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Corporates

Energy (Oil & Gas)
Europe
Special Report

European Integrated Oil Majors

'AA' Category Peer Analysis

Ratings

Royal Dutch Shell plc
Foreign Currency

Long-Term IDR	AA+
Short-Term IDR	F1+

BP plc
Foreign Currency

Long-Term IDR	AA+
Short-Term IDR	F1+

Total SA
Foreign Currency

Long-Term IDR	AA
Short-Term IDR	F1+

Eni Spa
Foreign Currency

Long-Term IDR	AA-
Short-Term IDR	F1+

Outlooks

Foreign-Currency Long-Term IDR's

Royal Dutch Shell plc	Stable
BP plc	Stable
Total SA	Stable
Eni Spa	Stable

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Related Research

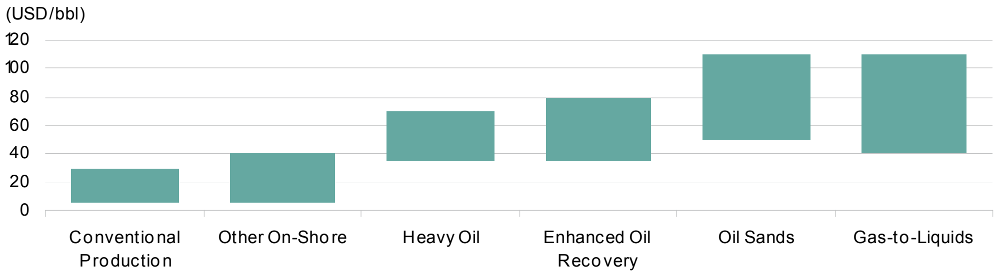
- *Depressed Mid-Term Outlook for Global Refining (July 2009)*
- *Oil & Gas Sector E&P Rating Methodology (October 2008)*
- *Credit Rating Methodology for Refiners (November 2007)*

Executive Summary

The high-investment-grade ratings for the large European integrated oil majors — Royal Dutch/Shell Group, BP plc, Total SA — reflect their leading global market positions, business strategies and operational profiles, complemented by conservative financial policies and proven free cash flow (FCF) generation through the business cycle.

Despite the downward move in oil prices in H208 and stagnation in Q109, the European majors have managed to maintain healthy credit profiles — primarily due to aggressive operating cost-cutting measures in areas such as upstream exploration, and postponement of development projects that are not economical in a lower crude oil price environment (see *Chart 1* below). At end-2008, Fitch Ratings expected the European oil companies to reduce 2009 capex by as much as 10%, due to the global economic slowdown. Instead, capex has been maintained broadly in line with 2008 levels on companies' anticipation of an economic recovery in 2010.

Chart 1: Production Cost Profile
As of December 2008



Source: AIE, Repsol

However, to finance capex and maintain their dividend policies, all the European majors have had to increase borrowings, as the level of internally generated cash flow has decreased in line with falling oil prices. For example, in H109, Total accessed the debt capital markets for EUR3.85bn of euro-denominated debt versus EUR1.0bn in the full-year 2008; BP issued USD7.5bn of US dollar-denominated debt versus USD4.4bn in 2008; Shell came to market for EUR8.0bn of euro-denominated debt and USD2.5bn of dollar-denominated debt versus USD2.8bn of dollar denominated debt in 2008; and Eni placed EUR3.5bn in H109 versus EUR1.2bn in 2008.

These additional borrowings have only marginally affected financial profiles, however, with leverage metrics such as gearing ratios (broadly defined by the companies as net debt to capitalisation) remaining within or below their publically-stated target ranges — as well as within the longer-term historical averages.

The Stable Outlooks for the abovementioned ratings reflect Fitch's expectation that as the global economy recovers and oil prices begin to rise on the back of increased global demand, the European integrated oil majors remain well positioned to benefit from improving business conditions. The Outlooks also reflect the agency's belief that these companies will maintain credit metrics in line with levels appropriate for their respective rating categories.

Table 1: Peer Comparison - Business Profile Score Summary

	Most recent proved reserve level	3-year average reserve replacement rate	OECD reserve location	3-year cumulative production growth rate	3-year average upstream production cost	OECD production location	Most recent refining throughput capacity	Equally weighted average
RDS plc	2	4	4	1	1	4	4	**2.9**
BP plc	4	2	3	3	2	3	2	**2.7**
Total SA	3	1	1	2	3	1	3	**2.0**
Eni SpA	1	3	2	4	4	2	1	**2.4**

Source: Fitch

European Integrated Oil and Gas Companies: Comparative Analysis

Sector Characteristics

The global integrated oil and gas industry is still mostly characterised by the presence of several large, privately-owned integrated competitors with diverse global operations both on a geographical and functional basis. As oil prices have risen and the need for production-sharing agreements (PSAs) has waned, the sector has seen the increasing dominance of several national oil and gas champions from countries outside the OECD: Saudi Aramco, Russia's OAO Gazprom ('BBB'/Negative), CNPC of China, NIOC of Iran, Venezuela's Petroleos de Venezuela S.A. (PDVSA, 'B+'/Stable), Brazil's Petroleo Brasileiro S.A. (Petrobras, 'BBB'/Stable), and Petroliam National Berhad (Petronas, 'A'/Stable) of Malaysia.

Overwhelmingly state-owned, they control almost one-third of the world's oil and gas production, and more than one-third of its total reserves. Despite this growing dominance, however, these companies are less profitable — and in many cases less operationally diverse — than their European peers; a fact that is displayed through the lower credit ratings of the national companies.

Key Credit Characteristics

The creditworthiness of European integrated oil majors is supported by their ability to generate positive FCF through the business cycle. As oil markets have been very robust over the past several years, these companies have enjoyed very favourable market conditions, which has been evident from record reported earnings. Median top-line revenue in 2008 was around USD293bn for the four companies listed in *Table 2 Peer Comparison* below, with median cash flow from operations (CFO) of USD34.2bn. This has meant that companies have been able to comfortably finance capex programmes from internally generated cash flows, with a median CFO to capex ratio of 1.6x.

The year 2009 is not expected to result in another set of record figures, as Brent Crude prices are expected by Fitch to average USD55 per barrel versus USD97 per barrel in 2008. Strong median credit measures in 2008 — such as CFO/net debt of 145%, adjusted net debt to EBITDAR of 0.7x, and FFO/net interest expense of 42.5x — imply credit stability, although industry conditions are expected to weaken somewhat in 2009, but likely recover in 2010 or 2011.

