

VALUATION OF AN EXPROPRIATED COMPANY: THE CASE OF YPF AND REPSOL IN ARGENTINA

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Abstract

On April 16, 2012 the Argentine federal government decreed the intervention of YPF. The share price of YPF declined 29% the day after. Two weeks later (May 3), the Argentinean Parliament approved the expropriation of 51% of the YPF shares owned by Repsol. Repsol had a 57.4% stake. YPF was the second biggest company in Argentina. In 2011, sales were \$13 billion and dividends \$1.3 billion.

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On April 16, 2012 the Argentine federal government decreed the intervention of YPF. The share price of YPF declined 29% the day after. Two weeks later (May 3), the Argentinean Parliament approved the expropriation of 51% of the YPF shares owned by Repsol. Repsol had a 57.4% stake.

YPF was the second biggest company in Argentina (see Exhibit 1). In 2011, sales were \$13 billion and dividends \$1.3 billion.

Main shareholders of YPF in April 2012

	Before the expropriation		After the expropriation
	Number of shares	(%)	
Repsol YPF	225,890,313	57.43%	6.43%
Petersen Group	100,145,077	25.46%	25.46%
Public	67,225,593	17.09%	17.09%
Argentine federal and provincial governments	11,388	0.003%	51.00%
Employee fund	40,422	0.01%	0.010%
Total	393,312,793		

A tribunal will determine the compensation Repsol will receive for its YPF shares.

You are required to help the tribunal. What is your best estimation of the compensation that Repsol should receive for its expropriated 51% of YPF shares?

The following sections provide you with information and data to answer this question.

1. Short History of Repsol in YPF
2. The Months Before the Expropriation
3. Precedent Transactions of YPF Shares
4. Analyst Reports About YPF
5. Vaca Muerta: A Huge Oil and Gas Shale
6. YPF's Bylaws Valuation Methodology
7. Cash Flows of Repsol Due to Its Investment in YPF

Exhibit 1. The Biggest Companies in Argentina
 Exhibit 2. Argentina: Some Indicators
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 Exhibit 7. Analyst Expectations for YPF
 Exhibit 8. About Repsol
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1. Short History of Repsol in YPF

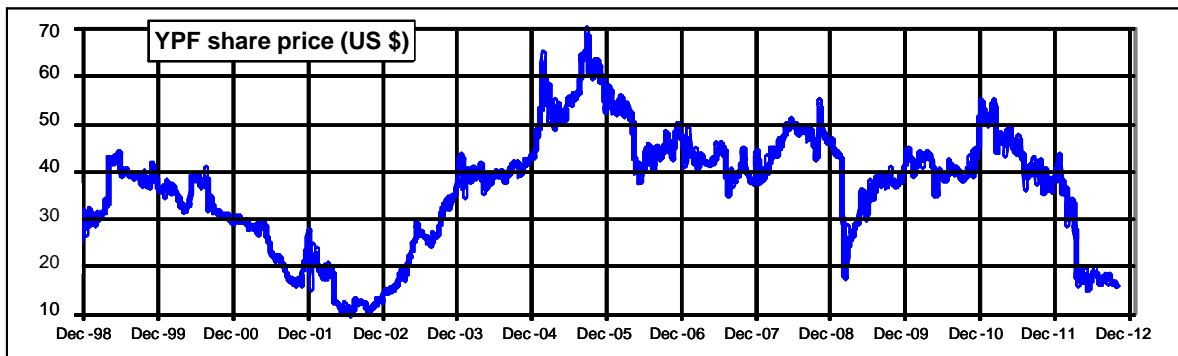
In January 1999, Repsol acquired a 14.99% stake of YPF from the Argentine government and subsequently launched a tender offer at US\$44.78/share for the rest of YPF’s share capital. Analysts said the price was fair and welcomed the strategic fit between the two companies, which they said would provide a balance to Repsol’s overexposure in refining and marketing while YPF had focused on exploration and production.

YPF was privatized in 1993 and had a strong financial profile: YPF could borrow on the international capital markets and achieved a credit rating better than that of Argentina.

1993. July. IPO of YPF shares (previously owned by the Argentine government) in ADS form. New York Stock Exchange.
1999. Repsol acquired 97.81% of YPF shares for more than \$15 billion.
2001. Merge of YPF with Astra (an Argentinean company owned by Repsol since 1996 with market value of \$1.6 billion).
2008. The Petersen Group (belongs to Eskenazi family) acquires from Repsol 15% of YPF shares. Shareholders’ agreement to distribute 90% of YPF’s net income as dividends.
2011. The Petersen Group buys additional shares to reach a 25.46% stake in YPF.
2010 – 2011. Repsol sells YPF shares to several funds and through an initial public offering. Sell side analysts start covering the YPF stock. Repsol keeps 57.43% of the shares.
2011. May. Communication of the discovery of Vaca Muerta Shale Oil.
2012. February 3. Repsol YPF (according to resources auditor Ryder Scott) raises its hydrocarbons reserves and resources estimate in the Vaca Muerta play to 22.8 billion barrels of oil equivalent.
2012. March 6. YPF executive says Vaca Muerta shale could produce 300,000 barrels/day in 10 years.
2012. April 15. YPF has 17% free-float and two major shareholders: Repsol (57.43%) and the Petersen Group (25.46%).
2012. April 16. The Argentine federal government decrees the intervention of YPF and sends a bill to Congress for the expropriation of 51% of YPF shares owned by Repsol.

Figure 1

Evolution of the YPF share price in US\$



Source: Datastream.

Some Opinions About YPF

President Cristina Fernandez de Kirchner:

2009. June 22. *"This investment (of YPF) shows the vital links forged between businesses, workers and the government to grow in harmony and allow everybody to benefit from this growth."*

2009. December 22. *"YPF is the largest company in terms of tax contributions to the state, not only by paying taxes but also by the dreams of Argentina that is now trying to get back on track." "This plan reaffirms the hope and optimism in the present and in the future we are seeing in almost every Argentine businessman."*

2010. September 3. She praised YPF and encouraged it *"to continue with their investments in the country and be a major contributor."* You are leading *"the most important company of Argentina."*

2010. December 12. *"We are very happy because this is going to keep up the country's growth." YPF's discoveries "make the growth of the country even more sustainable."*

2011. May 10. The discovery of Vaca Muerta *"will allow us to maintain and further promote development."*

Other:

2009. June 22. *"In our company the Argentinean flag must fly next to the Spanish flag ... Our Spanish friends are just as Argentinean as us, and we are just as Spanish as them."* Mr. Eskenazi, owner of the Petersen Group and VP of YPF.

