

# ENERGY OPPORTUNITIES



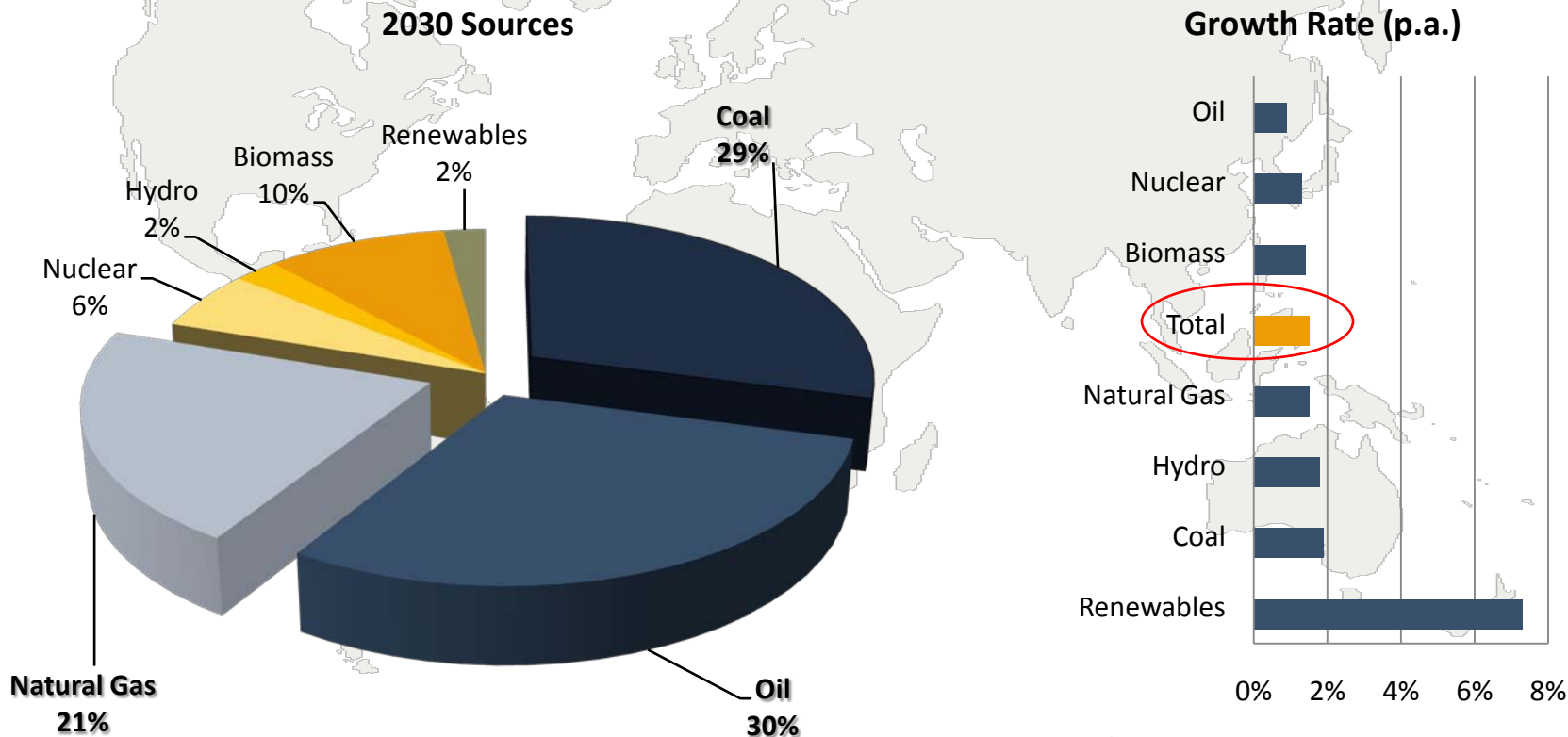
THIRD ANNUAL ENERGY CONFERENCE- PRESENTED BY SCOTT GILL  
NOVEMBER 3 – 4, 2010



## CONFERENCE CONTENT ALIGNS WITH PRIMARY ENERGY SOURCES

- I. The Deepwater Opportunity and Its Challenges and the International Prospect
- II. North American Resource Development Opportunities
- III. Energy, Debt and the Economy: A Biophysical Perspective
- IV. Special Topics: Natural Gas as Transport Fuel and Coal

### Primary Energy Mix 2030 (IEA's WEO 2009)



Source: International Energy Agency.