Overview of Companies

- **Royal Dutch Shell plc (Shell):** Europe's largest integrated oil company by revenue, with 2008 production of 2.3mmboed and proved reserves of approximately 7.0 billion boe. Shell's competitive advantage lies in its development of LNG projects, and the LNG market. Shell is currently developing LNG projects in seven countries, including the now-operational USD20bn project on Russia's Sakhalin Island and the 280,000boed Qatargas 4 LNG plant in the Middle East.
- **BP plc:** the UK's flagship oil and gas producer operates in 29 countries, with 92,000 employees and upstream production in 2008 of 2.5mmboed. BP's reserve position is one of the strongest, with 12.3 billion boe. This advantage does not include proved reserves from the company's equity-accounted entities such as its Russian JV TNK-BP International Ltd. ('BBB-'/'F3'/Negative).
- **Total SA:** Total engages in all aspects of the petroleum industry, including upstream operations (oil and gas exploration, development and production, LNG) and downstream operations (refining, marketing and the trading and shipping of crude oil and petroleum products). Total is a leading multinational energy company with 96,900 employees, and operations in more than 130 countries. In 2008, Total SA had production of approximately 1.87mmboed.
- **Eni Spa:** Eni is a major Italian integrated energy company operating in 70 countries with 79,000 employees. The company engages mainly in the activities of finding, producing, transporting, transforming and marketing oil and gas, with production in 2008 of approximately 1.75mmboed and proved reserves of 6.1 billion boe. Eni also has operations in electricity sale and generation, petrochemicals, oilfield services construction, and engineering industries.

Comparative Comments

Whilst all the European oil majors are expected to benefit from lower industry-wide operating costs in 2009 — as a result of supply chain deflationary pressure resulting from the global economic slowdown — Fitch expects this to benefit Shell the most, as it has historically experienced the highest per barrel production cost.

As oil price volatility has increased, companies have experienced more uncertainty with regards to their internally generated cash flow, which has implications for investment in new projects. All the European majors have publically stated their commitment to broadly maintain 2009 capex at 2008 levels in anticipation of a global economic recovery in 2010. This is especially important to BP's downstream segment, as management is working to restore refining availability and close the performance gap with its peers. Over a three-year period from 2006 to 2008, only Eni has seen a cumulative increase in upstream production (of approximately 3%), which compares quite favourably with Shell (down 14%), Total (down 11%) and BP (down 6%).

Table 1 above uses a rank order system to summarize seven key factors Fitch uses to analyse the business profiles of the integrated European oil majors in this report. The companies are ranked on a scale of 1 to 4 (4 being best and 1 being worst) based on who has the leading position in each respective category. Fitch then applies a simply equally weighted average to the seven categories to derive an overall score. As Table 1 shows, BP and Shell have similar scores, which supports the two companies having the same IDR of 'AA+'. Total has a lower score than Eni, implying a relative weaker business ranking according to these seven categories, but Total has a higher credit rating than Eni mainly due to the former's stronger financial profile as measured by factors such as total revenues, total adjusted debt to proved reserves, and CFO to net adjusted debt.

Fitch views BP's 'AA+' credit ratings as appropriate despite leverage ratios slightly higher than its same-rated peers. Key factors supporting Fitch's view include the company's globally diverse production and reserve profile; larger proved reserve base (excluding equity affiliates); higher level of developed reserves; competitive upstream F&D costs; larger hydrocarbon production than other European peers; consistently demonstrated superior downstream refining margins; and a relatively higher ratio of internally generated cash flow to fund capex.

Table 2: Peer Comparison – Summary Financial and Operating Statistics

	Royal Dutch Shell plc		BP plc		Total SA		Eni Spa	
Fitch IDRs	'AA+'/'F1+'/Stable		'AA+'/'F1+'/Stable		'AA'/'F1+'/Stable		'AA-'/'F1+'/Stable	
(USDm)	Dec 08	Dec 07	Dec 08	Dec 07	Dec 08	Dec 07	Dec 08	Dec 07
Operating performance								
Net revenue	458,361	355,782	361,143	284,365	225,457	201,364	153,090	129,632
EBITDAR	60,547	56,948	45,751	41,818	42,626	46,615	38,936	38,531
EBITDAR margin (%)	13.2	16.0	12.7	14.7	18.9	23.1	25.4	29.7
Total adjusted debt	52,937	44,127	62,784	56,521	45,567	38,345	38,876	35,071
Net adjusted debt	37,749	34,471	58,783	53,525	28,241	29,533	35,453	31,322
Capital expenditure	35,065	24,576	22,658	17,830	16,679	15,525	20,477	15,590
Net proved reserves (SEC)								
Proved reserves (mmboe)	6,941	6,555	12,333	12,347	7,680	7,577	6,112	5,885
Finding and Development (USD/boe)	13.34	69.47	13.07	29.84	13.64	138.59	16.48	145.82
Reserves developed (%)	41.1	43.5	49.8	50.6	54.7	55.9	63.2	64.2
Basic replacement ratio (%)	146	(98)	98	38	115	(53)	136	37
Production								
Oil produced ('000 boe/day)	2,282	2,391	2,523	2,523	1,871	2,006	1,749	1,687
Production cost (USD/boe)	11.71	10.45	7.24	7.09	6.30	5.40	5.31	5.45
1-year production variation (%)	(4.6)	(6.6)	--	(2.7)	(6.7)	3.1	3.7	(2.2)
R/P ratio (years)	8.3	7.5	13.4	13.4	11.2	10.3	9.6	9.6
Adjusted EBITDAX per boe (USD)	71.3	63.8	46.7	43.0	63.1	64.6	64.2	66.2
Key ratios								
FFO/gross interest (x)	18.5	23.9	28.6	19.6	17.1	11.8	3.4	4.7
Adjusted net debt/EBITDAR (x)	0.6	0.6	1.3	1.3	0.7	0.6	0.7	0.7
Total adj. debt/total adj. capitalisation (%)	29.1	25.9	40.5	37.4	39.4	36.3	30.1	33.5
Adjusted debt/proved reserves (USD)	7.63	6.73	5.09	4.58	5.93	5.06	6.36	5.96

Source: Fitch, Company 20-F SEC filings

Business Profile

Industry Conditions/Markets

Upstream

Like many other heavy industries, oil and gas has been negatively impacted by the global economic recession, with total demand for crude oil declining consecutively over the last two years. According to the International Energy Agency (IEA), total global crude oil demand is expected to decline by 3.0% in 2009 following a 0.3% decline in 2008, with a 5.0% decline coming from OECD countries (following a 3.4% decrease in 2008) and nearly a 1.0% decline coming from China (versus a 4.3% increase in 2008). Other issues facing the upstream industry include possible renewed pressure on spare production capacity (although this is mostly concentrated in OPEC countries) and a rebalancing of global demand that still appears weak.

