ExxonMobil (XOM)

Recommendation: NEUTRAL

December 5, 2012

Investment Opinion

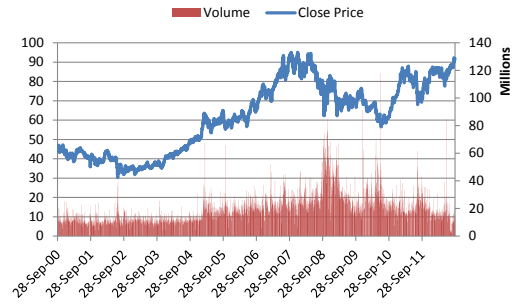
Price Target	$91.52
Current Price	$88.14

Target Share Prices	Base	High	Low
Net Asset Value	$ 103.10	$ 161.13	$ 65.01
Discounted Cash Flow	$ 97.81	$ 167.57	$ 61.30
Net Asset Value with @Risk	$ 87.88	$ 117.41	$ 55.71
Comparable Companies	$ 77.30	$ 111.21	$ 54.71
Average	**$ 91.52**	**$ 139.33**	**$ 59.18**

Basic Information

Market Cap	$401.86B
Enterprise Value	$406.87B
Diluted EPS	9.46
Trailing P/E	9.32

Stock Price: 2000-2012



Source: Google Finance, Yahoo Finance, Research

Please see the disclaimer at back of this report for important information.

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New Projects Online Outweighed by Resource Concerns, Rising Costs

Our price target is **$91.52**, which is **3.8% above** the current market value of **$88.14**. However, 3.8% is not enough of a margin, so we have a **NEUTRAL** recommendation. Exxon's gargantuan size has made it the most profitable oil company in the world, earning $41 billion in 2011, but the lack of growth in its reserves going forward limits its upside potential in our valuation.

Improving oil production outweighed by resource concerns and rising production costs

Exxon has experienced year-over-year production declines in five of the past seven years, but the company expects to onboard several key projects. These projects will boost this number by about 73 million oil-equivalent barrels per year going forward.

There are concerns, however, that recent acquisitions such as XTO Energy in 2010 are less about opportunities to purchase undervalued assets and more of an indicator that Exxon is having trouble growing its reserves organically.

US and EU Economic Malaise

The US economy has not fallen into a double-dip recession as many had predicted but it has not recovered fully either. With US GDP growth stuck below 3% and the EU projecting further obstacles for 2013, oil demand is projected to stay steady and keep oil prices at about their current levels for the next year.

Resiliency in the Chinese Economy

After a recent bout of slowing growth, many predicted that the cooling Chinese economy would bring the rest of the recovering global markets down with it. However, this slowdown is predicted to be a temporary blip and the Chinese economy is expected to return to 8-9% growth in the near term. Combined with China's annual Q4 export boom, we expect that Exxon will continue to grow its international revenues at around the 9% annual mark of the previous decade.

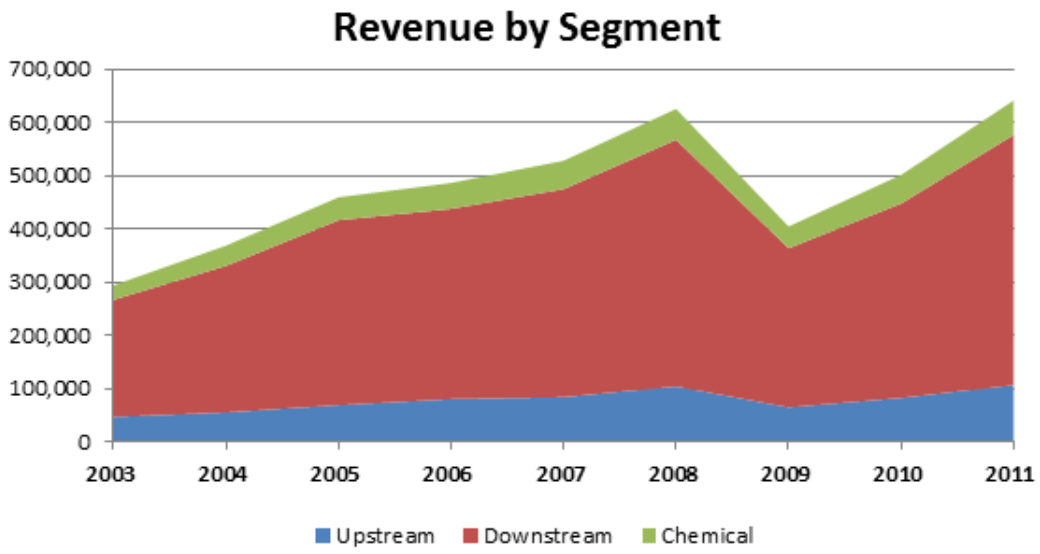
Background

Basic Information

ExxonMobil Corporation, incorporated in 1882, is a major oil and gas company. They have three main business segments: upstream, downstream, and chemical. Their upstream business consists of exploration and production of crude oil and natural gas. They also manufacture petroleum products, transport oil and gas, and directly sell crude oil, natural gas, and petroleum products. These chemical products include “olefins, aromatics, and polyethylene and polypropylene plastics.”[1] Other activities such as electric power generation and research & development make up a small portion of their revenues.

Exhibit 1 shows that Oil and natural prices, plus production numbers drive Exxon revenues. While most of the revenue comes from downstream sales, much of the after-tax profit comes from the upstream segment, shown in Exhibit 2. From these numbers, we find that the upstream segment is about 31% profitable, the downstream segment is only 1.67% profitable, and the chemical segment is 7.5% profitable, shown in Exhibit 3.

Exhibit 1: Revenue by Segment



[1] From 10-K 2011

Exhibit 2: Profit by Segment

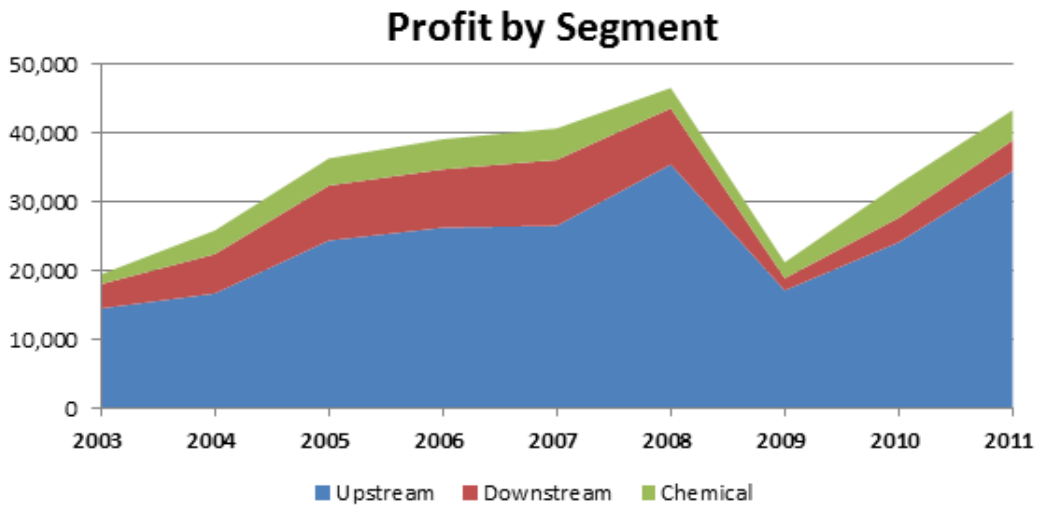
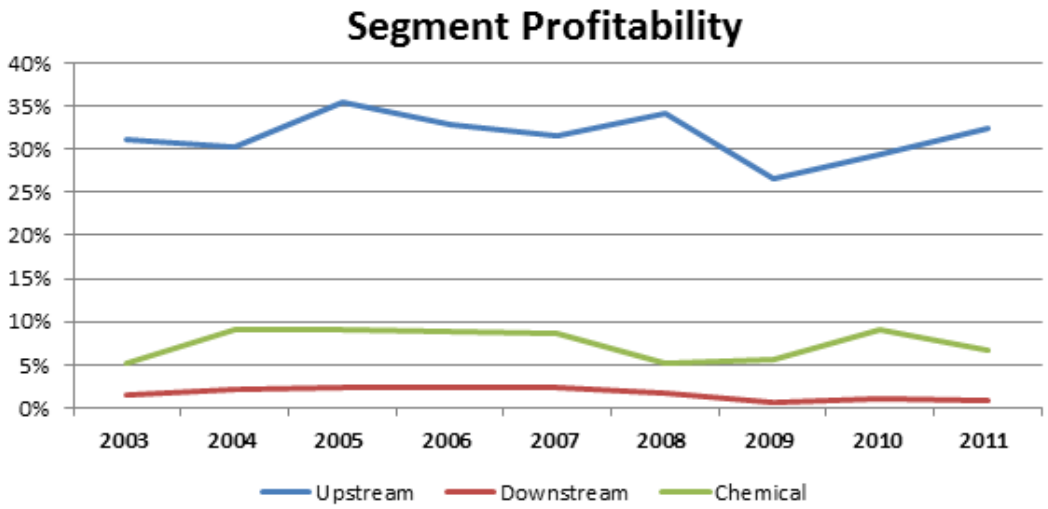


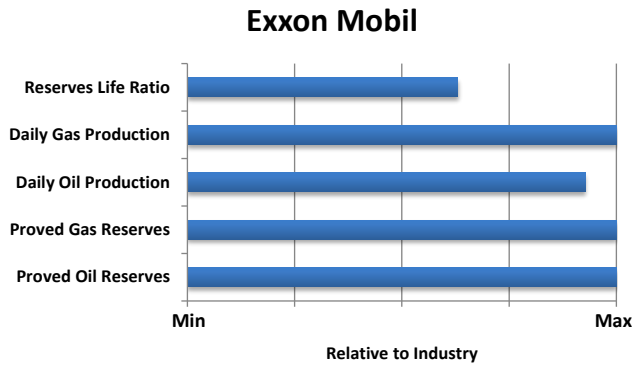
Exhibit 3: Segment Profitability



Market Position Overview

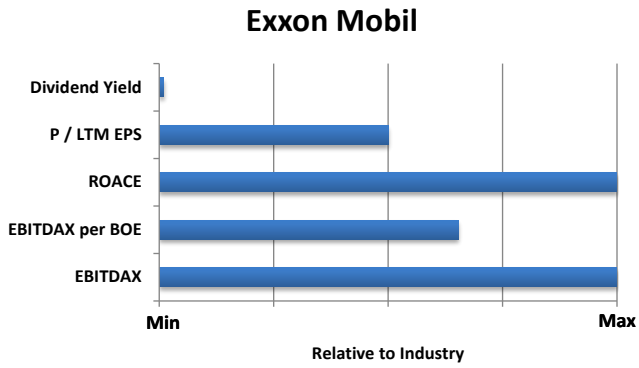
To give an overview of ExxonMobil's market position, we compare ExxonMobil with its major competitors on the key operating and financial metrics of 2011. We consider the other six supermajors, i.e. BP, Chevron, ConocoPhilips, Eni SpA, Royal Dutch Shell, and Total SA, as ExxonMobil's major competitors. In addition to the supermajors, PetroChina is also included in the comparison because it has operating metrics on a similar scale to ExxonMobil. Exhibit 4 shows that ExxonMobil has industry leading positions in the daily oil and gas productions and in proved oil and gas reserves. For financial performance, Exhibit 5 shows that ExxonMobil has highest EBITDAX in the industry and the highest return on average capital employed (ROACE) compared to its peers. However, ExxonMobil's EBITDAX per barrel of oil equivalent (BOE) and P / LTM EPS are at the industry's average and its dividend yield is at the minimum of the industry range. Considering ExxonMobil's mixed performance on financial metrics given its industry leading position on operating metrics, we use the medium of industry's multiples as the base case to value ExxonMobil in the public comparables valuation methodology.

Exhibit 4: ExxonMobil's Operational Position



Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 5: ExxonMobil's Financial Position



Source: Company SEC filings, Capital IQ and Google Finance

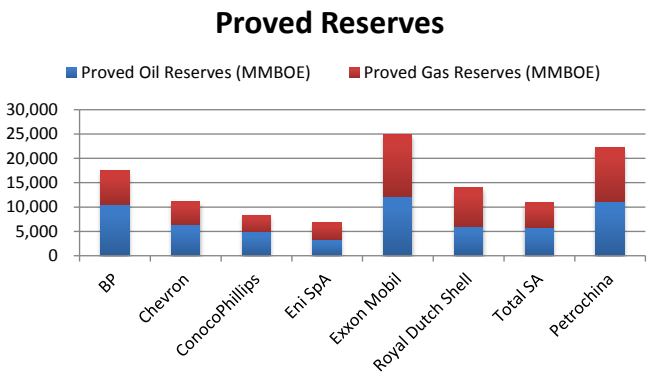
Key Operating Metrics

For operating metrics, we look at proved reserves, daily production and reserve life ratio in 2011.

