

Equities

23 June 2011 | 12 pages

Oilfield Equipment Services

Houston Field Trip Highlights

■ Industry Overview

- **Visited Four Companies on Oilfield Tour** — Citi's oilfield tour took place on June 22-23. Oilfield service companies we met with included Helmerich & Payne, FMC Technologies, National Oilwell Varco, and Halliburton.
- **Rig Orders Offer a Significant Opportunity** — NOV says that strong bookings over the next two to three quarters will come from the approximately 50 floaters -- including options -- that have been ordered from shipyards. Of these 50 orders, 37 rigs have yet to award rig equipment packages that will be valued at approximately \$250 million each.
- **Well-Positioned for Petrobras Contracts** — In the next few weeks, Petrobras is set to sign contracts on seven deepwater rigs to be built in Brazil. NOV expects to win all seven rig equipment packages due to its strong competitive position in Brazil and strong local content.
- **HAL Extending Pressure Pumping Advantages** — Halliburton appears to be lengthening its lead on the competition in pressure pumping through its new Q10 pump design and its targeted 35% reduction in field operating costs through its recently launched remote-control capability for fracturing operations.
- **Pricing Stabilizing Overseas** — In the international arena, HAL gave us several examples of how pricing has bottomed and has stabilized. The outlook for pricing increases in the second-half of 2011 is still encouraging given recent activity levels in Saudi Arabia, Mexico, Iraq, and other markets.
- **Targeting International Shale Leadership** — HAL already sees international shale plays emerging around the world. HAL recently completed its first horizontal shale frac in Australia. HAL is also working in Saudi tight gas wells, Poland shales, and Argentina shales. HAL believes it will be #1 in international shale hydraulic fracturing services based on its early leadership position.

Robin Shoemaker

+1-212-816-3258
robin.shoemaker@citi.com

Mark Brown

mark.brown@citi.com

Garett Gough

garett.gough@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Helmerich & Payne (HP.N; US\$61.26; 1H)

Valuation

We derive our \$78 HP price target by averaging P/E and EV/EBITDA methodologies. Our target is based on historical analysis of HP and group multiples.

Our P/E derivation generates a price target of \$80 by applying a 17.0x multiple to our *forward 12-month EPS estimate of \$4.70. The multiple is below the 55.0x peak HP multiple reached in the most recent downturn and is well above the 5.1x trough reached at the peak of the last upturn. The multiple is based on historical analysis of HP and relative market multiples and is within the 6.1x–42.7x historical range where the average of land driller stocks traded over the past ten years. The median group P/E multiple was 16.4x in the most recent cycle.

Our EV/EBITDA derivation generates a \$76 price target by applying a 7.0x EV/EBITDA multiple to our *forward-12-month EBITDA of \$1.2 billion. The multiple is below the 20.1x peak HP multiple reached in the most recent downturn and is well above the 3.0x trough HP multiple reached at the peak of the last upturn. The multiple is based on historical analysis of HP and relative market multiples and is within the 3.1–14.7x historical range within which the average of land driller stocks has traded over the past ten years. The median group EV/EBITDA multiple was 7.7x in the most recent cycle.

* Our forward-12-month estimate reflects the four quarters earnings stream beginning 12 months from the most recently reported quarter.

Risks

Our High Risk rating on Helmerich & Payne is based on a combination of quantitative and qualitative assessments compared to other stocks covered by Citi Investment Research and Analysis (CIRA). The principal elements of investment risk for H&P relative to the CIRA coverage universe are high earnings and stock price volatility, as well as the company's ability to implement day rate increases. Derivation of our price target and resulting Expected Total Return (ETR) is based on projected financial performance, which is highly dependent on the level of oil and gas exploration and production (E&P) activity. E&P activity can be significantly impacted by changes in oil and gas prices. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

FMC Technologies (FTI.N; US\$40.39; 1M)

Valuation

We derive our \$57 FTI price target by averaging P/E and EV/EBITDA methodologies. Our target is based on historical analysis of FTI and group multiples, which exhibit very high correlations to both the level and direction of forward earnings expectations.

Our P/E derivation generates a price target of \$59 by applying a 26.0x multiple to our *forward-12-month EPS estimate of \$2.29. The multiple is below the 27.6x historical ten-year peak FTI multiple and is well above the 9.3x trough reached at the peak of the last upturn. The multiple is based on historical analysis of FTI and relative market multiples and is above the 7.1x–24.7x historical range where the average of capital equipment supplier stocks traded over the past ten years. The median group P/E multiple was 18.0x in the most recent cycle.