In the short run, this will likely result in the European oil majors further reviewing their production levels and focusing on improving cost performance; while in the long run, Fitch expects key development projects — such as Shell's Athabasca oil sands project in Alberta, Canada — to remain intact as companies look at the prospects of eventual economic recovery.

Refining

Unlike 2008, when demand began to decline because of high prices, demand destruction in 2009 has mainly been driven by reduced economic activity, especially in transportation. Fitch expects weak demand from the developed OECD countries to translate into lower refinery utilisation rates as well. In fact, the first-quarter oil market report published by the IEA shows a 4.4% decrease in OECD utilisation rates, and a 1.54% decline in refinery crude throughputs year-on-year as of March 2009. Fitch expects the European majors to further reduce crude runs for the rest of 2009, and may even shut down some refineries ahead of schedule — for a combination of maintenance and economic reasons.

For more information on Fitch's view of global refining prospects, please see the agency's special report *"Depressed Mid-Term Outlook for Global Refining"* (see Related Research on page 1 for link), referenced on the front page of this report.

Competitive Position As Measured by Various Factors

As the global market for oil is quite large and fragmented, the European oil majors do not occupy dominant market positions — despite their relatively high revenue and resilient profit margins over time. Of the companies mentioned in this report, market share (as measured by percentage of non-OPEC global production) varies by about 3.5 to 5.0% (excluding equity-accounted entities).

Shell remains the European industry leader as measured by revenue and operating cash flow generation in US dollars. This is mainly due to the company's competitive advantage in the gas and power (liquefied natural gas, or LNG) and chemicals segments combined with a dominant position in the downstream sector, with refinery throughput of 3.4 million barrels per day (mmbpd) compared with 2.4mmbpd for Total and 2.2mmbpd for BP. BP, however, has a proved reserve profile that exceeds Shell's by a considerable margin (discussed below), which in Fitch's view helps to support BP's 'AA+' credit rating.

As of 2008, Shell was the peer group leader for LNG, with about 16 million tonnes per annum (mmtpa) of year-end capacity versus about 11mmtpa for BP and 8mmtpa for Total. Shell estimates that it will remain the peer group leader, and by 2014 its share of capacity will rise to approximately 22mmtpa — versus 15mmtpa for BP and 12.5mmtpa for Total.

Shell also performs well relative to its peers in terms of reserve replacement ratios and finding and development (F&D) costs. As of 2008, Shell had a three-year average organic reserve replacement rate of 112% compared with closer to 70% for its peers. At the same time, three-year average F&D costs were USD15.8 per barrel of oil equivalent (boe) compared with USD20.5 per boe for BP and USD22.7 per boe for Total.

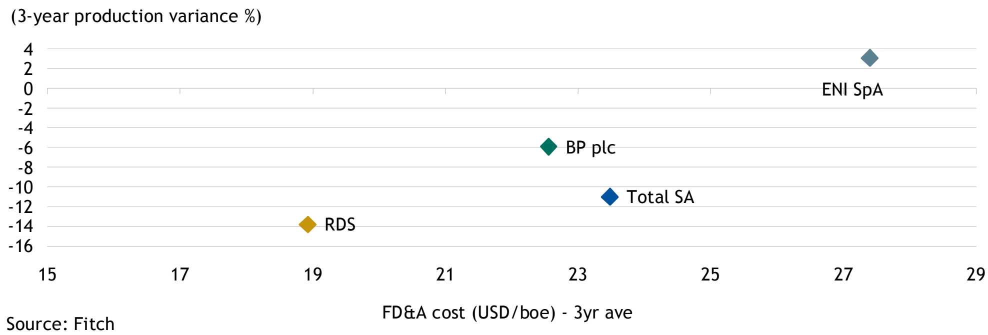
By other measures — such as capital efficiency, upstream production costs, and average reserve to production ratios — Shell does not compare as favourably. As of 2008, Shell's reserve to production ratio was 8.3 years, compared with 13.4 for BP, 9.6 for Eni and 11.2 for Total. In addition, as of 2008, upstream production costs for Shell were higher than its peers on a three-year average basis, at USD10.24 per boe versus nearly half of that for Total. BP's three-year average production cost of USD6.64 per boe was also considerably lower than that of Shell.

Finally, Shell appears more vulnerable to production interruptions, primarily at its offshore oil platforms in Nigeria where it suffers relatively frequent attacks by militants. Nigeria (as of H109) represents approximately 11% of Shell's total production (including equity-accounted entities), and the company has four additional key projects planned in the country — with peak production of approximately 470,000boepd and start-up scheduled between 2008 and 2012. These new projects are expected to more than double Shell's production profile in Nigeria. To help offset some of this heightened risk profile, Shell has stated that it is increasing exploration in OECD countries.

Operational/Asset Efficiency

One factor Fitch uses to measure the quality of a company's operations is to examine its capital efficiency (how effectively management increases production while containing costs incurred to replace reserves). As demonstrated in *Chart 2*, Eni has exceeded its peers (by a substantial margin) in terms of demonstrating an ability to increase production, but displays some difficulty in effectively replacing produced reserves (excluding equity affiliates) at a reasonable cost relative to its peers as measured over an average three-year period. This is mainly due to Eni acquiring a higher amount of producing reserves (Chart 4 shows Eni with the largest difference between organic and all-in reserve replacement ratios) at an overall higher cost relative to peers (see Chart 5*)* on a three-year average basis.

Chart 2: Capital Efficiency



Source: Fitch

At the other end of the spectrum is Shell, where finding, development and acquisition (FD&A) costs are far lower than at its peers, yet declining production presents considerable challenges for the company. In the middle is BP, which has suffered less of a decline in production than Shell or Total, and has maintained lower FD&A costs than Total and Eni. BP's ability to outperform Total on both these measures is one of the factors supporting BP's higher credit ratings.

