

# **Argentina's Oil and Gas Sector:**

### **Coordinated Federalism and The Rule of Law**

by Patricia I. Vásquez\*

### **Table of Contents**

Summary2
Recommendations for the Macri Administration 3
Introduction4
I. Chronology of Oil and Gas Developments: The Swings of the Pendulum
II. Governance of Oil and Gas: A Complex Institutional Arrangement
III. The Rule of Law in the Oil and Gas Sector
IV. Federalism and Sub-National Oil and Gas Rents
V. Conclusion

<sup>\*</sup> Independent Consultant, and Research Associate with the Center of Conflict, Development and Peacebuilding of the Graduate Institute of Geneva

### **Summary**

Management of the oil and gas industries in Argentina has been historically characterized by political and economic swings of the pendulum: from periods of investor-friendly policies to phases of government controls and market and price restrictions. Policy-making in the oil and gas sectors can be highly politicized and vulnerable to the country's personalized governing style, centered on the figure of the president and the powerful governors from resource-producing provinces. In a highly politicized context where a powerful executive calls the shots, the role of the judiciary is typically perceived as marginal and rather ineffective.

Argentina's political and institutional framework provides multiple opportunities for undermining full respect for the rule of law in the oil and gas sectors. This may happen as a consequence of two dynamics: a hyper-presidentialist style of government and the nature of the country's system of federalism. On the first issue, Argentina's frequent economic and political crises in recent decades resulted in the delegation of extraordinary powers to the executive. In a context of ample executive authority, presidents often make unilateral policy decisions regarding the hydrocarbons sector, or do so together with a handful of federal and provincial actors. This *modus operandi* typically subverts the institutional or legal structures normally designed to establish checks and balances among branches of government.

Argentina has a highly decentralized federal system of government in which sub-national political dynamics play a fundamental role in defining policies at the national level. In the oil and gas sector, every important national decision or piece of legislation adopted in recent decades has been negotiated with the governors of producing provinces. These negotiations typically become a bargaining platform from which governors obtain increased federal funds for their provinces in exchange for the votes of provincial legislators in the national Congress. Hyper-presidentialism and the nature of Argentina's federalism create a context in which oil and gas policy decisions result from political bargaining rather than from institutional consensus or open congressional deliberation. This serves to weaken the rule of law, even though the decisions *per se* are made within constitutionally-defined limits.

The government of President Mauricio Macri, who took office on December 10, 2015, has set out to correct the economic and political imbalances inherited from the previous government. This provides a unique opportunity for Argentina to revamp its oil and gas industry. Argentina has the fourth largest shale oil and gas reserves in the world. With the right policies in place, the new government should have no trouble in attracting new investment to restore Argentina's lost energy self-sufficiency and resolve ongoing shortages in the short run, and, in the long run, to restore Argentina's role as a regional energy exporter. Private investment will be essential to developing Argentina's non-conventional reserves. The right incentives need to be in place to attract them, among them a credible justice system and reliable, long-term rules of the game. The current environment of low international oil prices gives the Macri administration the time to design credible, sustainable policies while addressing governance inefficiencies in the hydrocarbons sector.

The following recommendations offer a path toward achieving those goals.

### **Recommendations for the Macri Administration**

- 1. Design a clear, long-term vision for the development of the oil and gas sectors, with an agreed upon road map and implementation plan. The vision should:
  - Be supported by ample consensus among all major stakeholders;
  - Define the role of the private sector, YPF, federal, and provincial governments in the development of shale reserves;
  - Include mechanisms to ensure accountability, transparency, and respect for the rule of law, such as the Extractive Industry Transparency Initiative (EITI) global standards for open and accountable extractive industry management;
  - Assess the pros and cons of establishing a Sovereign Wealth Fund to manage future revenue surpluses from the development of shale reserves;
  - Design an outreach campaign concerning fracking aimed at building consensus and addressing concerns.
- 2. Reinforce mechanisms to improve public participation and social and environmental safeguards in the hydrocarbons sector through:
  - A review of national and provincial legislation for the promotion of public participation in the oil and gas sectors (including an assessment of the extent and effectiveness of its implementation);
  - The design of procedures or laws for including social and environmental safeguards in shale oil and gas developments;
  - The definition of mechanisms for sustained public engagement and participation in decision making in the hydrocarbons sector, especially in shale producing regions, in order to enhance environmental and social sustainability and transparency;
- 3. Create an expert commission to evaluate the performance of energy-related government agencies overseeing private utilities and energy service providers (such as *Enargas* [*Ente National del Gas*]). The commission will provide expert advice on mechanisms for improving the role and effectiveness of these agencies.
- 4. Work closely with academic institutions, expert organizations (such as the *Instituto Argentino del Petróleo y Gas*, and major stakeholders in building consensus over issues of provincial versus federal "domain" (dominio) over natural resources as well as state versus private devel opment of oil and gas. The goal is to establish a solid and sustainable governance structure for the hydrocarbons sector.

#### Introduction

The development of the hydrocarbons industry in Argentina mirrors the country's political and economic volatility throughout its history. The oil and gas industries are not immune from Argentina's traditional swings of the political-economic pendulum: periods of investor-friendly policies followed by phases of government controls and market and price restrictions. Policy making in the oil sector can be highly politicized: it is vulnerable to the country's personalized governing style centered on the figure of the president and the powerful governors from resource-producing provinces. In this context, policy decisions in the sector are difficult to predict, have relatively short-term horizons, and are often made through parallel channels that do not always conform to the rule of law.

Argentina is a highly decentralized federation. Sub-national governments—the provinces—are responsible for executing national social welfare programs in their territory. However, provinces collect few revenues locally and receive most of the funds they need from the central government. Even hydrocarbons producing provinces, which have an additional source of revenue from royalties for oil and gas developments, often depend on federal funds to meet their needs.¹ Argentina's system of federalism encourages this type of provincial dependency on the center, creating a kind of "coordinated federalism" in which central government funds are disbursed in exchange for political support.

The 2003-15 governments of Néstor Kirchner and his wife, Cristina Fernández de Kirchner, were the most recent manifestations of Argentina's coordinated federalism. Decisions pertaining to the hydrocarbons sector were made by a small number of people and included a great deal of bargaining between the president and provincial governors. Like previous presidents, both Kirchner and Fernández used the extraordinary powers granted to them by Congress to make political deals outside of the formal institutions that typically are responsible for administering the hydrocarbons sector. Management of the sector in this way weakens the rule of law by limiting transparency in the decision making process, reducing government accountability, and undermining formal institutions.

This report analyzes the extent to which the rule of law is observed in Argentina with respect to decisions in the oil and gas industries. In particular, the research focuses on how Argentina's highly presidentialist form of government and the workings of its federal system may directly impact rule of law considerations. Section I provides a chronology of oil and gas industry development in Argentina, highlighting the pendulum swings in the political economy of the sector. Section II explores governance issues in relation to hydrocarbons. Section III analyzes the rule of law in the oil and gas sectors. And Section IV gives an overview of the management of the oil and gas industries through coordinated federalism.

<sup>&</sup>lt;sup>1</sup> See Law 27007/2014, Hidrocarburos.

#### I. Chronology of Oil and Gas Developments: The Swings of the Pendulum

Throughout the 20th century the private sector participated in different ways in the industry (both upstream and downstream), but always under threat of a sudden change of the rules of the game.

(Gadano, 1998)<sup>2</sup>

The development of Argentina's oil and gas industries has been historically guided by pendulum swings, from state controls to the opening up of the sector to private investment. Oil and gas decisions typically alternate from one end of the spectrum to the other in a matter of years. It is not unusual for producing countries around the world to adapt their hydrocarbons policies to changing economic or political circumstances, due mainly to the strategic importance of the sector and the high level of investment needed prior to production. In Argentina, however, the intensity, frequency, and relative unpredictability of the policy changes have been very pronounced in the decades following the 1907 discovery of oil.

#### From the 1930s to the 1980s

Until the mid-1930s, private participation in the oil industry was significant, representing around half of production. The other half was in the hands of state-owned *Yacimientos Petroliferos Fiscales* (YPF), which was founded in 1922 (Gadano, 1998). But towards the second half of the 1930s, nationalistic forces spread across the

**F**actors contributing to frequent policy changes include: the nature of the political pact between the central government and the provinces (with the latter playing an outsized role); a long tradition of populism in national politics; and the role of economic pragmatism, especially when crises are looming.

hydrocarbons sector, favoring a more prominent role for YPF and the adoption of barriers to the entry of private investors. As a result, by the 1940s Argentina passed legislation that gave YPF the leading role in the exploration, production and commercialization of oil and oil products, making it more difficult for private operators to compete with the increasingly powerful state- owned company. Some private oil and gas companies sold their assets to the central government; others lost exploration and production rights in producing provinces to YPF, which negotiated favorable terms with local governors in exchange for monetary benefits. In some cases, private assets were expropriated (Gadano, 2014, Chapter 9).

By the end of the 1940s, YPF had monopolistic control of oil production. A decade later, in the 1950s, a financially strained YPF—weakened by union demands and by difficulties in accessing enough credit to carry out exploration and production activities—led the government to ease up on its nationalization policies and again open the sector to private investment. (Gadano, 2014).<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Translation by the author. Original text in Spanish: A lo largo del siglo [XX] el sector privado participó de diversas formas en la industria (tanto en el upstream como en el downstream), pero siempre bajo la amenaza de un cambio abrupto en las reglas del juego (Gadano, 1998).

<sup>&</sup>lt;sup>3</sup> See: Gadano, (2014) for a chronology of the role of the state in Argentina's oil industry between 1907 and 1955.

**U**sually the decision to attract private investment is in reaction to a macroeconomic crisis or to major problems in the industry that call for immediate and urgent attention. (Gadano, 2010, pp. 369-403)

At the time, Argentina met close to 50 percent of its energy needs through imports of crude oil products and coal, straining its trade balance. A new wave of private investment helped to reduce Argentina's reliance on imports and the country became self-sufficient in oil production by the beginning of the 1960s. Soon thereafter, however, a Radical Party government once

again introduced state controls of the oil industry and cancelled private contracts. Oil production stagnated and imports rose again, prompting the military government that took over in 1966 to allow some private participation in the oil industry through concessions and contracts with YPF. The decline in oil production and the increase in imports continued throughout the 1970s and '80s, difficult decades for Argentina in political and economic terms, with intermittent military governments and frequent economic crises.

The pendulum swings that characterized the hydrocarbons industry from the 1930s to the 1980s coincided with what some scholars called the *stop-and-go-cycles* of economic development, in reference to Argentina's political and economic volatility and its inability to sustain long-term economic growth and development since the "golden years" prior to the 1930s (Diamand, 1985) (Braun & Joy, 1968) (Diamand, 1972, pp. 25-47). The factors contributing to frequent policy changes include: the nature of the political pact between the central government and the provinces (with the latter playing an outsized role); a long tradition of populism in national politics; and the role of economic pragmatism, especially when crises are looming.

#### The 1990s: The Menem Years

In the 1990s, President Carlos Menem brought the pendulum to an extreme never experienced before in Argentina, by adopting extensive market-oriented reforms that included the privatization of some of the country's flagship state-owned companies, particularly YPF. President Menem introduced the unrestricted commercialization of oil and oil products by decree, eliminating all constraints on foreign trade and allowing companies to freely manage the returns on their oil or gas investments. The deregulation and privatization of the entire hydrocarbons value chain was part of a larger economic and institutional reform process, and it took place in a context of an extremely weak economy, with 200 percent monthly inflation, declining rates of growth, and high unemployment.