Exhibit 6 shows that ExxonMobil has the highest total proved reserves at 24,931.7 million barrels of oil equivalent (MMBOE) among all the oil and gas supermajors in the world. As the proved reserves is one of the most important value drivers for the integrated oil and gas industry, ExxonMobil has a valuation advantage over its competitors by its market leading position in terms of the size of total proved reserves.

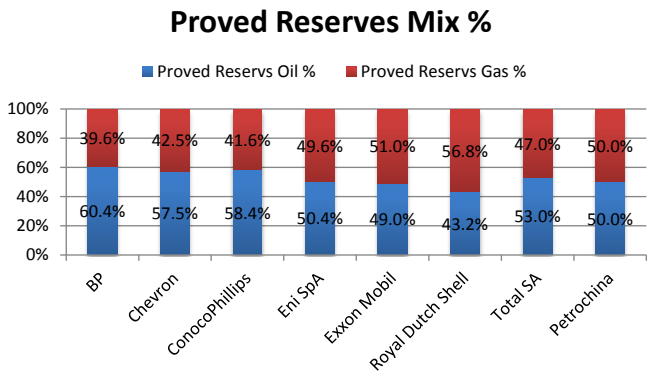
Exhibit 7 shows that ExxonMobil together with PetroChina and Eni SpA have the most balanced proved reserves mix between oil and gas while the other players have higher weights either towards oil or gas. Balanced proved reserves provide ExxonMobil with more flexibility especially at times of price shocks as it is less likely that the price shock of gas and oil will happen at the same time. If the price were less favorable for either oil or gas, the company would have the option or opportunity to profit from the other.

Exhibit 6: Proved Reserves Size Comparison



Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 7: Proved Reserves Mix Percentage Comparison



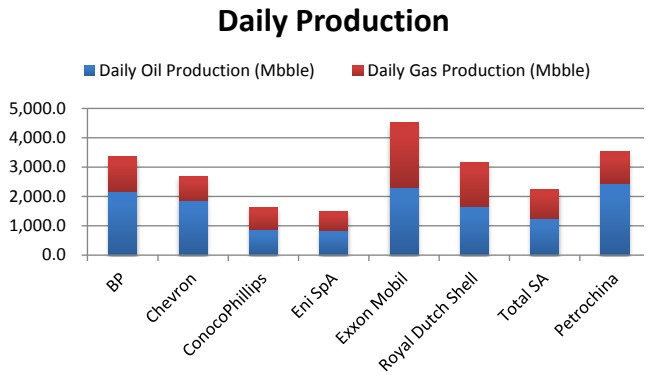
Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 8 shows that ExxonMobil significantly outperforms its competitors in the combined oil and natural gas production. ExxonMobil tops the world's other natural gas producers by producing 2,193.7 thousand barrels of oil equivalent (MBOE) per day, about 1.46 times the daily production of Royal Dutch Shell, the second largest natural gas producer. For oil, ExxonMobil is the world's second largest producer with oil production at 2,312.0 MBOE per day, about 95.23% of the daily production of PetroChina, the world's largest oil producer. As production is one of the two revenue drivers, ExxonMobil has very significant competitive advantage over its competitors by having the industry leading production capacity.

Exhibit 9 shows that ExxonMobil's daily production of oil to natural gas mix has a ratio of 51.3% to 48.7%, which is the most balanced production mix among all the supermajors.

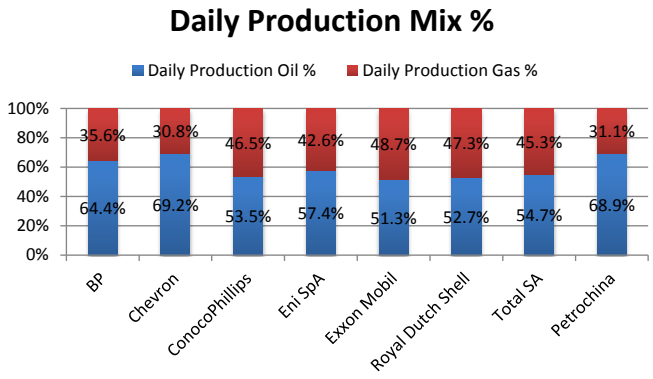
Just like proved reserves, balanced production provides ExxonMobil with more flexibility at times of price shocks.

Exhibit 8: Daily Production Comparison



Source: Company SEC filings, Capital IQ and Google Finance

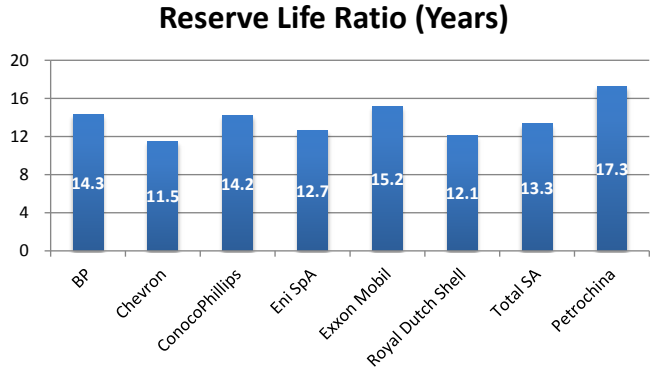
Exhibit 9: Daily Production Mix Percentage Comparison



Source: Company SEC filings, Capital IQ and Google Finance

"Reserve Life Ratio" is a metric indicating the number of years in which the total proved reserves, without adding any new proved reserves, would run out given the current daily production rate. The longer a company's reserves last, the higher the investors will value the company. Investors are likely to pay a premium for the stock of a company with a higher reserve life ratio because they can earn a return on their investment further into the future. Exhibit 10 indicates ExxonMobil has a reserve life ratio as high as 15.2 years, second only to PetroChina's 17.3 years among all the supermajors.

Exhibit 10: Reserve Life Ratio Comparison



Source: Company SEC filings, Capital IQ and Google Finance

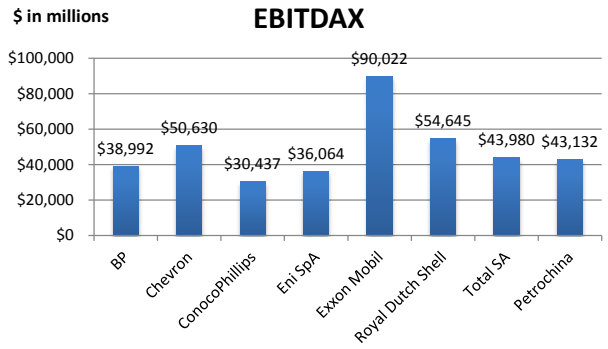
Key Financial Metrics

For financial metrics, we look at EBITDAX, return on average capital employed (ROACE), EBITDAX per BOE, price per LTM earnings and earnings plus dividends per share in 2011.

Exhibit 11 shows that ExxonMobil earned the highest EBITDAX of $90.0 billion among

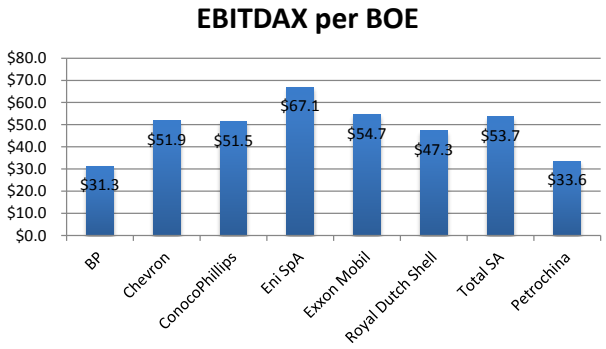
the supermajors in 2011. As EBITDAX is one of the important multiple valuation drivers, higher EBITDAX than the industry average would also increase the investors' willingness to pay more for the stock as it is an indicator of a company's ability of generating cash flows. ExxonMobil has a much higher EBITDAX than its peers; however, its stock does not trade at a multiple commensurate to its industry leading EBITDAX because of its lackluster EBITDAX per BOE. EBITDAX per BOE is an important metric to evaluate the profitability generating ability. Exhibit 12 shows that ExxonMobil had EBITDAX of $54.7 per oil equivalent barrel in 2011.

Exhibit 11: EBITDAX Comparison



Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 12: EBITDAX per Oil Equivalent Barrel Comparison



Source: Company SEC filings, Capital IQ and Google Finance

As the oil and gas industry is very capital intensive, it is also important to evaluate how efficiently a company generates profits over the capital invested. We compare ExxonMobil's return on average capital employed ratio with its peers. We use the following equation[2] to calculate the ROACE ratio.

$$ROACE$$

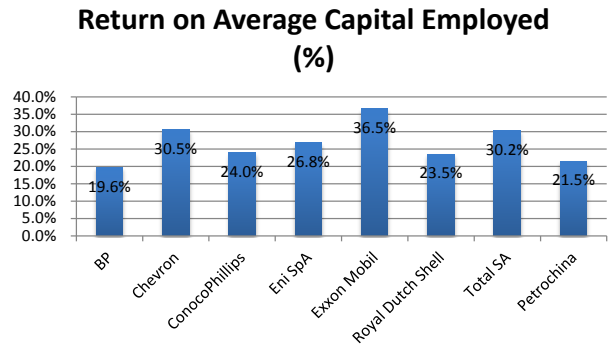
$$= \frac{EBITDAX}{Average\ Capital\ Employed}$$

$$= \frac{EBITDAX}{Average\ Total\ Assets - Average\ Current\ Liabilites}$$

Exhibit 13 shows that ExxonMobil had the highest ROACE at 36.5% among the supermajors. This indicates that ExxonMobil generated the highest profits on the capital invested among the supermajors in 2011. Exhibit 14 shows that ExxonMobil has the second highest price per LTM EPS at 9.5x among its peers, which makes ExxonMobil's stocks less attractive. Exhibit 15 shows that ExxonMobil has the lowest dividend yield at 2.59%, less than half of those given by its peers at the higher end.

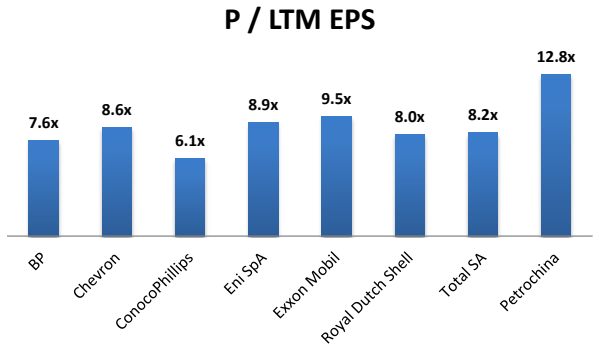
[2] Investopedia: Return on Average Capital Employed

Exhibit 13: Return on Average Capital Employed Comparison



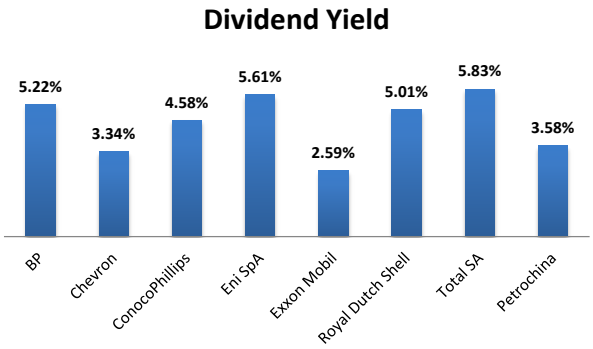
Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 14: Price per LTM EPS Comparison



Source: Company SEC filings, Capital IQ and Google Finance

Exhibit 15: Dividend Yield Comparison



Source: Company SEC filings, Capital IQ and Google Finance

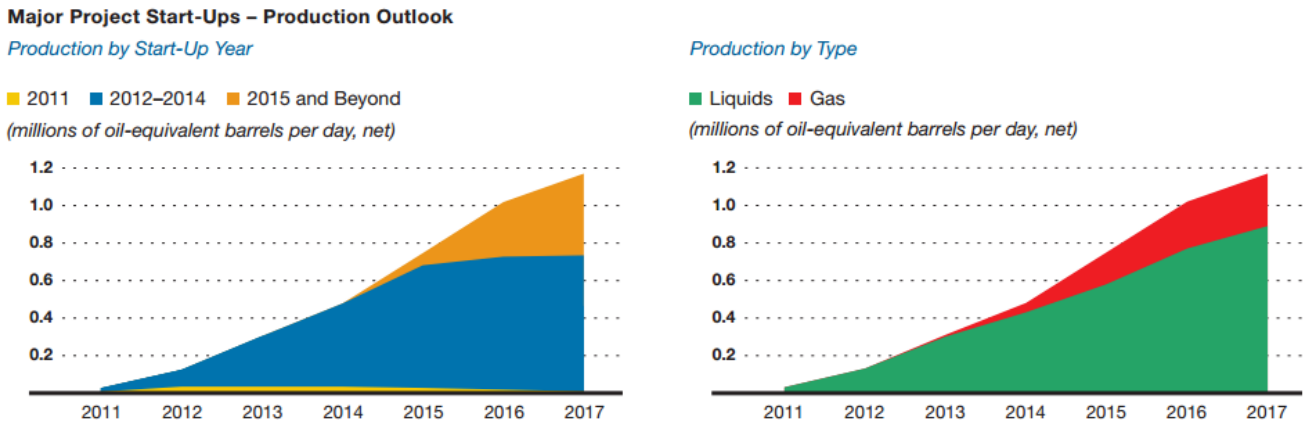
Development and Production

Major Projects and Production

ExxonMobil has a geographically diverse portfolio of more than 120 projects targeting production of 23 billion oil-equivalent barrels.[3] It started up one major project in 2011 and has 21 major projects to come on stream by the end of 2014.[4] In addition, ExxonMobil is in various stages to bring an additional 34 major projects on stream after 2014.[5] Exhibit 16 shows the production outlook by 2017 based on the major projects start-ups. Exhibit 18 summaries these major projects startup schedule and target peak productions.