Our EV/EBITDA derivation generates a price target of \$55 by applying a 13.5x EV/EBITDA multiple to our *forward-12-month EBITDA of \$951 million. The multiple is below the 15.8x historical ten-year peak FTI multiple and is well above the 4.6x trough reached at the peak of the last upturn. The multiple is based on historical analysis of FTI and relative market multiples and is within the 3.8x–15.4x historical range where the average of capital equipment supplier stocks traded over the past ten years. The median group EV/EBITDA multiple was 10.1x in the most recent cycle.

* Our forward 12-month estimate reflects the four quarters earnings stream beginning 12 months from the most recently reported quarter.

Risks

Our Medium Risk rating on FMC Technologies is based on a combination of quantitative and qualitative assessments compared to other stocks covered by Citi Investment Research and Analysis (CIRA). The company carries an investment-grade debt rating, exhibits low beta relative to other oil service companies, and has minimal debt balances. The principal elements of FTI investment risk relative to the CIRA energy coverage universe are relatively low market capitalization and moderate earnings volatility. Derivation of our price target and resulting Expected Total Return (ETR) is based on projected financial performance, which is highly dependent on the level of oil and gas development activity that can be significantly impacted by changes in oil and gas prices. Financial performance is sensitive to deepwater development activity. Our estimates could be negatively impacted if the anticipated increase in deepwater development activity does not occur or occurs at a slower pace than expected. Damage to any of FTI's key alliance relationships could also have an adverse effect on the company's earnings stream. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

Halliburton Co (HAL.N; US\$47.07; 1H)

Valuation

We derive our \$61 HAL price target by averaging P/E and EV/EBITDA methodologies. Our target is based on historical analysis of HAL and group multiples.

Our P/E derivation generates a price target of \$62 by applying a 16.0x multiple to our forward 12-month EPS estimate of \$3.87. The multiple is below the 23.3x peak HAL multiple reached in the most recent downturn and is well above the 6.3x trough reached at the peak of the last upturn. The multiple is based on historical analysis of HAL and relative market multiples and is within the 7.8x–33.8x historical range

where the average of large cap services stocks traded over the past ten years. The median group P/E multiple was 19.9x in the most recent cycle.

Our EV/EBITDA derivation generates a price target of \$60 by applying an 8.0x EV/EBITDA multiple to our forward 12-month EBITDA of \$7.09 billion. The multiple is below the 10.9x peak HAL multiple reached in the most recent downturn and is well above the 3.7x low multiple reached at the peak of the last upturn. The multiple is based on historical analysis of HAL and relative market multiples and is within the 4.3x–14.7x historical range where the average of large cap services stocks traded over the past ten years. The median group EV/EBITDA multiple was 9.6x in the most recent cycle.

* Our forward 12-month estimate reflects the four quarters earnings stream beginning 12 months from the most recently reported quarter.

Risks

Our High Risk rating on Halliburton is based on a combination of quantitative and qualitative assessments compared with those faced by other stocks covered by Citigroup Investment Research and Analysis (CIRA). Derivation of our price target and Expected Total Return (ETR) is based on projected financial performance, which is highly dependent on the level of oil and gas exploration and production (E&P) activity. E&P activity can be significantly affected by changes in oil and gas prices. HAL's performance is particularly sensitive to the NAM natural gas and pressure-pumping markets. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

National Oilwell Varco Inc (NOV.N; US\$71.81; 1H)

Valuation

Our \$92 price target for NOV is derived by averaging P/E and EV/EBITDA methodologies and is based on multiples at a discount to the group historical median.

Our P/E derivation generates a price target of \$91 by applying a 16.5x multiple to our forward-12-month* EPS estimate of \$5.54. The multiple is based on historical analysis of relative market multiples and is within the 7.2x–29.0x historical range where the average of service stocks have traded over the past ten years. The median P/E multiple has been 19.5x.

Our EV/EBITDA derivation generates a price target of \$93 by applying a 8.5x multiple to NOV's forward-12-month* EBITDA of \$4.0 billion. The multiple is based on historical analysis of relative market multiples and is within the range of 4.0x–13.2x where the average of service stocks have traded over the past ten years. The median EV/EBITDA multiple has been 9.6x.

