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Mexico regulates various sectors of its industrial capability to protect the public good and promote growth. To identify regulatory changes that will promote national stability, this paper establishes a relationship between these areas of governance, and pinpoints the requirement to reform Mexico's energy sector. Subsequent analysis demonstrates government ownership of Petroleos Mexico (Pemex) is the fundamental destabilizing flaw in regulatory policy, by tracing various problems back to this root cause. Recommendations for action are provided for the near, mid, and long-term, with particular emphasis on areas where the United States can provide assistance. These recommendations attempt to stabilize the situation initially and set conditions for the eventual transfer of this sector away from government control.

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**REFORMING MEXICO'S ENERGY SECTOR TO ENHANCE STABILITY**

**by**

**Jeffrey P. Hogan**

**Lieutenant Colonel , USMC**

**A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.**

**The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.**

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## Abstract

Mexico regulates various sectors of its industrial capability to protect the public good and promote growth. To identify regulatory changes that will promote national stability, this paper establishes a relationship between these areas of governance, and pinpoints the requirement to reform Mexico's energy sector. Subsequent analysis demonstrates government ownership of Petroleos Mexico (Pemex) is the fundamental destabilizing flaw in regulatory policy, by tracing various problems back to this root cause. Recommendations for action are provided for the near, mid, and long-term, with particular emphasis on areas where the United States can provide assistance. These recommendations attempt to stabilize the situation initially and set conditions for the eventual transfer of this sector away from government control.

## Introduction

Analysis of regulatory actions that will enhance stability in Mexico requires a framework to determine the relationship between these areas of governance and a method to isolate the industrial subsectors that pose the greatest threat. For the resulting conclusions to have any merit, they must address structural and enduring problems rather than the minor contours of a particular period or government administration. Using this approach, the Mexican oil industry emerges as the most heavily regulated sector and the one posing the greatest risk to stability. Reforming the nation's energy sector is the most effective regulatory action Mexico can take to enhance stability.

Petroleos Mexico (Pemex) is the second largest company in Latin America and the seventh largest producer of oil in the world.[1] The government of Mexico owns the company, and oil sales account for thirty-two percent of all government revenues annually.[2] In 2004, production of oil in Mexico began to decline due to a severe reduction in output from the nation's most prolific oil field, and the failure of Pemex to develop additional reserves to compensate.[3] Since that time, the crisis in Mexico's oil industry has emerged as an escalating threat to the government and the stability it provides through domestic spending.

However, the failure of Pemex to manage Mexico's oil resource competently is directly attributable to its ownership by the government. While the government regulates *some* aspects of other Mexican industries, it regulates *every* aspect of the oil industry. This regulation includes extraction of nearly all Pemex profits for government use, leaving little

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[1] U.S. Department of Energy. *Country Analysis Briefs, Mexico*, July 2011 (Washington, D.C.: Energy Information Administration), 1.
[2] Ibid,1.
[3] Lawrence Whitehead, "The Future of Oil in Mexico, Coping with Adversity in the Mexican Oil Industry: Como Pemex no hay dos," James A. Baker III Institute for Public Policy of Rice University (Baker Policy Report Number 48, April 29, 2011), 9.

remaining for business development or reinvestment.[4] Ironically, by attempting to manage Mexico's oil wealth for the public good through Pemex, the government has instead brought the industry to the point of near collapse.[5] Decades of government ownership have so entangled the decision-making at Pemex with the political process, that the industry is headed for deep, enduring trouble. Oil is simultaneously the most important, heavily regulated, and at-risk industry in the nation, and represents a mounting threat to the national economy that dwarfs the risk posed by challenges in other sectors. Left uncorrected, the resultant loss of government revenue and increased unemployment will have a destabilizing effect on the entire country for years to come. The methodology and background established below illustrates the urgent requirement to reform Mexico's energy sector.

