburton 10k 2014 page 51

\$8.6 bn.⁵ While Halliburton will acquire all of Baker Hughes' cash flows, the Company will come close to doubling its debt burden. This higher debt load could 1) reduce the chances of refinancing other debt securities at attractive rates; 2) limit the Company's flexibility to execute on strategic opportunities; 3) damage the Companies ability to fund capital expenditures and working capital needs. Moreover costs associated with combining the two companies will reduce cash flows in the early years of the merger. Therefore, when accounting for interest increases and other acquisition related expenses, Halliburton's cost cutting initiatives become even more important over what looks to be a strained few years. Despite the difficulties relating to the merger, if Halliburton can efficiently make it through the current market downturn, the Company will become a significantly stronger player.

Macondo

Halliburton remains liable for lawsuits relating to the British Petroleum Macondo oil well spill in the Gulf of Mexico. In September 2014, the court ruled that, "(1) BP's conduct was reckless, Transocean's conduct was negligent, and [Halliburton's] conduct was negligent, (2) fault for the Macondo blowout, explosion, and spill is apportioned 67% to BP, 30% to Transocean, and 3% to [Halliburton], and (3) the indemnity and release clauses in [Halliburton's] contract with BP are valid and enforceable against BP".⁶ During 2014, Halliburton reached an agreement to settle a substantial portion of claims for approximately \$1.1 billion, of which \$805 million remains payable as of December

⁵ Ibid

⁶ Halliburton 10k 2014 page 9

31, 2014, with \$367 million expected to be paid during 2015.⁷ Additionally, certain insurance companies have notified Halliburton that they do not intent to reimburse the Company for approximately \$200 mm of insurance coverage relating the Macondo settlements.⁸ While these one-time expenses are large, they finally provide Halliburton with vision into the extent of their future expenses relating to the spill.

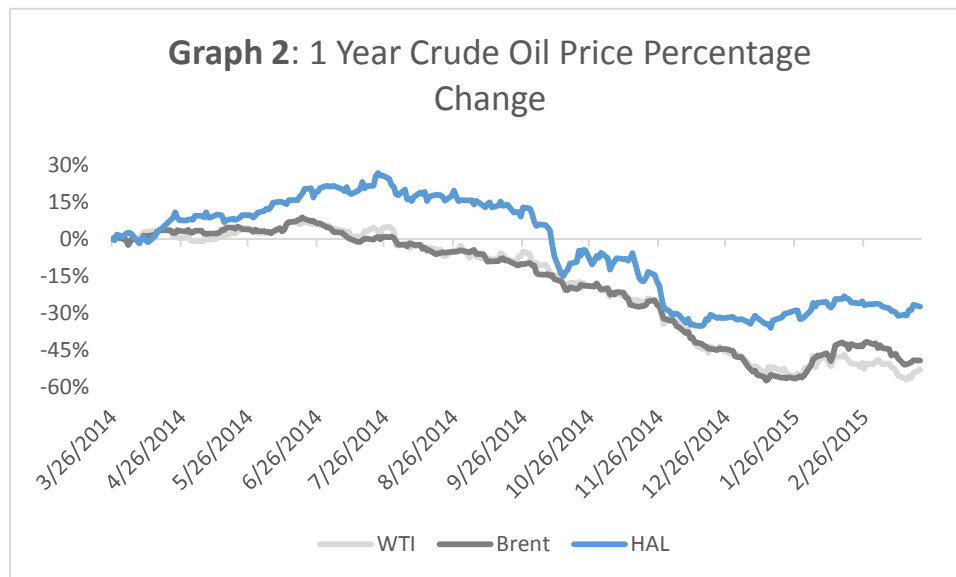
Current Industry Dynamics

In the second half of 2014 oil prices plummeted. Specifically, WTI spot prices fell from \$108 per barrel in June to \$53 per barrel in December and Brent crude spot prices fell from \$115 per barrel in June to \$55 per barrel in December.⁹ Oil prices fell due to a variety of factors, including weakening demand in Europe and Asia, increased production in the United States, and the decision by OPEC to maintain levels of production. The oil supply industry is currently in a prisoner's dilemma crisis: any producer that cuts supply risks losing significant market share, but if all producers decrease production, the industry can increase profits. The suppressed oil prices have caused marginal oilrigs and wells with higher break-even costs to begin shutting down. If prices continue to stay depressed many more unprofitable rigs may come offline, which would drastically hurt Halliburton's top line. Graph 2 (below) illustrates the percentage change of crude oil prices over the past year. Note that Halliburton's stock price closely follows the price of crude oil.

⁷ Halliburton 10k 2014 page 10

⁸ Ibid

⁹ All historical oil price information provided by the U.S. Energy Information Administration (EIA)



The United States Energy Information Administration (EIA) currently projects that Brent prices will average \$59 per barrel in 2015, with increases towards the end of the year to an average of \$75 per barrel during the fourth quarter. While the EIA is slightly bullish on a crude price recovery, most analysts seem to have similar views. Please find analyst projections for global crude oil prices in Table 1 below.