As part of the deregulation of the oil industry, YPF was initially restructured between 1991 and 1993 and eventually privatized.<sup>4</sup> During the initial restructuring phase, YPF relinquished some upstream areas that were put out to bid; and for its most productive blocks the company entered into joint ventures with private operators. The joint venture contracts were later questioned for their lack of both transparency and clear transfer mechanisms (Gerchunoff, 1992). YPF's downstream assets were also privatized, including refineries, port terminals, airplanes, and transportation equipment. Initially, up to 80 percent of YPF was privatized and the state held 20 percent of the company stock. Later on, the state sold its share to Spanish oil company Repsol, but kept veto power over key company decisions. In the gas sector, another state-owned company, *Gas del Estado*, was also privatized and divided up into two transportation and eight gas distribution companies.

<sup>&</sup>lt;sup>4</sup> In 1990, Decree 2778/90 established the privatization of YPF, which was ratified in 1992 by Law (Law 24,145/92).

Following Menem's reforms, oil and natural gas production and reserves saw a remarkable recovery.<sup>5</sup> Regional export infrastructure networks were upgraded to allow for increased trade in hydrocarbons, and Argentina became an important exporter of natural gas, mainly to neighboring Chile, through seven newly-built gas pipelines. Argentina

**T**he rates of production and the discovery of new reserves peaked during the Menem years.

also exported lower volumes of natural gas to Brazil, Uruguay, and Bolivia. The rates of production and the discovery of new reserves peaked during the Menem years.

#### The Kirchner-Fernández Years

In the 2000s, the market friendly reforms introduced by Menem in the 1990s were history, and a new era of strong government controls began. In 2001, Argentina went through one of the most turbulent economic crises in its history. The fixed exchange rate convertibility system that had anchored the peso to the U.S. dollar since 1991 ended abruptly, the Argentine peso lost some 70 percent of its value, and a weakened government had to adopt deep austerity measures. The income of average citizens shrunk dramatically overnight, poverty and unemployment skyrocketed, and social unrest spread throughout the country. President Fernando de la Rúa, who had succeeded Menem, resigned amidst riots, and an emergency government took office. For the energy sector, the crisis resulted in the undoing of the liberal policies of the 1990s and the adoption of emergency measures: foreign exchange controls and new temporary export taxes were introduced; public utility tariffs were frozen; and dollar contracts with utility companies were converted to devalued pesos.

The two governments that followed—Néstor Kirchner (2003-08) and his wife, Cristina Fernández (2008-15)—deepened the restrictive policies that had been adopted temporarily in response to the economic collapse. But they did so under a very different economic scenario and in search of specific political goals. After recovering from the 2001 economic crisis, Argentina saw nine years of impressive economic growth, sustained mainly by favorable terms of trade and high international demand for its exports, particularly in the agricultural sector: annual gross domestic product (GDP) grew by an average rate of 8.6 percent between 2003 and 2007, and reached 9.5 percent in 2010 (CEPAL, 2000-2015).

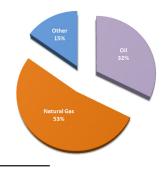
**C**onsumption subsidies, initially introduced in 2001 to assist those who fell into poverty during the 2001 economic crisis, were greatly expanded and became a distinguishing trait of the populist Kirchner and Fernández administrations.

Economic growth contributed to new government spending and to the expansion of social transfers. The energy sector was the largest recipient of subsidies, with 56 percent of the total, followed by public transportation (30 percent) and other public services in general (14 percent) (Hornbeck, 2013). Electricity generation in particular was highly

<sup>&</sup>lt;sup>5</sup> Oil production went from 521,000 barrels per day (b/d) in 1990 to 917,000 b/d in 1998, and reserves increased from 1.6 billion barrels in 1992 to 3.1 billion barrels in 2001 (EIA, 2014). Natural gas production increased from 812 billion cubic feet (Bcf) in 1990 to 1.85 Bcf in 2004, and reserves from 18 trillion cubic feet (Tcf) in 1995 to 27 Tcf in 2003 (EIA, 2014).

subsidized. The consumption subsidies, initially introduced to assist those who fell into poverty during the 2001 economic crisis, were greatly expanded and became a distinguishing trait of the populist Kirchner and Fernández administrations.

Figure 1: Energy Matrix



Source: Compiled by the author with data from Instituto Argentino del Petróleo y Gas (IAPG)

Despite the economic recovery, domestic natural gas prices remained controlled during the Kirchner and Fernández governments, negatively impacting production, transmission, and distribution companies in the sector (Mares, November, 2013). In response to domestic price controls, natural gas producers diverted supplies to the export market, but in 2011, the government tightened export taxes and imposed new quantitative export limits to keep the domestic market supplied. Companies were also forced to keep in Argentina the foreign currencies generated from exports. Faced with an unprofitable domestic market due to price controls and with restrictions for repatriating their earnings, companies cut investments in exploration and production (E&P). As a result, output declined.

Natural gas is the main component of Argentina's energy matrix (see Figure 1). Most electricity (61 percent) is generated from natural gas-fueled thermal power plants and more than half (52 percent) of total energy consumed comes from natural gas. On the demand side, subsidized natural gas prices and an expanding economy led to increased natural gas consumption. This generated a widening gap between falling production and increasing demand, resulting in the need to import natural gas to keep the domestic market supplied (See Figure 2). By 2013, Argentina imported 396 billion cubic feet (Bcf) of natural gas, roughly a 1,300 percent increase from 2004 volumes—for which it paid \$11.4 billion (YPF, September 29, 2015).

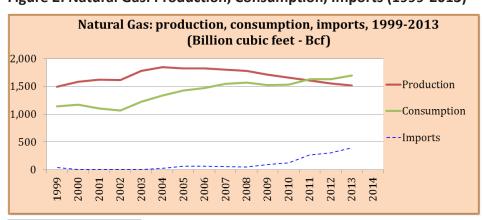
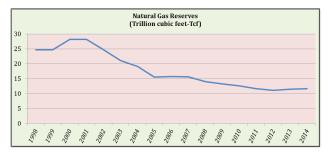


Figure 2: Natural Gas: Production, Consumption, Imports (1999-2013)

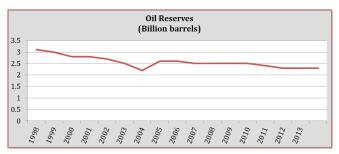
Source: Compiled by the Author with data from the U.S. Energy Information Administration (EIA, 2014)

<sup>&</sup>lt;sup>6</sup> See Executive Order 1722/2011.

Reduced investments and aging basins led to a drastic fall of oil and natural gas reserves, as shown in Figures 3 and 4. Natural gas, in particular, shows a spectacular decrease after the peak years of 2000-01, when Argentina was a net exporter to other Latin American countries. Additional explanations for the drop in natural gas reserves other than a decline in investment include: interventionist policies that affected long-term supplies (Ricardo Ponzoa, Dynerb, Arangob, & Larsenc, 2011); contractual disruptions in the natural gas market (Navajas, 2008); and the effects of artificially low prices in already maturing areas (Barril & Navajas, 2014).



Source: Compiled by Author with data from the Instituto Argentino del Petróleo Gas (IAPG) and BP Statistical Review of World Energy, June 2015.



Source: Compiled by Author with data from the BP Statistical Review of World Energy, June 2015.

In 2012, Argentina also imported small amounts of oil to produce liquid fuel and complement falling production. Oil output was at 629,000 barrels per day (b/d) in 2014, down from 910,000 b/d in 2001 (BP, 2015). Natural gas and oil were imported at international prices and sold in the domestic market at discounted rates.

#### The Final Years of the Kirchner-Fernández Era: 2012-2015

By 2012, the economic growth that followed the 2001 economic collapse had come to a halt. Nevertheless, the government emergency social transfers that had been adopted during the 2001 economic crisis had by now become permanent.<sup>7</sup> The high cost of those transfers during an economic slowdown started to erode Argentina's fiscal balance and from 2009 onward, the budget was in deficit. Energy subsidies went up exponentially, from U\$200 million in 2003 to \$17.6 billion in 2014, equivalent to 3.2 percent of GDP in 2014 (Navajas, April 30, 2015). Other variables contributing to the fiscal deficit included price controls, increasing public employment, and periodic wage adjustments to make up for rising inflation.

In view of the deteriorating fiscal and energy situation, the government of Cristina Fernández was forced to loosen some government restrictions to make the hydrocarbons sector attractive to private investors: export controls were relaxed and very generous wellhead oil and gas price

According to some estimates, there were a total of 60 social programs in 2014, up from 58 in 2013. See: Hilding Olhsson, M (2014). Las fallas de las políticas asistenciales para reducir la pobreza: Un análisis de los planes sociales en Argentina y en la Provincia de Buenos Aires 2013-2014.

<sup>&</sup>lt;sup>7</sup> Official statistics are hard to obtain, but according to non-official studies, almost 29 percent of all households and 64 percent of those living in extreme poverty received some kind of government transfer in 2014. See: *EDSA-Bicentenario* (2010-2016), Observatorio de la Deuda Social Argentina, UCA.

incentives were adopted, in what officially became the dismantling of years of controlled prices that had kept investors at bay (Parks, 2014).8 The pendulum moved back again towards investor friendly policies, although this time, the swing was not as dramatic as during the Menem years. President Fernández was determined to keep full control of the oil and gas sectors while at the same time making them attractive to investors. With that goal in mind, in 2012 Fernández nationalized YPF, a company that since the years of privatization under Menem had been majority-owned by Spain's Repsol. Subsequently, the Argentine government promoted public-private partnerships with a re-nationalized YPF. (See page 12 and Box 2, below.) The U.S. Energy Information Administration (EIA) had published a report in 2011 (subsequently updated in 2013) showing that Argentina held some of the world's largest shale gas and shale oil reserves (Energy Information Administration (EIA), April, 2011). Restoring energy self-sufficiency became a key government goal and YPF was given the responsibility for leading the way.9

Once again, Argentina reversed the swing of the pendulum. As in the past, the change in policy was prompted by a crisis, initially focused in the energy sector but which rapidly had ramifications throughout the economy. In parallel, the discovery of huge shale oil and gas reserves brought hope to a rather complex energy and economic scenario. Newly discovered shale oil and gas reserves quickly attracted private investors to a rather disorganized and unpredictable hydrocarbons sector.

#### Shale Oil and Gas to the Rescue: "God is Argentine"

Argentines have long joked that "God is Argentine," a saying that has gained new currency with the discovery of such huge reserves at a time of adverse economic projections overall and a severe energy crisis. Argentina has world-class shale oil and gas potential and could possibly be the country with the most promising shale prospects outside of the United States. ((EIA), June, 2013, pp. V-1). The hope of the outgoing Fernández administration and the new government of President Mauricio Macri is that the new shale reserves will resolve Argentina's energy scarcity and perhaps turn the country into a major producer of oil and gas.

Argentina has world-class shale oil and gas potential and could possibly be the country with the most promising shale prospects outside of the United States ((EIA), June, 2013, pp. V-1).

Argentina ranks third among countries holding non-conventional natural gas reserves and fourth among those that have stocks of shale oil, according to the EIA ((EIA), June, 2013).<sup>10</sup> But Argentina is still in the early stages of exploration and more research is necessary to gather precise data regarding the actual volume of the reserves and the economic feasibility of developing them. Experts believe it could take between five to ten years of analyses of the shale formations to determine

their real potential (Sbroivacca, August, 2013).

<sup>\*</sup>See Decree 929/13: Investment Promotion and Decree 927/13: Bienes de capital comprendidos en las posiciones arancelarias.

<sup>&</sup>lt;sup>9</sup> See Law 26741/12: Law of Hydrocarbons Sovereignty.

<sup>&</sup>lt;sup>10</sup> Technically recoverable resources are those that present oil and natural gas volumes that could be produced with existing technology, regardless of prices and costs. Economically recoverable resources are those that can be produced profitably under current market conditions, which depends on three factors: costs of drilling and completing wells; the amount of oil and natural gas produced from an average well over its lifetime; and the price received for the oil and gas production (Energy Information Administration (EIA), September, 2015).