[3] ExxonMobil 2011 Financial and Operating Review
[4] ExxonMobil 2011 Financial and Operating Review
[5] ExxonMobil 2011 Financial and Operating Review

Exhibit 16: Production Outlook by 2017



Source: ExxonMobil Financial and Operating Review 2011

For our valuation model, we came up with 3 production scenarios: base, high, and low

We develop our view on the base case of ExxonMobil's future oil production based on Exhibit 16. As the production outlook indicates a growth of oil production in the amount of 0.9 million oil-equivalent barrels per day over a period of 6 years from 2011 to 2017, we forecast the oil production growth with the same rate as shown in Exhibit 16. We add one standard deviation of ExxonMobil's oil production in the past 10 years onto the base case to get the best case and subtract one standard deviation to get the worst case.

We do the same thing for the natural gas production forecast. We also develop our view on the base case of ExxonMobil's future natural gas production based on Exhibit 16. As the production outlook indicates a growth of natural gas production in the amount of 0.2 million oil-equivalent barrels per day over a period of 6 years from 2011 to 2017, we forecast the natural gas production growth with the same rate as shown in Exhibit 16. We add one standard deviation of ExxonMobil's natural gas production in the past 10 years onto the base case to get the best case and subtract one standard deviation to get the worst case. The results of these calculations are displayed in Exhibit 17.

Exhibit 17: Base, High, Low Production Scenarios for Natural Gas and Crude Oil (Daily Production Rates)

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Natural Gas Daily	Production - Base	13,162	13,402	13,642	13,882	14,122	14,362	14,602	14,842	15,082	15,322	15,562
	Production - High	14,542	14,782	15,022	15,262	15,502	15,742	15,982	16,222	16,462	16,702	16,942
	Production - Low	11,782	12,022	12,262	12,502	12,742	12,982	13,222	13,462	13,702	13,942	14,182
	Reserves	76,222										
Crude Oil Daily	Production - Base	2,462	2,612	2,762	2,912	3,062	3,212	3,362	3,512	3,662	3,812	3,962
	Production - High	2,575	2,725	2,875	3,025	3,175	3,325	3,475	3,625	3,775	3,925	4,075
	Production - Low	2,349	2,499	2,649	2,799	2,949	3,099	3,249	3,399	3,549	3,699	3,849
	Reserves	12,228										

Exhibit 18: Major Projects Start-Ups

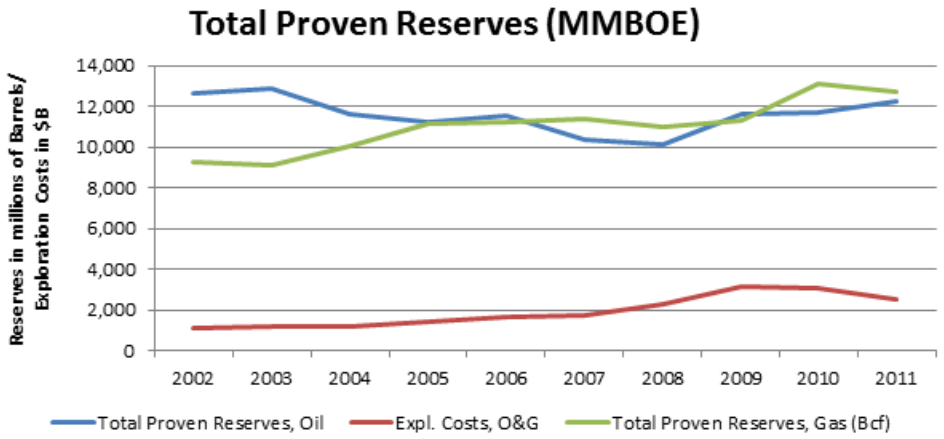
		2011 (Actual)			2012-2014 (Projected)			2015+ (Projected)		
Country	New Projects	Liquids (KBD)	Gas (MCFD)	ExxonMobil Working Interest	Liquids (KBD)	Gas (MCFD)	ExxonMobil Working Interest	Liquids (KBD)	Gas (MCFD)	ExxonMobil Working Interest
Angola	Pazflor	220		20%						
	Cravo-Lirio-Orquidea-Violeta				160		20.0%			
	Kizomba Satellites Phase 1				100		40.0%			
	AB32 Kaombo Split Hub							210		15.0%
	Kizoma Satellites Phase 2							65		40.0%
Australia	Kipper/Tuna				15	175	40.0%			
	Turrum				20	200	50.0%			
	Gorgon Area Expansion							10	850	25.0%
	Gorgon Jansz							20	2835	25.0%
	Scarborough								1190	50.0%
Canada	Cold Lake Nabiye Expansion				40		100.0%			
	Hibernia Southern Extension				55		27.0%			
	Kearl Initial Development				170		100.0%			
	Syncrude Aurora North Mine Sustaining Project				215		25.0%			
	Syncrude Mildred Lake Mine Sustaining Project				180		25.0%			
	Aspen							80		100.0%
	Firebag							280		80.0%
	Hebron							130		36.0%
	Kearl Expansion							175		100.0%
	Mackenzie Gas Project							10	830	56.0%
	Syncrude Aurora South Phases 1 and 2							200		25.0%
Indonesia	Banyu Urip				165	15	45.0%			
	Cepu Gas								210	41.0%
	Natuna								1100	
Iraq	West Qurna I							2825		60.0%
Kazakhstan	Kashagan Phase 1				290		17.0%			
	Kashagan Future Phases							1260		17.0%
	Aktote							50	850	17.0%
	Tengiz Expansion							250		25.0%
Malaysia	Damar Gas				5	200	50.0%			
	Telok					370	50.0%			
Nigeria	Etim/Asasa Pressure Maintenance				50		40.0%			
	Usan				180		30.0%			
	Satellite Field Development Phase 1				70		40.0%			
	Bonga North							100	60	20.0%
	Bonga Southwest							200	15	16.0%
	Bosi							135	140	56.0%
	Erha North Phase 2							60		56.0%
	Satellite Field Development Phase 2							80		40.0%
	Uge							110	20	20.0%
	Usan Future Phases							50		30.0%
	Usari Pressure Maintenance							50		40.0%
Norway	Aasgard Subsea Compression							35	360	14.0%
	Dagny							65	185	33.0%
	Luva								600	15.0%
Paqua New Guinea	PNG LNG				30	940	33.0%			
Russia	Sakhalin-1 Arkutun-Dagi				90		30.0%			
	Sakhalin-1 Future Phases							30	800	30.0%
Qatar	Barzan				85	1400	7.0%			
United Arab Emirates	Upper Zakum 750							750		28.0%
U.K.	Fram							20	140	69.0%
U.S.	Hadrian South					300	47.0%			
	Lucius				100	90	25.0%			
	Alaska Gas/Ponit Thomson							70	4500	36.0%
	Hadrian North							100	100	50.0%
	Julia Phase 1							30		50.0%

Source: ExxonMobil Financial and Operating Review 2011

Exxon's trouble with reserves

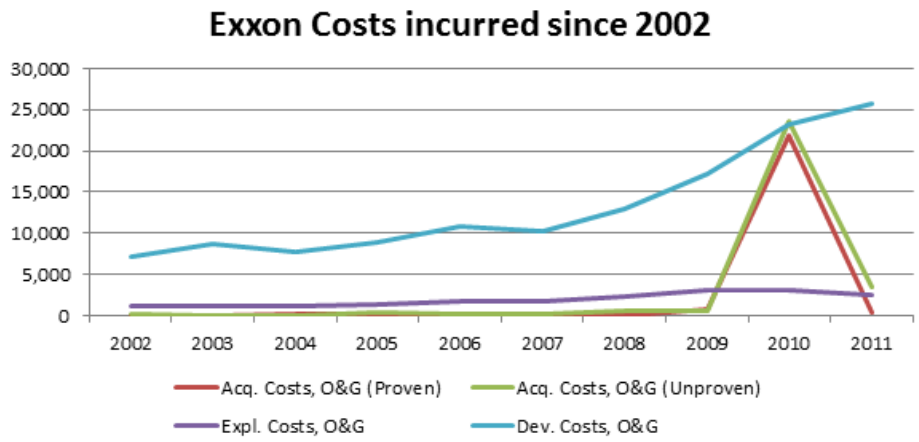
After a fallow period following the recent global financial meltdown, Exxon's stock price has only recently returned to its pre-crisis plateau of roughly $90 a share. While there are many factors responsible for the stocks stagnation, an important one that has been alluded to in many analyst reports and recent earnings calls has been the perception that the company is finding it more expensive to maintain its reserves as time goes on. While the company has steadily increased its exploration expenditures over the past decade, Exxon's reserves, and its oil reserves in particular, have increased only sporadically in the same timeframe (Exhibit 19). As a result, Exxon's reserves portfolio now consists of a smaller proportion of oil, even though the company extracts more profit from oil than gas.

Exhibit 19: Total Proven Reserves



In 2010, Exxon recently completed a merger with XTO, a natural gas company. Because of this deal, their proven gas reserves increased by nearly 2.8 billion cubic feet for that year. However, this came at a significant cost of about $30 billion to the company and led to a dramatic increase in their acquisition costs over their historical levels over the past decade. This turn of events has led many observers to speculate that Exxon is working furiously to tread water and that their inability to grow their reserves organically is a big sign for concern going forward.

Exhibit 20: Exxon Costs incurred since 2002



While we do not exactly share that same level of pessimism, there is some worry that Exxon did not purchase XTO for potential synergies and instead to have access to reserves that it would not be able to acquire otherwise. We are cautiously guarded that Exxon viewed an expensive acquisition like XTO as a rare opportunity, and have reflected in our model only slight upward growth in costs going forward.

Oil Price Forecasts

For our pricing forecasts, we used a few methods to arrive at our final numbers. In general, it has been very difficult to rely on the accuracy of long-term projections of organizations such as EIA or IBIS for their oil price forecasts, as they seem to misunderstand the movements (Exhibit 8 in Appendix) of the commodity in the past decade in relation to the rest of sample periods since 1974.

These forecasts rely on a predicted price one or two years out that is not significantly different from today's price. Since the most reliable indicator of a future oil price is most often its current price[6][7], this inherently makes sense, and does not indicate some high level of deductive reasoning on the part of the forecasting firms.

In light of the difficulty forecasts have had in predicting oil prices over the past decade, the Federal Reserve engaged in a lengthy exercise in a 2009 paper to identify the most consistently accurate method of forecasting the future price of oil. What they found was that outside of Auto Regressive Conditional Heteroskedasticity models that took into account volatility over time, you were often better off flipping a coin to predict the movements of oil prices than utilizing most forecasts.

[6] http://www.federalreserve.gov/pubs/ifdp/2011/1022/ifdp1022.htm
[7] http://www.freakonomics.com/2008/07/21/forecasting-oil-prices-its-easy-to-beat-the-experts/

This leads to the conclusion that the most accurate method of recent forecasting is indeed a random walk without drift, which is the method we primarily used here (and the method we used for the Net-Asset-Value with @Risk). For the price predictions in the base, high and low cases (Exhibit 24), we accounted for the fact that rarely has the long-term oil price drifted downward, so we had prices move upwards in all three scenarios. We also utilized the EIA's projection of a slight downward tick in next year's oil price, although we did not arrive at the same number, but instead discounted the expected yearly average increase to reflect the EIA's pessimism about the global economy. Finally, to arrive at our high, low, base values, we looked at the historical change in oil prices every year over time spans of up to 7 years and took the 25th, 75th and 50th percentile scenarios respectively to arrive at our forecasts.