2011. February 3. *"YPF is doing a great effort, supplying to 64% of our market."* Vice president Boudou.

2011. November 2. *"The federal government is in full agreement with the activities that YPF is developing."* Roberto Baratta, national government of Argentina representative on the Board of YPF.

2011. December 6. YPF *"is our flag company."* Julio de Vido, planning minister.

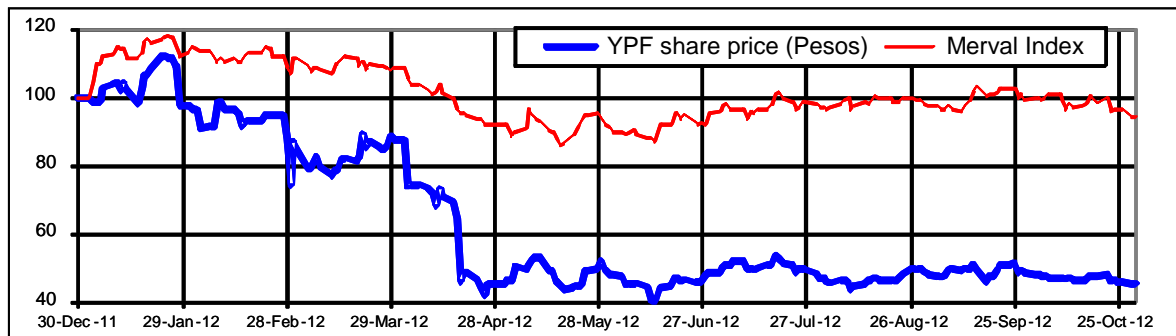
2. The Months Before the Expropriation

The rumors, news and announcements around a potential YPF expropriation started on January 27, 2012. YPF share price declined by 10.6% the day after, much more than the S&P Integrated Oil & Gas Index and the Merval Index¹ (which declined by 0.2% and 2.1%).

Over the next three months, YPF suffered cancellations of concessions for oil fields in several provinces. The governors of those southern regions accused YPF of not making investments to increase production. YPF share price dropped by 41% from January 27, 2012 to April 17, 2012, much more than the S&P Integrated Oil & Gas Index and the Merval Index, which declined by 9% and 16% (see Figure 2). On April 18, 2012, YPF's share price dropped 28.6%.

Figure 2

Evolution of the YPF share price compared with the Merval Index in 2012. December 2011 = 100



Source: Datastream.

Some events of the pressure building up on YPF in 2012 were the following:

- | | |
|-------------------------|---|
| 27-29 Jan. 2012. | Strong press rumors regarding a potential expropriation of YPF. Its share price fell 10.6% the day after. |
| 29 Jan. | Newspaper Pagina/12 reports that the government is considering the nationalization of YPF. |
| 1 Feb. | Repsol's CEO to travel to Argentina amid YPF rumors of nationalization. |
| 3 Feb. | Argentina's government suspended its Oil Plus and Refining Plus programs, which had aimed to encourage new investment. |
| 8 Feb. | YPF issues press release highlighting highest-ever capex (50% increase year-on-year) and Repsol publishes the Ryder Scott report about shale oil and gas resources in Vaca Muerta. |
| 23 Feb. | Roberto Baratta, the government's representative on YPF's Board, walks out after other officials including Energy Secretary Daniel Cameron and Deputy Economy Minister Axel Kicillof are barred from attending the Board meeting. |
| 24 Feb. | Oil producing provinces demand that oil companies increase production by 15% in the next two years or face losing their licenses. |
| 29 Feb. | Ambito Financiero reports that President Cristina Fernandez Kirchner could announce a takeover of YPF. |

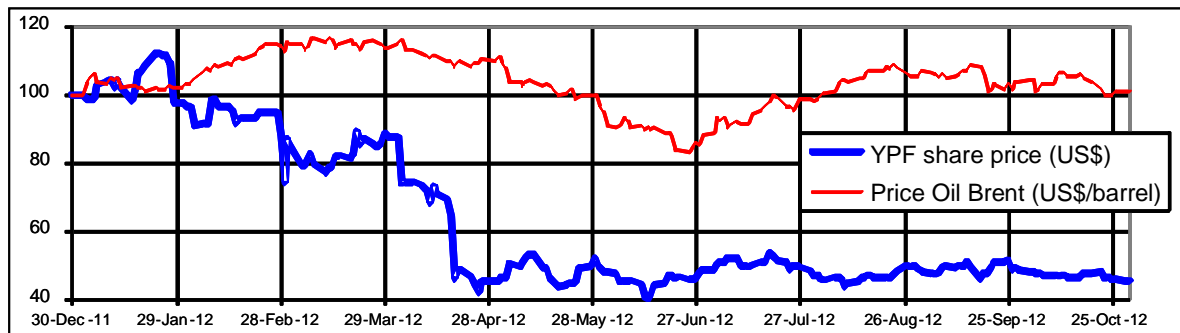
¹ The Merval Index is the most important index of the Buenos Aires Stock Exchange. It is a price-weighted index, calculated as the market value (in pesos) of a portfolio of stocks selected based on their market share, number of transactions and quotation price.

2 Mar.	Chubut province gives seven days to YPF to provide a working plan for its regional investments.
3 Mar.	Argentinean state news agency reports that the Santa Cruz province has given YPF a five-day deadline to justify its lack of investment in more than 20 oil and gas fields.
6 Mar.	Mendoza province gives one month to YPF to boost investments in two fields.
8 Mar.	YPF 2011 accounts approved with the single negative vote of the government representative in the Board of Directors.
9 Mar.	Neuquén province gives YPF a seven-day deadline to provide a development plan for some fields in the province.
13 Mar.	YPF asks the Santa Cruz government to extend oil license withdrawal deadlines.
14 Mar.	Chubut and Santa Cruz provinces withdraw five concessions from YPF.
23 Mar.	Mendoza, Salta, Río Negro and Neuquén regions withdraw YPF licenses.
29 Mar.	YPF announced a new oil field discover in Mendoza region.
11 Apr.	Santa Cruz region withdraws YPF license.
12 Apr.	New press rumors regarding a potential expropriation of YPF.
16 Apr.	Argentina's president announces that a 51% stake in YPF controlled by Repsol will be expropriated (out of its 57.4%).

Source: Various press reports.

Figure 3

Evolution of the YPF share price compared with the price of Brent oil. December 2011 = 100



Source: Datastream.