There are various challenges for turning Argentina's non-conventional industry into a profitable business. These include: high drilling costs per well; a steep drop in the international price of oil that makes development of non-conventional reserves less profitable; and the need to attract large investments—in the order of U\$19 billion per year—to develop the full reserve potential (Instituto Argentino de Petroleo y Gas (IAPG), September 2014). The bulk of the discovered non-conventional reserves are located in the Neuquén Basin (see map in Annex 1). There, the Vaca Muerta and Los Molles formations are estimated to hold more than half of Argentina's technically recoverable shale reserves. Other basins with non-conventional reserves include San Jorge, Austral, and Paraná. Table 1 summarizes technically recoverable shale reserves per basin.

Table 1: Estimates Shale Gas and Oil Reserves

Basins	Neuquén		Austral	San Jorge	Paraná	Total
	Vaca Muerta	Los Molles				
<b>Estimated Shale Gas Reserves</b>	308 Tcf	275Tcf	130Tcf	86Tcf	3.2Tcf	802.2Tcf
<b>Estimated Shale Oil Reserves</b>	16Bbl	3.7Bbl	6.6Bbl	0.5Bbl	0.01Bbl	26.81Tcf
Total Neuquén	Gas: 583Tcf -	Oil: 19.7Bbl				
Grand TOTAL All Basins	802.2 Tcf of shale gas and 26.81 Bbl of shale oil					

Source: Compiled by the Author with data from the EIA ((EIA), June, 2013). Tcf: trillion cubic feet; Bcf: billion cubic feet; Bbl: billion barrels.

The Vaca Muerta formation is huge and very promising. It is roughly the size of Belgium and is estimated to have geological characteristics similar to some of the world's most prolific shale formations—Eagle Ford, one of the top seven shale fields (known as "plays") in the United States (YPF, September 29, 2015). The Neuquén basin, home of the Vaca Muerta play, stretches across four provinces—Neuquén, La Pampa, Mendoza and Rio Negro—and is almost twice the size of Eagle Ford, which stretches from the Mexican border across southern Texas, in an area roughly 400 miles long and 50 miles wide. Vaca Muerta is currently producing approximately 50,000 b/d (Newbery, 2015).

Throughout the world, the development of non-conventional hydrocarbons has raised concerns about potential environmental impacts. In Argentina, the national and sub-national legal framework is limited in addressing environmental issues related to non-conventional operations, in spite of widespread environmental concerns about hydraulic fracturing, or fracking, the process used to produce non-conventional oil and gas. The federal government is normally responsible for setting environmental standards and provinces may issue specific norms to complement the national legislation. As in the United States, communities living close to non-conventional hydrocarbons areas and environmental groups are increasingly using local jurisdictional courts to limit or ban fracking. In Argentina, several municipalities passed resolutions banning fracking in their jurisdictions, but many of these municipal resolutions were revoked by higher courts that ruled that the constitutional regulatory authority over hydrocarbons rests with the provincial government (El Sol, 2013) (Mooney, Summer, 2015). In addition to environmental concerns, the development of non-conventional reserves faces challenges from labor unions and with indigenous populations (see Box 1).

# Box 1 Social Conflicts and Oil Developments in Argentina

It took the intervention of three cabinet ministers from the Macri administration and of the governor of the oil-producing province of Chubut, plus a government commitment to subsidize the drop in the international price of oil, to contain a brewing crisis with oil workers in February 2016. They feared losing their jobs. During negotiations between government officials and representatives from the oil industry and the unions, the government agreed to subsidize the price of exported oil by \$10/barrel for the first six months of 2016. This means that during that period, companies operating in Argentina will get \$35/barrel when the international price of oil is \$25/barrel. In exchange, oil companies promised not to lay off workers for six months. The intervention of the government helped to stop companies from cutting their workforce to make up for lower hydrocarbons activity due to the drop of the international price of oil. Lower oil prices make some oil developments less profitable, particularly more expensive non-conventional projects like Vaca Muerta.

**V**iolent conflicts with powerful Patagonian oil workers' unions demanding wage increases are probably the number one challenge for developing oil and gas in Argentina. Oil workers' unions are among the most powerful and combative in Argentina. Oil companies typically associate the elevated costs of operating in Argentina, relative to other countries, to high labor costs and risk premiums.

In 2012, angry union workers demanding better salaries and work security organized violent demonstrations and stopped production for 45 days in the country's most productive oil area, Cerro Dragon, located in the Patagonian province of Chubut (La Nacion, 2012). What prompted the government to intervene and agree to subsidize the price of oil in early 2016 was the likely possibility of layoffs that year and a repeat of the violent clashes of 2015. Following the February 2016 agreement, the Federation of Argentine Oil Workers' Union called off a planned strike that would have expanded across all hydrocarbons producing provinces.

The February 2016 agreement picked up from a previous social peace pact signed in 2015 between companies, unions, and the central and provincial governments that ended at the start of 2016. That earlier pact had promised to preserve salary levels and the jobs of 30,000 workers in the oil sector for six months, until the end of 2015. In exchange, periodic salary increase talks were frozen and a permanent negotiating platform was established.

Another source of conflict has been with indigenous populations over land devoted to oil or gas production. The Campo Maripe indigenous group claims ancestral property of territories that were destined for non-conventional oil developments In the Loma Campana non-conventional oil area, located in the province of Neuquén. The group took up oil installations several times since non-conventional works started in the area. There have been many negotiations with the provincial government and oil company YPF to find a solution to their differences. Campo Maripe accused YPF of failing to carry out proper consultation with them as required by the binding International Labor Organization (ILO) Convention 169 of which Argentina is a signatory.<sup>11</sup> They also accused YPF of oil spills in the Vaca Muerta region.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> See Convention concerning Indigenous and Tribal Peoples in Independent Countries (Entry into force: 05 Sep 1991). Adoption: Geneva, 76th ILC session (27 Jun 1989).

<sup>&</sup>lt;sup>12</sup> Author meetings with Campo Maripe representatives in Neuquén.

Shale oil and gas could not only solve Argentina's current energy crisis; they could also offer a solid platform for sustained economic growth for many generations to come. Rough initial estimates project the creation of between 20,000 - 22,000 jobs per year during the first twenty years of shale production (Accenture, 2014). How shale revenues are managed will be key to reaching that longer-term goal.

The 1994 Constitution grants the domain of natural resources within their territories to provincial governments, but it falls short of expanding on this concept.<sup>13</sup> Differences regarding provincial versus federal "domain" (dominio) over natural resources and state versus private development of oil and gas have always been issues of contention, contributing a layer of unpredictability to the hydrocarbons sector that negatively affects long-term investment.<sup>14</sup> Coming to terms with these two debates will be essential for the Macri administration in designing a national long-term vision for developing the oil and gas sectors. It will also be fundamental for ensuring stable and sustainable rules of the game, a central element for attracting much needed private investors. The next section will analyze the potential for the different stakeholders to engage in effective, long-term governance of the hydrocarbons sector.

#### II. Governance of Oil and Gas: A Complex Institutional Arrangement

While institutions set the stage when resource wealth arrives, political coalitions can eventually alter that very stage. (Roll, 2011).

#### Understanding the Political Context: The President in the Driver's Seat

For the last two decades Argentina's democratic governments operated under a system that the well-known Argentine political scientist Guillermo O'Donnell labeled "delegative democracy." (O'Donnell, 1994). The term refers to a tendency of the electorate to vote for representatives who become "rescuers" during times of crisis and to whom democratic powers are delegated, without appropriate checks and balances (O'Donnell, 1994). The term "delegative" refers to the delegation of all powers to one person—the president—who becomes the main custodian of national interests. According to this formulation, after elections that brought a president to power, the electorate becomes a passive spectator of events (O'Donnell, 1992).

In a situation of delegative democracy, the executive builds its increasingly personalized power by weakening institutions such as the legislature and the judiciary. Presidential elections are the only period when the population becomes interested and involved in the political process. Delegative democracies are characterized by a degree of vertical accountability by which citizens may punish or reward politicians through their vote. However, there is weak horizontal accountability, understood as the existence of state agencies that can sanction other state agents or agencies for unlawful actions (O'Donnell, 1998). Such a personalized system of governance with little horizontal accountability has two predictable effects: it creates a stimulus for the adoption of populist policies in order to win reelection; and, by weakening institutions of accountability such as the judiciary, it erodes the rule of law. Peronism, Argentina's main political movement that has dominated politics since the end of World

<sup>&</sup>lt;sup>13</sup> See Article 124 of the 1994 National Constitution. Two national laws incorporate this constitutional mandate: Hydrocarbons Law 17319, sanctioned on June 23, 1967; and Law 26,197, sanctioned on December 6, 2006, which amends the first one.

<sup>&</sup>lt;sup>14</sup> For a chronology of legal debates on this issue see: (2014) Pigretti, Eduardo Andrés. *Régimen Jurídico del Petróleo y del Gas Natural en la República Argentina*. Editorial Dunken. Buenos Aires.

War II, thrives alongside or within a system of delegative democracy (The Economist, 2015). Much of Argentina's institutional evolution, including that of agencies that govern the hydrocarbons sector, can be analyzed through the prism of delegative democracy and populist policies. The Kirchner-Fernández governments were a good example of this tendency.

**P**residents Kirchner and Fernández had special powers to make decisions that would normally have fallen to Congress, because they held onto special emergency powers that had been granted to the executive at the beginning of the 2001 economic crisis.

Presidents Kirchner and Fernández had special powers to make decisions that would normally have fallen to Congress, because they held onto special emergency powers that had been granted to the executive at the beginning of the 2001 economic crisis. These powers included the ability to freeze public utility tariffs; to regulate the exchange rate; to confiscate bank deposits; to expropriate property; to grant subsidies; to set import and export tariffs for hydrocarbons; and to renegotiate government contracts.

Without a clear vision and an agreed-upon road map to develop the energy sector, decisions regarding Argentina's oil and gas industries were unsystematic and personalized during the twelve years of the Kirchner and Fernández administrations. Important oil and gas policies were adopted through executive decree or resolution, and policy adjustments were *ad hoc* and typically aimed at resolving economic distortions. Such was the case with the increasingly severe energy shortages that prompted the government to adopt the *Programa de Racionalización de Exportaciones de Gas y del Uso de la Capacidad de Transporte* (Program for the Rationing of Gas Exports and the Use of Transport Capacity) in 2004, which introduced export caps for natural gas producers to ensure that the domestic market was supplied.<sup>15</sup> Another example of improvised policies adopted in an effort to correct economic distortions was a 2011 government resolution requiring companies to transfer to Argentina and convert into Argentine pesos all foreign currency obtained from exports.<sup>16</sup> The government hoped the new policy would help withstand the effects of Argentina's increasingly deteriorating financial scenario. Both in 2004 and in 2011, the government reversed its policy course unilaterally in response to a critical situation.

In hyper-presidentialist systems like that of Argentina, presidents have an incentive to undermine traditional institutions and create new ones that give them greater freedom to act (Rose-Ackerman, Desierto, & Volosin, 2011). Traditionally, in a context of energy deficit such as the one that has characterized Argentina for the past decade, it would have been the responsibility of the Energy Secretariat within the Planning Ministry to design a medium- to long-term plan to restore energy self-sufficiency. The Energy Secretariat has historically been the federal government agency responsible for the country's energy planning and policy design.<sup>17</sup> An organization within the Energy Secretariat, the *Ente Regulador del Gas* (Gas Regulation Agency, ENARGAS), is an autonomous agency responsible for supervising natural gas transportation and distribution.<sup>18</sup> During the twelve years of the Kirchner-Fernández administrations, both of these government agencies were relegated to a secondary role. Instead, a new government department was created in 2012—the *Comisión de Planificación* 

<sup>&</sup>lt;sup>15</sup> See Resolution 265/2004 on Natural Gas, from the Industry Secretariat.

<sup>&</sup>lt;sup>16</sup> See Executive Order 1722/2011.