Exhibit 24: Oil and Natural Gas Prices – Base, High, and Low Cases

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Natural Gas Daily	Price - Base	$ 4.69	$ 5.11	$ 4.88	$ 6.05	$ 5.08	$ 7.74	$ 8.05	$ 8.37	$ 8.70	$ 9.05	$ 9.42
	Price - Base	$ 4.69	$ 5.11	$ 4.88	$ 6.05	$ 5.08	$ 7.74	$ 8.05	$ 8.37	$ 8.70	$ 9.05	$ 9.42
	Price - High	$ 4.69	$ 5.91	$ 7.45	$ 7.08	$ 8.92	$ 10.51	$ 11.14	$ 11.80	$ 12.51	$ 13.26	$ 14.06
	Price - Low	$ 4.69	$ 4.22	$ 4.43	$ 4.64	$ 4.83	$ 5.02	$ 5.22	$ 5.43	$ 5.64	$ 5.87	$ 6.11
Crude Oil Daily	Price - Base	$ 95.47	$ 103.56	$ 107.10	$ 104.06	$ 120.86	$ 106.93	$ 119.76	$ 124.55	$ 129.53	$ 134.71	$ 140.10
	Price - Base	$ 95.47	$ 103.56	$ 107.10	$ 104.06	$ 120.86	$ 106.93	$ 119.76	$ 124.55	$ 129.53	$ 134.71	$ 140.10
	Price - High	$ 95.47	$ 106.93	$ 116.50	$ 117.43	$ 131.52	$ 147.30	$ 153.19	$ 159.32	$ 165.69	$ 172.32	$ 179.22
	Price - Low	$ 95.47	$ 84.01	$ 94.10	$ 95.47	$ 99.99	$ 97.38	$ 109.06	$ 113.43	$ 117.96	$ 122.68	$ 127.59

Valuation

Summary of Results

We valued ExxonMobil using four methods: Net-Asset-Value (NAV), Net-Asset-Value using @Risk (NAV@Risk), Discounted Cash-Flow (DCF), and Public Comparable Companies (COMPS).

Exhibit 25: Results – Target Share Prices – Base, High, and Low Cases

Target Share Prices	Base	High	Low
Net Asset Value	$ 103.10	$ 161.13	$ 65.01
Discounted Cash Flow	$ 97.81	$ 167.57	$ 61.30
Net Asset Value with @Risk	$ 87.88	$ 117.41	$ 55.71
Comparable Companies	$ 77.30	$ 111.21	$ 54.71
Average	**$ 91.52**	**$ 139.33**	**$ 59.18**

We have listed the resulting share prices for all three cases in Exhibit 25. The current market price is $$88.14. The NAV using @Risk model produced the value that is closest to the current market price: $87.88 (~0.3% upside). The NAV model produced the highest value: $103.10 (~17% upside). Comparable companies produced the lowest value of $77.30 (~12.3% downside). Finally, the DCF model produced an average value of $97.81 (~11% upside). Combined, these estimates produce a range of $77.30-$103.10.

Taking the averaging of all four methods, we get $91.52 (3.8% upside). This is not enough of a margin to recommend a buy, so we are **NEUTRAL** on XOM**.**

High/Low: We looked at high and low values for each of the different models. For the regular NAV and DCF model, we considered an optimistic case (high oil/gas prices and production) and a pessimistic case (low oil/gas prices and production) to get high and low values. These different cases reveal a NAV range of share prices from $65.01 - $161.13. The DCF share price range is from $61.30 - $167.57. For the NAV@Risk model, we used the p25 and p75 prices as “high” and “low” values, producing a range of $55.71 - $117.41. For COMPS, we looked at the average of maximum and minimum values: $54.71 - $111.21. The 52 week range is $77.13 - $93.67.

Net Asset Value (NAV) Model

The NAV model is the industry standard for the oil and gas industry. We chose this model for many reasons. First, oil and gas is a finite resource and since O&G revenues are highly dependent on this resource, it is difficult to predict what O&G revenue streams will look like when the resource runs out. At the same time, O&G companies require significant amounts of CapEx. Combined, these two things mean that, over time, this leads to declining or even negative free cash flows. Secondly, in an O&G company, enterprise value is highly dependent on the terminal value and the terminal growth rate is generally thought to be zero. This is because oil and gas are finite resources, so we cannot assume that the company will continue to grow forever. We used COMPS to evaluate the two non-asset portions of the company – the Refining/Chemicals portion and downstream revenue.

Exhibit 26: Net Asset Value Model – Assumptions

NAV Assumptions		
Natural Gas (BcF)		76,222
Oil (Mbbls)		12,228
Oil Equivalents (MMBOE)		24,932
Future Estimated Production Costs	$	(494,982)
Future Estimated Development Costs	$	(129,415)
Discount Rate:		10%

Assumptions: In the NAV model, we assume that ExxonMobil's current reserves (12,228 MMBbl of oil and 76,222 Bcf of gas)[8] will never increase, and that the company will cease operations once the reserves run out (common assumption in NAV models). We also assume that no additional CapEx will be required beyond the $624,397M[9] needed to develop the existing reserves. We make assumptions on oil/gas prices (from the above sections) and production scenarios (that production continues until the reserves runs out). Below are tables from the **base case.**

[8] From 2011 10-K
[9] Ibid.

Exhibit 27: Reserves, Production, and Price – Base Case

		Natural Gas				Oil			
	Year #	Beginning Reserves	Annual Production	Avg Price		Year #	Beginning Reserves	Annual Production	Avg Price
2012	1	76,222	4,804	$ 4.69	2012	1	12,228	899	$ 95.47
2013	2	71,418	4,892	$ 5.11	2013	2	11,329	953	$ 103.56
2014	3	66,526	4,979	$ 4.88	2014	3	10,376	1,008	$ 107.10
2015	4	61,547	5,067	$ 6.05	2015	4	9,368	1,063	$ 104.06
2016	5	56,480	5,155	$ 5.08	2016	5	8,305	1,118	$ 120.86
2017	6	51,325	5,242	$ 7.74	2017	6	7,187	1,172	$ 106.93
2018	7	46,083	5,330	$ 8.05	2018	7	6,015	1,227	$ 119.76
2019	8	40,753	5,417	$ 8.37	2019	8	4,788	1,282	$ 124.55
2020	9	35,336	5,505	$ 8.70	2020	9	3,506	1,337	$ 129.53
2021	10	29,831	5,593	$ 9.05	2021	10	2,169	1,391	$ 134.71
2022	11	24,239	5,680	$ 9.42	2022	11	778	778	$ 140.10
2023	12	18,559	5,680	$ 9.42	2023	12	-	-	$ 140.10
2024	13	12,878	5,680	$ 9.42	2024	13	-	-	$ 140.10
2025	14	7,198	5,680	$ 9.42	2025	14	-	-	$ 140.10

Next, we calculate revenues (price x production), subtract $624,397M needed for production and development, and take the NPV of future after-tax cash flows, discounted at 10%.

Exhibit 27: Revenue and Cash Flows

		Revenue ($ in Millions)				Cash Flows ($ in Millions)		
	Year #	Natural Gas	Oil & NGL	Total Revenue	Year #	Pre-tax Cash Flows	Cash Tax Rate	After-Tax Cash flows
2012	1	$ 22,531	$ 85,792	$ 108,324	1	$108,324	0.118	$95,541
2013	2	$ 25,007	$ 98,732	$ 123,739	2	$123,739	0.118	$109,138
2014	3	$ 24,297	$ 107,971	$ 132,267	3	$132,267	0.118	$116,660
2015	4	$ 30,655	$ 110,606	$ 141,261	4	$141,261	0.118	$124,592
2016	5	$ 26,168	$ 135,076	$ 161,243	5	$161,243	0.118	$142,217
2017	6	$ 40,566	$ 125,358	$ 165,925	6	$165,925	0.118	$146,345
2018	7	$ 42,894	$ 146,958	$ 189,852	7	$189,852	0.118	$167,449
2019	8	$ 45,343	$ 159,655	$ 204,998	8	$204,998	0.118	$180,808
2020	9	$ 47,919	$ 173,133	$ 221,052	9	$221,052	0.118	$194,968
2021	10	$ 50,629	$ 187,434	$ 238,063	10	$238,063	0.118	$209,972
2022	11	$ 53,479	$ 108,990	$ 162,469	11	$162,469	0.118	$143,298
2023	12	$ 53,479	$ -	$ 53,479	12	$53,479	0.118	$47,168
2024	13	$ 53,479	$ -	$ 53,479	13	$53,479	0.118	$47,168
2025	14	$ 53,479	$ -	$ 53,479	14	$53,479	0.118	$47,168

Net Present Value of Cash Flows from Proven Reserves	$ 416,165

Finally, we use COMPS to value the downstream and chemical portions of the company.

Exhibit 28: COMPS for Chemicals and Downstream

Chemicals	
12/31/2011 EBITDA	$ 6,712
EV/EBITDA Multiple	5
Estimated EV	$ 33,560

Downstream	
12/31/2011 EBITDA	$ 8,454
EV/EBITDA Multiple	3
Estimated EV	$ 25,362

Summing up the three sections (NPV for upstream, downstream, and chemicals), we get an Enterprise Value of $475 Billion and an Equity Value of $470 Billion, which equates to a share value of $103.10.

For a brief discussion the possibility of Exxon breaking up its upstream and downstream segments, please see exhibit 9 of the appendix.

Model Results and Sensitivity Analysis: We ran three different cases, which reveal a NAV range of share prices from $65.01 - $161.13, with a base case price of $103.10.

Exhibit 29: Results of Net-Asset-Value Model

Net-Asset-Value Model	
High Case	$ 161.13
Base Case	**$ 103.10**
Low Case	$ 65.01

We used a 10% discount rate because it is the industry standard. However, we ran a sensitivity analysis on different discount rates; from 8% to 12% and found that anything below a discount rate of 11.5% would yield a share price above the current share price of $88.14 (highlighted in blue to the right).

Exhibit 30: Sensitivity Analysis on Discount Rate

Discount Rate	Share Price
	$103.10
8.00%	$ 125.73
8.40%	$ 120.92
8.80%	$ 116.26
9.20%	$ 111.74
9.60%	$ 107.36
10.00%	$ 103.10
10.40%	$ 98.97
10.80%	$ 94.97
11.20%	$ 91.08
11.60%	$ 87.30
12.00%	$ 83.63

Discounted Cash Flow Model

DCF is the most commonly used valuation model. We used the following assumptions:

Assumptions:
(1) Perpetual growth rate: 1%. The industry standard is to use 0% since oil and gas are finite resources, and it is difficult to predict what the revenue streams will be after the resources run out. However, we will assume that ExxonMobil will continue to grow as a company, perhaps through offering different resources.
(2) WACC: 10% (Industry Standard); calculated to be around 10.4%
(3) Prices and production: Exhibit 17 and Exhibit 24 from above

Model Results and Sensitivity Analysis: The high, base, and low cases reveal a DCF range of share prices from $61.30 to $167.57, with a base case price of $97.81.

Exhibit 31: Results of Discounted Cash Flow Analysis

Discounted Cash Flow		
High Case	$	167.57
Base Case	**$**	**97.81**
Low Case	$	61.30

Given the importance of the WACC and the Terminal Growth Rate, we did sensitivity analysis around the values. We used a range of Terminal Growth Rates, from 0% (the industry standard) to 2% (average growth of the U.S. economy). We used the same range as the NAV model for the WACC range (8% to 12%). All of the WACCs and terminal growth rates yield share prices above the current market price of $88.14 (highlighted in blue). However, we would like to note that our production models are on the optimistic side (since the production numbers are produced by XOM themselves), so we would only consider the DCF as one of four valuation methods.

Exhibit 32: Sensitivity Analysis on WACC and Terminal Growth Rate

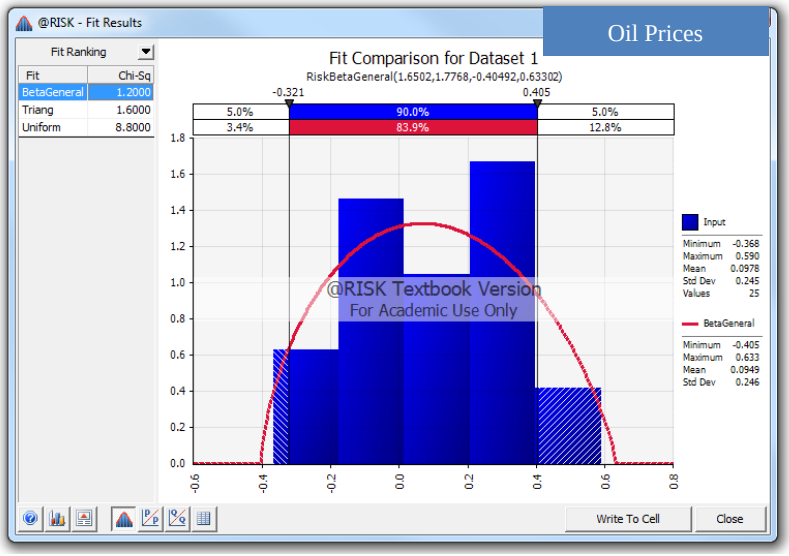
		Terminal Growth Rate										
	$97.81	0.00%	0.20%	0.40%	0.60%	0.80%	1.00%	1.20%	1.40%	1.60%	1.80%	2.00%
Weighted Average Cost of Capital	8.00%	$106.86	$107.27	$107.70	$108.15	$108.63	$109.14	$109.67	$110.24	$110.85	$111.49	$112.18
	8.40%	$104.54	$104.90	$105.27	$105.67	$106.09	$106.53	$106.99	$107.48	$108.00	$108.55	$109.14
	8.80%	$102.37	$102.68	$103.02	$103.36	$103.73	$104.11	$104.52	$104.94	$105.39	$105.87	$106.37
	9.20%	$100.33	$100.61	$100.90	$101.21	$101.53	$101.87	$102.22	$102.60	$102.99	$103.40	$103.84
	9.60%	$98.41	$98.66	$98.92	$99.19	$99.47	$99.77	$100.08	$100.41	$100.75	$101.12	$101.50
	10.00%	$96.59	$96.81	$97.05	$97.29	$97.54	$97.81	$98.08	$98.37	$98.67	$98.99	$99.32
	10.40%	$94.87	$95.07	$95.28	$95.49	$95.72	$95.95	$96.20	$96.45	$96.72	$97.00	$97.29
	10.80%	$93.23	$93.41	$93.60	$93.79	$93.99	$94.20	$94.42	$94.65	$94.89	$95.13	$95.39
	11.20%	$91.67	$91.83	$92.00	$92.18	$92.36	$92.55	$92.74	$92.94	$93.16	$93.38	$93.61
	11.60%	$90.18	$90.33	$90.48	$90.64	$90.80	$90.97	$91.14	$91.33	$91.52	$91.71	$91.92
	12.00%	$88.76	$88.89	$89.03	$89.17	$89.32	$89.47	$89.63	$89.79	$89.96	$90.14	$90.32