* Our forward-12-month estimate is based on the four quarters' earnings stream beginning 12 months from the most recent earnings quarter.

Risks

Our High Risk rating on National Oilwell Varco is based on quantitative and qualitative risk assessments compared with those faced by other stocks covered by Citi Investment Research and Analysis (CIRA). The principal elements of risk we see for NOV are price and earnings volatility. Derivation of our price target and resulting Expected Total Return (ETR) is based on projected financial performance, which is highly dependent on the level of oil and natural gas exploration and production (E&P) activity. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

FMC Technologies (FTI)

Ratings and Target Price History Fundamental Research

Analyst: Robin Shoemaker

Covered since September 15 2010

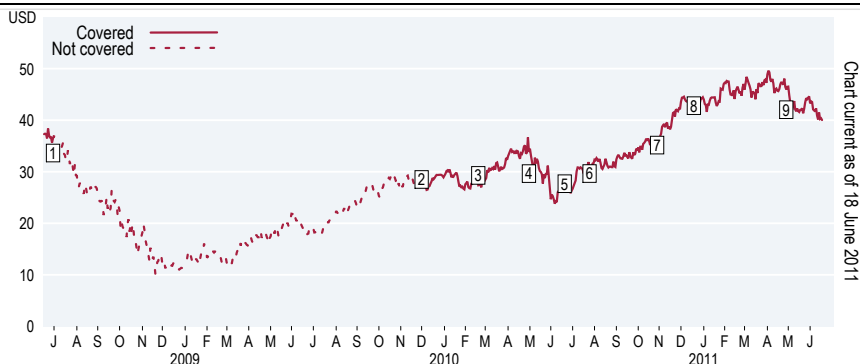


Chart current as of 18 June 2011

	Date	Rating	Target Price	Closing Price
1	30-Jun-08	Coverage terminated		
2	1-Dec-09	*1M	*33.00	28.22
3	18-Feb-10	1M	*34.50	27.40

* Indicates change

	Date	Rating	Target Price	Closing Price
4	30-Apr-10	*2M	*38.50	33.85
5	21-Jun-10	*1M	*34.50	27.50
6	26-Jul-10	1M	*36.00	30.91

	Date	Rating	Target Price	Closing Price
7	28-Oct-10	1M	*41.00	35.17
8	19-Dec-10	1M	*55.00	43.22
9	28-Apr-11	1M	*57.00	45.96

Rating/target price changes above reflect Eastern Standard Time

FMC Technologies (FTI)

Ratings and Target Price History Best Ideas Research

Relative Call (3 Month)

Analyst: Robin Shoemaker

Covered since September 15 2010

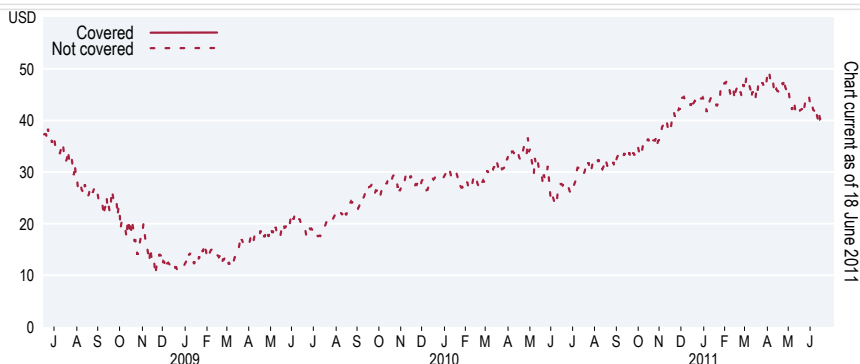


Chart current as of 18 June 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Halliburton Co (HAL)