Fitch expects the declining production trend for Shell, BP and Total to lessen over the next three years, especially for Shell (which has shown the largest decline) as projects in Australia, Russia and Qatar come fully on stream. FD&A costs are likely to average in the USD20-25 range over 2009-2011 for all companies in the peer group, as exploration is increasingly driven offshore. While Fitch expects F&D costs to rise for the industry as a whole, much will depend on global economic conditions and oil prices, as this is likely to significantly influence when and where companies deploy exploration resources.

Upstream Operations and Price Volatility

The past 12 months have been very challenging for integrated oil and gas companies, as crude oil price volatility has compelled management to re-evaluate the economic prospects of their investment plans. As oil prices have declined, free operating cash flow has largely disappeared. Fitch expects that none of the European majors will achieve a cash neutral position in 2009 (operating cash flow adequate to fund capex plus dividends). Furthermore, SEC-defined proved reserves declined in 2008 for all the majors, due to downward commodity price-induced reserve revisions. This trend could reverse in 2009, however, with the implementation of new SEC-based reserve replacement guidelines, but Fitch does not view this as having any impact on the companies' ratings as the changes are expected to affect all companies equally.

Reserve Position

Fitch examines the reserve positions of the European majors on an SEC basis. This allows for a more balanced comparison with the US peers, and aids in the standardisation of calculating and analysing reserve-based metrics. Whilst Fitch does consider a company's total proved reserve position including equity affiliates, reserve-based metrics (such as F&D costs) are calculated on a "net" basis using consolidated subsidiaries only — so as to avoid externalities, and accurately capture companies' core reserve performance measures.

Table 3 shows the net year-end reserve position of the major European integrated oil and gas companies as of 2008. Shell's reserve position of approximately 7.0 billion boe looks weak when compared with one of it closest rivals, BP, with approximately 12.3 billion boe. Shell's resource portfolio does, however, contain several large fields under development (Perdido in the Gulf of Mexico, and BC-10 offshore Brazil) and nearing start-up, where SEC-compliant proved reserve figures cannot yet be booked.

Table 3: Total Proved Year-End 2008 Reserves (SEC)

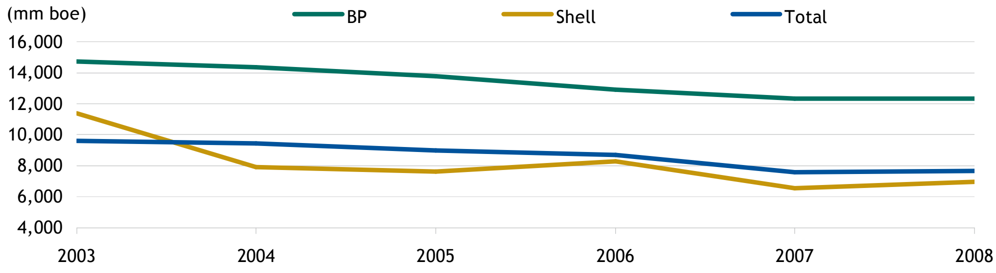
(mmboe)	BP	Shell	Total	Eni
Proved reserves	12,333	6,941	7,680	6,112
Developed reserves	6,140	2,852	4,198	3,865
Developed (%)	49.8	41.1	54.7	63.2

Excluding equity affiliates
Source: Company financials, Fitch

Nonetheless, the differential is even more pronounced when looking at the level of current net proved developed reserves (excluding equity affiliates) for Shell (which is roughly half that of BP). It is also worth highlighting Shell's relatively low percentage of developed reserves, at approximately 40%. Fitch considers a proportion of 60%-80% to be an optimal level, as it signifies a balanced portfolio of assets more capable of enabling a company to generate ongoing cash flow. A ratio of developed reserves below 60% could indicate large future capex demands and long project lead times.

Chart 3 shows the trend in the companies' proved reserve positions over time. Shell was particularly negatively impacted, due to the material downward reserve revision in 2004 and poor reserve replacement performance in 2007 relative to its peers.

Chart 3: Total Proved Reserves (SEC)
As of December 2008



Source: Company filings, Fitch

On a net reserve basis, Shell has the smallest reserve level of the European majors. However, when examining companies including equity affiliates, Shell's position is more competitive relative to BP (whose large proved reserve base supports its high-investment-grade rating), with end-2008 proved reserves of 10.9 billion boe versus 18.1 billion boe for BP. This is in line with Fitch's definition of a "very large" reserve base, and is satisfactory for the companies' current rating levels.

Political Risk and Reserves

Political risk affects private oil and gas producers more than other corporates — primarily through direct government intervention, corruption, legal and political uncertainty, production interruptions, and market constraints. Since all integrated oil and gas companies have increasingly had to explore for reserves in more risky areas, Fitch carefully examines the location of these reserves. As Table 4 shows, all the European integrated majors have more than half of their proved reserves located outside of OECD countries, representing varying degrees of risk. Shell holds the most favourable position, and in 2008 achieved nearly 70% of exploration resource additions in OECD countries, compared with less than 25% in 2004.

Table 4: Proved Oil and Gas Reserve Location as of Year-End 2008

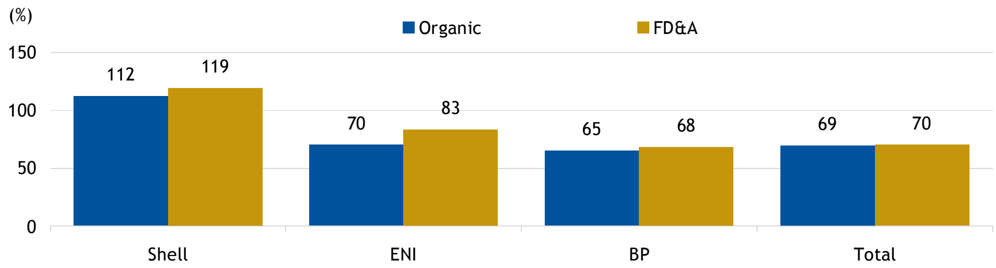
(%)	BP	Shell	Total	Eni
OECD	37.4	43.3	19.3	21.0
Non-OECD	62.6	56.7	80.7	79.0

Including equity affiliates
Source: Company financials, Fitch estimates

Of the other European majors, Fitch views BP's risk to be greater than that of Total and Eni despite the latters' greater absolute exposure to non-OECD countries. This is primarily due to BP's exposure to one country (Russia; 'BBB'/Negative/'F3'). While both Total and Eni have exposure to volatile regions, their relative non-OECD diversification is greater. Fitch views this diversification as helping to mitigate some of the political risks mentioned earlier, everything else being equal.