# THE CRITICAL ROLE OF OFFSHORE/INTERNATIONAL

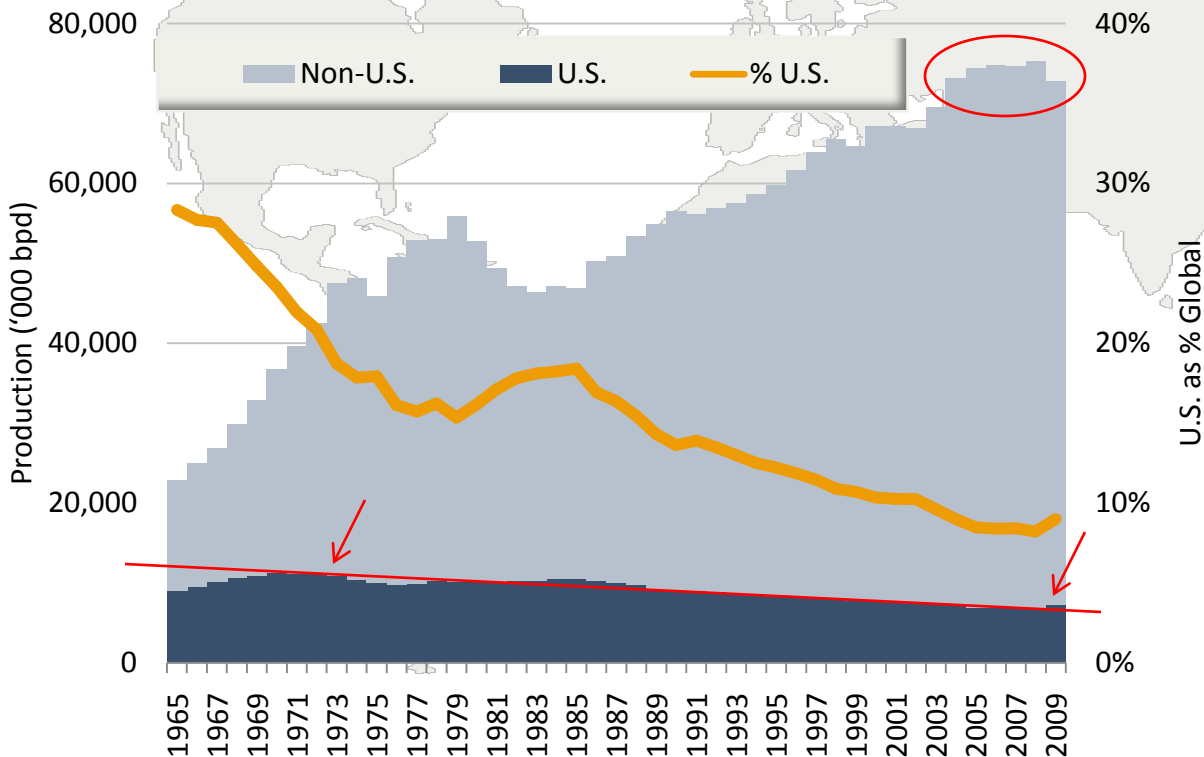


# GLOBAL OIL PRODUCTION GROWTH DRIVEN BY NON-U.S.

## U.S. Oil Production As % World Total:

Year	1965	1975	1985	1995	2005	2009
% U.S.	28	18	18	12	8	9

U.S. and Global Oil Production (1965-2009)



- Peak U.S. oil production occurred in 1970 at 11.3 million bpd.
- In 2009, oil production was 7.2 million bpd, up from 2008 which was 6.7 million bpd.
- The increase last year was driven predominantly by deepwater gains.
- Note also the global plateau beginning in 2005.