Ratings and Target Price History

Fundamental Research

Analyst: Robin Shoemaker
Covered since July 1 2008

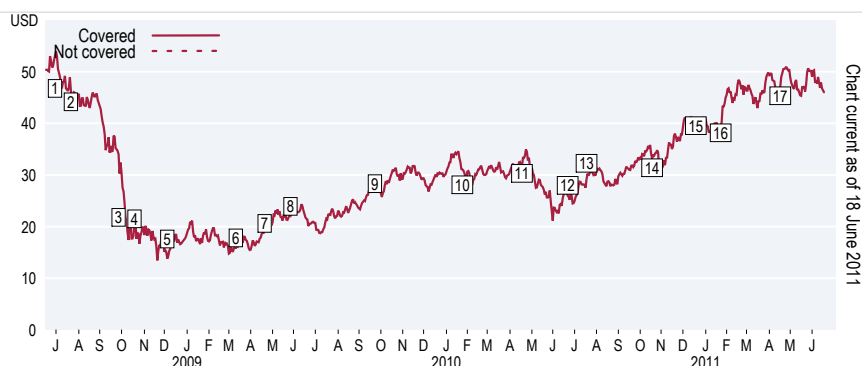


Chart current as of 18 June 2011

	Date	Rating	Target Price	Closing Price
1	30-Jun-08	1H	*\$63.00	53.07
2	22-Jul-08	1H	*\$64.00	46.30
3	26-Sep-08	1H	*\$46.00	34.00
4	20-Oct-08	1H	*\$36.00	20.80
5	4-Dec-08	1H	*\$25.00	13.78
6	11-Mar-09	1H	*\$20.00	15.77

* Indicates change

	Date	Rating	Target Price	Closing Price
7	21-Apr-09	1H	*\$23.00	19.96
8	27-May-09	1H	*\$27.00	22.06
9	23-Sep-09	1H	*\$34.00	27.35
10	25-Jan-10	1H	*\$40.00	31.07
11	19-Apr-10	1H	*\$43.00	31.57
12	22-Jun-10	1H	*\$34.00	25.99

	Date	Rating	Target Price	Closing Price
13	19-Jul-10	1H	*\$42.00	29.17
14	19-Oct-10	1H	*\$47.00	33.18
15	19-Dec-10	1H	*\$50.00	39.89
16	24-Jan-11	1H	*\$56.00	39.55
17	18-Apr-11	1H	*\$61.00	47.14

Rating/target price changes above reflect Eastern Standard Time

Halliburton Co (HAL)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Robin Shoemaker
Covered since July 1 2008

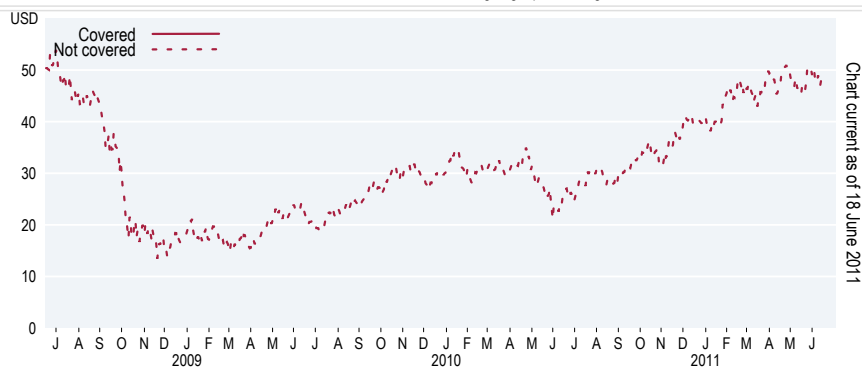


Chart current as of 18 June 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Helmerich & Payne (HP)

Ratings and Target Price History

Fundamental Research

Analyst: Robin Shoemaker
Covered since January 20 2010

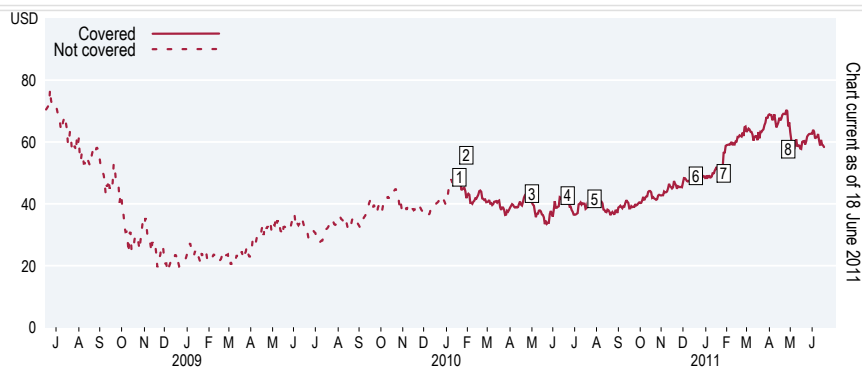


Chart current as of 18 June 2011

	Date	Rating	Target Price	Closing Price
1	20-Jan-10	*1H	*\$58.00	47.28
2	29-Jan-10	1H	*\$64.00	41.83
3	2-May-10	1H	*\$62.00	40.62