<sup>&</sup>lt;sup>17</sup> A government decree transferred the Energy Secretariat from the realm of the Ministry of Economy to that of the Planning Ministry in 2003.

<sup>&</sup>lt;sup>18</sup> See Ley 24076 of 1992: Marco Regulatorio de la Actividad. *Privatización de Gas del Estado Sociedad del Estado. Transición. Disposiciones Transitorias y Complementarias.* 

y Coordinación Estratégica del Plan Nacional de Inversiones Hidrocarburíferas (Commission for Strategic Planning and Coordination of the National Hydrocarbons Investment Plan) with a mandate to regulate hydrocarbons investments, and with functions that overlapped and sometimes exceeded those of other agencies that the two administrations sought to supplant.<sup>19</sup> The new commission was directly managed by the Ministry of Economy and its functions included the evaluation of companies' investment plans, their production levels, and their cost and income structure. The dismantling of the controversial Commission was among the first actions taken by the Macri administration soon after taking office. <sup>20</sup> (La Nacion, 2016).

A 2008 report by a non-governmental organization found violations of the merit-based requirements for appointing or removing ENARGAS agents (Justicia, 2008). In 2007, following a corruption scandal that involved the president of ENARGAS, the executive branch took control of the agency by decree, removed its board and president, and replaced them with one official. The initial executive branch take-over was supposed to last six months, but President Kirchner extended it four times. As a result, the official named by decree managed ENARGAS for over two years without congressional oversight or merit-based review (Rose-Ackerman, Desierto, & Volosin, 2011).

#### Oil and Gas Producing Provinces: The New Stakeholders

Argentina has a federal system of government. The reformed 1994 Constitution transferred to provincial governments the responsibility for onshore oil and natural gas resources and offshore areas up to 12 nautical miles. Hu it was not until the decade of the 2000s that that constitutional mandate became effective with the enactment of enabling legislation twice under President Kirchner's government: an executive decree in 2003 and a law in 2007. President was not until the decade of the 2000s that that constitutional mandate became effective with the enactment of enabling legislation twice under President Kirchner's government: an executive decree in 2003 and a law in 2007.

Out of a total of 24 provinces, ten produce oil and gas and benefit directly or indirectly from the development of hydrocarbons.<sup>23</sup> Most of the country's oil and gas production is centered

The sub-national management of the hydrocarbons industry was mired in controversy due to irregularities and allegations of corruption.

in Patagonia: the province of Chubut produces most of the oil, while roughly half of the country's natural gas comes from Neuquén. Producing provinces are organized under the *Organización Federal de Estados Productores de Hidrocarburos* (Organization of State Producers of Hydrocarbons, or OFEPHI), created in 1984 to serve as a forum for the discussion, analysis, and protection of their interests vis-à-vis the national government.

Following passage of the enabling legislation that transferred the domain of oil and gas resources to producing regions, provincial governments swiftly began to exercise their new rights: they sent

<sup>&</sup>lt;sup>19</sup> This commission was created by Resolution 1/2012.

<sup>&</sup>lt;sup>20</sup> See Decree 272/2015.

<sup>&</sup>lt;sup>21</sup> Ibid, 12.

<sup>&</sup>lt;sup>22</sup> See Decree 546/03: Estados Provinciales Derechos, Permisos de Exploracion; Law 26197/07 [known as Ley Corta (Short Law)]: Administración de las provincias sobre los yacimientos de hidrocarburos que se encontraren en sus respectivos territorios, lecho y subsuelo del mar territorial del que fueren ribereñas. Acuerdo de Transferencia de Información Petrolera.

<sup>&</sup>lt;sup>23</sup> The 10 provinces are: Chubut, Tierra del Fuego, Neuquén, Santa Cruz, Mendoza, Rio Negro, La Pampa, Salta, Formosa, and Jujuy.

representatives overseas to attract investors; and they organized provincial bidding rounds that succeeded in drawing international attention, particularly at a time of high international oil prices (Chelbi, 2007). Subnational governments were now in control of the industry and started to allocate exploration and production areas in their regions and to negotiate contracts directly with companies. The sub-national management of the hydrocarbons industry was mired in controversy due to irregularities and allegations of corruption.

New provincial oil and gas companies were created during in the 2000s and became active players in the sector, although some of them appeared to have questionable credentials. The newly created provincial companies that won development rights in areas offered for bidding usually had modest or no background in oil or gas exploration or production. By contrast, few of the more experienced international players won areas during bidding rounds organized by the provinces (Chelbi, 2007). The new provincial oil and gas entities made little or no new investment, and they were accused of making speculative deals by buying rights to oil or gas areas put out for bid and reselling them later for a profit (Bianchi, 2015). Some authors describe this period as the "balkanization" of the sector, through the creation of provincial companies whose main goal was to get rapid monetary returns but which made little long-term contribution to the development of oil and gas (Roig, 2012).

Transferring the oil and gas domain to provincial governments failed to revamp Argentina's oil and gas industry. By 2010 imports of natural gas reached peak volumes to make up for the fall in production, contributing to an unsustainable trade deficit. Pressed by a deteriorating energy and economic crisis, the federal government made attracting private investment a priority. The central government took action to halt speculative moves in producing provinces and to introduce checks and balances on local oil and gas companies in order to send the right signals to potential investors.

#### A New Role for Yacimientos Petrolíferos Fiscales (YPF)

In 2012, President Cristina Fernández announced the expropriation of a 51 percent controlling stake in YPF, which since the 1990s had been majority owned by Repsol. The remaining 49 percent of shares are with private investors: 11.9 percent with Repsol and 37.1 percent with minority shareholders. President Fernández went on national television to announce the expropriation, saying it meant the "recovery of sovereignty and control" for the country

**T**he majority takeover of YPF had a clear goal: to gain control of Argentina's—and one of the world's—largest nonconventional reserves and develop them to address Argentina's energy shortages.

(Romero & Minder, 2012). Notably, Repsol had announced the discovery of the Vaca Muerta shale plays in 2010, an area that constituted the largest reserve finding in the history of the company. The majority takeover of YPF had a clear goal: to gain control of Argentina's—and one of the world's—largest non-conventional reserves and develop them to address Argentina's energy shortages.

Following the takeover, YPF was re-launched as a dynamic mixed ownership company that was to lead the recovery of Argentina's energy self-sufficiency in partnership with private operators. YPF is Argentina's largest company when measured by market capitalization and it is also the largest employer in the country. It is an integrated energy company, with upstream assets as well as an important downstream presence in the refining, transportation, and marketing of crude oil and refined products; petrochemical production; electric power generation; and natural gas distribution.

# Box 2 The Nationalization of YPF

Perhaps the best recent example of political maneuvering that raised questions about respect for the rule of law involved the 2012 renationalization of YPF. In May 2012, Argentina's Congress approved by a wide majority a law that declared that achieving energy self-sufficiency was a national public interest and key government objective.<sup>24</sup> The same law authorized the expropriation of 51 percent of YPF from the Spanish company Repsol, arguing it was a necessary step towards recovering Argentina's oil and gas self-sufficiency. YPF became a mixed company, with the federal and provincial governments holding 51 percent ownership and private investors the remaining 49 percent.

Argentina's Constitution allows expropriation to protect the public interest but stipulates that there should be proper compensation.<sup>25</sup> But the government initially broke the law by refusing to compensate Repsol. President Fernández whipped up popular sentiment by publicly accusing Repsol of mishandling YPF, claiming that that the Spanish company had favored dividend payouts over new investments in exploration and production, thereby contributing to Argentina's dramatic loss of hydrocarbons output and reserves.

The way the takeover of YPF was initially handled by the government was a clear example of populist maneuvering. Eventually the government acknowledged that the failure to compensate Repsol could result in serious damage to relations with investors. It thus reversed its initial decision, agreeing to \$5 billion in compensation. This was after the Spanish company threatened to sue Argentina and Chevron in international courts; Chevron holds a joint venture with YPF to develop shale reserves in Vaca Muerta that were originally discovered by Repsol.

Critics of the nationalization argue that the YPF takeover could have been done differently, by simply purchasing the company from Repsol. A number of analysts believe, however, that the Fernández administration actually preferred nationalization in order to stir up popular sentiment. In the end this was not difficult, as ample majorities approved the re-nationalization of YPF. Governors of producing provinces helped create an enabling environment for the YPF expropriation, canceling YPF concessions owned by Repsol on the grounds that the Spanish company was not making new investment. In addition to public opinion, also supportive of the takeover were industrial and agricultural private associations. (Sabbatella, 2012).

Soon after the government takeover, YPF launched an ambitious 2013-17 business plan, which, if successful, could be transformational for the company and for Argentina (YPF, August, 2012). The main goal of the plan is oil and gas independence through the development of non-conventional reserves. The five-year plan calls for investments of \$37.2 billion to increase upstream and downstream production by 37 percent and 32 percent respectively; the creation of 10,000 jobs by 2017; and an increasing yearly investment scale for YPF from \$1 billion to \$5 billion. Funding for such an ambitious plan is to come mostly from internally generated cash flows (70 percent), and also from external financing (18 percent) and shale partnerships (12 percent). The plan will likely be reviewed by the Macri administration.

<sup>&</sup>lt;sup>24</sup> Law 26.741: Hydrocarbons Sovereignty in the Argentine Republic.

<sup>&</sup>lt;sup>25</sup> See Article 17 of the National Constitution and Law 21499/1977, Expropriations.

A newly-nationalized YPF became a key stakeholder in Argentina's oil and gas sector. New wellhead price incentives introduced by the Fernández administration particularly benefited YPF because the company holds the largest number of production and exploration areas in the country. Following the nationalization, YPF bought assets in Argentina of Brazilian oil giant Petrobras and Apache of the United States. In 2014, YPF issued a \$1 billion bond in New York that was the largest-ever Argentine corporate bond. This constituted a breakthrough for the company and also for Argentina, which until then had been barred from borrowing debt in international markets due to an unresolved dispute with creditors (the so-called hold-outs).

Most of the positive developments in Argentina's hydrocarbons sector after the government takeover of YPF were attributed largely to one man: the company's CEO, Miguel Galuccio, and not to a deeper institutional transformation. Galuccio became known as "El Mago" (the magician) for battling adversity and restoring to the company its past glory. His pragmatism and international reputation and connections were instrumental in attracting foreign investors to Vaca Muerta, and his style consistent with Argentina's tradition of highly personalized management. The Macri administration and Galuccio differed over YPF's level of indebtedness, with had increased from \$2 billion in 2012 to about \$7 billion several years later, as well as the company's non-transparent financial management. Galuccio was replaced in March 2016 (Mander, 2016).

#### III. The Rule of Law in the Oil and Gas Sector

Rule of law "refers to a principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated, and which are consistent with international human rights norms and standards. It requires, as well, measures to ensure adherence to the principles of supremacy of law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision-making, legal certainty, avoidance of arbitrariness and procedural and legal transparency." (United Nations Security Council, August 23, 2004).

#### The Legal Framework

Argentina's oil and gas legal framework is characterized by a wide array of laws, decrees, and regulations at the federal, provincial, and municipal levels that often overlap and sometimes contradict one other. A Hydrocarbons Law approved in 2014 amended earlier framework legislation dating back to 1967 and tried to simplify the legal framework by bringing together *ad hoc* rules and regulations that had been adopted in previous years and were scattered in various legal texts.<sup>26</sup>

The 2014 law made two key modifications to the hydrocarbons legal framework. One was the introduction of the figure of non-conventional concessions for exploring and producing shale oil and gas. Until then, the law only contemplated conventional licenses. The second important change involved the adoption of certain limits to the constitutionally-mandated prerogatives of Argentina's provinces in the oil and gas sector. There was a generalized belief that provincial governments

<sup>&</sup>lt;sup>26</sup> Hydrocarbons Law 17,319 was amended by Law 27,007.

had abused the legal rights granted to them in 2007 with passage of the law that transferred the domain of oil and gas reserves to sub-national regions. One of the examples typically used to illustrate this argument were allegations that Pan American Energy (PAE)—in which UK BP holds a majority stake (40 percent)—had paid bribes to provincial authorities in 2007 for the extension of its Cerro Dragón concession in Chubut. The U.S. Securities and Exchange Commission (SEC) initiated a probe of PAE in 2010, following a voluntary presentation on the issue by BP. Particularly controversial was the fact that the extension of the concession was granted ten years before it was due to expire with "no technical or productive justification" (Sabbatella, 2012).