Net Asset Value (NAV) with @Risk Model

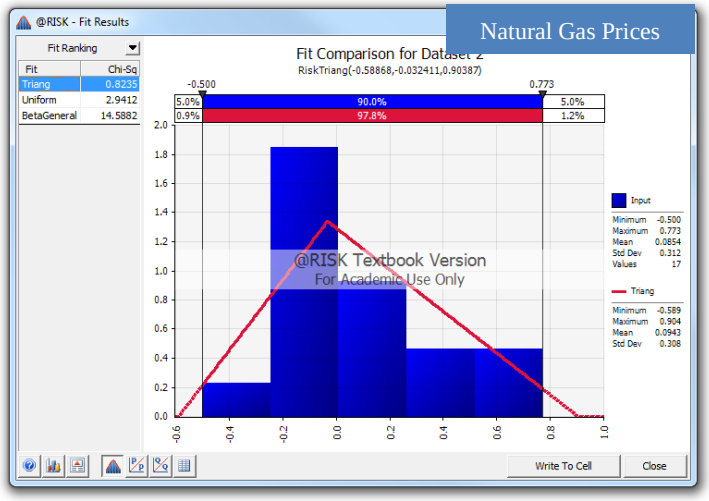
In addition to the Net Asset Value model, the O&G industry also uses Monte Carlo modeling to account for uncertainty. We did another version of the NAV model, where we used @Risk to model oil and gas prices. First, we gathered past oil prices and natural gas prices from 1987 to present and from 1994 to present, respectively[10]. We then calculated the year over year growth rate and found that the oil growth rates fit a "BetaGeneral" curve, with a mean of .0978 and a standard deviation of .245. The natural gas growth rates fit a triangular distribution, with a mean of .0854 and a standard deviation of .312.

Exhibit 33: Fitted Oil and Natural Gas Prices

Date	Oil Price	Growth
1986		
1987	18.75	
1988	15.26	-19%
1989	18.70	23%
1990	24.02	28%
1991	20.54	-14%
1992	19.74	-4%
1993	17.48	-11%
1994	16.31	-7%
1995	17.49	7%
1996	21.13	21%
1997	19.61	-7%
1998	13.31	-32%
1999	18.38	38%
2000	29.23	59%
2001	24.97	-15%
2002	25.39	2%
2003	29.59	17%
2004	39.34	33%
2005	55.26	40%
2006	65.46	18%
2007	72.41	11%
2008	97.85	35%
2009	61.81	-37%
2010	79.57	29%
2011	105.80	33%
2012	102.18	-3%



Date	Natural Gas Prices	YOY Growth
1993		
1994	$ 2.01	
1995	$ 1.72	-14.09%
1996	$ 2.39	38.54%
1997	$ 2.43	1.72%
1998	$ 2.25	-7.31%
1999	$ 2.38	5.66%
2000	$ 4.22	77.30%
2001	$ 4.08	-3.24%
2002	$ 3.46	-15.22%
2003	$ 5.46	57.87%
2004	$ 6.41	17.36%
2005	$ 9.17	43.04%
2006	$ 7.62	-16.97%
2007	$ 7.47	-1.90%
2008	$ 9.08	21.49%
2009	$ 4.53	-50.04%
2010	$ 4.52	-0.35%
2011	$ 4.13	-8.70%

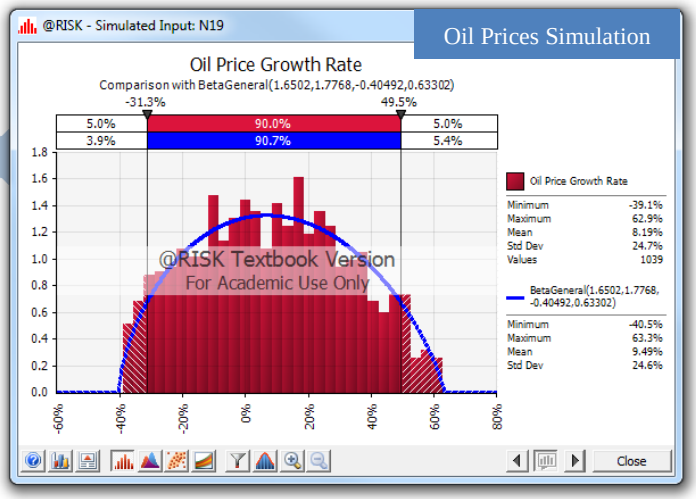


[10] http://www.federalreserve.gov/pubs/ifdp/2011/1022/ifdp1022.htm
http://www.eia.gov/forecasts/steo/

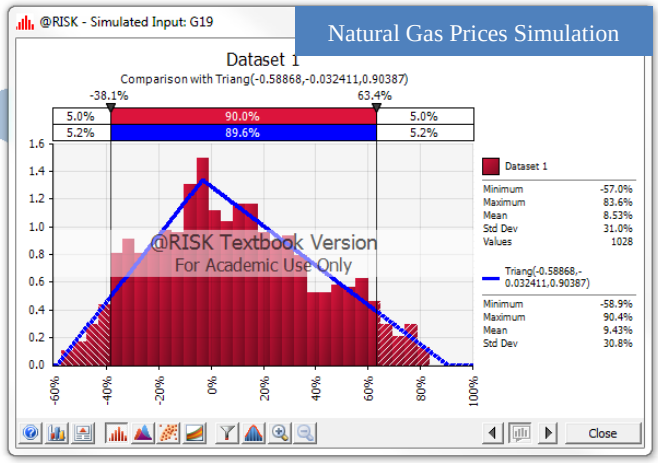
We setup a random walk model which varies the annual year-over-year growth rates, and hence the annual oil and natural gas prices. We ran 10,000 Monte Carlo trials, each of which have different sets of prices (Exhibit 34 shows one example trial, with varying oil and natural gas prices). We set an oil price cap of $200, because it was the upper limit for the oil price predictions from the Energy Information Agency (EIA).[11]

Exhibit 34: Example Trial – Oil and Gas Price Simulations

		Oil			
	Year #	Beginning Reserves	Annual Production	Avg Price	Oil Price Growth
2012	1	12,228	911	$ 104.25	
2013	2	11,317	918	$ 114.30	9.65%
2014	3	10,399	938	$ 166.01	45.24%
2015	4	9,460	921	$ 158.28	-4.66%
2016	5	8,539	979	$ 167.68	5.94%
2017	6	7,561	955	$ 157.30	-6.19%
2018	7	6,606	878	$ 150.85	-4.10%
2019	8	5,728	871	$ 168.05	11.40%
2020	9	4,857	884	$ 200.00	23.87%
2021	10	3,973	844	$ 200.00	26.47%
2022	11	3,129	865	$ 182.75	-8.62%
2023	12	2,263	865	$ 191.92	5.01%
2024	13	1,398	865	$ 190.52	-0.73%
2025	14	533	533	$ 200.00	18.73%



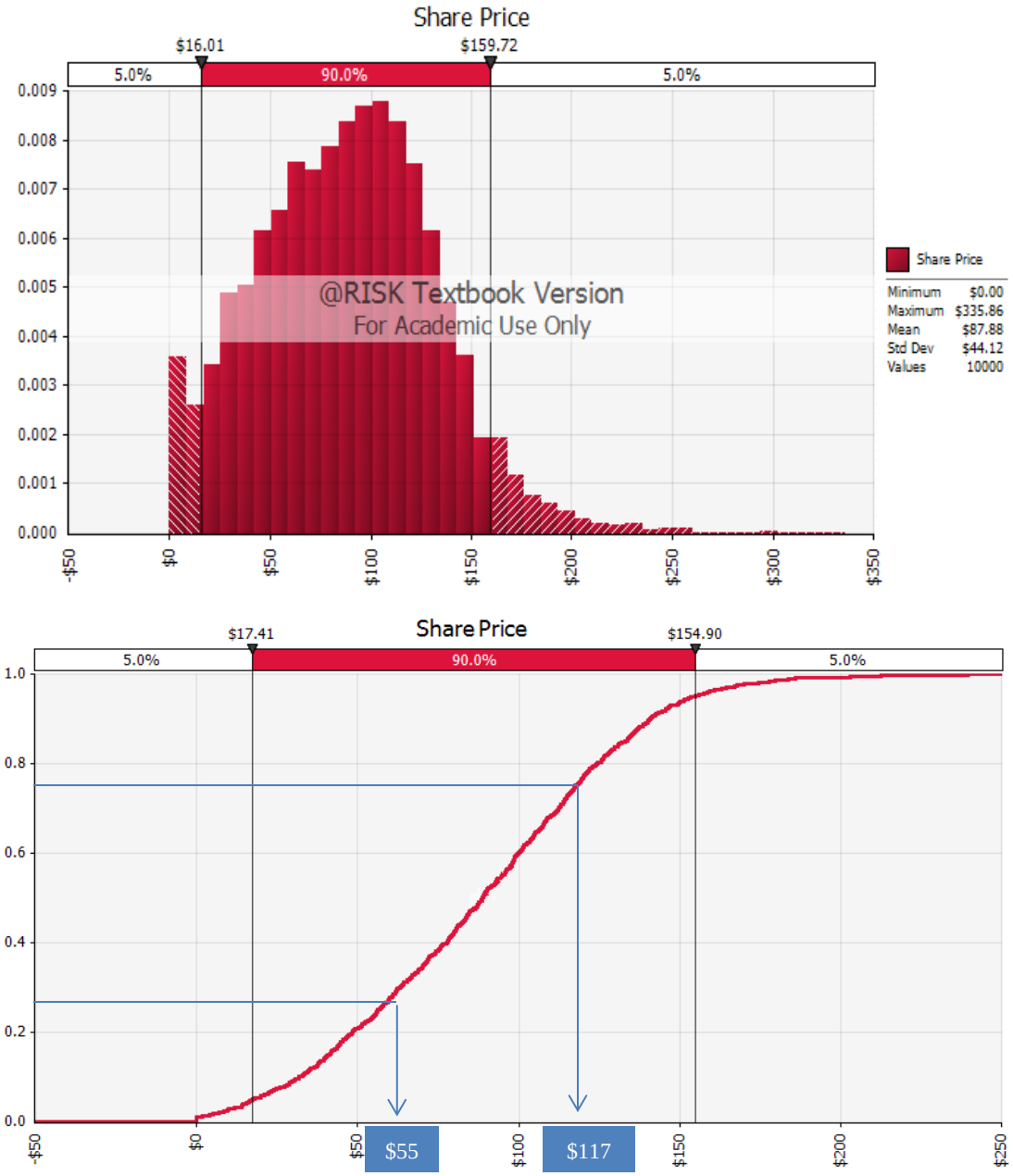
		Natural Gas			
	Year #	Beginning Reserves	Annual Production	Avg Price	Gas Price Growth
2012	1	76,222	4,745	$ 4.69	
2013	2	71,477	4,928	$ 4.65	-0.80%
2014	3	66,550	5,110	$ 4.09	-12.14%
2015	4	61,440	5,293	$ 2.50	-38.87%
2016	5	56,147	5,475	$ 3.64	45.49%
2017	6	50,672	5,658	$ 3.18	-12.41%
2018	7	45,015	5,840	$ 5.08	59.42%
2019	8	39,175	6,023	$ 5.98	17.75%
2020	9	33,152	6,205	$ 4.93	-17.46%
2021	10	26,947	6,388	$ 7.73	56.78%
2022	11	20,560	6,570	$ 7.85	1.45%
2023	12	13,990	6,570	$ 7.13	-9.16%
2024	13	7,420	6,570	$ 6.29	-11.78%
2025	14	850	850	$ 9.68	54.00%



[11] http://www.eia.gov/forecasts/aeo/images/figure_64-sm.jpg

The resultant share price has a mean of $87.8, with a most probable price range of $55.71 (p25) to $117.41 (p75). To get an absolute maximum and minimum, we looked at p10 and p90 values: $29.29 - $141.99.

Exhibit 35: Results of Net-Asset-Value Model with @Risk



Public Comparable Companies

For public comparable companies, we used industry-specific multiples like EBITDAX (Earnings before interest, taxes, depreciation, depletion, amortization, and exploration expenses), Proved Reserves, and Daily Production.