* Indicates change

	Date	Rating	Target Price	Closing Price
4	22-Jun-10	1H	*\$54.00	40.31
5	29-Jul-10	1H	*\$63.00	40.44
6	19-Dec-10	1H	*\$65.00	48.74

	Date	Rating	Target Price	Closing Price
7	27-Jan-11	1H	*\$74.00	56.74
8	28-Apr-11	1H	*\$78.00	65.05

Rating/target price changes above reflect Eastern Standard Time

Helmerich & Payne (HP) **Ratings and Target Price History** **Best Ideas Research** **Relative Call (3 Month)**

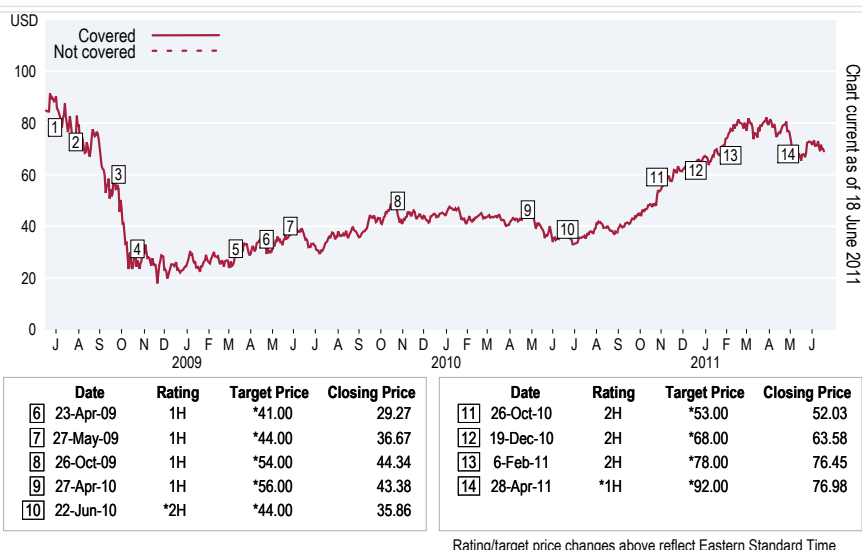
Analyst: Robin Shoemaker
Covered since January 20 2010



* Indicates change

National Oilwell Varco Inc (NOV) **Ratings and Target Price History** **Fundamental Research**

Analyst: Robin Shoemaker
Covered since July 1 2008



Date	Rating	Target Price	Closing Price
1 30-Jun-08	1H	*105.00	88.72
2 29-Jul-08	1H	*110.00	75.05
3 26-Sep-08	1H	*84.00	54.57
4 23-Oct-08	1H	*56.00	26.78
5 11-Mar-09	1H	*44.00	28.16

* Indicates change

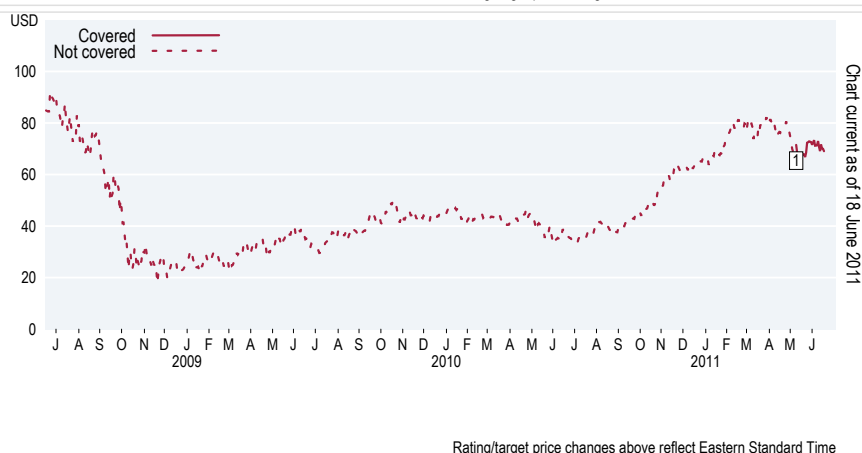
Date	Rating	Target Price	Closing Price
6 23-Apr-09	1H	*41.00	29.27
7 27-May-09	1H	*44.00	36.67
8 26-Oct-09	1H	*54.00	44.34
9 27-Apr-10	1H	*56.00	43.38
10 22-Jun-10	*2H	*44.00	35.86