**T**he 2014 Hydrocarbons law tried to restore to the central government some of its relinquished prerogatives by restricting provincial rights.

The 2007 transfer of the domain of oil and gas areas to producing provinces somewhat limited the power of the federal government in the design and management of the hydrocarbons industry. The 2014 Hydrocarbons law tried to restore to the central government some of its relinquished prerogatives by restricting provincial rights. This was done in three ways: 1) it removed the so-called

"carry system" which obliged exploration companies to partner with provincial counterparts. The carry system was eliminated based on the argument that it had been abused by provincial oil companies, which shared in profits but made no new capital investments in oil and gas projects; 2) it gave the federal government the right to lower royalties charged by producing provinces in areas difficult to develop or of low productivity; and 3) it restored to the Energy Secretariat the responsibility for designing a nation-wide, standardized bidding process, to be developed in collaboration with provincial governors. Until passage of the new legislation, each province was free to design its own licensing round, something that created confusion among potential investors who were faced with different bidding rules in each producing area.

Table 2: Key Issues in the Hydrocarbons Law 27.007 of 2014

	CONVENTIONAL	NON-CONVENTIONAL			
Concession	25 years	35 years (including initial pilot period of up to 5 years).			
Exploration License	Two initial 3-year periods + extension of 5 years.  Maximum duration: 11 years.  (Before, maximum duration: 14 years)	Two initial 4-year periods and extension of 5 years.  Maximum duration: 13 years.			
Royalties	12 percent at wellhead, charged by province. GOA can reduce it up to 5 percent when taking into account productivity and location and condition of the areas. First extension period: royalty increases by 3 percent, up to a maximum of 18 percent for subsequent extensions. Allows for reduction of royalty by 25 percent of applicable royalty to promote non-conventional projects.				
Bidding Process	To be standardized throughout the country.				
Corporate Social Responsibility	One-time payment of 2.5 percent of initial investment to provincial government.				

Source: Compiled by the author

The 2014 Hydrocarbons Law includes investment incentives that already had succeeded in attracting the attention of some of the world's largest oil companies to Argentina's vast shale reserves. However, thusfar the financial commitments made by these companies have been quite modest. The largest investment--\$1.24 billion—was made by Chevron for the development of a pilot project in the Loma Campana area of Vaca Muerta. Dow Chemical and Malasyan Petronas promised only \$188 million and \$550 million, respectively, for shale pilot projects in El Orejano and Amarga Chica (YPF, October, 2014). Other companies, including Exxon, Total, and Wintershal also expressed an interest in Vaca Muerta.

#### The Rule of Law: The Argentine Paradox

A close look at the extent to which the rule of law is respected in Argentina's hydrocarbons sector offers a mixed picture. On the one hand, the World Bank's Doing Business database indicator on contract enforcement ranks Argentina 38 among 189 countries, which is the highest rate in Latin America and among the best scores for developed countries.<sup>27</sup> The quality of judicial processes index within the same indicator ranks Argentina 12 among 189 countries, a score higher than many developed economies<sup>28</sup> (The World Bank Group, 2016). On the other hand, another database—the Worldwide Governance Indicators, which also measures the quality of contract enforcement within its quality of rule of law index—ranked Argentina among the lowest countries in Latin America and the world in 2014.<sup>29</sup> According to this index, the quality of the rule of law greatly deteriorated in Argentina during the decade of the 2000s (Worldwide Governance Indicators, 2014). Interestingly, the Worldwide Governance Indicators gave comparatively high rankings to Argentina's Voice and Accountability indices, which worldwide typically tend to be paired with the rule of law indicators. The Worldwide Governance Indicators are built on surveys of perceptions, while the World Bank Doing Business index is a quantitative measure of the time and cost of resolving disputes.

Qualitative research carried out for this study had similarly paradoxical results. According to legal specialists, the law is generally observed in Argentina, which would seem to coincide with the results of the World Bank Doing Business database that measures administrative systems.<sup>30</sup> The same legal experts, however, had a low opinion of the judiciary, which they see as inefficient, relatively slow, and sometimes prone to political pressures which affect its impartiality. The opinions of those interviewed appear to match the perceptions-based Worldwide Governance Indicators that gave Argentina a relatively poor rating.

These paradoxical results could derive from Argentina's hyper-presidentialist governing style. While Argentina has the necessary judicial mechanisms and institutions in place that perform with relative efficiency, actors appear to prefer to make deals outside of these institutions, for reasons

<sup>&</sup>lt;sup>27</sup> The enforcing contracts indicator measures the time and cost for resolving a commercial dispute through a local first-instance court. These figures reflect the most recent round of data collection that was completed in June 2015.

<sup>&</sup>lt;sup>28</sup>The quality of judicial processes index evaluates whether each economy has adopted a series of good practices that promote quality and efficiency in the commercial court system. These figures reflect the most recent round of data collection that was completed in June 2015.

<sup>&</sup>lt;sup>29</sup> The indicator captures perceptions of confidence and respect for rules in a society, in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

<sup>&</sup>lt;sup>30</sup> Author interviews in Buenos Aires and Neuquén.

of expediency and also to exercise better political control. These parallel, informal channels, outside of institutional frameworks, are typically encouraged and sometimes even created through constant political interference by the executive. This tendency was on frequent display during the Fernández administration that left office in December 2015.

Until the end of the Fernández government, public utility tariffs were adjusted informally, through ad hoc bilateral negotiations between the government and public utility companies. These informal tariff adjustment mechanisms prevailed for more than a decade and had been put in place by President Kirchner during the 2001 economic crisis. At the time, Congress granted President Kirchner extraordinary powers to address the critical economic and social situation. He used those executive powers to cancel all dollar-denominated public utility contracts and transfer them to devalued pesos. He then created a special government committee to renegotiate the terms of each of the 59 public utility contracts that had been affected by the change from dollar to peso denomination.<sup>31</sup> In practice, however, the committee never renegotiated the contracts and the process to this day remains inconclusive. Negotiating tariffs through frequent, ad hoc meetings with each utility company gave the president better control of the process and more room to maneuver in case of disagreements. Most importantly, it allowed him to better control possible utility tariff increases and discontent among utility companies, which were required by law to keep providing their services while tariffs remained capped in devalued pesos. Some of the companies defaulted on dollar denominated debt had acquired abroad prior to the economic crisis. Several foreign utility companies filed arbitration claims against the government of Argentina at the World Bank International Center for Settlement of Investment Dispute (ICSID), arguing that the "pesification" of their contracts constituted a de facto expropriation.

Interestingly, however, over the years some of those claimants suspended their ICSID proceedings and joined others who had refrained from taking Argentina to international arbitration or to domestic courts, preferring instead to solve their tariff disputes through informal negotiations with the government. The belief among public utility companies was that going to local courts would have been time-consuming and costly, so they decided instead to engage in informal negotiations. Contrary to the World Bank quantitative indicator, the generalized perception is that courts are ineffective mainly because of the time required to resolve cases. "We discard going to court from the beginning, it is not an option," said a representative from a small utility company.<sup>32</sup>

Agreements reached outside of the formal institutional framework are not necessarily illegal; but informal deal making can contribute to the generalized perception of inefficient institutions reflected in the Worldwide Governance indicators. This is particularly true when a small number of actors reach policy agreements behind closed doors, agreements that in practice affect the whole society. Extra-judicial, informal negotiating also contributes to the generalized view of a weak judiciary that can be easily sidestepped and politically influenced. Political pressure on judges is common, contributing to a widely-held belief that political elites actually desire a weak judiciary in order to reduce checks and balances (Cohen, 2012). The public perception in general in Argentina is that corruption in the public sector is high, and non-transparent, informal negotiating mechanisms

<sup>&</sup>lt;sup>31</sup> The Comisión de Renegociación de Contratos de Obras y Servicios Públicos (Commission for the Renegotiation of Public Service Contracts) was created in 2002 but later replaced by the *Unidad de Renegociación y Análisis de Contratos de Servicios Públicos* (Unit for the Renegotiation and Analysis of Public Service Contracts, UNIREN).

<sup>&</sup>lt;sup>32</sup> Meetings with the author in Buenos Aires.

reinforce that view. The Transparency International Corruption Perceptions Index 2015, which registers perceptions, ranked Argentina 107 among 168 countries (Transparency International, 2016).<sup>33</sup>

In the oil and gas sector, interference by the executive branch and extra-institutional deal-making similar to the utility tariff example mentioned above can be common. Argentina's frequent economic and political upheavals were such that Congress granted successive presidents emergency powers that served to minimize the checks and balances typically exercised by Congress and the judiciary at the same time that formal negotiating mechanisms were skirted.

**U**sing extraordinary powers is clearly not against the law—such powers are granted in the Constitution—but their exercise contributes to a widely-held perception of an unfettered executive that engages in informal deal-making and judicial manipulation. These practices serve to undermine the rule of law.

Often, emergency powers were used for introducing transformational reforms to correct economic imbalances inherited from the previous government. Using extraordinary powers is clearly not against the law—such powers are granted in the Constitution—but their exercise contributes to a widely-held perception of an unfettered executive that engages in informal deal-making and judicial manipulation. These practices serve to undermine the rule of law.

In 1989, President Carlos Menem used extraordinary powers to deregulate and privatize the oil and gas industries, launching a process that resulted in the privatization of YPF. At the same time, he took full advantage of available legal and institutional tools to remove non-supportive members of the judiciary, thereby ensuring that a friendly judiciary would support reforms that included opening up the hydrocarbons sector.

Three decrees signed in 1989 unleashed the deregulation of the hydrocarbons industry. The decrees authorized the sale to private investors of oil and gas areas that had been abandoned by YPF; converted all service contracts with YPF into production concessions that gave private partners full discretion over the crude they produced; introduced new regulation frameworks for exploration and production; and privatized YPF in 1993 and state-owned Gas del Estado in 1992.34 At the same time, Menem enlarged the size of the Supreme Court from five to nine members and proceeded to nominate supportive judges who were approved by a legislature controlled by the ruling party. He later replaced most members of the Fiscal Tribunal which audits government accounts as well as the attorney general for administrative inquires, who was in charge of prosecuting irregularities in public administration (Manzetti, 2000). These actions help to explain the malleability of the Argentine judiciary. Judges exercise strategic self-restraint when they are afraid of political retaliation by the government. In other words, a "friendly" judge votes in favor of the president mainly out of fear of external factors that would challenge the stability of his or her judicial appointment. For example, one study found that judges are more tolerant of executive actions when the president has a majority in Congress, as the president can punish wayward behavior by recommending congressional impeachment. (laryczower, Spiller, & Tommassi, 2002).

<sup>&</sup>lt;sup>33</sup> The Corruption Perceptions Index (CPI) ranks countries and territories based on perceptions of corruption in the public sector.

<sup>&</sup>lt;sup>34</sup> The three decrees: 1055, 1212 and 1589 of 1989.