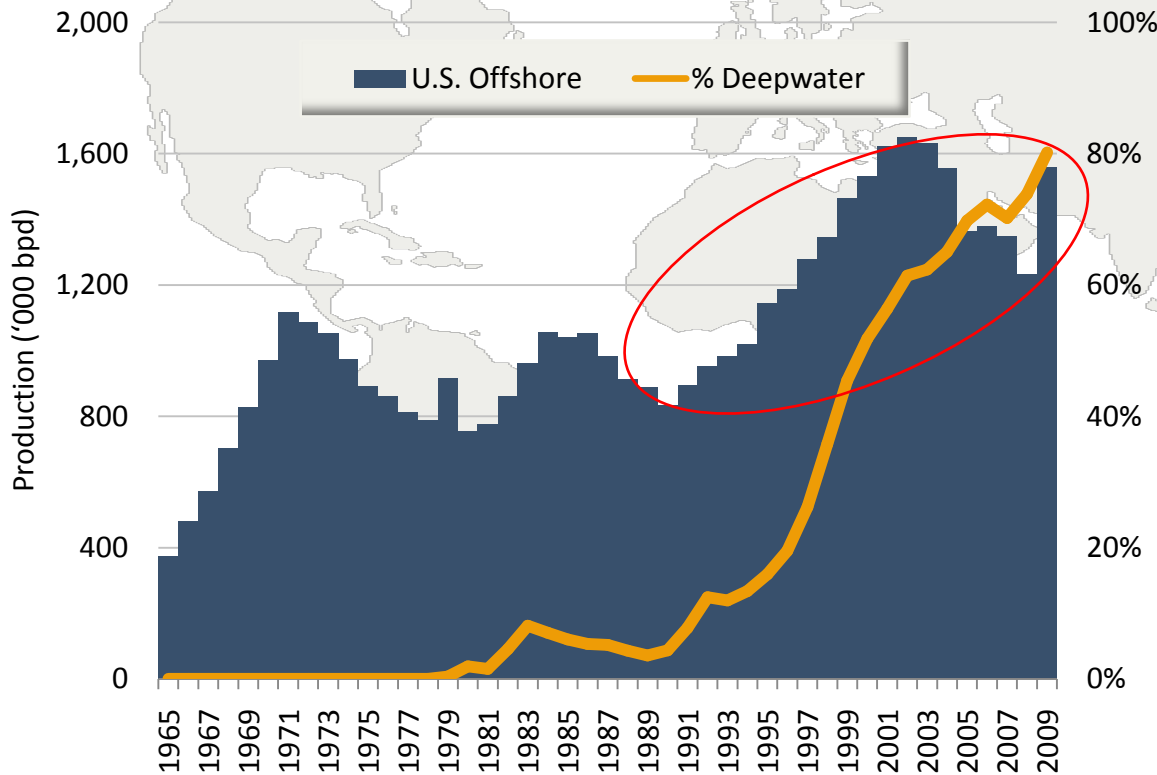
Source: BP Statistical Review

## OFFSHORE OIL PRODUCTION: AN INCREASINGLY IMPORTANT SOURCE

### U.S. Offshore Production As % U.S. Total:

Year	1965	1975	1985	1995	2005	2009
% O/S	4	9	10	14	20	22

U.S. Offshore Oil Production and Deepwater Contribution (1965-2009)