Despite Shell's historical problems regarding its reserves, the company has demonstrated a superior ability to replace reserves (especially natural gas reserves) as measured by the three-year average reserve replacement ratio, also known as the basic replacement ratio, which is a measure of the company's all-sources (FD&A) reserve replacement as a percentage of production. Chart 4 shows that Shell satisfactorily replaced production over a three-year average period, which compares more favourably with its peers that are all struggling to replace produced reserves.

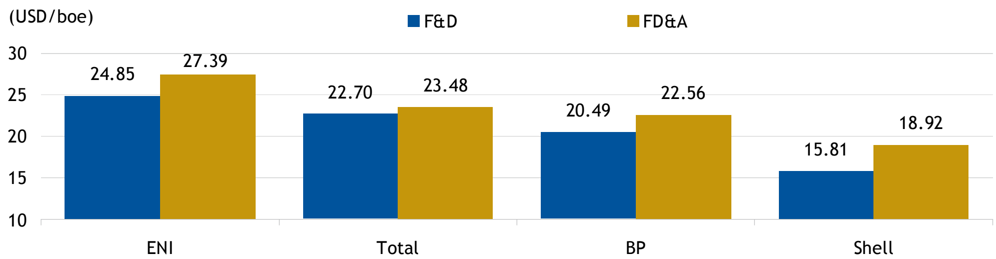
Chart 4: Three Year Average Reserve Replacement Ratios (SEC)
As of December 2008



Source: Company financials, Fitch

Just as important as the actual ability to replace reserves is the cost of replacement, either organically or through acquisition. Once again, Shell displays a superior performance — as measured by the three-year average upstream FD&A cost. As Chart 5 demonstrates, Shell has managed to replace reserves organically for approximately USD15.80 per boe on a three-year average, compared with more than USD20 per boe for its closest peers. The company has, however, spent more to acquire reserves, primarily in South and North America (outside of the US).

Chart 5: Upstream Finding & Development Costs (3-Year Average)
As of December 2008



Source: Company financials, Fitch

Production Profile

As discussed above, Fitch notes that political risk affects private oil and gas producers more than other corporates. As Table 5 shows, the European oil majors (with the exception of Shell) have a significant level of production located in non-OECD countries. As discussed regarding reserve location, Fitch views BP's production risk to be greater than that of Total and Eni, due to BP's Russian exposure.

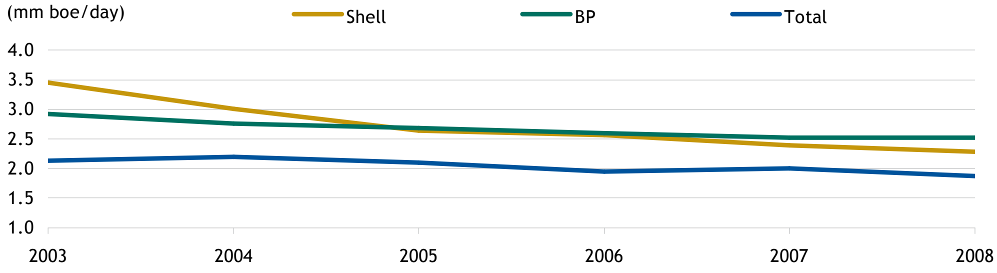
Table 5: Production Location as of Year-End 2008

(%)	BP	Shell	Total	Eni
OECD	32.7	56.2	27.0	30.0
Non-OECD	67.3	43.8	73.0	70.0

Includes equity affiliates
Source: Company financials, Fitch estimates

All of the European majors, with the exception of Eni, have had difficulty expanding — or, in some cases, even maintaining — production levels over the past few years. As Chart 6 shows, Shell has suffered the largest absolute fall in production, while Total has managed to broadly maintain production levels.

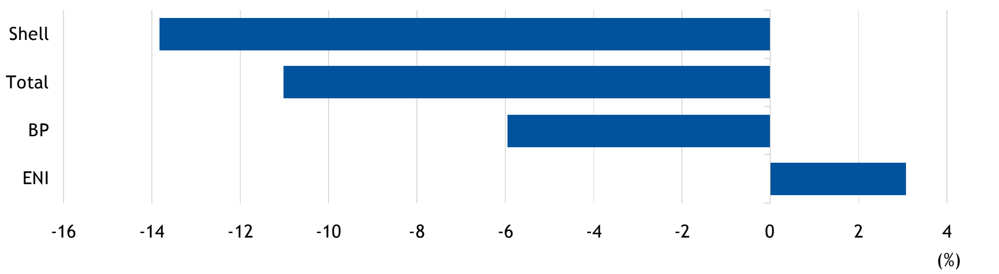
Chart 6: Total Hydrocarbon Production
As of December 2008



Source: Company filings, Fitch

Chart 7 shows the cumulative three-year change in production for the European majors (excluding equity affiliates) in percentage terms. While Shell's decline was the largest (approximately 14%), Fitch expects this trend to reverse in the near future — with Perdido expected to begin production in early 2010, and BC-10 by end-2009. In the meantime, BP has also restarted its Thunderhorse platform in the Gulf of Mexico, and north field production resumed in February 2009 following hurricane damage suffered in September 2008. Total SA has five major projects that are expected to begin production in 2009, adding approximately 200,000bpd in 2009 and 350,000bpd in 2010, including equity affiliates. Fitch expects these new projects to help lessen or reverse the decline in production seen over the past few years.

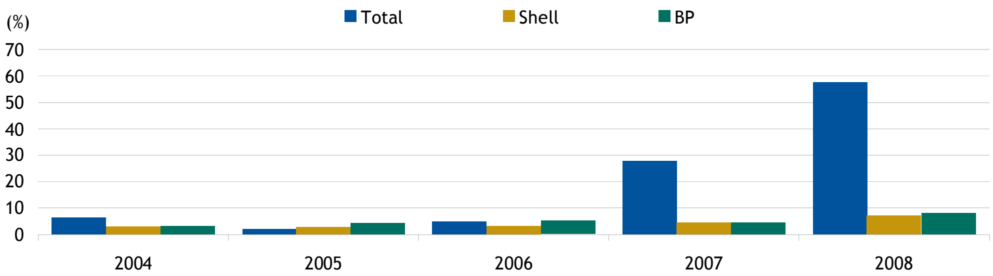
Chart 7: Three Year Cumulative Change In Production
As of December 2008