#### IV. Federalism and Sub-National Oil and Gas Rents

"Sergio, no te doy la provincia, te la presto". (Sergio, I am not giving you the province, I am lending it to you"). Néstor Kirchner.<sup>35</sup>

#### Federalism à la Carte

Getting a grasp of the political dynamics between Argentina's central government and governors of producing provinces is critical for understanding the country's hydrocarbons sector. As mentioned above, political decision making is highly centralized and characterized by behind-the-scenes agreements, both at the federal and provincial government levels. The president and provincial governors typically reach bilateral agreements that bypass Congress and the judiciary. Philosopher Carlos Nino attributed this pattern to what he called "foolish anomie" (anomía boba), defined as both a collective disregard for laws, and the application of special norms for governing that may be arbitrary, ever changing, or non-transparent (Nino, 2005). Argentina's system of fiscal federalism reinforces these tendencies, inevitably impacting the quality of the rule of law.

Fiscal decentralization in Argentina encourages what some authors call "perverse incentives" for behind-the-scenes trading of additional federal funds in exchange for political favors (Tommasi, 2006). Provincial governors are very powerful economic and political actors who typically trade the vote of their provincial representatives in the national Congress for concessions from the central government (Ardanaz, Leiras, & Tommasi, 2013). Those concessions usually materialize as a larger share of federal resources allocated to their province.

President Néstor Kirchner took advantage of the system's dynamics for his own political benefit. As a former governor of the province of Santa Cruz, Kirchner had an insider's knowledge about ways to navigate the national and provincial political map. He became president of Argentina in 2003 with only 22.2 percent of the vote and was succeeded by his wife, Cristina Fernández in

**P**rovincial governors are very powerful economic and political actors who typically trade the vote of their provincial representatives in the national Congress for concessions from the central government.

2007. From the outset Kirchner needed the support of provincial leaders to consolidate his political power, initially to reinforce his position given his slim margin of victory and later to influence the choice of his successor (his wife) (Roig, 2012). In pursuit of both goals he passed enabling laws to implement Article 124 of the 1994 Constitution that gave "dominion" of oil and gas to producing provinces. This gave a substantial benefit to hydrocarbons producing provinces. The province of Neuquén, for example, saw a remarkable increase in natural gas royalties following the passage of the enabling legislation. Its revenues jumped from \$\$134 million in 2001 to \$\$1.5 billion in 2014 (Ministerio de Planificacion. Secretaria de Energia, 2015).

<sup>&</sup>lt;sup>35</sup> Néstor Kirchner was governor of Santa Cruz between 1995 and 2003 prior to becoming president. He was succeeded in Santa Cruz by Sergio Acevedo. Kirchner objected to Acevedo's choice of provincial cabinet members and it is popularly believed that he made this comment to show he still had political control of the province.

<sup>&</sup>lt;sup>36</sup> See Decree 546/03 and Law 16.197/07.

Generally speaking, provinces collect only a small fraction of the revenues they need locally and depend for the bulk of their financial resources on transfers from the central government. The system of federal transfers dates back to the 1980s and parts of it have been modified repeatedly over the years.<sup>37</sup> It is so convoluted that it is commonly known as "the labyrinth," encompassing federal, provincial and municipal rights and obligations for collecting and sharing taxes. By spending federal funds and collecting few local taxes, provincial politicians enjoy the political benefits of spending but pay only a small fraction of the political costs of taxation (Ardanaz, Leiras, & Tommasi, 2013).

In the oil and gas sectors, the main downstream tax is on liquid fuels and gas, which is shared with provincial governments according to a specific formula. Oil and gas companies are subject to regular taxes—corporate, income and value-added taxes, which are also shared—and provinces collect and get to keep general taxes on hydrocarbons activities, such as the stamp tax, gross sales tax, and real property tax. On the upstream, the most important taxes are royalties and export taxes. Producing provinces keep royalties on oil and gas production (except for offshore production beyond 12 nautical miles, which is under the domain of the central government). The federal government keeps the proceeds from export taxes and import duties.

#### Coordinated Federalism and the Rule of Law

Research abounds on the potential for oil or gas windfall gains to weaken the rule of law, make governments less democratic, and ultimately result in conflict, particularly in countries with weak institutions. Growing evidence suggests that hydrocarbons producing countries with authoritarian governments and weak institutions become even more authoritarian as natural resource revenues increase (Ross, 2012). Oil extraction has also been linked to conflict (Ross, 2004), although not necessarily to civil wars as earlier research had suggested (Collier & Hoeffler, 2004). Lack of transparency around the management of oil and gas revenues is frequently a source of conflict. Citizens living in oil producing regions generally remain ignorant of the real extent of government oil revenues because the hydrocarbons sector is managed with relatively low transparency. In this context, it becomes more difficult to hold authorities accountable for the oil revenues they spend (Ross, 2012). Governments, meanwhile, not only keep oil revenues secret in order to avoid public scrutiny but also to increase their spending discretion (Collier, 2010).

Most studies have focused on the impact of hydrocarbons rents on central governments. Much less is known about the effects at the sub-national level of increased oil and gas revenues, although new insights have started to emerge in recent years. Gervasoni argues that in regions heavily subsidized by the central government, provincial authorities can please constituents by delivering more benefits than local tax collection would allow (Gervasoni, 2010). These windfall-like federal transfers are similar to oil rents in that they can both hinder democracy by creating *rentier* subnational entities where authorities are rich in fiscal resources, free of taxpayer accountability, and in control of much spending discretion (Gervasoni, 2010). This scenario, the theory goes, weakens the rule of law and puts democracy at risk.

By comparison, sub-national regions that do *not* receive large amounts of federal transfers or which do *not* have oil or gas resources depend only on local tax collection for their spending. In this case, sub-national governments can only spend as much as they receive in taxes without

<sup>&</sup>lt;sup>37</sup> See Law 23.548/1988: Coparticipación Federal. Régimen Transitorio.

running budgetary deficits, and citizens may hold them accountable. If the government wants to spend more, it has to increase taxes, a move that is typically unpopular. If taxes do go up, however, scrutiny of public spending may actually increase as citizens want to ensure that their money is being well spent.

For the past 53 years Neuquén has been governed by a single provincial party—the Movimiento Popular Neuquino (MPN)—an independent political group created in the 1960s by a family of politicians. The Neuquén government enjoys political flexibility because the MPN is not affiliated to any national party; in practice, it has great independence to make alliances with whichever party is in charge at the federal level. When in need of additional funds, Neuquén officials negotiate additional federal transfers and only increase provincial taxes as a last resort. The MPN supported Presidents Kirchner and Fernández with votes in exchange for generous fiscal transfers. This type of alliance has been described as "coordinated federalism."

Neuquén gets almost 80 percent of its revenues from automatic federal transfers and oil and gas royalties, generally in that order. Provincial taxes are the third source of revenue, although these normally are low in comparison to the other two. As mentioned earlier, Neuquén benefitted tremendously from the enabling legislation adopted during the Kirchner administration that dramatically increased provincial royalties in the mid-2000s. In addition, to make up for lower than expected royalties, between 2008 and 2013 Neuquén received a five-year extraordinary 3 percent royalty subsidy—the Extraordinary Canon on Production (*Canon Extraordinario de Producción*)—that added to regular automatic federal transfers.<sup>38</sup> When the extraordinary canon ended in 2013, Neuquén negotiated yet more federal subsidies that also fell outside of the automatic federal revenue sharing system and that were used for funding public works and social programs.<sup>39</sup> By 2014, Neuquén had received 72 percent more total federal transfers (adding up automatic and additional subsidies) than during the previous year.

The constant reelection of the MPN for more than half a century raises questions about the democratic nature of Neuquén's political system. Coordinated federalism greatly benefited the MPN by facilitating constant federal fund transfers to carry out a variety of social, infrastructure, and other programs throughout the province, including in remote municipalities. An example is the municipality of Añelo, a previously forgotten small town next to the Vaca Muerta non-conventional development. Almost overnight, the town became the center of the shale revolution. From the time that non-conventional projects got underway in Vaca Muerta, Añelo saw a massive transformation; in one year, its population tripled, from roughly 2,000 to about 6,000 inhabitants. Añelo needed investment to expand sewage systems and build more schools, hospitals, and roads. Transfers from the Neuquén government to Añelo more than tripled between 2009 and 2014—from \$6.1 million to \$18.7 million—contributing to the landslide re-election of the local mayor, Darío Díaz, in the April 2015 municipal elections (Gobierno de la Provincia de Neuquén (2009-2014). Díaz is an MPN ally and won with 70 percent of the vote.

<sup>38</sup> Provincial Law 2615/08.

<sup>&</sup>lt;sup>39</sup> Funds from the central government that were outside the automatic federal transfers included the Plan de Obras Públicas; Fondo Federal Solidario; and Plan Más Cerca, among others. Additional funding was received by Neuquén for infrastructure works in the towns surrounding Vaca Muerta's non-conventional development.

Some projections indicate that, once they are developed, non-conventional resources will increase current revenues in Neuquén by 55-80 percent (Peña, September 23, 2014). Perhaps by then the province will not need to depend as much on coordinated federalism to meet its needs. The question then arises as to whether oil windfall revenues will further weaken democratic institutions or whether, on the contrary, there will be a call for stronger institutions and enhanced respect for the rule of law.

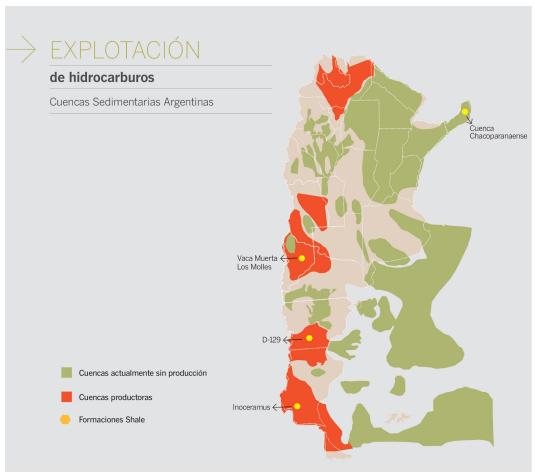
#### V. Conclusion

Argentina has a relatively well-developed institutional and legal system. However, given the strong tendency to delegate authority to a powerful executive, respect for the rule of law is sometimes compromised. The hydrocarbons sector is a classic example of this phenomenon. It is common for presidents to assume constitutionally-granted extraordinary powers to address Argentina's recurrent economic crises. Vested with these extraordinary powers, the executive has often made policy decisions related to the oil or gas industry that bypass institutions that would normally serve as checks and balances on his or her actions.

Argentine federalism is based on political alliances between the executive and provincial governors, an arrangement that reinforces the country's highly presidentialist system. Producing provinces have the legal authority to grant exploration and production licenses and to charge royalties; but they still depend on federal transfers to meet the bulk of local spending needs. Presidents regularly offer increased economic support to governors in exchange for the votes of their affiliated deputies in the legislature. This so-called coordinated federalism contributes to the weakening of democratic institutions by limiting the accountability of government officials.

The Macri administration has a unique opportunity to revamp the hydrocarbons industry and recover Argentina's lost energy independence and regional export potential. In that effort private investment will be key and Argentina's recently discovered non-conventional oil and gas reserves offer a perfect investment incentive. The government has already indicated its strong interest in encouraging private investment in the oil and gas sectors and the initial response from companies has been positive. In the long run, however—and beyond the current administration—Argentina needs to address the historic sources of political and economic instability if an efficient, modern, sustainable, and well-managed hydrocarbons industry is to flourish. The current scenario of low international oil prices will most likely postpone any sizeable new investment in the hydrocarbons sector. This delay could provide a grace period during which Argentina could consider long-standing governance and rule of law issues with an eye to improving if not resolving them once and for all.

**Annex 1 Argentina's Hydrocarbons Basins and Shale Formations** 



Source: Instituto Argentino del Petróleo y Gas (IAPG)

#### **Bibliography**

Accenture. (2014). *Reimaginando Argentina: Una mirada no convencional hacia el 2035*. Retrieved November 3, 2015 from Accenture: <a href="https://www.accenture.com/ar-es/insight-reimaginando-argentina">https://www.accenture.com/ar-es/insight-reimaginando-argentina</a>.