Announcing the expropriation, President Cristina Fernandez de Kirchner said energy was a “*vital resource*” and accused YPF of not investing enough to increase output from its oilfields, and so lessen the need for imports.

million US\$	2009	2010	2011
YPF. Capital expenditures and investments	1,528	2,256	3,169
<i>Annual increase</i>		48%	40%

Exhibit 3 shows some reactions to the expropriation. Exhibit 4 shows the evolution of the P&L and balance sheet of YPF. Exhibit 5 contains the evolution of the reserves of YPF. Exhibit 8 provides some basic information about Repsol.

But on top of the reserves, according to the EIA (U.S. Energy Information Administration), Argentina has some of the world's largest resources of shale oil and gas. Repsol announced in May 2011 the discovery of one of the world's largest deposits of shale oil and gas at Vaca Muerta in western Argentina.

3. Precedent Transactions of YPF Shares

Table 1 contains all the precedent transactions involving an acquisition of shares of YPF and the price paid in each of them in US\$/share. It includes both sales to third parties and acquisitions by Repsol (initial acquisition of a 14.99% stake in January 1999 and subsequent tender offer at US\$44.78/share for the remaining YPF share capital).

Table 1

Transactions of YPF shares

Event	Million US\$	US\$/share
1999. January 20. Repsol acquired 14.99% of YPF previously owned by the Argentine government.	2,011	38.0
1999. June 24. Repsol tender offer and acquisition of an additional 82.47%. Total cost US\$13.04 billion.	13,036	44.8
1999. November. Repsol acquires an additional 0.35%.	55	44.8
2008. February 21. The Petersen Group acquires 14.9% of the shares from Repsol. Agreement to distribute 90% of YPF's net income as dividends.	2,235	38.1
2008. May. The Petersen Group exercises an option to buy an additional 0.1%.	13	34.3
2008. October 21. Tender offer of the Petersen Group. Acquisition of 0.462%.	89	49.5
2010. The Repsol Group sells 0.97% to several funds.	147	38.5
2010. Dec. 23. Eton Park and Capital funds acquire 3.26% from Repsol.	500	39.0
2011. May 4. The Petersen Group exercises its option and acquires an additional 10% stake in YPF (39.3 million shares). Price agreed upon in 2008.	1,304	33.2
2011. March 14. Lazard AM (2.9%) and other funds (0.93%) acquire 3.83% from Repsol.	639	42.4
2011. March 23. Repsol sells a 7.67% stake through a public offering in ADS on the New York SE.	1,209	40.1
2011. Repsol sells 0.88% to several funds.	153	44.1

In February 2008, Repsol sold 14.9% of the capital stock of YPF to Petersen Energía in the amount of US\$2.235 billion. In addition, in May 2008, Petersen Energía exercised an option to buy an additional 0.10%, launching a takeover, and in May 2011, the Petersen Group exercised its call option to buy another 10% of YPF, ahead of the exercise deadline in February 2012. The deal size was US\$1.304 billion. Following the transaction date, the Petersen Group owned 25.46% of YPF. The key price reference for the entire acquisition (US\$38.14/share or \$15 billion for the equity value) was determined in February 2008.

In December 2010, Repsol sold 1.63% of the share capital of YPF to funds managed by Eton Park Capital Management and another 1.63% to funds managed by Capital Guardian Trust Company and Capital International, Inc. for US\$500 million (US\$39/share).

On March 14, 2011, Repsol sold 3.83% of the share capital of YPF to Lazard Asset Management and other funds (US\$42.4/share). Also in March 2011, Repsol YPF sold, through a secondary offering, 7.67% of YPF's share capital, raising total net proceeds of US\$1.209 billion (US\$40.1/share).

Repsol's ownership interest in YPF at December 31, 2011 stood at 57.43%.

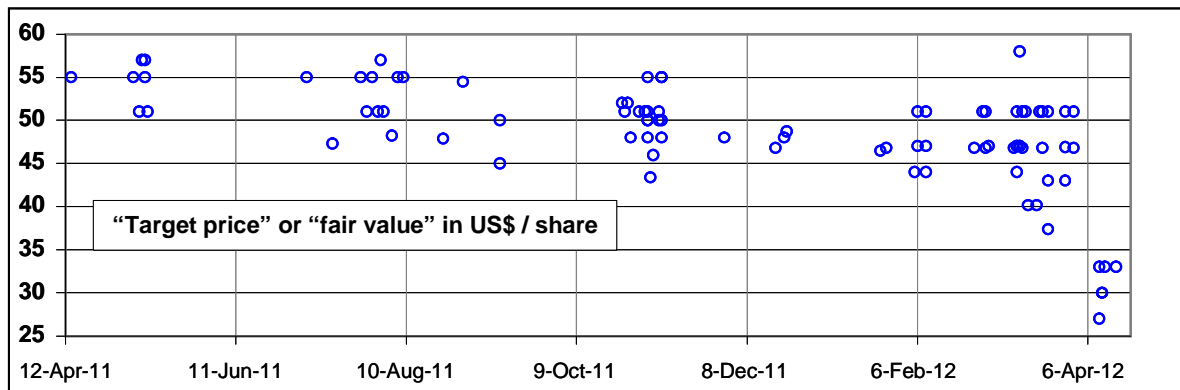
These transactions did not incorporate any value from Vaca Muerta because its discovery was announced in May 2011.

4. Analyst Reports About YPF

Table 4 contains the “target price” or “fair value” of YPF shares according to the analyst reports listed in Exhibit 6.

Figure 4

“Target price” of YPF in analyst reports published between April 2011 and April 16, 2012



Average until February 2012: US\$50.7/share.

Table 2

Last recommendation before January 27, 2012

Broker	Date	Target price (US\$/share)	Recommendation
Capital Markets Argentina	5-Nov-11	45.96	Buy
Allaria Ledesma & Co	24-Jan-12	46.50	Buy
ITAU BBA	26-Jan-12	46.80	Outperform
Wright Investors Service	15-Jul-11	47.30	AAA5
Raymond James	21-Dec-11	48.00	Outperform
BBVA Bancomer	22-Dec-11	48.70	Buy
Credit Suisse	8-Nov-11	50.00	Outperform
Deutsche Bank	7-Nov-11	51.00	Hold
Santander	2-Aug-11	51.00	Hold
Morgan Stanley	8-Nov-11	55.00	Overweight

Exhibit 7 contains the forecasts of EBITDA and net income for YPF according to the analysts.