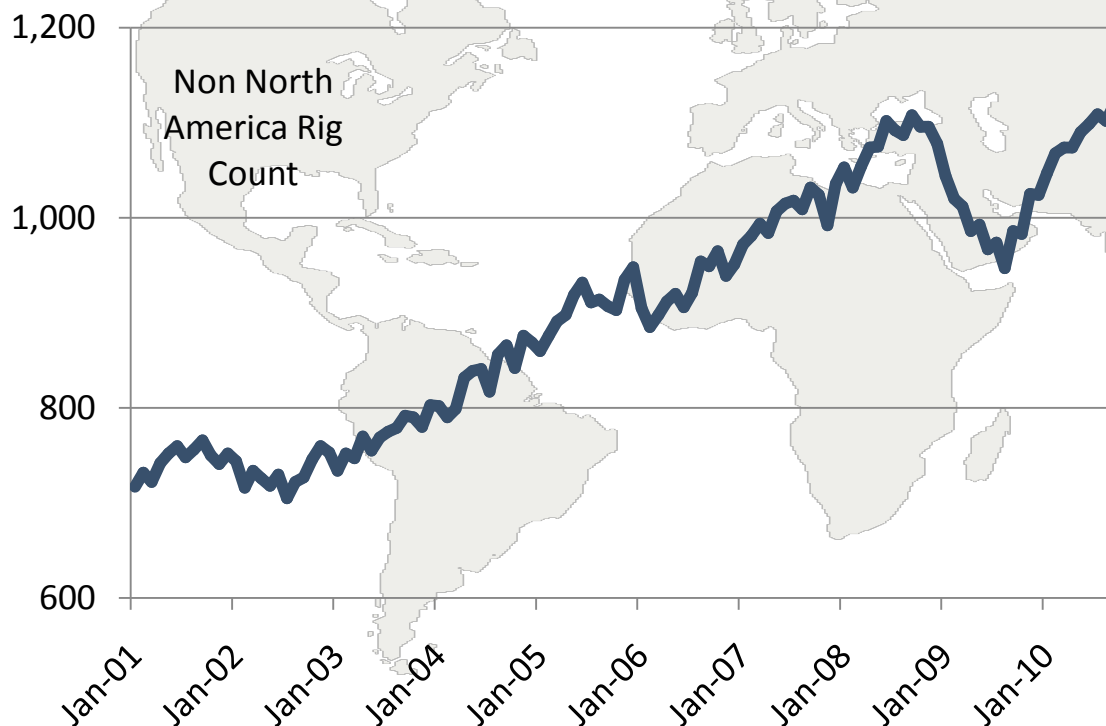
- 2009 oil production 7.2 million bpd.
- 2009 offshore oil production 1.56 million bpd: 22% U.S. total.
- 2009 deepwater oil production 1.25 million bpd: 17% U.S. total.
- 30% of OPEC oil production comes from offshore.
- 39% of non-OPEC production comes from offshore.

Source: US DOE

## INTERNATIONAL ACTIVITY GAINS

- Excluding the impact from the 2008 – 2009 financial crisis, the international rig count had been on a steady increase at a healthy pace of 7% per annum.
- Activity has rebounded nicely in late 2009 and 2010.
- Expectations call for robust activity gains for the 2011 – 2013 timeframe.

International Rig Count (2001 - present)



Source: Baker Hughes

## COMPANY PRESENTATIONS



Period	NOV	XLE	SPX
1 Year	35.6%	9.2%	16.5%
3 Years	-8.8%	-6.7%	-5.7%
5 Years	12.8%	5.2%	1.5%
7 Years	28.6%	15.3%	3.8%
10 Years	14.2%	8.2%	-0.0%
<b>Cum.</b>	<b>275.9%</b>	<b>119.5%</b>	<b>-0.2%</b>

Period	CAM	XLE	SPX
1 Year	18.4%	9.2%	16.5%
3 Years	-3.5%	-6.7%	-5.7%
5 Years	18.9%	5.2%	1.5%
7 Years	22.3%	15.3%	3.8%
10 Years	11.7%	8.2%	-0.0%
<b>Cum.</b>	<b>203.4%</b>	<b>119.5%</b>	<b>-0.2%</b>