Table 1: Brent Price Estimates			
Current Price (3/23/15)	53.82		
June Peak	115.19		
	2015E	2016E	As of
EIA ¹⁰	\$59.32	\$75.03	Apr-15
World Bank ¹¹	\$54.40	\$71.40	Jan-15
Goldman Sachs ¹²	\$50.40	\$70.00	Jan-15
JP Morgan ¹³	\$49.00	\$56.80	Jan-15
Median	\$52.40	\$70.70	
Average	\$53.28	\$68.31	

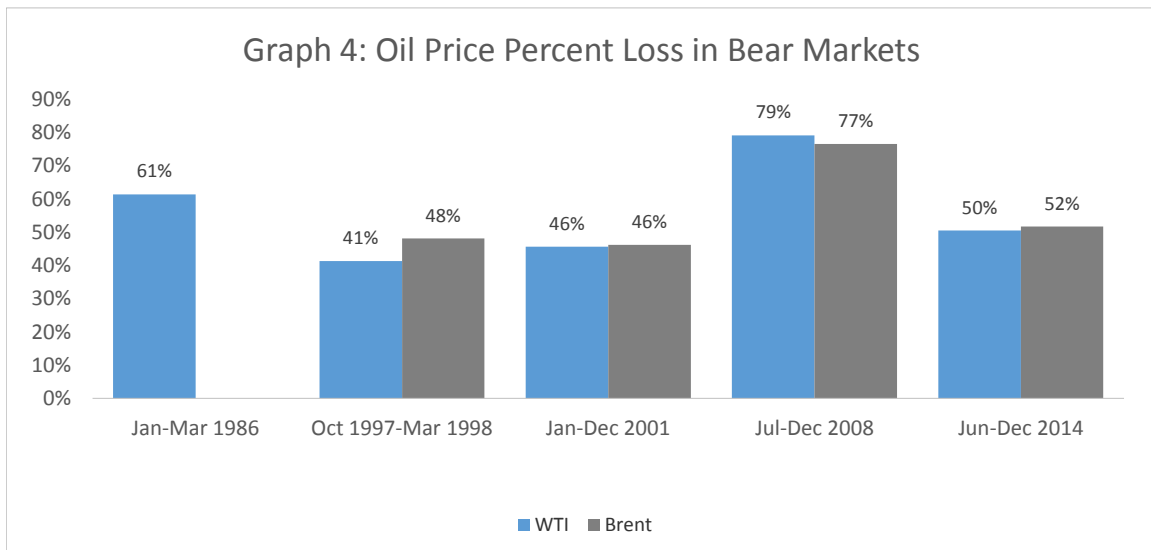
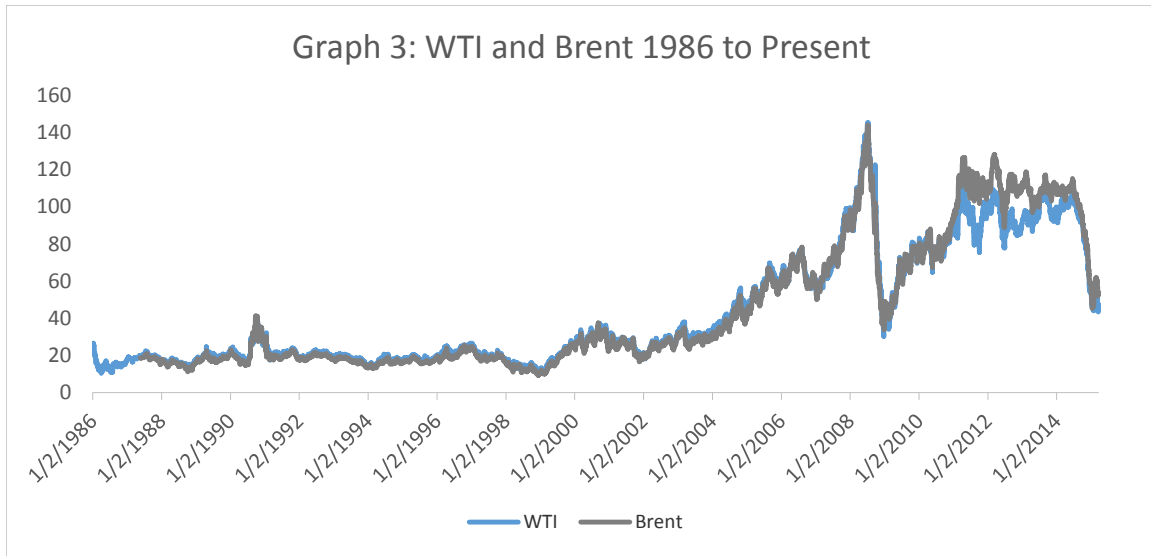
¹⁰ "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." *Short-Term Energy Outlook*. N.p., 7 Apr. 2015. Web.

¹¹ "Crude Oil Price Forecast: Long Term 2015 to 2025 | Data and Charts - Knoema.com." *Knoema*. N.p., n.d. Web.

¹² Johnson, Christopher. "Goldman Sachs Slashes Oil Price Forecasts." *Reuters*. Ed. Michael Urquhart. Thomson Reuters, 12 Jan. 2015. Web.

¹³ Kollmeyer, Barbara. "Oil Prices Fall as J.P. Morgan Becomes Latest to Slash Forecast." *MarketWatch*. MarketWatch, 19 Jan. 2015. Web.

Over the past 30 years, there have been five major bear markets in oil prices: mid 1980s, 1997-1998, 2001, 2008 and the current market. Graph 3 (below) illustrates historical oil prices since 1986. Due to scale, not all bear markets are evident in Graph 3, so please find price drops in each bear market in Graph 4.



As seen above, while oil bear markets have seen significant drops in market prices of at least 40%, rebounds were historically modest and usually did not exceed \$40 until the

mid-2000s. During the great recession, oil prices fell almost 80% following the strongest bull market in history. However, in 2008, forward prices did not fall with spot prices, indicating that the market believed the fall in prices was a result of the Great Recession and prices would rebound to previous levels as the economy moved back toward expansion. This outlook proved to be correct until the second half of 2014, when, as discussed above, prices plummeted again. Unlike 2008, forward prices did fall with spot prices in 2014, demonstrating that the market believes the current market conditions are due to inherent industry dynamics that may continue to suppress future oil prices. Given this market reaction and analyst estimates, mid-long term oil prices will likely rebound modestly as supply and demand rebalance, but will not reach the historically high levels of 2008 and 2014.