5. Vaca Muerta: A Huge Oil and Gas Shale

New technologies have enabled the production of oil and gas from previously untapped shale reservoirs. These technologies were first commercially applied in 1998 in the U.S. Barnett Shale and in 2005 in the U.S. Bakken formation (North Dakota).

Over the last decade shale gas production in the United States has boomed and it currently accounts for 25% of total domestic production, offsetting the decline of conventional fields and reducing the quantity of liquid gas imports.

In 2012, U.S. crude oil domestic production was expected to reach 6.2 million barrels per day (mbpd), of which 2 mbpd would come from unconventional fields. Conventional production is declining and unconventional production is growing rapidly. In 2012, the investment in non-conventional resources in the United States amounted to US\$87 billion.

Transactions in the world oil industry (upstream)

Number of transactions	World				United States			
	2009	2010	2011	2012*	2009	2010	2011	2012*
Conventional	1,002	984	1,001	848	213	238	310	215
Non-conventional	272	376	431	359	97	200	220	155
Total	1,274	1,360	1,432	1,207	310	438	530	370
% Non-conventional/Total	21%	28%	30%	30%	31%	46%	42%	42%
<i>Average value of non-conventional transaction (US\$ million)</i>	727	741	452	476	1228	454	509	417

Until November 7, 2012.

Source: IHS Herold database.

In May 2011, Repsol YPF announced one of its largest discoveries of unconventional hydrocarbons at the Vaca Muerta formation located in the Argentinean province of Neuquén. The total hydrocarbon resources and reserves discovered at Vaca Muerta amounted to 22,807 million barrels of oil equivalent (mboe), according to the international specialist Ryder Scott. These discovered volumes equated less than half of the mining rights held by YPF (three million acres) in this formation because the Ryder Scott report only covered an acreage of around 1.99 million acres (YPF owns 1.2 million of them).

The information about the extraction costs of Vaca Muerta is still insufficient for a precise valuation, but given the acreage of YPF (around three million acres) and the range of the recent transactions of unconventional resources in the United States (from 2,500 to \$30,000/acre, being the average \$5,000/acre), its value should be in the interval between US\$7.5 billion and US\$90 billion. Analyst's reports² written in 2012, and before the expropriation, estimated an average value of \$6.269 billion.

Certified prospective volumes represent about 30 years of oil supply and 50 years of gas supply at the current consumption rates in Argentina. The current oil and gas production capacity of Argentina could double in 10 years' time, but it would be necessary to invest \$25 billion per year to develop the whole of existing prospective resources. A program of such magnitude would require an important capital investment in Argentina from international markets; a powerful domestic industry (equipment, services, etc.), and highly technically qualified human resources since Argentina competes against other similar developments worldwide (the United States, China, Australia, Eastern Europe, etc.).

² Ahorro, Allaria Ledesma, Bank of America ML, BBVA, BPI, BTG Pactual, Cheuvreux, Credit Suisse, Deutsche Bank, Exane-BNP, Goldman Sachs, Itau BBA, Raymond James, RBC, TPH, UBS.

A Credit Suisse analyst wrote (February 9, 2012) that “YPF’s resource potential in the Vaca Muerta formation keeps getting bigger. After announcing a 150 mboe resource estimate back in May 2011, YPF surprised the market in November 2011 with a 927 mboe resource number. Yesterday the company did it once again, with Ryder Scott’s resource certification report providing a 22.8 billion boe resource estimate.” “Our \$47/ADR target price does not incorporate any shale value.”

Cristina Fernandez de Kirchner (May 2011): Vaca Muerta “is a discovery of YPF, but for all Argentines” (Pagina/12, May 10, 2011).

Rodrigo Alvarez, Argentine economist, in the Argentine newspaper *Perfil*: “Vaca Muerta, the real reason behind the renationalization of YPF.” “With such shale gas reserves, Argentina could position itself as a nation with cheap and abundant energy, and profit from the high prices in the international market.”

6. YPF’s Bylaws Valuation Methodology

Articles 7 and 28 of YPF’s bylaws were approved by the Argentinean government in 1993 at the time of the privatization. These articles were included in YPF’s bylaws by the Argentinean government at the time of the IPO (in 1993), as a protection for investors.

Article 28 establishes that if, as a result of acquisitions, the national Argentinean government becomes the owner of 49% of the capital stock, it would need to launch a tender offer for all YPF’s share capital. The price to be offered is determined by Article 7. There are four methodologies to determine the offer price and the highest of these four is the one that should be paid:

- A. The highest price per share paid by the bidder within the two-year period preceding the notice of takeover.
- B. The highest closing price per share during the 30-day period preceding the notice of takeover.
- C. A price per share equal to the market price calculated in B. multiplied by the ratio between the highest price per share paid by the bidder within the two-year period preceding the notice of takeover and the price per share the day preceding the two-year period preceding the notice of takeover.
- D. YPF net income per share during the last four complete fiscal quarters preceding the notice of takeover multiplied by the highest of: a) the price/income ratio for that period; b) the highest price/income ratio during the two-year period preceding the notice of takeover.

Methodologies A and C are not applicable as there were no acquisitions by the Argentinean government in the two-year period preceding the expropriation.

B. Considering January 27, 2012 [April 16, 2012] as the day immediately preceding the takeover, the highest closing price during the 30-day period preceding the notice was US\$43.5 [US\$34.3] per share.

D. Considering January 27, 2012 [April 16, 2012] as the day immediately preceding the takeover, the relevant price/income ratio is 18.1 [15.1]. Multiplying the price/income ratio by the net income per share of 2011 (1232/393.31), we get US\$56.7 [US\$47.3] per share.

Therefore, considering January 27, 2012 as the day immediately preceding the takeover notice, the price for the tender offer should have been US\$56.7/share. Considering April 16, 2012, the price for the tender offer should have been US\$47.3/share.

7. Cash Flows of Repsol Due to Its Investment in YPF

Table 3 shows the cash flows of Repsol due to its investment in YPF.