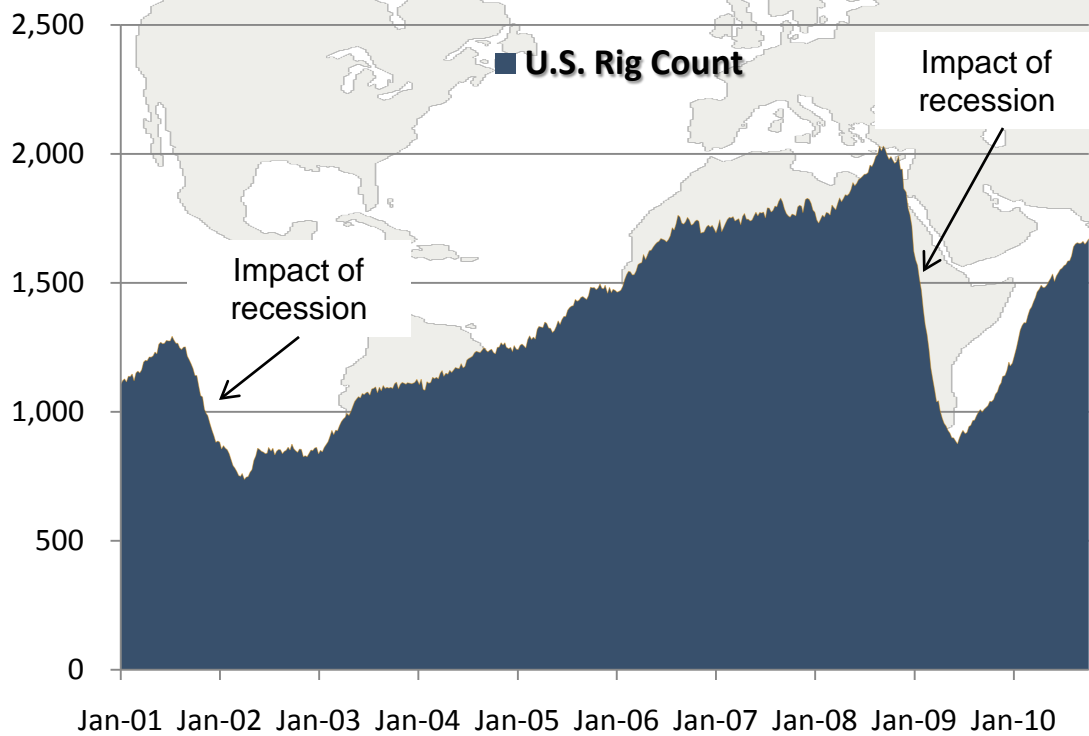
Source: Bloomberg. Date = 10/31/10.