The current market conditions will clearly differentiate the strong long term players and the poorly managed competitors that may not survive. As seen below in the financial analysis, Transocean Ltd (RIG) is a poor performer with negative growth, margins and interest coverage and asset efficiency well below industry average. With stock prices at all-time lows, Transocean could be another acquisition candidate for Halliburton. If conditions continue to deteriorate, Halliburton could potentially buy Transocean assets at attractive prices or acquire the entire business to expand its capabilities to offshore.

Financial Analysis¹⁴

Operations

Despite the weakening market, Halliburton performed remarkably well in 2014 with annual revenue and net income growth of 11.8% and 62.4%, respectively. However, it is important to note that in 2013 Halliburton took a \$1bn loss on its income statement due to the Macando well incident. Adjusting 2013 earnings for this non-recurring item Halliburton's net income growth falls to approximately 16.4%. Even considering this adjustment, Halliburton's growth significantly outpaced the industry average and median, demonstrating the Company's ability to win contracts in a tight market. Moreover, after the oil market plunge, in the fourth quarter Halliburton was able to grow its revenues and net income year over year 14.9% and 17.1%, respectively. This growth was due to locked in contracts and Halliburton's preemptive cost cutting initiatives. Please find Halliburton's growth compared with its industry peers in Table 2 below.

Company	Revenue	Net Income
Schlumberger	7.3%	-18.2%
Baker Hughes	9.8%	56.9%
Weatherford International	-2.3%	71.7%
Fluor Corporation	-21.3%	-21.3%
Transocean	-0.8%	-240.6%
Average	-1.5%	-30.3%
Median	-0.8%	-18.2%
Halliburton	11.8%	62.4%

¹⁴ All financial data for Halliburton and competitors was found on each company's respective annual report (10k) for the year ending 2014

In addition, Halliburton leads the industry with respect to margins. With EBIT, EBITDA and net income margins of 15.5%, 22.0% and 10.5%, respectively, Halliburton's cost efficiency is second only to Schlumberger, the largest player in the industry. As seen in Table 3 (below), the largest companies have the best overall margins, indicating that significant cost economies of scale exist within the oil and gas services industry. Therefore, industry evidence demonstrates that the Company's merger with Baker Hughes may yield even better margin performance.

Table 3: Margins				
Company	EBIT	EBITDA	Net Income	Market Capitalization
Schlumberger	19.5%	28.0%	11.3%	\$104,580
Baker Hughes	11.6%	19.0%	7.1%	26,960
Weatherford International	3.4%	12.6%	-3.6%	9,330
Fluor Corporation	5.6%	6.5%	3.0%	8,550
Transocean	-15.0%	-2.6%	-21.4%	5,550
Average	5.0%	12.7%	-0.7%	30,994
Median	5.6%	12.6%	3.0%	9,330
Halliburton	15.5%	22.0%	10.5%	36,200

Productivity

The Company's return on assets (ROA), return on equity (ROE) and asset turnover are all well above the median among Halliburton's peers. Halliburton's 15% ROA and 1.02 asset turnover indicate more efficient use of assets than even Schlumberger. Moreover, if Halliburton implements best practices in the Baker Hughes merger, there is strong potential upside to increase the productivity of Baker Hughes as well. Please find Halliburton's productivity compared to its industry peers in Table 4 below:

Table 4: Productivity

Company	ROA	ROE	Asset Turnover
Schlumberger	14.2%	14.5%	0.73
Baker Hughes	10.1%	12.4%	0.86
Weatherford International	1.8%	-2.9%	0.52
Fluor Corporation	14.8%	20.1%	2.63
Transocean	-7.3%	-28.0%	0.49
Average	6.7%	3.2%	1.04
Median	10.1%	12.4%	0.73
Halliburton	15.8%	21.1%	1.02

Liquidity and Solvency

Halliburton has not faced any liquidity issues in recent years. The Company's current and quick ratios indicate its ability to pay off current liabilities quickly with only cash and receivables. The interest coverage ratio of 13x demonstrates that under the current capital structure Halliburton can easily pay interest obligations even if operations deteriorate. However, the merger with Baker Hughes would have a material effect on Halliburton's liquidity due to the addition of close to \$8bn of debt. Please find Halliburton's liquidity metrics in Table 5 below.

Table 5: Liquidity			
Company	EBIT/ Interest	Current Ratio	Quick Ratio
Schlumberger	25.7 x	1.74	1.01
Baker Hughes	12.3 x	1.59	1.02
Weatherford International	1.0 x	2.60	1.27
Fluor Corporation	41.0 x	1.73	1.04
Transocean	-2.9 x	1.97	1.40
Average	15.4 x	1.93	1.15
Median	12.3 x	1.74	1.04
Halliburton	12.9 x	2.56	1.68

Similar to its liquidity, Halliburton's solvency is extremely healthy; however, the Baker Hughes merger could double its debt burden. Halliburton's debt credit rating is currently investment grade with an A2 rating from Moody's and an A rating from Standard & Poor's. While more debt could boost ROE, it is important for Halliburton to maintain a low debt capitalization, due to the cyclical nature of the oil and gas industry.

Table 6: Solvency			
Company	Debt/ EBITDA	Debt/ Equity	Debt/ Assets
Schlumberger	0.8 x	0.10	0.16
Baker Hughes	0.8 x	0.15	0.14
Weatherford International	3.6 x	0.73	0.24
Fluor Corporation	0.7 x	0.12	0.12
Transocean	-37.9 x	1.63	0.48
Average	-6.4 x	0.54	0.23
Median	0.8 x	0.15	0.16
Halliburton	1.1 x	0.22	0.24

While, the Baker Hughes merger will adversely affect Halliburton's liquidity and solvency, the post-acquisition Company will still maintain strong financial health. However, increased debt burden from the merger leaves Halliburton with less wiggle

room with respect to worse than expected performance during the cyclical downturn.