Table 3

Cash flows of Repsol due to its investment in YPF (US\$ million)

	Shares Astra	Shares YPF		US\$ million		€ million
	Merge (*)	Bought	Sold	Dividends	Total	Total
1999		-15,102.0		366.8	-14,735.2	-14,699.9
2000				304.8	304.8	324.6
2001	-1,652			1,644.0	-8.0	-9.0
2002				437.5	437.5	416.9
2003				1,039.1	1,039.1	823.8
2004				1,828.1	1,828.1	1,344.9
2005				1,656.4	1,656.4	1,404.2
2006				767.8	767.8	582.2
2007				752.9	752.9	515.0
2008			1,232.0	2,435.8	3,667.8	2,638.6
2009				1,088.1	1,088.1	758.4
2010			647.0	942.0	1,589.0	1,184.5
2011			2,679.0	767.0	3,446.0	2,654.5
2012 (1)					744.6	581.7
<i>Sum</i>	-1,652	-15,102	4,558	14,030.2	2,578.7	-1,479.6
			Internal rate of return		1.9%	-1.2%

(*) In January 2001 Astra and Repsol Argentina merged with YPF. The assets and liabilities of Astra and Repsol Argentina were transferred to YPF in exchange for 40,312,793 new YPF shares that were given to Repsol. The market value of the Astra shares was US\$1.6 billion. After this merge, the number of YPF shares increased from 353 million to 393,312,793. Repsol owned 99.04% of YPF shares.

(1) The cash flow that appears in 2012 is the market value (October 31, 2012) of the YPF stock that belonged to Repsol:

- 6.43% just after the expropriation, plus
- 5.38% of the YPF stock recovered by Repsol in May 2012 from the Petersen Group because they could not pay Repsol the loans agreed upon in 2008 (\$1.015 billion) and in 2011 (\$626 million).

Exhibit 1

The Biggest Companies in Argentina

RK 2010	Company	Industry	US\$ million in 2010			Increase in sales 10/09 (%)
			Sales	Net income	EBITDA	
1	TECHINT	Steel	19,092	N.A.	N.A.	7
2	YPF	Oil/Gas	11,013	1,444	3,678	23
3	TENARIS	Steel	7,712	1,127	2,080	-5
4	TERNIUM	Steel	7,382	780	1,437	49
5	CARGILL	Agribusiness	4,111	N.A.	N.A.	3
6	CENCOSUD	Trade	3,720	N.A.	N.A.	15
7	TELECOM	Telecommunications	3,661	454	1,136	15
8	CARREFOUR	Trade	3,635	N.A.	N.A.	11
9	PETROBRAS ENERGY	Oil/Gas	3,602	152	676	15
10	BUNGE	Agribusiness	3,441	N.A.	N.A.	5

Source: http://rankings.americaeconomia.com/2011/500/pais_argentina.php.

Exhibit 2

Argentina: Some Indicators

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
Real GDP growth	-4.4%	-10.9%	8.8%	9.0%	9.2%	8.5%	8.7%	6.8%	0.9%	9.2%	8.9%	4.2%

	2008	2009	2010	2011	2012*
Public debt (general government gross debt as a % of GDP)	58.5%	58.7%	49.1%	44.2%	43.3%
Public deficit (general government net lending/borrowing as a % of GDP)	-0.8%	-3.6%	-1.6%	-3.3%	-3.1%
Inflation Rate (from GDP price deflator)	19.4%	9.6%	20.7%	19.6%	

*Estimate.

Population 2012: 40,868,853

Area total: 2,766,890 km²

Coastline: 4,989 km

Main cities and population in 2012: Greater Buenos Aires: 13,015,875; Cordoba: 1,529,092; Rosario: 1,230,275.

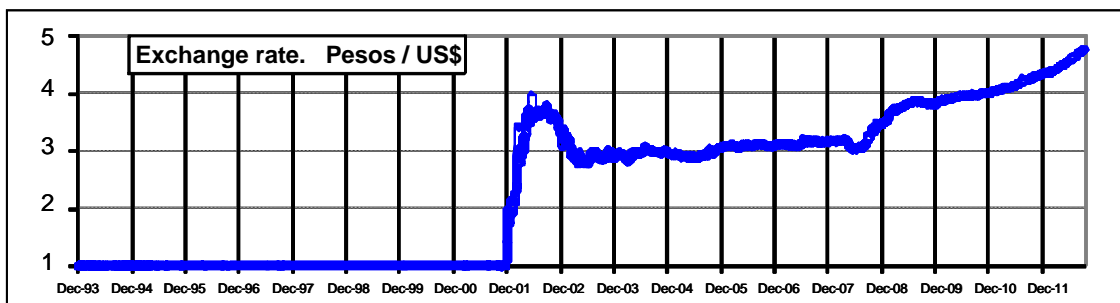


Exhibit 3

Some Reactions to the Expropriation

- Repsol. It *“considers the announced measure to be manifestly unlawful and gravely discriminatory.”*
- Spanish Foreign Minister Garcia Margallo. The action had *“broken the climate of friendship.”*
- The U.S. State Department. *“These kinds of actions against foreign investors can ultimately have an adverse effect on the Argentine economy and could further dampen the investment climate in Argentina.”*
- Mexican President Calderón. The expropriation was not *“very responsible nor very rational.”* *“It is very regrettable, because this will not be good for anyone, especially the Repsol investors, where Pemex owns close to 10% of its shares.”*
- Chilean government. The expropriation *“clearly violates agreements and treaties.”*
- U.K. foreign secretary: *“This goes against all the commitments Argentina has made in the G20 to promote transparency and reduce protectionism.”*
- An Argentinean economist: *“This is Malvinas two.”*
- Oil analyst at Oppenheimer. The financial risk associated with Argentina had increased considerably.
- An advisor for energy companies. *“Vaca Muerta was truly the main reason behind the nationalization of YPF.”*
- Cristina Fernandez de Kirchner. This expropriation was aimed at *“recovering sovereignty”* over natural resources.
- Economy Minister A. Kicillof. Environmental liabilities would be deducted from the Repsol compensation.