# NORTH AMERICAN OPPORTUNITIES ABOUND



# U.S. DRILLING ACTIVITY VOLATILE, YET ROBUST

### U.S. Drilling Activity (2001-present)



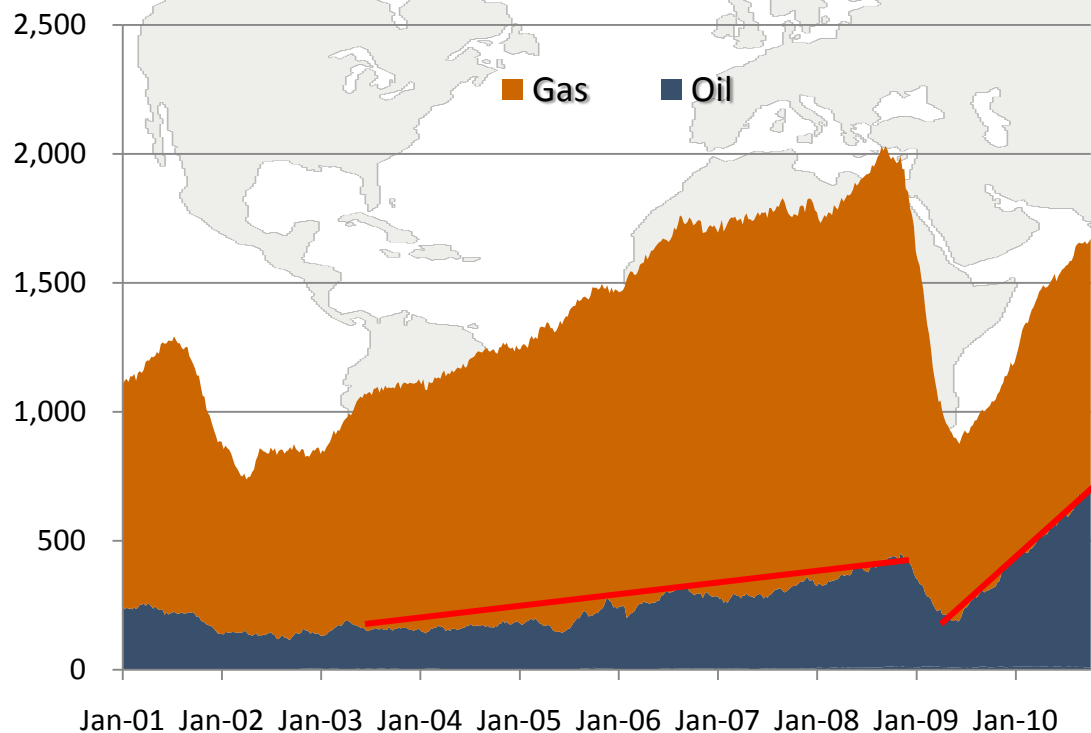
Source: Baker Hughes

## U.S. DRILLING ACTIVITY – POCKETS OF SOLID GROWTH

### U.S. Oil Drilling As % Total:

Year	2001	2005	2008	2009	2010	Present
% Oil	19	14	20	26	36	41

### U.S. Oil and Gas Drilling Activity (2001-present)



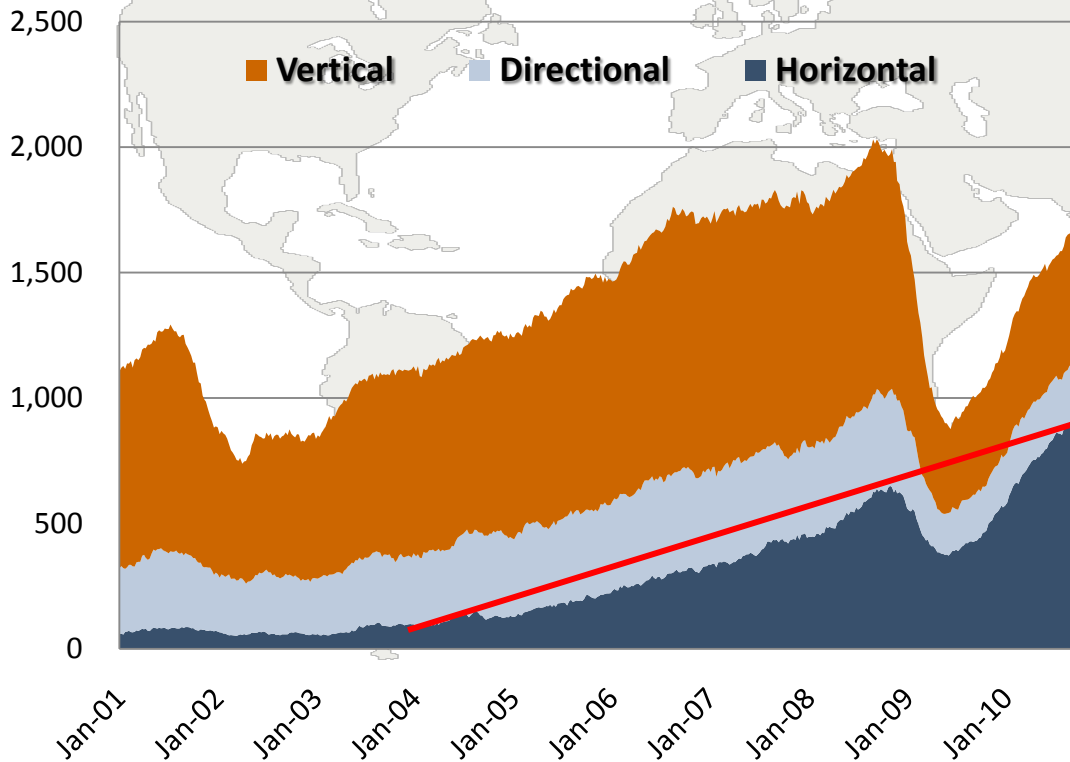
Source: Baker Hughes

## U.S. DRILLING ACTIVITY VOLATILE, YET ROBUST

### U.S. Horizontal And Directional Drilling As % Total:

Year	2001	2005	2008	2009	2010	Present
% H & D	31	38	49	61	67	68

### U.S. Drilling Activity (2001-present)



Over the past five years, horizontal drilling activity is up 34% per annum, or 335%.



Period	CPX	XLE	SPX
1 Year	<b>146.4%</b>	9.2%	16.5%
3 Years	5.9%	-6.7%	-5.7%
4/21/06	-3.0%	1.3%	-0.1%

Period	SPN	XLE	SPX
1 Year	27.9%	9.2%	16.5%
3 Years	-9.3%	-6.7%	-5.7%
5 Years	5.3%	5.2%	1.5%
7 Years	17.5%	15.3%	3.8%
10 Years	11.6%	8.2%	-0.0%
<b>Cum.</b>	<b>198.6%</b>	<b>119.5%</b>	<b>-0.2%</b>

Source: Bloomberg. Date = 10/31/10.

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