Ardanaz, M., Leiras, M., & Tommasi, a. M. (January, 2013). The Politics of Federalism in Argentina and its Implications for Governance and Accuntability. *World Development*.

Barril, D., & Navajas, F. (2014, April 14). *Natural Gas Supply Behaviour Under Intervensionism: The Case of Argentina*. Retrieved October 29, 2015, from United States Association for Energy Economics: <a href="http://www.usaee.org/usaee2014/submissions/OnlineProceedings/Barril%20-%20Navajas%20-%20April%2014%202014.pdf">http://www.usaee.org/usaee2014/submissions/OnlineProceedings/Barril%20-%20Navajas%20-%20April%2014%202014.pdf</a>.

Bianchi, A. (2015). Argentina Saudita. La Maldición de la Nueva Promesa Petrolera. Vaca Muerta, YPF-Chevron, crisis energética. (K. E. 4013, Ed.) Buenos Aires: Penguin Random House Grupo Editorial Argentina.

BP. (2015). BP Statistical Review of World Energy June 2015. London: BP Statistical Review of World Energy.

Braun, O., & Joy, L. (1968). A Model of Economic Stagnation: A Case Study of the Argentine Economy. The Economic Journal.

Brollo, F., Nannicini, T., Perotti, R., & Tabellini, G. (2013). The Political Resource Curse. *American Economic Review, 103* (5), 1759-96.

Calvo, E., & M.V. Murillo. (2009). When parties meet voters: Partisan networks and distributive expectations in Argentina and Chile. 2009 Conference of the Latin American Studies Association. Rio de Janeiro.

Carignano, A. (2015). Situación y Perspectivas de la Actividad Hidrocarburífera en Neuquén. Gobierno de la Provincia de Neuquén-Subsecretaría de Minería e Hidrocarburos.CEPAL. (2000-2015). CEPALSTAT-Base de Datos y Publicaciones Estadísticas. Argentina: Perfil Nacional Económico. Retrieved 2015 23 November from Comisión Económica para América Latina: interwp.cepal.org/cepalstat.WEB cepalstat/Perfil nacional economico.asp?Pais=ARG.

Chelbi, G. (2007). Procesos Licitatorios Provinciales. *Petrotécnia*, 92-100.

Cohen, M. A. (2012). Argentina's Economic Growth and Recovery. The Economy in a Time of Default. Oxon: Routledge.

Collier, P., & Hoeffler, A. (2004). Greed and Grievance in Civil War. Oxford: Oxford University.

Collier, P. (2010). The Plundered Planet: Why We Must--and How We Can--Manage Nature for Global Prosperity. Oxford, UK: Oxford University Press. Kindle file. Retrieved from Amazon.com.

Conde, R. C. (2005). La Economía Política de la Argentina en el siglo XX. Buenos Aires: Edhasa.

Diamand, M. (1985). *El péndulo argentino: hasta cuando?* Buenos Aires: Centro de Estudios de la Realidad Económica y Social (CERES).

Diamand, M. (1972). La estructura productive desequilibrada argentina y el tipo de cambio. Desarrollo Económico.

El Sol. (November 6, 2013). General Alvear: la presión social revierte un veto que anulaba la ordenanza contra el fracking. *El Sol*.

Energy Information Administration (EIA). (April 2011). World Shale Gas Resources: An Initial Assessment of 14 Regions Outside the United States. Washington, DC: US Department of Energy.

Energy Information Administration (EIA. (June 2013). *Technically Recoverable Shale Oil and Shale Gas Resources: An Assessment of 137 Shale Formations in 41 Countries Outside the United States.* Washington, DC: US Department of Energy.

Energy Information Administration (EIA. (April 2014). *International Energy Statistics*. Retrieved October 31, 2015 from US Energy Information Administration (EIA): <a href="https://www.eia.gov.">https://www.eia.gov.</a>

Energy Information Administration (EIA. (September 2015). *Technically Rcoverable Shale Oil and Gas Resources: Argentina*. Washington, DC: US Department of Energy.

Bloomberg (2014, December 18). Exxon Mobil Makes Second Argentine Shale Find in Vaca Muerta. Retrieved November 3, 2015, from Bloomberg: <a href="http://www.bloomberg.com/news/articles/2014-12-18/exxon-mobil-makes-second-argentine-shale-find-in-vaca-muerta">http://www.bloomberg.com/news/articles/2014-12-18/exxon-mobil-makes-second-argentine-shale-find-in-vaca-muerta</a>.

Gadano, N. (1998). *Determinantes de la Inversión en el sector petrolero y gas de la Argentina*. Serie Reformas Económicas. CEPAL.

Gadano, N. (2010). Urgency and Betrayal. Three Attempts to Foster Private Investments in Argentina's Oil Industry. In W. H. Sturzenegger (Ed.), *The Natural Resources Trap. Private Investment without Public Commitment* (pp. 369-403). London: Massachusetts Institute of Technology.

Gadano, N. (2014). *Historia del Petróleo en la Argentina. 1907-1955: Desde los Inicios hasta la Caída de Perón.* Buenos Aires: Edhasa. Kindle file. Retrieved from Amazon.com.

Gerchunoff, P. (1992). Las Privatizaciones en la Argentina. Primera Etapa. Instituto Torcuato Di Tella. Buenos Aires: Instituto Torcuato Di Tella.

Gervasoni, C. (2010). A Rentier Theory of Subnational Regimes. World Politics, 62 (2), 302-340.

Gervasoni, C. (2011). Democracia, autoritarismo e hibridez en las provincias argentinas: la medición y causas de los regímenes subnacionales. *Journal of Democracy en Español*, *Volume 3*, 75-93.

Giliberti, F. (October 8, 2014). *Desafíos y Aprendizajes del Desarrollo no convencional en la Argentina* (Powerpoint slides). Retrieved December 20, 2015 from the Fundación de Investigación para el Desarrollo blog: <a href="http://blog.fide.com.ar/wp-content/uploads/2014/10/FIDE-8-oct-2014-FINAL.pdf">http://blog.fide.com.ar/wp-content/uploads/2014/10/FIDE-8-oct-2014-FINAL.pdf</a>.

Gobierno de la Provincia de Neuquén. (2009-2014). *Total de recursos transferidos a municipios.* Coordinación Provincial de Relaciones Fiscales con Municipios- Subsecretaría de Ingresos Públicos - Ministerio de Economía y Obras Públicas de la Provincia de Neuquén. Retrieved November 20, 2015 from Ministerio de Economía e Infrasestructura de Neuquén: www.haciendangn.gob.ar.

Helmke, G. (1999). Judicial Decision-Making and Strategic Defection: Court-Executive Relations in Argentina, 1976-1995. *Prepared for the Conference on the Scientific Study of Judicial Politics*. Texas: A&M University.

Hornbeck, J. (2013). *Argentina's Post Crisis Economic Reform: Challenges for US Policy.* Washington, DC: Congressional Research Service.

laryczower, M., Spiller, P., & Tommassi, M. (2002). Judicial Independence in Unstable Environments, Argentina 1935–1998. *American Journal of Political Science, 46* (4), 699–716.

Instituto Argentino del Petróleo y Gas (IAPG). (2014). *Estadísticas de Petróleo y Gas. Argentina. Anuario 2013.* Buenos Aires: IAPG.

Instituto Argentino de Petróleo y Gas (IAPG). (September 2014). Análisis y Proyección de Impactos Económicos Esperados del Desarrollo de los Hidrocarburos No Convencionales en Argentina Cuantificación de Impactos Económicos del Desarrollo en Escala de Vaca Muerta en la Provincia de Neuquén. Comisión de Estudios Económicos. Buenos Aires: IAPG.

Asociación Civil por la Igualdad y la Justicia. (March, 2008). *La Situación Institucional Actual en los Entes de Control de Servicios Públicos.* Programa de Servicios Públicos. Retrieved on February 5, 2016 from Asociación Civil por la Igualdad y la Justicia: <a href="www.acij.org.ar">www.acij.org.ar</a>.

La Nación. (April 24, 2012). Un gremio con pasado de violencia en Chubut.

La Nación. (April 11, 2013). Shell calificó como 'ilegitimo' el precio tope de los combustibles y criticó a Moyano.

La Nación. (May 21, 2014). YPF halló un yacimiento de petróleo y gas en Chubut.

La Nación. (January 4, 2016). El Gobierno disolvió la comisión encargada de planificar inversiones en el sector hidrocarburífero.

Mander, B. (March 9, 2016). Miguel Galuccio resigns from Argentina's YPF. Financial Times.

Manzetti, L. (2000). Market Reforms without Transparency. In J. Tulchin, & R. Espach (Eds.), *Combating Corruption in Latin America* (pp. 130-172). Washington, DC: Woodrow Wilson Center Press.

Mares, D. (November, 2013). *The Geopolitics of Natural Gas. Political Economy of Shale Gas in Argentina*. Harvard University's Belfer Center and Rice University's Baker Institute Center for Energy Studies. Institute for Public Policy of Rice University.

Mejía, J. F. (2008, April). El Régimen Jurídico del Abastecimiento Interno de Hidrocarburos. *Petrotécnia*, pp. 32-52.

Ministerio de Planificación.(November 30, 2015). *Regalías de Petroleo Crudo, Gas Natural, GLP, Gasolina y Condensado*. Secretaría de Energía. Secretaría de Energía. Retrieved November 25, 2015 from Secretaria de Energia: <a href="http://www.energia.gov.ar/contenidos/verpagina.php?idpagina=3181">http://www.energia.gov.ar/contenidos/verpagina.php?idpagina=3181</a>.

Ministerio de Planificación. Secretaría de Energía. (2015 30 November). *Regalías de Petroleo Crudo, Gas Natural, GLP, Gasolina y Condensado*. Retrieved 2015 25 November from Secretaría de Energía: http://www.energia.gov.ar/contenidos/verpagina.php?idpagina=3181.

Molinelli, G. (1999). La Corte Suprema de Justicia de la Nación frente a los poderes políticos a través del control de constitucionalidad, 1983-1998. Buenos Aires: Universidad de Buenos Aires.

Molinelli, G., Palanza, V., & Sin, G. (1999). *Congreso, Presidencia y Justicia en Argentina. Materiales para su Estudio*. Buenos Aires: Fundación Gobierno y Sociedad.

Mooney, L. (Summer, 2015). Promoting the Rule of Law in the Intersection of Business, Human Rights and Sustainability. *Georgetown Journal of International Law*, 46 (4), 1135-1151.

Navajas, F. (2008, January-June 31). Infrastructure integration and incomplete contracts: Natural gas in the Southern Cone. *Integration and Trade, 28,* pp. 25-48.

Navajas, F. (April 30, 2015). *Subsidios a la Energía, devaluación y precios*. Buenos Aires: Fundacion de Investigaciones Economicas Latinoamericanas (FIEL).

Diariamente Neuquén. (October 27, 2014). Neuquén prevé gastar \$ 27 mil millones en 2015. Digital newspaper. Retrieved on January 24, 2016 from Diaramente Neuquén: <a href="http://www.diariamenteneuquen.com.ar/2014/10/27/neuquen-preve-gastar-27-mil-millones-en-2015">http://www.diariamenteneuquen.com.ar/2014/10/27/neuquen-preve-gastar-27-mil-millones-en-2015</a>.

Newbery, C. (2015, August 17). Struggles to cut cost delay oil play production in Argentina: At the Wellhead. *Platts*.

Nino, C. (2005). *Un País al Margen de la Ley.* Buenos Aires: Airel

Obarrio, M. (2005, March 11). Llamó Kirchner a un boicott contra la petrolera Shell. *La Nación*.

O'Donnell, G. (April, 1993). On the State, Democratization and Some Conceptual Problems. A Latin American view with glances at some post communist countries. Working Paper #192. The Helen Kellogg Institute for International Studies.

O'Donnell, G. (1994). Delegative Democracy. Journal of Democracy, Vol.5 (N0.1), 55-69.