Source: Company financials, Fitch

It is well understood in the industry that producing oil and gas has become increasingly difficult as resources are more remote, harder to reach, smaller, and more scattered than in the past. This is most evident by examining companies' drilling success rates. As Chart 8 shows, the percentage of dry wells drilled to total

Chart 8: Ratio of Dry Wells Drilled to Total Wells Drilled
As of December 2008



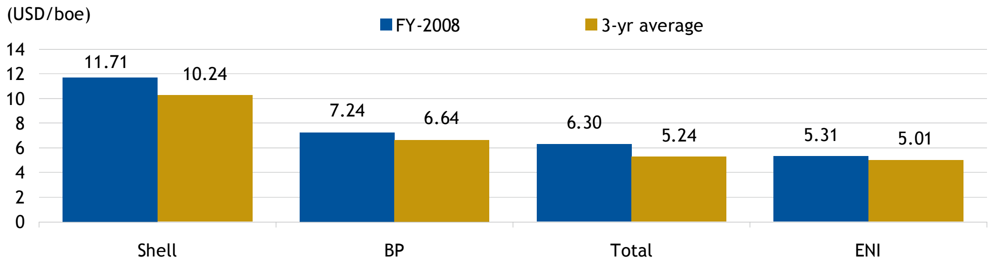
Source: Company data books

wells drilled (both exploratory and development) has risen for all the European majors (now almost 10% for BP), but has particularly affected Total in the last two years — reaching a surprising level of over 50% in 2008.

This has mainly resulted from a sharp rise in dry development wells in North America. Total defines a dry well as one found to be incapable of producing sufficient quantities to justify completion. As such, Fitch expects Total's production costs to rise further if this trend is not reversed in the near term.

Another important area of focus for Fitch is the trend in overall industry costs. Since 2000, upstream industry costs have risen by approximately 110% as of June 2009, according to the IHS Cambridge Energy Research Associates (IHS CERA). This steep rise in costs has slowed, however, in the wake of the global recession. The IHS CERA Upstream Capital Costs Index, which tracks costs associated with the construction of new oil and gas facilities, has fallen by 8.5% since end-2008. According to IHS CERA, the reduction in capital costs was driven by "a slackening of project activity and lower levels of resource utilisation, as well as a sharp decline in the cost of steel and subsea equipment." As Chart 9 shows, the upward production cost trend is evident, with 2008 production costs per boe higher than the three-year average for all European oil and gas majors.

Chart 9: Upstream Production Costs
As of December 2008



Source: Company financials, Fitch

Among the European majors, Shell has displayed the highest level of production costs primarily from offshore and LNG activities, while Eni's production costs per boe are roughly half of Shell's — due to a greater onshore presence.

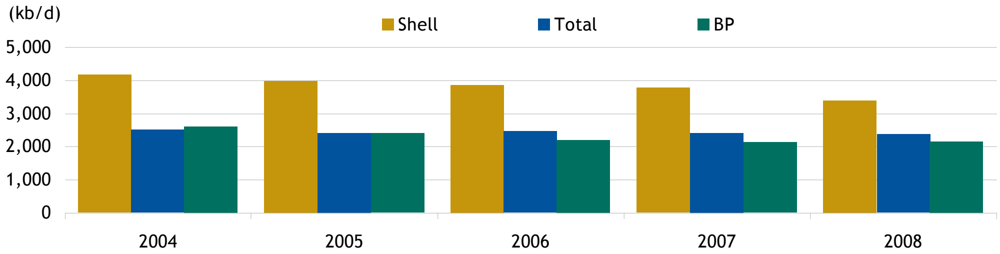
Fitch expects the overall industry cost trend to show further reductions in 2009 and possibly 2010. For example, Jean-Marie Guillermou, Senior VP of Total's Development and Operations Techniques, said: "While most cost models generally assumed that it takes two years for crude oil price evolution to be reflected in project costs, plunging oil prices in the fourth quarter of 2008 saw project costs begin to decline before the end of the year."

Fitch therefore expects companies to look aggressively at pushing deflation into the supply chain, and possibly to renegotiate higher-priced service and supply contracts that were signed between 2006 and 2008.

Downstream Operations

Once again, Chart 10 shows Shell as the industry leader, with a downstream refinery throughput greater than its peers in every year for the past five years. Whilst throughput has declined for all three companies, Shell has displayed the largest decrease, averaging 5% year-on-year for the past four years compared with 4.6% for BP and a 1.4% decrease for Total. Also worth noting is that by 2008, Total's throughput was marginally higher than BP — compared with 2005 when they were equal, and 2004 when BP was greater.

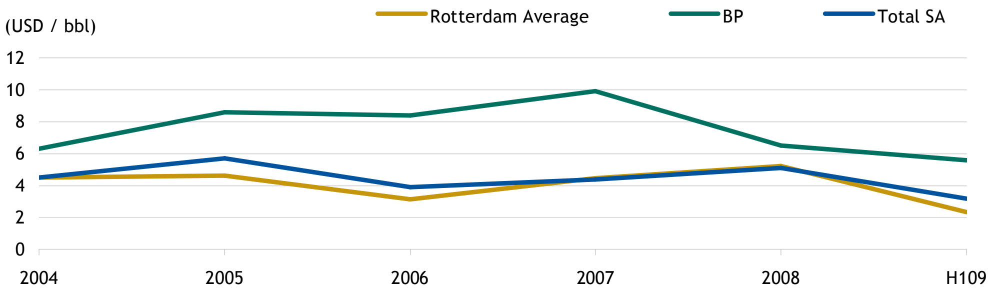
Chart 10: Refinery Throughput
As of December 2008



Includes actual crude oil and other feedstock input for both subsidiaries and third parties
Source: Company data books

Despite the fact that Total's throughput is now higher than BP, the latter has managed to maintain a significantly higher average refining margin than Total, as demonstrated in Chart 11. Total's refining margin has historically been more in line with the European average, as measured by the Rotterdam Brent complex price per barrel, while BP has comfortably exceeded this average for a number of years. This is primarily due to the higher margins BP earns from its US business — with US Gulf Coast, Mid-West and West Coast margins substantially higher than north-western European margins, giving BP another competitive advantage that supports its higher credit ratings.

Chart 11: Average Refining Margins
As of June 2009



Source: Company filings, Fitch

Financial Profile

Financial Policy

The European oil majors broadly aim to conduct operations on a cash neutral basis (matching cash from operations and disposals against capex, dividends and share buybacks) over the business cycle. This is intended to limit borrowings, and can be categorised as a conservative approach to financing in line with assigned credit ratings.