Exhibit 36: Industry-Specific Multiples

Company Name	Equity Value	Enterprise Value	Enterprise Value / EBITDAX	Enterprise Value / Proved Reserves	Enterprise Value / Daily Production
BP	$ 135,828	$ 169,700	4.4x	9.70	50.66
Chevron	$ 212,637	$ 202,697	4.0x	18.04	75.85
ConocoPhillips	$ 69,981	$ 94,070	3.1x	11.22	58.12
Eni SpA	$ 83,078	$ 124,303	3.4x	18.24	84.44
PetroChina	$ 249,447	$ 316,736	7.3x	14.24	89.93
Royal Dutch Shell	$ 225,514	$ 244,431	4.5x	17.47	77.26
Total SA	$ 114,348	$ 137,724	3.1x	12.63	61.42
Maximum	$ 249,447	$ 316,736	7.3x	18.24	89.93
75th Percentile	$ 219,076	$ 223,564	4.4x	17.76	80.85
Median	**$ 135,828**	**$ 169,700**	**4.0x**	**14.24**	**75.85**
25th Percentile	$ 98,713	$ 131,014	3.3x	11.92	59.77
Minimum	$ 69,981	$ 94,070	3.1x	9.70	50.66
Exxon Mobil	**$392,423**	**$397,434**	**4.4x**	**15.94**	**88.21**

Model Results: ExxonMobil is above the median for EV/EBITDAX, above the mean for EV/Daily Production, and above the median for EV/Proved Reserves. To get our COMPS values, we took averages to get a range from $54.71 to $111.21.

Exhibit 37: Industry-Specific Multiples

ExxonMobil: Enterprise Value	EBITDAX Multiple	Proved Reserves Multiple	Daily Production Multiple
Maximum	$661,074.50	$454,788.58	$405,203.61
75th Percentile	397,233.20	442,668.24	364,277.10
Median	**360,402.89**	**355,117.35**	**341,734.54**
25th Percentile	296,093.95	297,276.98	269,293.97
Minimum	278,226.16	241,860.52	228,242.41

ExxonMobil: Equity Value	EBITDAX Multiple	Proved Reserves Multiple	Daily Production Multiple
Maximum	$656,063.50	$449,777.58	$400,192.61
75th Percentile	392,222.20	437,657.24	359,266.10
Median	**355,391.89**	**350,106.35**	**336,723.54**
25th Percentile	291,082.95	292,265.98	264,282.97
Minimum	273,215.16	236,849.52	223,231.41

ExxonMobil: Share Price	EBITDAX Multiple	Proved Reserves Multiple	Daily Production Multiple
Maximum	$ 144.99	$ 99.75	$ 88.87
75th Percentile	$ 87.13	$ 97.09	$ 79.90
Median	**$ 79.05**	**$ 77.89**	**$ 74.95**
25th Percentile	$ 64.94	$ 65.20	$ 59.06
Minimum	$ 61.02	$ 53.05	$ 50.06

Exhibit 38: Results of Comparable Companies Analysis

COMPS	Median	Max	Min
EBITDAX Multiple	$ 79.05	$144.99	61.02
Proved Reserves Multiple	$ 77.89	$99.75	53.05
Daily Production Multiple	$ 74.95	$88.87	50.06
Average	**$ 77.30**	**$ 111.21**	**$ 54.71**

Appendix

Exhibit 1: ExxonMobil Stock Prices 2003-2012

Exhibit 2: DCF

ExxonMobil: DCF

Dollars in millions, except per share, shares in millions

Discounted Cash Flow

	Historical Years					Estimated	Projected Years									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EBIT	$ 60,761	$ 66,290	$ 26,239	$ 40,122	$ 54,104	$ 40,389	$ 31,257	$ 10,935	$ (17,152)	$ (47,676)	$ (100,419)	$ (154,094)	$ (229,566)	$ (321,464)	$ (429,165)	$ (548,317)
Less: Taxes	$ 29,864	$ 36,530	$ 15,119	$ 21,561	$ 31,051	$ 21,942	$ 17,047	$ 8,921	$ (2,309)	$ (14,514)	$ (35,603)	$ (57,065)	$ (87,243)	$ (123,988)	$ (167,052)	$ (214,695)
After-Tax EBIT	$ 30,897	$ 29,760	$ 11,120	$ 18,561	$ 23,053	$ 18,447	$ 14,210	$ 2,013	$ (14,843)	$ (33,162)	$ (64,816)	$ (97,029)	$ (142,324)	$ (197,476)	$ (262,113)	$ (333,622)
Plus: Depreciation, Depletion and Amortizatic	$ 12,250	$ 12,379	$ 11,917	$ 14,760	$ 15,583	$ 16,747	$ 17,997	$ 19,341	$ 20,785	$ 22,337	$ 24,005	$ 25,798	$ 27,724	$ 29,795	$ 32,019	$ 34,410
Less: Capital Expenditure	$ (15,387)	$ (19,318)	$ (22,491)	$ (32,226)	$ (33,638)	$ (40,166)	$ (48,201)	$ (58,130)	$ (70,443)	$ (85,765)	$ (104,900)	$ (128,878)	$ (159,025)	$ (197,048)	$ (245,155)	$ (306,201)
Less: Changes in Working Capital	$ 691	$ (4,485)	$ (19,992)	$ (6,823)	$ (893)	$ (1,623)	$ (1,785)	$ (1,963)	$ (2,160)	$ (2,376)	$ (2,613)	$ (2,875)	$ (3,162)	$ (3,478)	$ (3,826)	$ (4,209)
Free Cash Flow	$ 57,843	$ 65,942	$ 65,520	$ 72,370	$ 73,167	$ 76,982	$ 82,193	$ 81,448	$ 78,545	$ 77,316	$ 66,703	$ 60,522	$ 47,587	$ 32,845	$ 18,888	$ 11,198
Terminal Value																125,665
Mid-Year Discount Factor							0.95	0.87	0.79	0.72	0.65	0.59	0.54	0.4893	0.4448	0.4044
Present Value							$ 78,368	$ 70,598	$ 61,892	$ 55,385	$ 43,439	$ 35,830	$ 25,612	$ 16,070	$ 8,401	$ 55,342
Net Present Value (USD)						$ 450,938										

Enterprise Value	
Plus: Cash & Cash-Equivalents	
Less: Total Debt	
Less: Asset Retirement Obligation	
Less: Preferred Stock	
Less: Noncontrolling Interests	
Equity Value	
DCF Target Share Price	

Weighted Average Cost of Capital	Terminal Growth Rate										
$ 97.81	0.00%	0.20%	0.40%	0.60%	0.80%	1.00%	1.20%	1.40%	1.60%	1.80%	2.00%
8.00%	$ 106.86	$ 107.27	$ 107.70	$ 108.15	$ 108.63	$ 109.14	$ 109.67	$ 110.24	$ 110.85	$ 111.49	$ 112.18
8.40%	$ 104.54	$ 104.90	$ 105.27	$ 105.67	$ 106.09	$ 106.53	$ 106.99	$ 107.48	$ 108.00	$ 108.55	$ 109.14
8.80%	$ 102.37	$ 102.68	$ 103.02	$ 103.36	$ 103.73	$ 104.11	$ 104.52	$ 104.94	$ 105.39	$ 105.87	$ 106.37
9.20%	$ 100.33	$ 100.61	$ 100.90	$ 101.21	$ 101.53	$ 101.87	$ 102.22	$ 102.60	$ 102.99	$ 103.40	$ 103.84
9.60%	$ 98.41	$ 98.66	$ 98.92	$ 99.19	$ 99.47	$ 99.77	$ 100.08	$ 100.41	$ 100.75	$ 101.12	$ 101.50
10.00%	$ 96.59	$ 96.81	$ 97.05	$ 97.29	$ 97.54	$ 97.81	$ 98.08	$ 98.37	$ 98.67	$ 98.99	$ 99.32
10.40%	$ 94.87	$ 95.07	$ 95.28	$ 95.49	$ 95.72	$ 95.95	$ 96.20	$ 96.45	$ 96.72	$ 97.00	$ 97.29
10.80%	$ 93.23	$ 93.41	$ 93.60	$ 93.79	$ 93.99	$ 94.20	$ 94.42	$ 94.65	$ 94.89	$ 95.13	$ 95.39
11.20%	$ 91.67	$ 91.83	$ 92.00	$ 92.18	$ 92.36	$ 92.55	$ 92.74	$ 92.94	$ 93.16	$ 93.38	$ 93.61
11.60%	$ 90.18	$ 90.33	$ 90.48	$ 90.64	$ 90.80	$ 90.97	$ 91.14	$ 91.33	$ 91.52	$ 91.71	$ 91.92
12.00%	$ 88.76	$ 88.89	$ 89.03	$ 89.17	$ 89.32	$ 89.47	$ 89.63	$ 89.79	$ 89.96	$ 90.14	$ 90.32

Exhibit 3: Production Model and Revenue Profile

Production Profile

	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Daily Production											
Oil (Kbbls)	2,616	2,405	2,387	2,422	2,312	2,462	2,612	2,762	2,912	3,062	3,212
Natural Gas (MMcf)	9,384	9,095	9,273	12,148	13,162	13,162	13,402	13,642	13,882	14,122	14,362
Total Daily Production (Mbble)	**4,180**	**3,921**	**3,933**	**4,447**	**4,506**						
Total Annual Production											
Crude Oil (MMBbl)	955	880	871	884	844	899	953.4	1,008.1	1,062.9	1,117.6	1,172.4
Natural Gas (Bcf)	3,425	3,329	3,385	4,434	4,804	4,804	4,891.7	4,979.3	5,066.9	5,154.5	5,242.1
Total Annual Production (MMbble)	**1,526**	**1,435**	**1,435**	**1,623**	**1,645**	**1,699**	**1,768.7**	**1,838.0**	**1,907.4**	**1,976.7**	**2,046.1**
Average Daily Production Growth / (Decline) Rates											
Crude Oil	(2.4%)	(8.1%)	(0.7%)	1.5%	(4.5%)	6.5%	6.1%	5.7%	5.4%	5.2%	4.9%
Natural Gas	0.5%	(3.1%)	2.0%	31.0%	8.3%	0.0%	1.8%	1.8%	1.8%	1.7%	1.7%

Resource Price and Revenue Profile

	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Realized Sales Prices ($ in USD)											
Crude Oil ($ per Bbl) Price - Base	$ 66.02	$ 89.32	$ 57.86	$ 74.04	$ 100.79	$ 95.47	$ 103.56	$ 107.10	$ 104.06	$ 120.86	$ 106.93
Natural Gas ($ per Mcf) Price - Base	$ 5.83	$ 8.35	$ 4.69	$ 5.00	$ 5.93	$ 4.69	$ 5.11	$ 4.88	$ 6.05	$ 5.08	$ 7.74
Average Realized Sales Prices Growth/(Decline) Rates											
Crude Oil	13.2%	35.3%	(35.2%)	28.0%	36.1%	(5.3%)	8.5%	8.5%	8.5%	8.5%	8.5%
Natural Gas	(4.1%)	43.2%	(43.8%)	6.6%	18.6%	(20.9%)	9.0%	9.0%	9.0%	9.0%	9.0%
Total Revenue ($ in Millions)											
Crude Oil (USD)	$ 63,039	$ 78,622	$ 50,411	$ 65,454	$ 85,055	$85,792	$98,732	$107,971	$110,606	$135,076	$125,358
Natural Gas (USD)	$ 19,969	$ 27,795	$ 15,874	$ 22,170	$ 28,488	$22,531	$25,007	$24,297	$30,655	$26,168	$40,566
Total Upstream (Estimated)	$ 83,007	$ 106,417	$ 66,285	$ 87,624	$ 113,543	$ 108,324	$ 123,739	$ 132,267	$ 141,261	$ 161,243	$ 165,925
Total Upstream (Actual)	$ 83,750	$ 103,799	$ 64,461	$ 82,109	$ 106,159	$ 112,737	$ 128,780	$ 137,656	$ 147,016	$ 167,813	$ 172,685
	100.89%	97.54%	97.25%	93.71%	93.50%	104.07%					