Please find Halliburton's pre and post-acquisition pro forma debt capitalization in Tables 7 and 8 below.

Table 7: Debt Capitalization (Pre Acquisition)		
Security	Principle Outstanding	Cash Interest
3.5% senior notes due August 2023	\$1,098	\$38
6.15% senior notes due September 2019	998	61
7.45% senior notes due September 2039	995	74
4.75% senior notes due August 2043	898	43
6.7% senior notes due September 2038	800	54
1.0% senior notes due August 2016	600	6
3.25% senior notes due November 2021	499	16
4.5% senior notes due November 2041	498	22
2.0% senior notes due August 2018	400	8
5.9% senior notes due September 2018	400	24
7.6% senior debentures due August 2096	293	22
8.75% senior debentures due February 2021	184	16
6.75% notes due February 2027	104	7
7.53% notes due May 2017	45	3
Other	42	
Total	7,854	395
Leverage (Debt/EBITDA)	1.1 x	
Interest Coverage (EBIT/Interest)	12.9 x	
Weighted Average Interest Rate	5.06%	

Table 8: Debt Capitalization Adjusted for Acquisition		
Security	Principle Outstanding	Cash Interest
Pre Acquisition Debt	\$7,854	\$395
8.75% Senior Secured Bridge Facility	8,300	726
Total	16,154	1,121
Leverage (Debt/EBITDA)	1.4 x	
Interest Coverage (EBIT/Interest)	6.1 x	
Weighted Average Interest Rate	6.96%	

Moreover, Halliburton does not currently have any significant debt maturities until its \$600mm of 1% senior notes are due in August of 2016. By the time that ~\$2bn worth of debt matures in 2018 and 2019 Halliburton will likely be able to refinance or pay off its debt due to better market conditions. Please find a Halliburton's debt maturities by year in Table 9 below.

Table 9: Debt Maturity Risk							
Year	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	Thereafter	Total
Principle Due	\$14	\$610	\$52	\$806	\$1,000	\$5,389	\$7,857

Cash Flows

The most important financial analysis for Halliburton is the cash flow analysis. Due to current depressed oil prices, Halliburton faces a difficult year ahead with respect to its cash. Four main factors will drive Halliburton's cash flows. (1) Weakening supply of oil will lead to lower demand for the Company, reducing Halliburton's top line. (2) The acquisition of Baker Hughes will decrease operating margins for at least one year while the two companies integrate their operations. (3) Halliburton's customers will likely try to stretch receivables in the face of poor market conditions to conserve their own cash. (4) As stated in the Company's 2014 10k, Halliburton's management is committed to maintaining consistent capital expenditure growth with a long-term market view. Please find the primary assumptions made in the Halliburton projected cash flow model in Table 10 below.

Table 10: Cash Flow Model Primary Assumptions

	<u>12/31/2015</u>	<u>12/31/2016</u>	<u>12/31/2017</u>	<u>12/31/2018</u>	<u>12/31/2019</u>
Revenue Growth	-10.0%	-5.0%	0.0%	2.0%	5.0%
Operating Margins	12.0%	13.0%	15.0%	16.0%	17.0%
Days Receivable	100	90	80	80	80
CapEx Growth	5.0%	5.0%	10.0%	10.0%	15.0%

These assumptions indicate a “worst case” scenario to determine Halliburton’s near term liquidity risk. The depressed oil market will force negative growth and increased receivable days, which will both recover to normalized levels by 2019. Operating margins will initially fall, but increase as merger synergies are realized. While lower than normal, capital expenditure growth remains strong and increases as the market improves. Please find the cash flow build (including Baker Hughes) in Table 11 below. While the execution of the merger is likely, the cash flow build excluding Baker Hughes can be found in the appendix.

Table 11: Cash Flow Model (with Baker Hughes)

	Projected				
	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Income Statement					
Service revenue	\$37,381	\$35,512	\$35,083	\$35,365	\$36,504
Sales revenue	14,298	13,583	13,449	13,587	14,070
Total revenue	51,679	49,095	48,533	48,953	50,574
Cost of services	(32,895)	(30,895)	(29,821)	(29,707)	(30,299)
Cost of sales	(12,583)	(11,818)	(11,432)	(11,413)	(11,678)
G&A	(2,143)	(2,036)	(2,027)	(2,060)	(2,150)
Total operating expenses	(47,620)	(44,748)	(43,280)	(43,180)	(44,127)
Operating income	4,058	4,346	5,253	5,773	6,448
Interest expense	(1,121)	(1,121)	(1,121)	(1,121)	(1,121)
Pretax income	2,937	3,225	4,131	4,651	5,326
Tax					
Net income	2,937	3,225	4,131	4,651	5,326
EBITDA	7,781	8,163	9,440	10,217	11,237
Unlevered free cash flow adjustments					
(+) Interest adjustment	1,121	1,121	1,121	1,121	1,121
(+) D&A	3,722	3,816	4,187	4,444	4,789
(-) Net change in operating working capital	(2,375)	2,088	1,490	(96)	(367)
(-) Capital expenditure	(5,328)	(5,594)	(6,153)	(6,769)	(7,784)
Unlevered free cash flow	78	4,657	4,776	3,352	3,086
Contractual obligations					
(-) Long term debt	(14)	(610)	(52)	(806)	(1,000)
(-) Interest on debt	(1,121)	(1,121)	(1,121)	(1,121)	(1,121)
(-) Operating leases	(567)	(354)	(268)	(131)	(106)
(-) Purchase obligations	(1,217)	(458)	(318)	(163)	(74)
(-) Other long-term liabilities	(71)	(42)	(42)	(10)	(10)
Cash Flow After Contractual Obligations	(2,912)	2,073	2,976	1,121	775
Beginning cash	4,031	1,119	3,191	6,168	7,289
Cash Surplus (Deficit)	1,119	3,191	6,168	7,289	8,064