Exhibit 4

Balance Sheets and P&Ls of YPF (Million US\$). 1999 – 2011

(million US\$)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cash	60	26	39	74	124	166	82	38	62	113	175	144	209
Investments	2,852	2,784	1,441	438	523	302	304	574	462	485	560	642	278
Trade receivables	933	1,101	1,026	592	708	714	650	746	1,037	790	748	843	812
Other receivables	717	950	1,415	1,867	2,684	1,792	2,102	1,919	1,641	813	791	1,177	948
Inventories and other assets	301	349	563	195	351	514	255	924	819	1,001	806	976	1,413
Fixed assets	7,107	7,383	8,699	5,616	6,972	6,915	7,256	7,342	8,074	8,119	7,335	7,947	9,212
Total assets	11,970	12,593	13,183	8,782	11,361	10,403	10,648	11,543	12,096	11,321	10,415	11,729	12,872
Accounts payable	558	1,067	1,217	533	801	969	1,602	1,938	2,184	2,965	2,687	3,337	4,367
Financial debt	3,058	1,870	2,248	1,265	1,072	649	480	465	316	1,298	1,787	1,961	2,966
Other payables	817	1,071	921	754	1,576	1,009	707	597	587	453	700	927	508
Accruals/Contingencies	162	292	315	202	227	346	409	604	736	708	603	710	678
Shareholders' equity	7,375	8,293	8,482	6,028	7,684	7,430	7,450	7,940	8,273	5,897	4,638	4,794	4,353
Total	11,970	12,593	13,183	8,782	11,361	10,403	10,648	11,543	12,096	11,321	10,415	11,729	12,872
(million US\$)	1999	2000	2001	2002	2003	2004	2006	2006	2007	2008	2009	2010	2011
Net sales	6,578	6,219	8,162	5,824	7,220	6,705	7,567	8,360	9,239	10,103	8,993	11,118	13,173
Gross profit	2,382	2,366	3,294	2,851	3,359	3,606	3,847	3,201	3,208	3,147	2,920	3,591	3,431
Selling & adm. expenses	-692	-651	-989	-160	-542	-628	-728	-806	-323	-376	-354	-1,119	-1,308
Other income/expenses	-571	489	-353	-276	-149	-404	-281	-217	-887	-948	-1,488	-579	-146
Net financial results	-264	-147	-427	-986	33	81	52	208	175	-26	466	378	-59
Income taxes	-378	-828	-706	-123	-1,123	-1,015	-1,127	-913	-876	-741	-631	-813	-686
Net income	477	1,229	819	1,306	1,578	1,640	1,764	1,472	1,297	1,054	913	1,458	1,232
Dividends paid	311	311	1,660	468	1,019	1,786	1,612	770	749	2,690	1,283	1,119	1,293
<i>Million shares</i>	<i>353</i>	<i>353</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>	<i>393.31</i>

Exhibit 5

Additional Information About YPF

YPF. Capital expenditures and investments

million US\$	2009	2010	2011
Exploration and production	1,132	1,580	2,120
Refining and marketing	308	460	740
Chemicals	41	179	255
Corporate and other	47	38	53
Total	1,528	2,256	3,169
<i>Annual increase</i>		48%	40%

Reserves and production YPF									
<i>Million equivalent oil barrels</i>									
Year	Reserves			Production			Revisions, discoveries, acquisition, sales		
	Liquids	Gas	Total	Liquids	Gas	Total	Liquids	Gas	Total
2011	585	427	1,012	99	80	179	153	48	201
2010	532	460	992	108	90	198	100	63	163
2009	538	475	1,013	111	94	205	69	16	85
2008	580	553	1,133	115	108	223	72	1	73
2007	623	660	1,283	120	112	232	63	54	117
2006	680	716	1,396	126	116	242	29	-2	27
2005	777	834	1,611	134	119	253	-153	-59	-212
2004	1,064	1,012	2,076	146	126	272	8	-11	-3
2003	1,202	1,149	2,351	157	115	272	-28	-334	-362
2002	1,387	1,598	2,985	160	97	257	-118	-118	-236
2001	1,665	1,813	3,478	182	100	282	185	116	301
2000	1,662	1,681	3,343	164	103	267	377	-74	303
1999	1,449	1,858	3,307	174	106	280	106	233	339

The first strong expropriation rumors took place on January 27 – 29, 2012, and a continued negative news flow translated into a significant decline with higher than average trading volumes.



Exhibit 6

85 Analyst Reports on YPF in the Period From April 2011 – April 2012 That Included "Target Price" or "Fair Value"

Analyst	Date	Target price (\$)	Recommendation	WACC	Ke	
Allaria Ledesma & Co	24-jan-12	46.50	Buy	17.1%		Pesos
Allaria Ledesma & Co	23-mar-12	37.40	Buy	17.0%		Pesos
Allaria Ledesma & Co	29-mar-12	46.87	Buy	17.0%		Pesos
Capital Markets Argentina	05-aug-11	48.21	Buy	7.5%		P
Capital Markets Argentina	16-mar-12	40.18	Hold	7.4%	12.3%	P
Capital Markets Argentina	23-aug-11	47.91	Buy	7.5%		P
Capital Markets Argentina	30-aug-11	54.45	Buy			P
Capital Markets Argentina	12-sep-11	45.00	Buy	7.5%	12.8%	P
Capital Markets Argentina	05-nov-11	45.96	Buy	7.4%		P
Capital Markets Argentina	19-mar-12	40.18	Hold	7.4%	12.3%	P
BBVA Bancomer	04-nov-11	43.37	Hold			P
BBVA Bancomer	22-dic-11	48.70	Outperform	15.2%		P
BBVA Bancomer	13-mar-12	58.00	Outperform			P
Credit Suisse	12-sep-11	50.00	Outperform	13.0%	16.4%	\$
Credit Suisse	3 & 8-nov-11	50.00	Outperform	14.0%	15.6%	\$
Credit Suisse	6 & 9-feb-12	47.00	Outperform	12.0%	15.6%	\$
Credit Suisse	2, 12 & 13-mar-12	47.00	Outperform	12.0%	15.6%	\$
Credit Suisse	23 & 29-mar-12	43.00	Outperform	12.0%	15.6%	\$
Credit Suisse	11-apr-12	30.00	Neutral	12.0%	19.9%	\$
Deutsche Bank	8, 11-my; 27, 31-jul; 26, 31-oct; 2, 3, 7- nov-11	51.00	Hold	11.0%	11.6%	\$
Deutsche Bank	6, 9, 29-feb; 1, 12, 14, 20, 21, 23, 29- mar-12	51.00	Buy	12.0%	14.3%	\$
Deutsche Bank	01-apr-12	51.00	Buy			\$
Deutsche Bank	10 & 12-apr-12	33.00	Hold	13.4%	16.3%	\$
Deutsche Bank	16-apr-12	33.00	Hold	17.0%		\$
ITAU BBA	14-ap, 6 & 10-may, 6, 25, 29-jul-11	55.00	Market Perform	9.8%		\$
ITAU BBA	07-aug-11	55.00	Outperform	9.6%		\$
ITAU BBA	25, 27-oct-11	52.00	Outperform	10.3%		\$
ITAU BBA	03-nov-11	50.00	Outperform	10.2%		\$
ITAU BBA	18-dic-11, 26-jan; 26-feb; 1, 11, 14, 21-mar; 1-apr-12	46.80	Outperform	11.6%		\$
Morgan Stanley	9, 10-may-11	57.00	Overweight/Buy			\$
Morgan Stanley	01-aug-11	57.00	Overweight			\$
Morgan Stanley	09-aug-11	55.00	Overweight			\$
Morgan Stanley	3, 8, 28-nov-11	55.00	Overweight			\$
Raymond James	28-oct-11	48.00	Outperform 2	12.1%	15.0%	\$
Raymond James	3, 8, 30-nov-11	48.00	Outperform 2			\$
Raymond James	21-dic-11	48.00	Outperform 2			\$
Raymond James	5, 9-feb; 12-mar-12	44.00	Outperform 2	12.1%	15.0%	\$
Raymond James	10-apr-12	27.00	Market Perform 3	13.2%	16.5%	\$
Santander	02-aug-11	51.00	Hold	10.8%		
Wright Investors Service	15-jul-11	47.30	Aaa5			
Credit Suisse	17-apr-12	11.00	Underperform	15.7%	19.9%	\$
Raymond James	18-apr-12	SUSP	Suspended			
Deutsche Bank	03-may-12	25.00	Hold	16.7%	21.1%	\$