Total Revenue Profile

	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Revenue by Segment ($ in Millions)											
All Other	$ 333	$ 291	$ 305	$ 304	$ 284	$501	$ 882	$ 1,556	$ 2,742	$ 4,834	$ 8,521
Upstream - United States	$ 13,257	$ 16,384	$ 10,124	$ 16,997	$ 23,830	$ 22,111	$ 25,258	$ 26,999	$ 28,835	$ 32,913	$ 33,869
Upstream - Non-United States	$ 70,493	$ 87,415	$ 54,337	$ 65,112	$ 82,329	$ 90,626	$ 103,522	$ 110,657	$ 118,182	$ 134,899	$ 138,816
Downstream - United States	$ 115,613	$ 132,926	$ 86,635	$ 107,145	$ 139,333	$157,834	$ 178,792	$ 202,532	$ 229,425	$ 259,889	$ 294,398
Downstream - Non-United States	$ 275,548	$ 331,082	$ 212,594	$ 258,739	$ 331,328	$372,956	$ 419,815	$ 472,560	$ 531,933	$ 598,765	$ 673,994
Chemical - United States	$ 22,500	$ 24,061	$ 17,147	$ 23,096	$ 27,692	$31,641	$ 36,154	$ 41,310	$ 47,202	$ 53,934	$ 61,626
Chemical - Non-United States	$ 30,917	$ 34,001	$ 23,832	$ 30,540	$ 37,039	$42,582	$ 48,954	$ 56,280	$ 64,703	$ 74,386	$ 85,518
Corporate	$ (170,061)	$ (166,581)	$ (103,474)	$ (131,808)	$ (174,806)	($211,949)	$ (256,985)	$ (311,590)	$ (377,798)	$ (458,074)	$ (555,407)
Adjustments for Excise Taxes	$ 3,106	$ (34,508)	$ (25,936)	$ (28,547)	$ (33,503)	($39,458)	$ (45,073)	$ (48,180)	$ (51,456)	$ (58,734)	$ (60,440)
Total Revenue	**$ 361,706**	**$ 425,071**	**$ 275,564**	**$ 341,578**	**$ 433,526**	**$466,844**	**$ 511,319**	**$ 552,125**	**$593,768**	**$642,812**	**$680,894**

Exhibit 4: Income Statement

Income Statement	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenue											
All Other	$ 333	$ 291	$ 305	$ 304	$ 284	$ 501	$ 882	$ 1,556	$ 2,742	$ 4,834	$ 8,521
Upstream - United States	$ 13,257	$ 16,384	$ 10,124	$ 16,997	$ 23,830	$ 22,111	$ 25,258	$ 26,999	$ 28,835	$ 32,913	$ 33,869
Upstream - Non-United States	$ 70,493	$ 87,415	$ 54,337	$ 65,112	$ 82,329	$ 90,626	$ 103,522	$ 110,657	$ 118,182	$ 134,899	$ 138,816
Downstream - United States	$ 115,613	$ 132,926	$ 86,635	$ 107,145	$ 139,333	$ 157,834	$ 178,792	$ 202,532	$ 229,425	$ 259,889	$ 294,398
Downstream - Non-United States	$ 275,548	$ 331,082	$ 212,594	$ 258,739	$ 331,328	$ 372,956	$ 419,815	$ 472,560	$ 531,933	$ 598,765	$ 673,994
Chemical - United States	$ 22,500	$ 24,061	$ 17,147	$ 23,096	$ 27,692	$ 31,641	$ 36,154	$ 41,310	$ 47,202	$ 53,934	$ 61,626
Chemical - Non-United States	$ 30,917	$ 34,001	$ 23,832	$ 30,540	$ 37,039	$ 42,582	$ 48,954	$ 56,280	$ 64,703	$ 74,386	$ 85,518
Corporate	$ (170,061)	$ (166,581)	$ (103,474)	$ (131,808)	$ (174,806)	$ (211,949)	$ (256,985)	$ (311,590)	$ (377,798)	$ (458,074)	$ (555,407)
Adjustments	$ 3,106	$ (34,508)	$ (25,936)	$ (28,547)	$ (33,503)	$ (39,458)	$ (45,073)	$ (48,180)	$ (51,456)	$ (58,734)	$ (60,440)
Total Revenue	**$ 361,706**	**$ 425,071**	**$ 275,564**	**$ 341,578**	**$ 433,526**	**$ 466,844**	**$511,319**	**$552,125**	**$593,768**	**$642,812**	**$680,894**
YoY% Growth	*6.8%*	*17.5%*	*(35.2%)*	*24.0%*	*26.9%*	*7.7%*	*9.5%*	*8.0%*	*7.5%*	*8.3%*	*5.9%*
Expenses											
Cost of Goods Sold	$ 229,113	$ 284,724	$ 183,816	$ 231,513	$ 304,035	$ 348,248	$ 398,890	$ 456,896	$ 523,338	$ 599,441	$ 686,612
Selling General & Admin Exp.	$ 14,022	$ 15,004	$ 14,000	$ 13,912	$ 14,179	$ 14,488	$ 14,804	$ 15,127	$ 15,457	$ 15,794	$ 16,138
Exploration/Drilling Costs	$ 1,469	$ 1,451	$ 2,021	$ 2,144	$ 2,081	$ 2,299	$ 2,540	$ 2,807	$ 3,101	$ 3,427	$ 3,786
Depreciation & Amort.	$ 12,250	$ 12,379	$ 11,917	$ 14,760	$ 15,583	$ 16,747	$ 17,997	$ 19,341	$ 20,785	$ 22,337	$ 24,005
Other Operating Expense/(Income)	$ 44,091	$ 45,223	$ 37,571	$ 39,127	$ 43,544	$ 44,673	$ 45,831	$ 47,019	$ 48,238	$ 49,489	$ 50,772
Total Operating Expense	**$ 300,945**	**$ 358,781**	**$ 249,325**	**$ 301,456**	**$ 379,422**	**$ 426,455**	**$ 480,062**	**$ 541,190**	**$ 610,919**	**$ 690,488**	**$ 781,313**
YoY% Growth	*8.2%*	*19.2%*	*(30.5%)*	*20.9%*	*25.8%*	*12.4%*	*12.6%*	*12.7%*	*12.9%*	*13.0%*	*13.2%*
Operating Income	**$ 60,761**	**$ 66,290**	**$ 26,239**	**$ 40,122**	**$ 54,104**	**$ 40,389**	**$ 31,257**	**$ 10,935**	**$ (17,152)**	**$ (47,676)**	**$ (100,419)**
YoY% Growth	*0.3%*	*9.1%*	*(60.4%)*	*52.9%*	*34.8%*	*(25.3%)*	*(22.6%)*	*(65.0%)*	*(256.9%)*	*178.0%*	*110.6%*
Other Income/(Expense)											
Interest Expense	$ (400)	$ (673)	$ (548)	$ (259)	$ (247)	$ (452)	$ (452)	$ (452)	$ (452)	$ (452)	$ (452)
Income/(Loss) from Affiliates	$ 8,901	$ 11,081	$ 7,143	$ 10,677	$ 15,289	$ 7,906	$ 7,906	$ 7,906	$ 7,906	$ 7,906	$ 7,906
Currency Exchange Gains (Loss)	-	$ (143)	-	-	-	$ (143)	$ (143)	$ (143)	$ (143)	$ (143)	$ (143)
Other Non-Operating Inc. (Exp.)	-	$ 3,023	$ 1,455	$ 1,018	$ 1,269	$ 1,691	$ 1,691	$ 1,691	$ 1,691	$ 1,691	$ 1,691
Merger & Related Restruct. Charges	-	-	-	-	-	$ (410)	$ (410)	$ (410)	$ (410)	$ (410)	$ (410)
Impairment of Goodwill	-	-	-	-	-	$ -	$ -	$ -	$ -	$ -	$ -
Gain (Loss) On Sale Of Invest.	-	$ 62	-	-	-	$ 1,151	$ 1,151	$ 1,151	$ 1,151	$ 1,151	$ 1,151
Gain (Loss) On Sale Of Assets	$ 2,217	$ 3,757	$ 488	$ 1,401	$ 2,842	$ 1,634	$ 1,634	$ 1,634	$ 1,634	$ 1,634	$ 1,634
Other Unusual Items	-	-	-	-	-	$ -	$ -	$ -	$ -	$ -	$ -
Other Income/(Expense)	**$ 10,718**	**$ 17,107**	**$ 8,538**	**$ 12,837**	**$ 19,153**	**$ 11,377**	**$ 11,377**	**$ 11,377**	**$ 11,377**	**$ 11,377**	**$ 11,377**
Pre-Tax Income	**$ 71,479**	**$ 83,397**	**$ 34,777**	**$ 52,959**	**$ 73,257**	**$ 51,766**	**$ 42,634**	**$ 22,312**	**$ (5,775)**	**$ (36,299)**	**$ (89,042)**
Income Tax Expense	**$ 29,864**	**$ 36,530**	**$ 15,119**	**$ 21,561**	**$ 31,051**	**$ 21,942**	**$ 17,047**	**$ 8,921**	**$ (2,309)**	**$ (14,514)**	**$ (35,603)**
Income Tax Rate	*(41.8%)*	*(43.8%)*	*(43.5%)*	*(40.7%)*	*(42.4%)*	*(40.0%)*	*(40.0%)*	*(40.0%)*	*(40.0%)*	*(40.0%)*	*(40.0%)*
Earnings of Discontinued Ops.	$ -	$ -	$ -	$ -	$ -	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45
Extraord. Item & Account. Change	$ -	$ -	$ -	$ -	$ -	$ 55	$ 55	$ 55	$ 55	$ 55	$ 55
Net Income to Company	$ 41,615	$ 46,867	$ 19,658	$ 31,398	$ 42,206	$ 29,869	$ 25,632	$ 13,435	$ (3,421)	$ (21,740)	$ (53,394)
Minority Int. in Earnings	$ (1,005)	$ (1,647)	$ (378)	$ (938)	$ (1,146)	$ -	$ -	$ -	$ -	$ -	$ -
Net Income	**$ 40,610**	**$ 45,220**	**$ 19,280**	**$ 30,460**	**$ 41,060**	**$ 29,869**	**$ 25,632**	**$ 13,435**	**$ (3,421)**	**$ (21,740)**	**$ (53,394)**
YoY% Growth	2.8%	11.4%	(57.4%)	58.0%	34.8%	(27.3%)	(14.2%)	(47.6%)	(125.5%)	535.5%	145.6%

Exhibit 5: Capital Expenditures

Capital Expenditure	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Expenditure											
All Other	$ (601)	$ (572)	$ (468)	$ (187)	$ (932)	$ (1,274)	$ (1,742)	$ (2,382)	$ (3,257)	$ (4,453)	$ (6,089)
Upstream - United States	$ (1,595)	$ (2,699)	$ (2,973)	$ (6,349)	$ (10,887)	$ (13,942)	$ (17,855)	$ (22,866)	$ (29,284)	$ (37,502)	$ (48,027)
Upstream - Non-United States	$ (9,139)	$ (10,545)	$ (13,307)	$ (20,970)	$ (18,934)	$ (21,759)	$ (25,005)	$ (28,735)	$ (33,021)	$ (37,947)	$ (43,608)
Downstream - United States	$ (1,061)	$ (1,550)	$ (1,449)	$ (982)	$ (400)	$ (397)	$ (393)	$ (390)	$ (386)	$ (383)	$ (380)
Downstream - Non-United States	$ (1,578)	$ (1,552)	$ (1,447)	$ (1,523)	$ (1,334)	$ (1,336)	$ (1,337)	$ (1,339)	$ (1,340)	$ (1,342)	$ (1,343)
Chemical - United States	$ (335)	$ (413)	$ (294)	$ (279)	$ (241)	$ (241)	$ (241)	$ (241)	$ (241)	$ (241)	$ (241)
Chemical - Non-United States	$ (1,078)	$ (1,987)	$ (2,553)	$ (1,936)	$ (910)	$ (1,217)	$ (1,628)	$ (2,178)	$ (2,913)	$ (3,896)	$ (5,211)
Total Capital Expenditure	$ (15,387)	$ (19,318)	$ (22,491)	$ (32,226)	$ (33,638)	$ (40,166)	$ (48,201)	$ (58,130)	$ (70,443)	$ (85,765)	$ (104,900)
Capital Expenditure, Percent % of Total											
All Other	4%	3%	2%	1%	3%	3%	4%	4%	5%	5%	6%
Upstream - United States	10%	14%	13%	20%	32%	35%	37%	39%	42%	44%	46%
Upstream - Non-United States	59%	55%	59%	65%	56%	54%	52%	49%	47%	44%	42%
Downstream - United States	7%	8%	6%	3%	1%	1%	1%	1%	1%	0%	0%
Downstream - Non-United States	10%	8%	6%	5%	4%	3%	3%	2%	2%	2%	1%
Chemical - United States	2%	2%	1%	1%	1%	1%	0%	0%	0%	0%	0%
Chemical - Non-United States	7%	10%	11%	6%	3%	3%	3%	4%	4%	5%	5%
Total Capital Expenditure	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Capital Expenditure Growth/(Decline) Rates											
All Other	(10%)	(5%)	(18%)	(60%)	398%	37%	37%	37%	37%	37%	37%
Upstream - United States	(18%)	69%	10%	114%	71%	28%	28%	28%	28%	28%	28%
Upstream - Non-United States	(6%)	15%	26%	58%	(10%)	15%	15%	15%	15%	15%	15%
Downstream - United States	48%	46%	(7%)	(32%)	(59%)	(1%)	(1%)	(1%)	(1%)	(1%)	(1%)
Downstream - Non-United States	(10%)	(2%)	(7%)	5%	(12%)	0%	0%	0%	0%	0%	0%
Chemical - United States	30%	23%	(29%)	(5%)	(14%)	0%	0%	0%	0%	0%	0%
Chemical - Non-United States	181%	84%	28%	(24%)	(53%)	34%	34%	34%	34%	34%	34%
Total Capital Expenditure	**(0%)**	**26%**	**16%**	**43%**	**4%**	**19%**	**20%**	**21%**	**21%**	**22%**	**22%**