O'Donnell, G. (1998). Horizontal Accountability in New Democracies. Journal of Democracy, 9 (3), 112-126.

Olhsson, M. H. (2014). Las Fallas de la Políticas Assistenciales para Reducir la Pobreza: Un Análisis de los Planes Sociales en Argentina y en la Provincia de Buenos Aires 2013-2014. Retrieved October 26, 2015, from Libertad y Progreso: <a href="http://www.libertadyprogresonline.org/wp-content/uploads/2014/06/Las-fallas-de-las-pol%C3%ADticas-asistenciales-para-reducir-la-pobreza-Marcos-Hilding-Ohlsson.pdf">http://www.libertadyprogresonline.org/wp-content/uploads/2014/06/Las-fallas-de-las-pol%C3%ADticas-asistenciales-para-reducir-la-pobreza-Marcos-Hilding-Ohlsson.pdf</a>

Parks, K. (October 30, 2014). Argentine House Passes Law to Boost Shale Investment. The Wall Street Journal. Retrieved on Noember 25, 2015 from: <a href="http://www.wsj.com/articles/argentine-house-passes-law-to-boost-shale-investment-1414685216">http://www.wsj.com/articles/argentine-house-passes-law-to-boost-shale-investment-1414685216</a>.

Peña, J. (September 23, 2014). *Impacto económico derivado del desarrollo de los hidrocarburos no convencional*. Instituto Argentino del Petróleo y Gas (IAPG), Comisión Estudios Económicos IAPG. Neuquen: IAPG.

Rabanal, R. (2015, November 6). Guiño a nuevo Gobierno: Cristina pide renovar la Emergencia y Cheque. *Ambito Financiero*.

Reed, S., & Minder, R. (2014, February 25). Repsol in \$5 billion Settlement with Argentina. *The New York Times*.

Reuters. (2012, November 28). *Argentina says wellhead natural gas prices to rise*. Retrieved January 25, 2015, from Reuters US Edition: <a href="http://www.reuters.com/article/argentina-naturalgas-idU-stle8MS7V720121128">http://www.reuters.com/article/argentina-naturalgas-idU-stle8MS7V720121128</a>.

Ricardo Ponzoa, Dynerb, I., Arangob, S., & Larsenc, E. R. (2011, March). Regulation and development of the Argentinean gas market. *Energy Policy, Volume 39, Issue 3*, pp. 1070–1079.

Roig, D. P. (2012). Los Hidrocarburos No Convencionales en e Escenario Energético Argentino. Revista Theomai.

Roll, M. (2011). Introduction: Resource Governance, Development and Democracy in the Gulf of Guinea. In Friedrich Ebert Stiftung, M. Roll, & S. Sperling (Eds.), Fuelling the World – Failing the Region? Oil Governance and Development in Africa's Gulf of Guinea (pp. 8-32).

Romero, S., & Minder, R. (2012 16 April). Argentina to Seize Control of Oil Company. *The New York Times*.

Rose-Ackerman, S., Desierto, D., & Volosin, N. (2011). Hyper-Presidentialism: Separation of Powers without Checks and Balances in Argentina and Philippines. *Berkley Journal of Internationa Law, 29* (1), 246.

Ross, M. (2004). How Do Natural Resources Influence Civil War? Evidence from 13 Cases. *International Organization*, 58 (1), 35-67.

Ross, M. (2012). *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations.* Princeton University Press. Kindle File. Retrieved from Amazon.com.

Sabbatella, I. M. (2012). La Política Petrolera de la Posconvertibilidad: De la Herencia Neoliberal a la Expropiación de YPF. *Argumentos. Revista de Crítica Social, 14,* 149-180.

Sbroivacca, N. D. (August, 2013). *Shale Oil y Shale Gas en Argentina. Estado de Situación y Prospectiva.* Department of Energy Economics. Bariloche: Fundación Bariloche.

Secretaría de Energía. (2005-2015, November 13). *Regalías de Petróleo Crudo, Gas Natural, GLP, Gasolina y Condensado*. Retrieved November 13, 2015, from Ministerio de Planificación. Secretaría de Energía: http://www.energia.gov.ar/contenidos/verpagina.php?idpagina=3181

Svampa, M. (2013). Resource Extractivism and Alternatives: Latin American Perspectives on Development. In *Beyond Development: Alternative Visions from Latin America* (pp. 117-143).

The Buenos Aires Herald. (August 25, 2015). Neuquén gives Shell rights over Vaca Muerta.

The Economist. (October 17, 2015). The Persistence of Peronism. Argentina's dominant political brand is defined by power, not ideology.

The World Bank Group. (2016). *Doing Business. Measuring business regulations. Enforcing contracts.* Retrieved February 1, 2016, from The World Bank Group: <a href="http://www.doingbusiness.org/data/exploretopics/enforcing-contracts#close">http://www.doingbusiness.org/data/exploretopics/enforcing-contracts#close</a>

Tommasi, M. (2006). Federalism in Argentina and the reforms of the 1990s. In J. W. Srinivasan, & J. W. Srinivasan (Ed.), *Federalism and economic reform: International perspectives* (pp. 25-84). Cambridge, United Kingdom: Cambridge University Press.

Transparency International. (2016, January 29). *Corruption by Country*. Retrieved February 3, 2016, from Transparency International: <a href="https://www.transparency.org/country/#ARG\_DataResearch">https://www.transparency.org/country/#ARG\_DataResearch</a>

United Nations Security Council. (August 23, 2004). *The Rule of Law and Transitional Justice in Conflict and Post-Conflict Societies.* Report of the Secretary General. United Nations. S/2004/616

Valdez, A. (September, 2015). Estado Actual del Desarrollo de los Reservorios no Convencionales. Gobierno de la Provincia de Neuquén-Subsecretaría de Minería e Hidrocarburos-Dirección Provincial de Hidrocarburos y Energía.

Vásquez, P. I. (2014). Oil Sparks in the Amazon: Local Conflicts, Indigenous Populations, and Natural Resources. Athens, Georgia: University of Georgia.

Vidal, A. (2002, March 26). The decrees 1055, 1212 and 1589 of 1989. *Clarín* .

Vorterix Radio. (September 3. 2013). Sapag: "Nosotros tenemos la legislación ambiental [petrolera] más exigente de la República". Neuquén, Argentina.

Wintershall. (January 7, 2014). Wintershall signs farm-in-agreement with Gas y Petróleo del Neuquén. Retrieved November 1, 2015, from Wintershall: <a href="http://www.wintershall.com/en/press-news/detail/news/wintershall-signs-farm-in-agreement-with-gas-y-petroleo-del-neuquen.html">http://www.wintershall.com/en/press-news/detail/news/wintershall-signs-farm-in-agreement-with-gas-y-petroleo-del-neuquen.html</a>.

Wintershall. (March, 2015). *E&P Brief. A Wintershall Fact Sheet*. Retrieved November 3, 2015, from Wintershall: <a href="http://www.wintershall.com/uploads/user\_pxbxconnector/pxbxrawdata/350/factsheet-argentinien-en.pdf">http://www.wintershall.com/uploads/user\_pxbxconnector/pxbxrawdata/350/factsheet-argentinien-en.pdf</a>.

Wood MacKenzie. (November, 2015). Argentina: on the cusp of change. Report. Wood MacKenzie.

World Economic Forum. (2015, September 1). *Competitiveness Ranking*. Retrieved February 1, 2016, from World Economic Forum: <a href="http://reports.weforum.org/global-competitiveness-re-port-2015-2016/competitiveness-rankings/">http://reports.weforum.org/global-competitiveness-re-port-2015-2016/competitiveness-rankings/</a>

Worldwide Governance Indicators. (2014). *The Worldwide Governance Indicators*. Retrieved February 2, 2016, from Worldwide Governance Indicators: <a href="http://info.worldbank.org/governance/wgi/index.aspx#reports">http://info.worldbank.org/governance/wgi/index.aspx#reports</a>

Yacimientos Petrolíferos Fiscales (YPF). (August, 2012). *Estrategia de Gestión* 2013-2017. Plan de los 100 Dí*as*. Buenos Aires: YPF. Retrieved November 20, 2016 from YPF: <a href="https://www.ypf.com/inversoresaccionistas/Lists/Presentaciones/30-08-2012%20Presentación%20Plan%20Estratégico.pdf">https://www.ypf.com/inversoresaccionistas/Lists/Presentaciones/30-08-2012%20Presentación%20Plan%20Estratégico.pdf</a>.

Yacimientos Petrolíferos Fiscales (YPF). (October, 2014). Desafíos y Aprendizajes del Desarrollo No Convencional en la Argentina. Power Point Presentation for the Fundación de Investigación para el Desarrollo (FIDES). Buenos Aires: Yacimientos Petrolíferos Fiscales.

Yacimientos Petrolíferos Fiscales (YPF). (2014). *Recursos no convencionales*. Retrieved November 3, 2015, from YPF: https://www.ypf.com/EnergiaYPF/Paginas/recursos-no-convencionales.html.

Yacimientos Petrolíferos Fiscales (YPF). (September 29, 2015). Resultados de Gestión y Oportunidades para el Desarrollo Argentino. Power Point Presentation. Buenos Aires: Yacimientos Petrolíferos Fiscales (YPF).

## WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS Jane Harman, President, Director, and CEO

#### **BOARD OF TRUSTEES**

Thomas R. Nides, Chairman

Public Members: William Adams, Chairman, National Endowment for the Humanities; Sylvia Mathews Burwell, Secretary, U.S. Department of Health and Human Services; Arne Duncan, Secretary, U.S. Department of Education; David Ferriero, Archivist of the United States; John F. Kerry, Secretary, U.S. Department of State; David Mao, Acting Librarian of Congress; David Skorton, Secretary, Smithsonian Institution

## Designated Appointee of the President from within the Federal Government:

Fred P. Hochberg, Chairman and President, Export-Import Bank

Private Citizen Members: Peter Beshar, John T. Casteen III, Thelma Duggin, Lt. Gen. Susan Helms, USAF (Ret.), Barry S. Jackson, Nathalie Rayes, Earl W. Stafford, Jane Watson Stetson

#### Wilson National Cabinet:

Ambassador Joseph B. Gildenhorn & Alma Gildenhorn, Co-Chairs

Eddie & Sylvia Brown, Dr. Armeane Choksi & Mary Choksi, Ambassadors Sue & Chuck Cobb, Lester Crown, Thelma Duggin, Judi Flom, Sander R. Gerber, Harman Family Foundation, Frank F. Islam, Willem Kooyker, Raymond Learsy, Frederic & Marlene Malek, Linda B. & Tobia G. Mercuro, Thomas R. Nides, Nathalie Rayes, Wayne Rogers, B. Francis Saul II, Diana Davis Spencer, Jane Watson Stetson, Leo Zickler

THE WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS, established by Congress in 1968 and headquartered in Washington, D.C., is a living national memorial to President Wilson. The Center's mission is to commemorate the ideals and concerns of Woodrow Wilson by providing a link between the worlds of ideas and policy, while fostering research, study, discussion, and collaboration among a broad spectrum of individuals concerned with policy and scholarship in national and international affairs. Supported by public and private funds, the Center is a nonpartisan institution engaged in the study of national and world affairs. It establishes and maintains a neutral forum for free, open, and informed dialogue. Conclusions or opinions expressed in Center publications and programs are those of the authors and speakers and do not necessarily reflect the views of the Center staff, fellows, trustees, advisory groups, or any individuals or organizations that provide financial support to the Center.

ONE WOODROW WILSON PLAZA, 1300 PENNSYLVANIA AVENUE, NW, WASHINGTON, DC 20004-3027



SMITHSONIAN INSTITUTION
OFFICIAL BUSINESS
300\$, PENALTY FOR PRIVATE USE

Presorted First Class Mail Postage and Fees Paid Smithsonian Institution

G-94