Exhibit 7

Analyst Expectations for YPF

Analyst	Date	Target price (\$)	WACC	Expected EBITDA (\$ million)				Expected net income (\$ million)			
				2012	2013	2014	2015	2012	2013	2014	2015
Allaria Ledesma & Co	24-jan-12	46.50		4407	5272	6414	7335	1846	2263	2887	3422
Allaria Ledesma & Co	23-mar-12	37.40		3913	4698	5671	6607	1491	1900	2412	2943
Capital Markets Argentina	05-aug-11	48.21	7.5%	4092				1673			
Capital Markets Argentina	16-mar-12	40.18	7.4%	3801	4109			1492	1595		
Credit Suisse	12-sep-11	50.00	13.0%	4827	6157	6967	7896	1724	2395	2774	3287
Credit Suisse	03-nov-11	50.00	14.0%	4827	6157	6967	7896	1724	2395	2774	3287
Credit Suisse	06-feb-12	47.00	12.0%	4267	5547			1420	1981		
Credit Suisse	23-mar-12	43.00	12.0%	3936	4946	5728		1243	1715	2072	
Credit Suisse	11-apr-12	30.00	12.0%	3772	4788	5748		1148	1627	2084	
<i>Credit Suisse</i>	<i>17-apr-12</i>	<i>11.00</i>	<i>15.7%</i>	<i>3772</i>	<i>4788</i>	<i>5748</i>		<i>1148</i>	<i>1627</i>	<i>2084</i>	
Deutsche Bank	08-may-11	51.00	11.0%	4886	5118			2135	2364		
Deutsche Bank	31-jul-11	51.00	11.0%	4742				2159			
Deutsche Bank	07-nov-11	51.00		4726				2127			
Deutsche Bank	29-feb-12	51.00	12.0%	4550				1768			
Deutsche Bank	10-apr-12	33.00	13.4%	4292	4673			1640	1928		
<i>Deutsche Bank</i>	<i>03-may-12</i>	<i>25.00</i>	<i>16.7%</i>	<i>4292</i>	<i>4673</i>			<i>1640</i>	<i>1928</i>		
ITAU BBA	14-apr-11	55.00	9.8%	4413	4894	5441	6215	1660	1994	2429	3013
ITAU BBA	07-aug-11	55.00	9.6%	4913	5444	5722	5791	2016	2420	2682	2782
ITAU BBA	26-jan-12	46.80	11.6%	4458	5083	5344	5680	1406	1960	2091	2342
Morgan Stanley	09-may-11	57.00		4344	4631			1674	1685		
Morgan Stanley	09-aug-11	55.00		4378	4694			1579	1608		
Raymond James	28-oct-11	48.00	12.1%	4739	5242	5474	5729	1834	2121		
Raymond James	05-feb-12	44.00	12.1%	4364	4695	5079	5546	1556	1767		
Raymond James	10-apr-12	27.00	13.2%	4250	4581	5079	5546				

Exhibit 8

About Repsol

Repsol is an integrated Spanish oil and gas company with operations in 30 countries. The bulk of its assets are located in Spain. In 2012 it was the 15th largest petroleum company according to the Fortune Global 500 list, employing over 40,000 people worldwide.

Main magnitudes. Million €. January – September 2012

Capitalization	19,755	EBITDA	5,405
Capital employed	40,572	EBIT	3,543
Net debt	9,703	Net income	1,796
Preferred shares	3,211	CCS adj. net income	1,437
Equity	27,656	Investments	2,504

The Repsol YPF Group is engaged in all the activities relating to the oil and gas industry, including exploration, development and production of crude oil and natural gas, the transportation of oil products, liquid petroleum gas (LPG) and natural gas, refining, the production of a wide range of oil products and the retailing of oil products, oil derivatives, petrochemicals, LPG and natural gas, as well as the generation, transportation, distribution and retailing of electricity.

Its exploration activities are spread around the globe – from Brazil, the United States and Canada, in the Western Hemisphere, to Norway, Ireland and Russia, in Europe, and to West Africa.

The production sites are primarily located in the Americas and North Africa: deep-water production in the United States, and onshore production in North Africa (Libya) and Latin America (Trinidad and Tobago, Venezuela, Peru and Bolivia).

Repsol YPF, S.A.'s shares trade on the Spanish stock exchanges and the Buenos Aires stock exchange. Repsol YPF, S.A.'s American depository shares (ADSs) are traded in the OTCQX market (until March 2011 in the New York Stock Exchange).