Note that this model does not include dividends and much of the beginning cash in later periods would have been distributed to shareholders. As seen above, while the Company comes close to running out of cash, it still has enough cash on its balance sheet to cover its loss in 2015. The sensitivity analysis in Table 12 below, demonstrates how severe the operating conditions must be in order for Halliburton to run out of cash and be forced to either draw on its revolving credit facility or cut capital expenditures. This sensitivity

analysis illustrates the effect of receivable days and operating margins. The maximum loss equals the cash on the balance sheet in the beginning of 2015. Values highlighted in red indicate situations when Halliburton’s balance sheet cannot cover its cash losses.

Please find Table 12 below.

Table 12: 2015 Cash Flow Sensitivity- Days Receivable vs. Margins						
<i>(with Baker Hughes)</i>						
Max Loss	\$4,031	Days Receivable				
		90	95	100	105	110
Operating Margin	15%	705	(13)	(731)	(1,448)	(2,166)
	14%	(22)	(740)	(1,458)	(2,176)	(2,893)
	13%	(749)	(1,467)	(2,185)	(2,903)	(3,621)
	12%	(1,477)	(2,194)	(2,912)	(3,630)	(4,348)
	11%	(2,204)	(2,922)	(3,639)	(4,357)	(5,075)

Competitive Analysis (Five Forces)

Internal Rivalry- High

Although there are thousands of oilfield services companies throughout the world, the market is dominated by the top five players. While Halliburton sits comfortably as one of the largest companies in the industry, second only to Schlumberger, the competition between the leaders in the industry is intense. The top players in the oilfield services industry are all constantly competing for contracts with the largest customers to maintain their high volume of business. Depressed oil prices will further exacerbate internal rivalry by decreasing demand and putting pressure on contract prices.

Buyer Power- *High*

While none of Halliburton's customers represent more than 10% of its revenue, the Company still depends on a relatively limited number of customers. As the company stated in its annual report, "the loss of one of our more significant customers could have a material adverse effect on our business." This reliance on each customer gives Halliburton's customers the bargaining strength to stretch receivables, which could hurt Halliburton's cash flows. Customers are increasingly likely to delay or even default on their obligations during the current cyclical downturn.

In addition, close to 50% of Halliburton's revenue is generated in the United States. While there are many customers within the United States, Halliburton has significant exposure to this particular geographic region and could suffer large losses if there is any issue with the North American customer base.

Supplier Power- *Moderate*

The availability and quick delivery of raw materials is essential to Halliburton's business and delays will have a negative impact on operations. Moreover, there are some markets where Halliburton has a relationship with only one supplier for a particular resource. Therefore, suppliers have some bargaining power over the Company. There is a strong threat that during the market downturn an important supplier will go out of business, which would severely hinder Halliburton's ability to provide high quality products and services to its customers.

Threat of New Entrants- *Low*

Barriers to entry in the oilfield services industry are high due to high cost of the equipment used in the oil extraction process. In order to attain any profitable economies of scale significant capital is required. Some types of pumping trucks at well sites can cost upwards of \$1 million each. The high learning curve and intense rivalry among existing players also serves as a deterrent for potential industry entrants.

Threat of Substitute Products- *Moderate*

While there are many alternative energy sources, none are currently technologically capable of replacing oil and natural gas. Oil and natural gas provide a consistent baseline source of energy, which cannot be replicated by alternatives. For example, solar energy is only effective during the day (when the sun is out) and wind energy is generally most effective at night (when there is the most wind). Since there are no current efficient ways of storing the energy produced by alternatives, fuels like oil, natural gas and coal are necessary to maintain consistent baseline energy in power plants. However, if technology progresses such that energy produced from alternatives can be efficiently stored, Halliburton's business will be significantly negatively impacted.

SWOT Analysis

SWOT Analysis	
Strengths	Weaknesses
<ol style="list-style-type: none">1. Diversified Product Offerings2. Size Advantage3. Financial Strength	<ol style="list-style-type: none">1. Near Term Cash Flows2. Exposure to Oil Prices3. Exposure to Exchange Rates4. Exposure to Interest Rates
Opportunities	Threats
<ol style="list-style-type: none">1. Growing Energy Demands2. Complexity of Extraction Process3. Baker Hughes Merger	<ol style="list-style-type: none">1. Counterparty Risk2. Regulatory Obstacles and Fines3. Political and Economic Turmoil4. Extended Depressed Oil Prices

Strengths

Diversified Product Offerings – Halliburton is well known within the industry for consistently delivering a wide array of necessary products and services for oil and gas extraction. This one-stop-shop characteristic allows the company to more easily retain existing clients and gain new clients as further oil infrastructure is established. The Company's diversified array of income from numerous projects and product lines allows the Halliburton to hedge risk from a downturn in any one specific point along the upstream oil and gas extraction process.

Size Advantage – The Company is well positioned to enforce pricing power and has the resources to deal with any changes in the industry or regulatory environment. As seen in the financial analysis, the oil field services industry is subject to significant economies of scale, which allow Halliburton to more efficiently cut costs and create barriers to entry

for large contracts. The Baker Hughes merger will further enhance Halliburton's size advantage.