A widely-followed figure in the industry is on-balance sheet net debt to equity plus net debt (or gearing ratio), with most companies targeting a range of 20%-30%. BP and Total (which uses the more conservative net debt to equity ratio) are currently in this range, the main difference between them being the trend. Total's gearing ratio has been declining over the past three years, and as of 2008 was below the five-year average. BP, by contrast, has an increasing gearing ratio that, as of 2008, is above the five-year average. Shell has historically reported a ratio of around 6%, and was below this level as of 2008, but is expected to be close to 20% by the end of 2009.

Profitability and Earnings

Until Q408, all the European oil and gas majors had reported stable to improving profit margins. As Table 6 demonstrates, 2008 EBITDAR margins declined across the board in line with the sharp correction in global oil prices during H208, in combination with operating costs that are historically slower to adjust.

Table 6: EBITDAR Margin

(%)	BP	Shell	Total	Eni
2008	12.7	13.2	18.9	25.4
2007	14.7	16.0	23.2	30.1
2006	15.2	16.6	22.7	30.0
2005	11.8	16.8	26.1	30.1

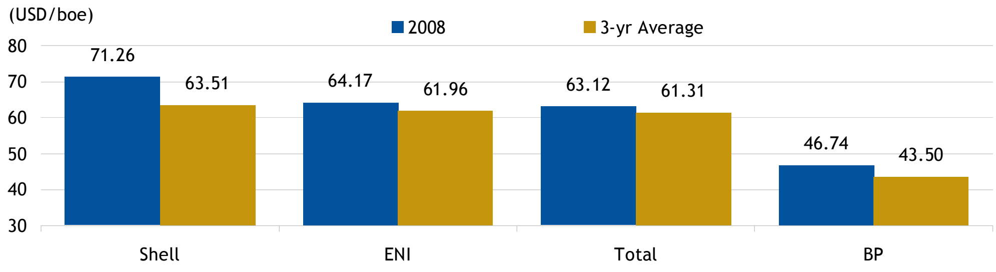
Source: Fitch

In 2009, Fitch anticipates profit margins to slightly improve, as companies work to drive deflation into their cost base. Although this can take time, factors such as lower day-rates for oilfield services, employee redundancies, and lower commodity prices for materials such as steel, should contribute to stable-to-improving margins in the upstream business.

Of the European majors examined in this report, BP appears to be the one that would benefit most from such cost reductions. As Chart 12 shows, when measuring profitability on an equivalent barrel-produced basis, the company has lagged its peers by a significant margin, both in 2008 and on a three-year average. Fitch attributes this mostly to greater inefficiency and higher overhead costs, especially in the downstream business, which has the effect of eroding profitability despite achieving refining margins that are better than its peers.

In its 2009 strategy update, BP management announced an initiative intended to “close the gap” in terms of improving downstream performance by 2011; and in its Q209 investor conference call, announced that the company was making good progress in reducing overall costs in 2009 — having already achieved its cost-reduction target of USD2.0bn for the full year. BP said it was looking to remove an additional USD1.0bn of costs by year-end.

Chart 12: EBITDAX to Production (BOE)
As of December 2008



Source: Company financials, Fitch

Fitch anticipates downstream profitability to be weak across the industry in 2009. Many European entities such as Shell and Repsol YPF (‘BBB+’/Stable/‘F2’), to name two, have either scaled back or shut down low-margin refining operations — in the wake of rising costs resulting from higher inputs costs combined with lower petroleum product prices.

Cash Flow Protection

Cash flow generation for the European oil majors has broadly followed the trend in earnings, rising steadily over the past few years in line with higher oil prices. As

Table 7 demonstrates, this has allowed all of the European majors to maintain very comfortable interest coverage ratios that are in line with expectations for the ratings. Fitch measures this ratio based on net interest coverage, which is especially significant for Eni which has a relatively larger interest expense offset by robust interest income.

Table 7: FFO Net Interest Coverage

(x)	BP	Shell	Total	Eni
2008	49.4	35.6	31.6	47.8
2007	34.2	74.9	36.6	>100
2006	55.9	51.2	46.3	>100
2005	89.3	57.2	66.1	n.m.

For Eni, n.m. denotes interest income exceeding interest expense
Source: Fitch

Fitch measures leverage based on net adjusted debt to funds from operations (FFO). As Table 8 shows, all of the European companies have broadly similar leverage ratios, with BP having shown a slight deterioration in 2008. This was due mostly to a USD5.3bn increase in net adjusted debt combined with a USD2.9bn decrease in FFO for the year.

Table 8: FFO-Adjusted Net Leverage

(x)	BP	Shell	Total	Eni
2008	1.7	0.9	1.2	1.2
2007	1.5	0.8	1.0	1.3
2006	1.5	0.8	1.4	0.7
2005	0.9	0.5	0.9	0.7

Source: Fitch

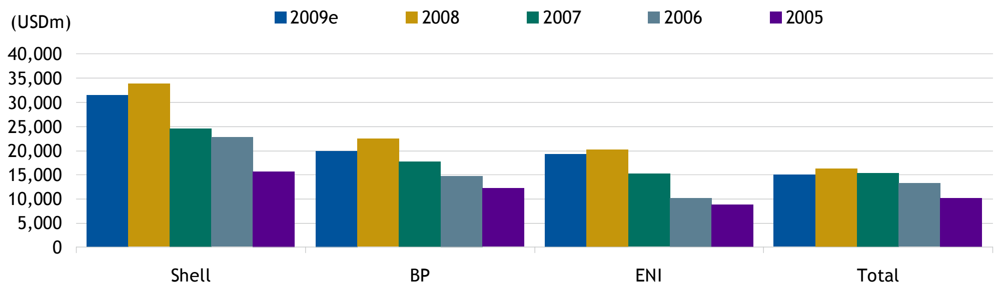
Fitch expects these ratios to deteriorate somewhat in 2009 for all the European majors, as cash generation declines in conjunction with rising debt levels used to fill the funding gap. Ratios are not expected to rise above 2.0x, however, a level that would not meet current expectations for the 'AA' rating category.

Capital Expenditure and Cash Flow

Unlike previous cyclical downturns, European oil and gas majors are not yet aggressively cutting capex. The most comparable cycle to the current downturn would be the late-1990s period, when Brent fell by 33% from an average USD19.10 per barrel in 1997 to USD12.72 per barrel by 1998. This was followed by a 23% reduction in capex by BP from 1998 to 1999, and a 44% reduction by Shell over the same period.