Date	Rating	Target Price	Closing Price
11 26-Oct-10	2H	*53.00	52.03
12 19-Dec-10	2H	*68.00	63.58
13 6-Feb-11	2H	*78.00	76.45
14 28-Apr-11	*1H	*92.00	76.98

Rating/target price changes above reflect Eastern Standard Time

National Oilwell Varco Inc (NOV) **Ratings and Target Price History** **Best Ideas Research** **Relative Call (3 Month)**

Analyst: Robin Shoemaker
Covered since July 1 2008



Date	Rating	Target Price	Closing Price
1 10-May-11	*ADD MP	-	71.49

* Indicates change

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from FMC Technologies, Halliburton Co.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from FMC Technologies, Halliburton Co, Helmerich & Payne, National Oilwell Varco Inc in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): FMC Technologies, Halliburton Co.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: FMC Technologies, Halliburton Co, Helmerich & Payne, National Oilwell Varco Inc.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: FMC Technologies, Halliburton Co, Helmerich & Payne, National Oilwell Varco Inc.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Investment Research & Analysis product ("the Product"), please contact Citi Investment Research & Analysis, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Investment Research & Analysis Ratings Distribution

Data current as of 31 Mar 2011	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Investment Research & Analysis Global Fundamental Coverage	52%	37%	11%	9%	82%	9%
% of companies in each rating category that are investment banking clients	43%	41%	41%	51%	41%	45%

Guide to Citi Investment Research & Analysis (CIRA) Fundamental Research Investment Ratings:

CIRA's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of CIRA's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" will be monitored daily by management. As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis.

To satisfy regulatory requirements, we correspond Under Review to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.

Relative three-month ratings: CIRA may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the analyst's coverage universe over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in his coverage universe, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings are: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Inc

Robin Shoemaker; Mark Brown; Garrett Gough

OTHER DISCLOSURES

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Halliburton Co, National Oilwell Varco Inc. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Investment Research & Analysis (CIRA) does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of CIRA to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers: Morgan Stanley & Co. Incorporated (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Investment Research & Analysis (CIRA) research report. Ask your Financial Advisor or use smithbarney.com to view any available Morgan Stanley research reports in addition to CIRA research reports.

Important disclosure regarding the relationship between the companies that are the subject of this CIRA research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at www.morganstanleysmithbarney.com/researchdisclosures. The required disclosures provided by Morgan Stanley and Citigroup Global Markets, Inc. on Morgan Stanley and CIRA research relate in part to the separate businesses of Citigroup Global Markets, Inc. and Morgan Stanley that now form Morgan Stanley Smith Barney LLC, rather than to Morgan Stanley Smith Barney LLC in its entirety. For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to www.morganstanley.com/researchdisclosures and https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html.

This CIRA research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of CIRA. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in Chile through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in France by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in Indonesia through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in Israel through Citibank NA, regulated by the Bank of Israel

and the Israeli Securities Authority. Citibank, N.A. Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in Italy by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Foro Buonaparte 16, Milan, 20121, Italy. The Product is made available in Japan by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by Nikko Cordial Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 110-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd.

<http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd. (Company Number 604457), a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 Lambton Quay, Wellington. The Product is made available in Pakistan by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the Philippines through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Spain by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gassef, 4th Floor, Madrid, 28006, Spain. The Product is made available in Taiwan through Citigroup Global Markets Taiwan Securities Company Ltd., which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan. If the Product is related to non-Taiwan listed securities, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangkok, Bangkok 10500, Thailand. The Product is made available in Turkey through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Büyükdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the U.A.E, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different CIRA ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to CIRA's Products can be found at www.citigroupgeo.com.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount

invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. CIRA concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual analysts may also opt to circulate research to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels.

© 2011 Citigroup Global Markets Inc. Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