Financial Strength- Halliburton is an industry leader in terms of growth, margins and asset efficiency. Moreover, the Company has minimal risk of financial distress due to its strong balance sheet. This financial strength gives Halliburton flexibility to execute quickly on any strategic opportunities that arise. Even the potential increased debt burden from the Baker Hughes merger will leave Halliburton with a strong liquidity and solvency metrics.

Weaknesses

Near Term Cash Flow – Halliburton might have difficulties in securing adequate cash flow to cover its short-term obligations. Capital expenditures consume a significant portion of overall cash flow, and the company has recently seen an extension of its timeframe for accounts receivable, further restricting capital flexibility. Additionally, fines and fees from regulators could tie up much needed capital (such as those from the BP oil spill). If the Company's operating and market situation fall weaker than the bear case outlined above, then Halliburton will be forced to either cut capital expenditure or increase debt by drawing down on its \$3 bn revolving credit facility.

Exposure to Oil Prices – Since new drilling projects are highly sensitive to the market price of oil, low prices translate into decreased drilling activities across the board. With oil prices hovering near multi-year lows, demand for oilfield products and services is

likely to remain subdued. Thus Halliburton's top line will suffer as customers cut back marginal capital spending projects.

Exposure to Exchange Rates- While Halliburton uses derivative instruments, including forward foreign exchange contracts and foreign exchange options, significant exchange rate volatility could have an adverse effect on cash flows. The Company notes that a hypothetical 10% adverse change in the value of foreign currency positions relative to the United States dollar as of December 31, 2014 would result in a \$90mm, pre-tax, loss for net monetary assets denominated in currencies other than United States dollars. While a \$90mm is insignificant during a booming market, a loss of this size could seriously hurt Halliburton's cash flows over the next two years.

Exposure to Interest Rates- Due to floating rate debt securities, Halliburton faces risk that interest rates will increase. The real risk free rate is currently hovering around 0%, but as the United States economy continues improve, it is likely that the Federal Reserve will begin increasing short term rates again. Halliburton's floating rate debt is fixed to the LIBOR rate. The company estimates that due to its current interest rate swap positions, a hypothetical 100 basis point increase in the LIBOR rate would result in approximately an additional \$15 million of interest charges for the year ended December 31, 2014.

Opportunities

Growing Energy Demands- Global consumption of energy continues to rise. Developing countries in particular will likely continue to rely on petroleum and natural gas to fuel economic and industrial growth. As demand grows, so too will the need to expand

extraction efforts, offering Halliburton the opportunity to capitalize on new projects internationally and further diversify its business geographically.

Complexity of Extraction Process – As companies try to find oil in hard to reach places and the oil and gas extraction process becomes increasingly difficult, customers will require more complex and scientific technology. Halliburton’s continued research and capital spending puts the Company in strong position to capture a large portion of the potential market for complex drilling solutions. Moreover, if Halliburton is able to develop proprietary efficient technology, the Company can boost margins, earnings and cash flows.

Baker Hughes Merger- The pending merger with Baker Hughes will allow Halliburton to more effectively compete with Schlumberger, the leading player in the industry. The combined company will be able to drive cost efficiencies, increase margins and grow at a faster rate. Some analysts project that the merger will create \$2bn in synergies through a combination of research and development and operations¹⁵. However, the merger does not come without risks. If Halliburton fails to acquire Baker Hughes, the Company could face a breakup fee as high as \$3.5bn if it fails to clear regulatory agencies.

¹⁵ De La Merced, Michael J. "Halliburton and Baker Hughes Agree to Friendly \$34.6 Billion Merger." *DealBook Halliburton and Baker Hughes Agree to Friendly 346 Billion Merger Comments*. New York Times, 17 Nov. 2014. Web.

Threats

Counterparty Risk- Halliburton’s most significant risk is its exposure to poorly performing customers and vendors. As discussed above, if vendors fail to supply the Company with quality and timely raw materials, Halliburton’s relationships with customers will be severely tarnished. Moreover, since Halliburton charges all of its customer on credit, it runs the risk of not being paid for its products and services. Over the past 5 years, the Company’s allowances for bad debts have ranged between 1.6% and 2.7%. Halliburton currently estimates that, “a hypothetical 100 basis point change in our estimate of the collectability of our notes and accounts receivable balance as of December 31, 2014 would have resulted in a \$76 million adjustment to 2014 total operating costs and expenses.” Halliburton’s large customers have the lowest probability of default given their stronger balance sheets and large credit facilities. Defaulting accounts will likely be the product of liquidity constraints in smaller industry players. Table 13 illustrates the cash implications of Halliburton’s bad debt allowance. Note that the sensitivity table only shows small changes. If large customers were to default, Halliburton’s losses would significantly increase.

Table 13: Bad Debt Sensitivity						
		Receivable Days				
		90	95	100	105	110
Bad Debt Allowance	1.8%	133	141	148	155	163
	2.0%	148	156	164	173	181
	2.2%	163	172	181	190	199
	2.4%	177	187	197	207	217
	2.6%	192	203	214	224	235

Regulatory Obstacles and Fines– Government regulations pose a serious threat to oil and natural gas extraction both in terms of cost and volume. Incidents like the BP oil spill continue to put pressure on the fossil fuel extraction industry. Combined with financial compensation or fees, this regulation could hinder growth.

Political and Economic Turmoil - Oil extraction is highly dependent on stability, both to continue operations and also to ensure return on capital. Unrest in the Middle East or the developing world could easily halt production or even cause ownership to change hands. Additionally, economic instability can strain both the demand for extraction as well as the ability to undertake long term capital intensive projects like those with which Halliburton contracts.

Extended Depressed Oil Prices- Halliburton’s financial strength will likely carry it through the current downturn in the oil market, but the Company cannot sustain business with oil prices at current levels forever. If the crude market takes longer than expected to rebound to profitable levels, Halliburton’s operations may be severely impacted.