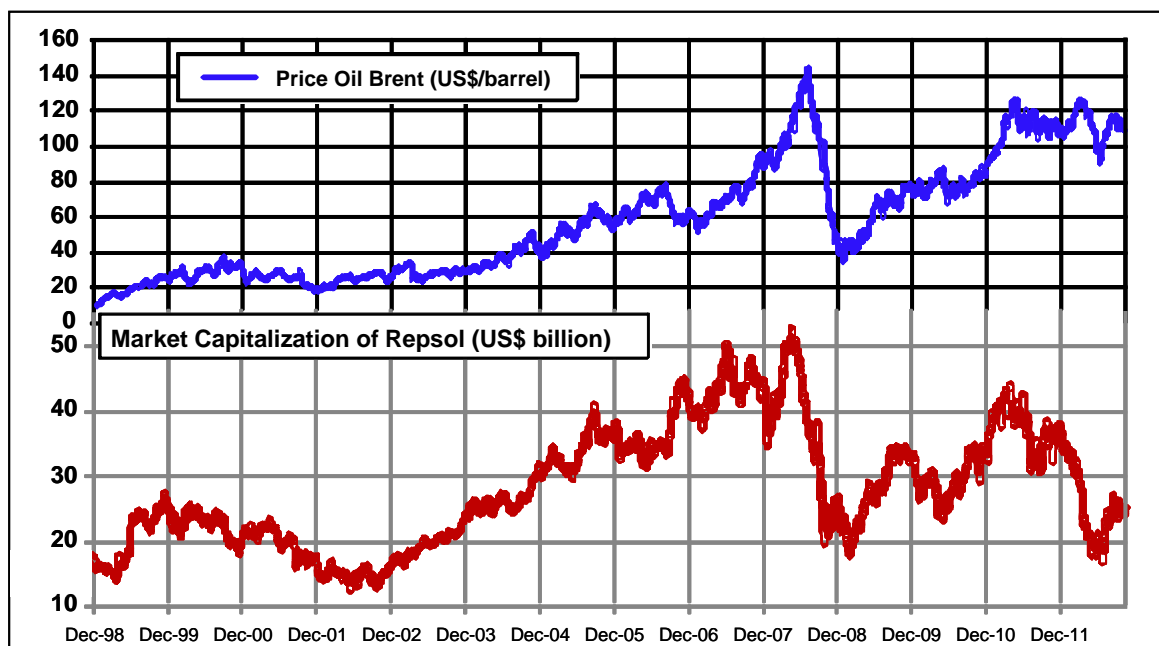


Exhibit 8 (continued)

Repsol has built a solid pipeline of contingent resources. Drilled resources in delineation phase are mostly located in Alaska, Brazil, Sierra Leone, the United States and Libya. Repsol has developed a portfolio of prospective resources covering multiple locations such as the Gulf of Mexico, Brazil, Angola and Namibia, the Norwegian offshore, Louisiana, Beaufort Sea and East Canada, Colombia, Peru and Guyana, among others.

The Platts Top 250 Global Energy Company Rankings™ recognize outstanding accomplishments of the top performing energy companies around the world. Each company listed has distinguished itself through its remarkable performance and the outstanding efforts and dedication of its team in the previous year:

The Platts Top Integrated Oil and Gas 2011

1	Exxon Mobil
2	Chevron
3	Gazprom OAO
4	PetroChina Co
5	Total SA
6	Royal Dutch Shell
7	ConocoPhillips

8	China Petroleum & Chemical
9	OJSC Rosneft Oil Company
10	Lukoil Oil Company
11	Statoil ASA
12	Petrobras-Petroleo Brasilier
13	Repsol YPF
14	Eni SpA

15	TNK-BP Holdings
16	Ecopetrol
17	Occidental Petroleum
18	PTT Plc
19	Gazprom Neft JSC
20	Marathon Oil Corp

Exhibit 9

Vaca Muerta: Unconventional Resources

The Vaca Muerta oil and gas field is located mainly in the Neuquén Province in Argentina. And it was here where energy giant Repsol-YPF struck black gold. The presence of shale gas and shale oil is proven. It began production in 2011 and produces oil. In February 2012, YPF raised its estimate of oil and gas resources to more than 22 billion barrels.

According to a newspaper, “*Vaca Muerta makes Argentina third in the world in terms of shale gas reserves, after the United States and China according to the American Energy Information Administration.*”

According to Repsol, some \$25 billion per year would be needed to exploit Vaca Muerta's shale oil and gas potential. This could double the Argentine production in 10 years. But this would require some 3,000 shale oil and gas wells in an area where there are only 28 at the moment.

Mr. Galuccio, YPF CEO after the expropriation, said to journalists that YPF hopes to invest \$37 billion through the end of 2017. Of this, 73% will be devoted to production, 22% to improving refinery capacity and 4% to new exploration.

Non-Conventional Resources. Shale Gas and Oil

Any basin having a production of conventional hydrocarbons in the past is a candidate to be explored in search of shale gas and oil.

YPF started applying these new techniques in Argentina. YPF revised all the existing opportunities in the country and selected Vaca Muerta to adapt what was going on in the United States to Argentina. It proved to be successful. In the second half of 2010, YPF drilled two wells and discovered the capacity of Vaca Muerta to produce commercial grade gas and oil.

By the end of January 2012, YPF SA had drilled 28 new wells. The Vaca Muerta formation spreads over an area of about 30,000 km² (7.4 million acres), from which YPF holds an interest in 12,000 km² (three million acres – 40% of the total). Initial results would indicate that 77% of its area would be in the oil area and the rest would be distributed between wet gas and dry gas.

With Vaca Muerta, Argentina has the opportunity of creating a new industry of shale and what this involves; manufacturing of drilling and workover equipment in the country, creation of companies that engage in the construction of wells, valves, tubes, equipment, etc.

Unconventional oil is petroleum produced or extracted using techniques other than the conventional (oil well) method. Oil industries and governments across the globe are investing in unconventional oil sources due to the increasing scarcity of conventional oil reserves. Although the depletion of such reserves is evident, unconventional oil production is a less efficient process and has greater environmental impacts than that of conventional oil production.

Exhibit 9 (continued)

Argentina is South America's largest natural gas producer and a significant producer of oil. However, the heavily regulated energy sector includes policies that limit the industry's attractiveness to private investors while shielding consumers from rising prices. Consequently, demand for energy in Argentina's rapidly growing economy continues to rise while production of both oil and gas are in decline – leading Argentina to depend increasingly upon energy imports.

August 23, 2012. DowJones. Argentina ranked third in the world, behind China and the United States, in potentially recoverable shale-gas reserves, according to a study last year by the U.S. Energy Information Administration. Argentina also has large quantities of shale oil.

Chevron also plans to drill three exploratory wells in the Vaca Muerta formation this year targeting unconventional oil and gas, Mr. Moshiri, Chevron's president of Latin America and Africa, said.

Argentina has enough unconventional gas locked away in shale formations to become a gas exporter again if it can develop those resources, he said.

The country's untapped energy riches have attracted the attention of France's Total SA (TOT, FP.FR) and U.S.-based Apache Corp. (APA) and Exxon Mobil Corp. (XOM).

“Last year, we spent almost 20% of our exploration money, about \$2.5 billion, exploring for unconventional,” Mr. Moshiri said. “Ten years ago I would never have thought of that.”