Chart 13: Capital Expenditures

As of December 2008



Source: Company financials, Fitch

As Chart 13 demonstrates, capex is only slightly down from 2008 levels, and remains above the spending levels in 2007. This seems largely attributable to the companies expecting an economic recovery in 2010 (or at the latest by 2011), and consequently not wishing to fall behind on project completion for fear of losing out to competitors. Spending has been reduced, however, in areas such as exploration.

An important aspect of the European oil majors' high credit ratings is a demonstrated ability to fund capex to boost production, and replace reserves with their own internally generated capital. As Table 9 shows, companies have historically managed to cover capex with internally generated cash by an average 1.5x to 2.0x. As of 2008, BP displayed the greatest capacity to cover capex from interally generated funds. Coverage for all the majors has declined somewhat over the past four years, however, as companies have increased capex in line with rising costs in the industry (Chart 13).

Table 9: Cash Flow from Operations to Capex

(x)	BP	Shell	Total	Eni
2008	1.7	1.3	1.6	1.5
2007	1.4	1.4	1.7	1.5
2006	1.9	1.4	1.6	2.2
2005	2.2	1.9	1.7	2.1

Source: Fitch

Whilst Fitch expects companies to maintain ratios in line with historical averages, 2009 will likely see some deterioration as CFO is expected to decline more rapidly than reductions in capex.

Capital Structure

Current debt maturities (defined as debt maturing in less than one year) do not appear onerous for the European majors, having tended to range on average from 25% to 45% per year of total balance sheet debt over the past five years. As of December 2008, BP needed to refinance or repay nearly 50% of its on-balance sheet debt within 12 months, with debt maturities of USD15.7bn (USD10.8bn excluding US municipal bonds and long-term gas supply contracts). As of the date of this report, BP has successfully accessed debt capital markets by issuing USD7.5bn of dollar-denominated debt, and has additional refinancing ability under its existing debt issuance programmes. As a result, Fitch concludes that companies' balance sheets are likely to remain broadly healthy, despite the recent increase in borrowing to cover the drop in operating cash flow, and remain in line with the rating category.

Pensions

One issue in particular for the oil majors is the level of pension deficits. Shell reported a large deficit of USD8.3bn in 2008 compared with a surplus of USD13.7bn in 2007. Shell attributes the huge change to a "lower return on plan assets", and, in a report to members, Shell's pension trustees cite "an over-exposure to credit and small cap stocks." The company has increased contributions in 2009 to USD5.0bn from a typical USD1.0bn–2.0bn annual cash contribution funded from operating cash flow.

Fitch views such actions as supportive of the company's credit rating. BP reported a pension deficit of USD8.7bn in 2008 compared with USD301m in 2007. Unlike Shell, BP is not making additional contributions to its funded pension plans due to the fact that the plans were 98% funded in aggregate as of December 2008 (according to BP). The company makes benefit payments of about USD2.4bn per annum, and Fitch expects BP to be able to comfortably fund such expenditure. Finally, Total in 2008 reported a pension deficit of EUR1.6bn, but this is down by almost half compared with 2005 when the deficit was EUR3.4bn. Fitch views this deficit as manageable, and Total has not made any statements about increasing its pension contributions.

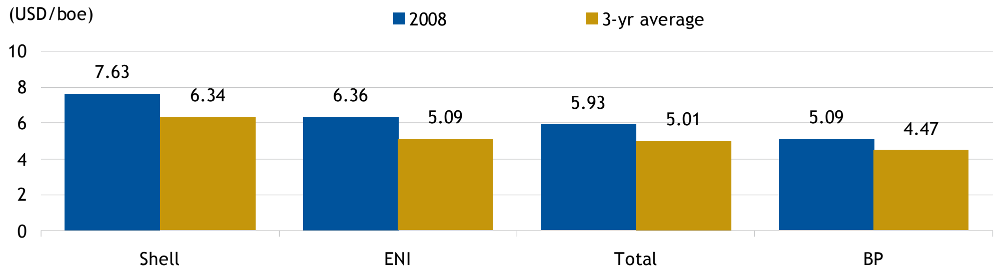
Debt per Barrel of Oil Equivalent

Another measure of leverage that Fitch utilises in the exploration and production methodology (referenced on the front page of this report) is the amount of adjusted debt per equivalent barrel of oil of proved reserves. This is largely a measure of the amount of debt attached to each barrel of potential future production. Whilst this is an imperfect measure, as Fitch does not expect companies to produce all of their proved reserves, it is a reflection of the indebtedness of each company relative to the asset base that is available to monetise and service future debt obligations.

As Chart 14 shows, Shell currently has the highest level of indebtedness due to its relatively small proved reserve base excluding equity affiliates, and has consistently exceeded its peers on a three-year average. This measure remains broadly in line with its peers, however, and is also in line with expectations for the rating category.

Chart 14: Total Adjusted Debt to Proved Reserves

As of December 2008



Source: Company financials, Fitch

Fitch expects Shell to continue to underperform based on this measure, as reserve replacement is sourced from equity affiliates and becomes increasingly challenging and more expensive. BP, by contrast, has a large proved reserve base excluding equity affiliates, and displays better metrics as a result, which is an important factor supporting the company's ratings.

Financial Flexibility

In line with Fitch's expectations for companies in the 'AA' rating category, all the European majors have considerable financial flexibility through cash holdings, committed bank lines, unencumbered financeable assets, and demonstrated access to public capital markets. Another source of funding for the large incumbent players is saleable non-core assets. Both BP and Shell have been active in utilising this source of funding over the past five years, with cumulative disposal proceeds of approximately USD27.6bn and USD26.2bn respectively.

Fitch does not expect any of the companies mentioned in this report to experience funding or refinancing difficulties.

Table 10: Financial Flexibility

BP	USD4.6bn of undrawn committed credit facilities maturing in 2011, a USD20bn European debt issuance programme (USD9.7bn available), and a USD10bn US shelf registration programme (USD3.5bn available) as of December 2008
Shell	Two registered Commercial Paper (CP) programmes for USD10bn apiece, a USD25bn EMTN programme, and an unlimited US shelf registration programme with an ability to issue debt with a 30-year maturity
Total	USD8.966bn of confirmed credit facilities from a consortium of international banks, of which USD8.73bn was unused as of year-end 2008; in June 2009, the company increased the size of its Euro Medium Term Note Programme to EUR18bn from EUR15bn

Source: Company Financials, Fitch