Strategic Recommendations

Halliburton is an operationally and financially strong company that is prepared to handle poor industry conditions for the next 1-2 years. If Halliburton is able to weather the current storm, it will emerge as a much stronger player in the industry due to its Baker Hughes merger and increasing cost efficiency. The following are strategic

recommendations for Halliburton to increase operational performance in the near and long term.

Focus on High Quality Counterparties- As discussed above, Halliburton's primary risk during the current industry downturn is counterparty risk, i.e. the risk that a customer will not pay their accounts or a vendor will not supply a product on time. Therefore, it is extremely important that the Company choose its customers and vendors carefully. Moreover, if Halliburton has enough cash, it may need to cover for its vendor's lack of liquidity. For example, Halliburton could finance its vendor's work in progress inventories to assure timely delivery of materials.

Focus on High Margin Regions and Business Segments- With counterparty quality in mind, Halliburton must focus resources on the most profitable and reliable business areas, while cutting back on the underperforming segments. Please find a breakdown of Halliburton's operating margins in Table 14 below.

Table 14: Operating Margins By Region and Business Segment

	12/31/2013	12/31/2014
Operating Margins		
<i>Completion and Production:</i>		
North America	17%	19%
Latin America	13%	13%
Europe/Africa/CIS	15%	14%
Middle East/Asia	19%	18%
Total	16%	18%
<i>Drilling and Evaluation:</i>		
North America	17%	15%
Latin America	13%	9%
Europe/Africa/CIS	12%	9%
Middle East/Asia	16%	18%
Total	15%	13%
<i>All Segments:</i>		
North America	17%	18%
Latin America	13%	11%
Europe/Africa/CIS	13%	11%
Middle East/Asia	17%	18%
Total	16%	16%

As seen above, North America and the Middle East/Asia are the most profitable regions. Additionally, Completion and Production is a higher margin business than Drilling and Evaluation. Given the market downturn, Completion and Production will likely remain a more profitable business in the near term, as companies will cut drilling expansion projects. Halliburton should maintain its foothold in the North American markets, as North America already accounts for more than 50% of revenues, and focus on expansion in the Middle East and Asia with an emphasis on Completion and Production. Note that Halliburton should only expand to areas with manageable counterparty risk. The Company cannot afford to take chances on unreliable customers during the current market conditions. While Halliburton may scale back operations in less profitable

businesses and regions, the Company should maintain presence in every market in order to diversify and facilitate expansion on the other side of the cycle.

Stock Based Compensation Structure- With significant portion of expenses in the oilfield services industry coming from employee costs, Halliburton's ability to implement cash cost cutting initiatives with its employees will be of great importance. The Company plans to eliminate redundant corporate positions in its merger with Baker Hughes. When corporations merge, the threat of layoffs pushes many employees to preemptively reach out to head hunters to find positions at other firms. However, Halliburton only leads its industry due to its ability to retain the top talent. Therefore, the Company cannot eliminate too many jobs without running the risk of strong employees leaving for safer jobs. Halliburton should save cash on its employee costs by restructuring its compensation. For example, the Company could pay its employees less cash and more stock with a five year vesting period.

Invest in Innovative Technology- Most companies within the oil and gas services industry provide similar products and services. Therefore, the industry leaders have traditionally used economies of scale and cost leadership to achieve superior profitability. However, companies can gain a competitive advantage through innovative systems. Halliburton should focus a portion of its cash on research and development to differentiate its products. In addition, the Company should be aware of potential acquisition targets that are developing innovative technologies.

Continue “Rainy Day” Fund- As the current market conditions have reminded the industry, the oil and gas industry is inherently cyclical. Therefore, Halliburton should continue to maintain significant cash reserves and revolving credit facilities to act as a shock absorber if the Company is subject to lawsuits or the industry market conditions further deteriorate.

Appendix

Table 15: Income Statement

mm USD	Historical			
	12/31/2011	12/31/2012	12/31/2013	12/31/2014
<i>Revenue</i>				
Services	\$19,692	\$22,196	\$22,257	\$25,039
Product sales	5,137	6,307	7,145	7,831
Total revenues	24,829	28,503	29,402	32,870
<i>Operating Costs</i>				
Cost of services	(15,432)	(18,747)	(18,959)	(21,060)
Cost of sales	(4,379)	(5,322)	(5,972)	(6,599)
Loss contingency of Macondo	0	0	(1,000)	195
G&A	(281)	(275)	(333)	(309)
Total operating expenses	(20,092)	(24,344)	(26,264)	(27,773)
Operating income	4,737	4,159	3,138	5,097
<i>Other Income</i>				
Interest expense	(268)	(305)	(339)	(396)
Interest income	5	7	8	13
Other, net	(25)	(39)	(43)	(2)
Pretax income	4,449	3,822	2,764	4,712
Tax	(1,439)	(1,235)	(648)	(1,275)
Net income	3,010	2,587	2,116	3,437