Exhibit 6: Changes in Working Capital

Changes in Working Capital	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Changes in Working Capital											
Increase in cash and ST investments	$ 6,256	$ (2,493)	$ (21,145)	$ (3,037)	$ 4,839						
Increase in accounts and notes receivat	$ 7,508	$ (11,748)	$ 2,943	$ 4,639	$ 6,358	$ 1,909	$ 2,100	$ 2,310	$ 2,541	$ 2,795	$ 3,075
(Increase) decrease in inventories	$ 375	$ 557	$ (93)	$ 1,423	$ 2,048	$ 712	$ 783	$ 862	$ 948	$ 1,042	$ 1,147
Increase in prepaid expenses and other	$ (3,953)	$ (13)	$ 1,264	$ 724	$ 734	$ 495	$ 545	$ 599	$ 659	$ 725	$ 798
Increase (decrease) in accounts payabl	$ (5,234)	$ 8,628	$ 2,934	$ (7,401)	$ (3,534)	$ (1,823)	$ (2,005)	$ (2,206)	$ (2,426)	$ (2,669)	$ (2,936)
Increase (decrease) in income and other	$ (4,261)	$ 584	$ (5,895)	$ (3,171)	$ (11,338)	$ (2,916)	$ (3,208)	$ (3,528)	$ (3,881)	$ (4,269)	$ (4,696)
Total Changes in Working Capital	$ 691	$ (4,485)	$ (19,992)	$ (6,823)	$ (893)	$ (1,623)	$ (1,785)	$ (1,963)	$ (2,160)	$ (2,376)	$ (2,613)
% Changes in Working Capital											
Increase in accounts and notes receivat	415%	(256%)	(125%)	58%	37%	25.3%	10.0%	10.0%	10.0%	10.0%	10.0%
(Increase) decrease in inventories)	(73%)	49%	(117%)	(1,630%)	44%	(266.2%)	10.0%	10.0%	10.0%	10.0%	10.0%
Increase in prepaid expenses and other	(36,036%)	(100%)	(9,823%)	(43%)	1%	(4,904.7%)	10.0%	10.0%	10.0%	10.0%	10.0%
Increase (decrease) in accounts payabl	1,334%	(265%)	(66%)	(352%)	(52%)	91.1%	10.0%	10.0%	10.0%	10.0%	10.0%
Increase (decrease) in income and other	99%	(114%)	(1,109%)	(46%)	258%	(117.0%)	10.0%	10.0%	10.0%	10.0%	10.0%
Total Capital Expenditure	**(1,021.3%)**	**(749.1%)**	**345.8%**	**(65.9%)**	**(86.9%)**	81.7%	**10.0%**	**10.0%**	**10.0%**	**10.0%**	**10.0%**

Exhibit 7: Metrics

ExxonMobil: Valuation Metrics

Dollars in millions, except per share, shares in millions

Proved Reserves

Bbl to Mcf Conversion Factor 6.0

	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Crude Oil (MMBbl)											
Proved Developed Reserves	6,435	6,483	7,338	7,587	7,126						
Proved Undeveloped Reserves	3,945	3,652	4,313	4,086	5,102						
Total	**10,380**	**10,135**	**11,651**	**11,673**	**12,228**						
Natural Gas (Bcf)											
Proved Developed Reserves	40,720	42,749	48,771	57,173	53,810						
Proved Undeveloped Reserves	27,542	23,130	19,236	21,642	22,412						
Total	**68,262**	**65,879**	**68,007**	**78,815**	**76,222**						
Total Proved Reserves (MMBOE)	21,757	21,115	22,986	24,809	24,932						
Total Proved Reserves (Bcfe)	130,542	126,689	137,913	148,853	149,590						
Proved Reserves % Crude Oil	**47.7%**	**48.0%**	**50.7%**	**47.1%**	**49.0%**						
Total Annual Production (MMBOE)	**1,526**	**1,435**	**1,435**	**1,623**	**1,645**						
Reserve Life Ratio (Years)	**14.3**	**14.7**	**16.0**	**15.3**	**15.2**						

EBITDA & EBITDAX

	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net Income	$40,610	$45,220	$19,280	$30,460	$41,060	$ 29,869	$ 25,632	$ 13,435	$ (3,421)	$ (21,740)	$ (53,394)
Plus: Interest Expense/(Income)	$400	$673	$548	$259	$247	$ (452)	$ (452)	$ (452)	$ (452)	$ (452)	$ (452)
Plus: Income Tax Expense	$29,864	$36,530	$15,119	$21,561	$31,051	$ 21,942	$ 17,047	$ 8,921	$ (2,309)	$ (14,514)	$ (35,603)
Plus: Depreciation, Depletion and Amortization	$12,250	$12,379	$11,917	$14,760	$15,583	$ 16,747	$ 17,997	$ 19,341	$ 20,785	$ 22,337	$ 24,005
EBITDA	**$83,124**	**$94,802**	**$46,864**	**$67,040**	**$87,941**	**$ 68,106**	**$ 60,224**	**$ 41,246**	**$ 14,603**	**$ (14,369)**	**$ (65,444)**
Plus: Exploration Expenses	$1,469	$1,451	$2,021	$2,144	$2,081	$ 2,299	$ 2,540	$ 2,807	$ 3,101	$ 3,427	$ 3,786
EBITDAX	**$84,593**	**$96,253**	**$48,885**	**$69,184**	**$90,022**	**$ 70,405**	**$ 62,764**	**$ 44,053**	**$ 17,705**	**$ (10,942)**	**$ (61,658)**

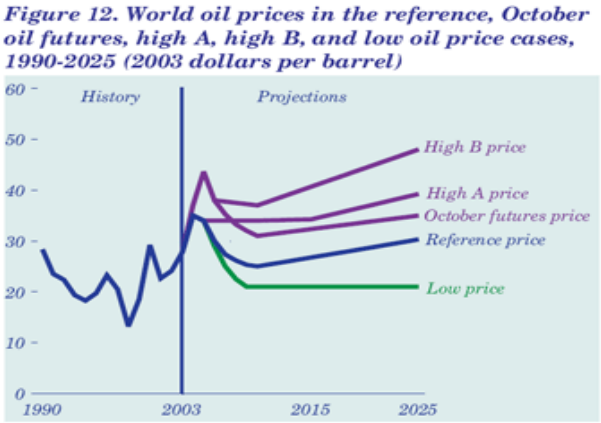
Valuation Multiples

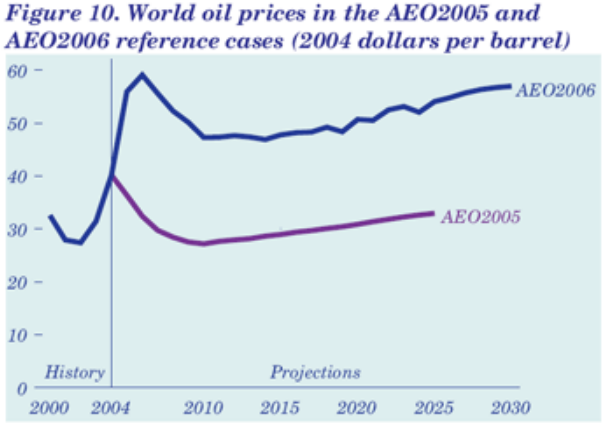
	Historical Years					Estimated	Projected Years				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EV / EBITDA						5.84	6.60	9.64	27.22	(27.66)	(6.07)
EV / EBITDAX						5.64	6.33	9.02	22.45	(36.32)	(6.45)
EV / Proved Reserves (MMBOE)					15.94						
EV / Daily Production (Mbble)					88.21						

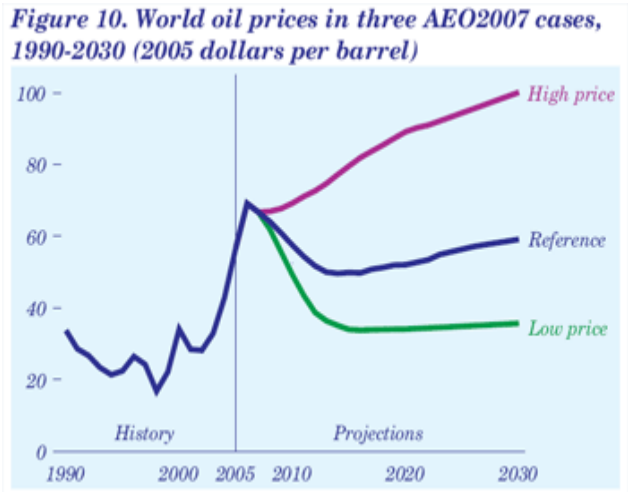
Exhibit 8: Oil Prices Forecast cont.

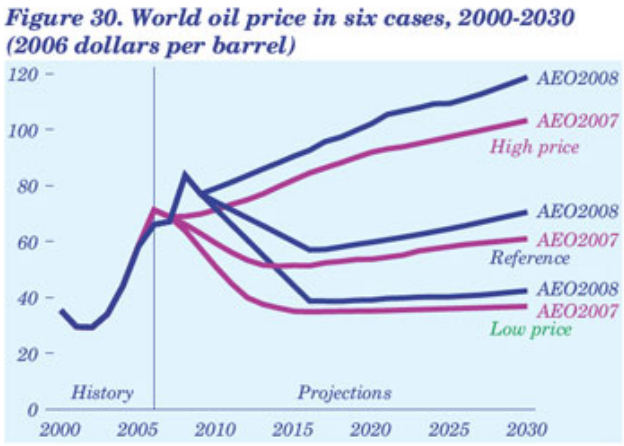
Most of EIA forecasts do a decent job of predicting the price of oil for one year, but then are dramatically off the mark for any projections beyond 3 years. Exhibit 23 shows EIA price predictions from 2003 – 2006 and 2010. In 2003, EIA predicted that oil prices would still be below $50 by 2035; yet prices shot past $50 in 2005. Predictions from other years were also well off the mark.

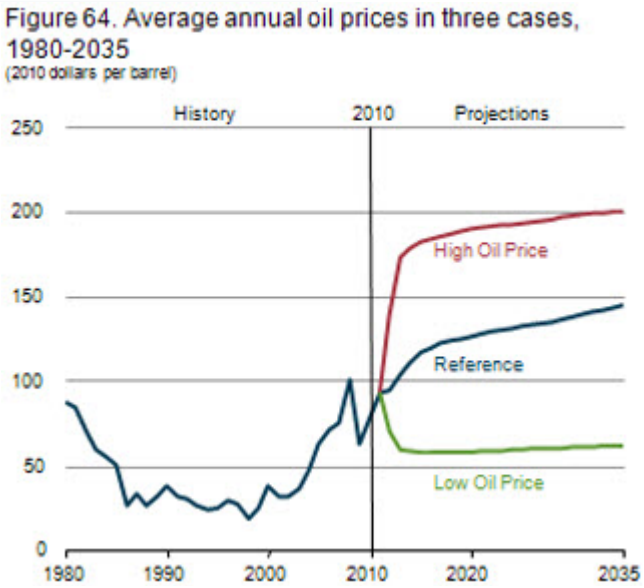
Exhibit 23: World Oil Price Predictions 2003, 2004, 2005, 2006, 2010











Source: EIA

Exhibit 9: Exxon Break-up Case

In many analyst reports we observed, there often was a hint of speculation that Exxon may explore breaking up their upstream segments, in order to "unlock value" in their stock. In response to direct questions about the possibility, Exxon only elaborated it was not a strategy they were currently looking into. This stands in contrast to their competitor, Chevron, which has been adamant that a breakup is not something the company is looking to do.

On the surface, a break-up of Exxon's upstream and downstream would make a lot of sense. As with most integrated O&G companies, most of Exxon's profits come from upstream operations. Conversely, margins are squeezed in the downstream segment due to competitive pressures and increasing costs. Thus, separating the upstream would allow Exxon to focus on only the most profitable part of their business, and leave the refining and marketing from hampering the stock going forward.

However, two things make this an unlikely scenario for the near future. The first is the sheer size of Exxon. ConocoPhillips recently announced a split of their upstream and downstream operations[12]. However, the company has said the process will not be completed for at least three years. Given that Conoco has a market cap a fifth of the size of Exxon's, this makes the possibility of Exxon completing the process of finding buyers interested in the sizeable downstream operations anytime this decade unlikely.

The second roadblock is the performance of Marathon Oil's stock (MRO) since the completion of the breakup between its upstream and downstream segments in July of 2011. While many observers believed the stock of the upstream segment would take off without the downstream segment, the opposite has been the case. The stock price of the downstream segment (MPC) has increased nearly 60 percent while the upstream stock has seen its value fall by 44 percent since last July. This turn of events has led some to believe that companies such as Exxon and Chevron are now hesitant to even consider a break-up as a result.

[12] http://www.forbes.com/sites/steveschaefer/2011/07/14/oil-breakup-conocophillips-to-be-pure-play-spin-off-refining/

Marathon Oil Stock Price since 2011

Source: Capital IQ

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