Table 16: Balance Sheet

mm USD	Historical			
	12/31/2011	12/31/2012	12/31/2013	12/31/2014
ASSETS				
<i>Current assets:</i>				
Cash and equivalents	\$2,698	\$2,484	\$2,356	\$2,291
Receivables	5,084	5,787	6,181	7,564
Inventories	2,570	3,186	3,305	3,571
Other current assets	1,225	1,629	1,862	1,642
Total current assets	11,577	13,086	13,704	15,068
PP&E	8,492	10,257	11,322	12,475
Goodwill	1,776	2,135	2,168	2,330
Other assets	1,832	1,932	2,029	2,367
Total assets	23,677	27,410	29,223	32,240
LIABILITIES AND EQUITY				
<i>Current liabilities:</i>				
Accounts Payable	1,826	2,041	2,365	2,814
Accrued employee compensation and benefits	862	930	1,029	1,033
Loss contingency for Macondo well incident	0	0	278	367
Other current liabilities	1,433	1,781	1,354	1,669
Total current liabilities	4,121	4,752	5,026	5,883
Long-term debt	4,820	4,820	7,816	7,840
Loss contingency for Macondo well incident	0	300	1,022	439
Employee compensation and benefits	534	607	584	691
Other liabilities	986	1,141	1,160	1,089
Total Liabilities	10,461	11,620	15,608	15,942
<i>Shareholders' equity:</i>				
Common shares	2,683	2,682	2,680	2,679
Paid-in capital	455	486	415	309
Accumulated other comprehensive loss	(273)	(309)	(307)	(399)
Retained earnings	14,880	17,182	18,842	21,809
Treasury stock	(4,547)	(4,276)	(8,049)	(8,131)
Company equity	13,198	15,765	13,581	16,267
Noncontrolling interest	18	25	34	31
Total shareholders' equity	13,216	15,790	13,615	16,298
Total Liabilities and equity	23,677	27,410	29,223	32,240

Table 17: Cash Flow Statement

mm USD	Historical			
	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Cash flows from operations:				
Net income	\$3,010	\$2,587	\$2,116	\$3,501
<i>Adjustments to reconcile cash flows:</i>				
D&A	1,359	1,628	1,900	2,126
Deferred income tax benefit	(30)	165	(132)	(454)
Activity related to Macondo	0	300	1,000	(569)
<i>Changes in working capital:</i>				
Receivables	(1,218)	(682)	(449)	(1,375)
Accounts payable	649	200	327	489
Inventories	(564)	(611)	(107)	(247)
Payment of Barracuda-Caratinga obligation				
Other	478	67	11	591
Total cash flow from operations	3,684	3,654	4,447	4,062
Cash flows from investing:				
Capital expenditure	(2,953)	(3,566)	(2,934)	(3,283)
Sale of investment securities	1,001	258	356	444
Payments to acquire businesses, net	(880)	(214)	(94)	(231)
Purchases of investment securities	(501)	(506)	(329)	(183)
Other investing activities	143	340	131	115
Total cash flows from investing	(3,190)	(3,688)	(2,870)	(3,138)
Cash flows from financing activities:				
Payments to reacquire common stock	0	0	(4,356)	(800)
Dividends	(330)	(333)	(465)	(533)
Proceeds from long-term borrowings, net	978	0	2,968	0
Other financing activities	185	161	99	303
Total cash flows from financing	833	(172)	(1,754)	(1,030)
Effect of exchange rate on cash	(27)	(8)	49	41
Change in cash and equivalents	1,300	(214)	(128)	(65)
Cash and equivalents at beginning of period	1,398	2,698	2,484	2,356
Cash and equivalents at end of period	2,698	2,484	2,356	2,291

Table 18: Cash Flow Model (w/o Baker Hughes)

	Projected				
	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Income Statement					
Service revenue	\$22,535	\$21,408	\$20,980	\$20,980	\$21,400
Sales revenue	7,048	6,696	6,562	6,562	6,693
Total revenue	29,583	28,104	27,542	27,542	28,093
Cost of services	(19,831)	(18,625)	(17,833)	(17,623)	(17,762)
Cost of sales	(6,202)	(5,825)	(5,577)	(5,512)	(5,555)
G&A	(447)	(425)	(417)	(417)	(425)
Total operating expenses	(26,480)	(24,875)	(23,827)	(23,552)	(23,742)
Operating income	3,103	3,228	3,715	3,990	4,351
Interest expense	(411)	(411)	(411)	(411)	(411)
Pretax income	2,701	2,821	3,312	3,592	3,953
Tax	(810)	(846)	(994)	(1,078)	(1,186)
Net income	1,891	1,975	2,319	2,514	2,767
EBITDA	4,993	5,203	6,033	6,504	7,118
Unlevered free cash flow adjustments					
(+) Interest adjustment	402	407	402	398	398
(+) D&A	1,891	1,975	2,319	2,514	2,767
(-) Net change in operatign working capital	(1,376)	1,174	893	(4)	(121)
(-) Capital expenditure	(3,447)	(3,620)	(3,981)	(4,380)	(5,037)
Unlevered free cash flow	(640)	1,912	1,951	1,043	774
Contractual obligations					
(-) Long term debt	(14)	(610)	(52)	(806)	(1,000)
(-) Interest on debt	(362)	(369)	(371)	(376)	(351)
(-) Operating leases	(283)	(201)	(115)	(79)	(54)
(-) Purchase obligations	(1,100)	(429)	(289)	(118)	(29)
(-) Other long-term liabilities	(43)	(3)	(3)	(2)	(2)
Cash Flow After Contractual Obligations	(2,442)	300	1,121	(338)	(662)
Beginning cash	2,291	(151)	149	1,270	932
Cash Surplus (Deficit)	(151)	149	1,270	932	270

Table 19: 2015 Cash Flow Sensitivity- Days Receivable vs. Margins

(w/o Baker Hughes)

Max Loss	\$2,291	Days Receivable				
		90	95	100	105	110
Operating Margin	15%	(390)	(801)	(1,211)	(1,622)	(2,033)
	14%	(800)	(1,211)	(1,622)	(2,033)	(2,443)
	13%	(1,210)	(1,621)	(2,032)	(2,443)	(2,854)
	12%	(1,620)	(2,031)	(2,442)	(2,853)	(3,264)
	11%	(2,030)	(2,441)	(2,852)	(3,263)	(3,674)