## A Framework for Analysis: Stability, Growth, and Industrial Regulation

The metrics of economic performance do not line up neatly with those of stability. However, it is possible to express stability qualitatively by correlating quality of life data with economic measurements. Not surprisingly, negative trends in unemployment, infant mortality, government support, and poverty rate can all be seen as implicitly detrimental to overall stability, and track closely with gross domestic product (GDP). Following the global financial crisis in 2009, Mexican GDP grew at a rate of negative six percent. During the same period, unemployment increased by two percent, people living below the poverty line increased five percent, and public approval of the government decreased eighteen pecent.[6]

[4] M. Angeles Villarreal, "The Mexican Economy After the Global Financial Crisis." (Washington, D.C.: Congressional Research Service, September 9, 2011), 10.
[5] Carlos Manuel Rodriguez, "Pemex's Proved Oil Reserves Decline for 12th Year in a Row," *Bloomberg News*, March 30, 2011, http://www.bloomberg.com/news/print/2011-03-30/pemex-s-proved-oil-reserves-decline-for-12th-year-in-a -row/.
[6] Pew Research Center. *Crime and Drug Cartels Top Concerns in Mexico*. (Global Attitudes Project, August 31, 2011), 6.

Other stability related data showed similar negative trends.[7] Although these changes are the consequence of more than GDP alone, and will lead and lag growth, there is a significant correlation between GDP growth and stability. To connect stability to industrial regulation, by way of this GDP relationship, requires additional discussion and clarification of terminology.

The industrial sector is the portion of an economy concerned with the manufacture of goods, to include the mining and processing of natural resources. When combined with the service and agricultural sectors, the result is a description of the total national economy. Successful industrial development is a necessary part of a country's transition from an emerging economy to a more modern and competitive developed economy.[8] Many leaders view the growth of an industrial sector as a national imperative because the ability of government to provide basic services increases as the economy expands and diversifies.

Among the instruments available to government are industrial policies that are broad, interventionist actions to manipulate economic factors in the interests of the country. For an emerging market economy, a typical industrial policy might have the goal of creating or stimulating the growth of a certain organic manufacturing capability within the country. This would generally be accomplished by making a given imported item more scarce (by increasing the price and/or limiting availability physically) to create a demand signal within the country to stimulate the development of an internal production capability.[9] While closely related to industrial policy, industrial regulation is that part of government action intended to

[7] International Human Development Indicators, United Nations Development Programme, accessed October 25, 2011, http://hdrstats.undp.org/en/countries/profiles/MEX.html.
[8] David R.Mares, "Explaining Choice of Development Strategies: Suggestions from Mexico, 1970-1982." *MIT Press*, February 22, 2010, http://www.jstor.org/stable/2706719.
[9] Irfan Haque, "Rethinking Industrial Policy."*United Nations Conference on Trade and Development*, Discussion Paper No. 183, April 2007, 2.

control the operations of existing enterprises to protect public interests. These include laws against monopolies, environmental protections, tax law, worker safety standards, and regulating the use of public resources by private businesses.[10] While policy and regulation are distinguishable intellectually, they share the common goal of promoting growth and are therefore difficult to separate in a practical sense. Regardless, government action in the industrial sector (be it policy or regulation) has an influence on GDP, and therefore stability.

Special Regulatory Case: Government Ownership

Before proceeding, it is important to consider the case of industrial sectors owned predominantly or entirely by the government. From the perspective of action in the industrial sector, nationalization represents the high water mark for both policy and regulation: the most unadulterated form of either is outright government ownership. Many countries have gone through periods of industrial nationalization. This is particularly true of those emerging from colonial pasts or other periods of external domination. The initial impulse to nationalize a resource is generally politically motivated, however as time passes, government ownership has the same effect as policy and regulation; it manages the growth of an internal industrial capability, and regulates it for the public good. In some cases, nationalization is temporary, lasting only long enough to demonstrate sovereign prerogatives. In other examples, the government maintains control indefinitely, sometimes varying its level of control based on market and political conditions. Depending on the application, government control might be very passive, or actively involved in setting prices, production targets, labor policies, and long-term strategy.[11]

[10] Ibid, 8.
[11] Mares, *Explaining Choice of Development Strategies: Suggestions from Mexico, 1970-1982*, 670-671.

However, the consequences of government ownership can be damaging. If the government relies heavily upon a nationalized asset, short-term political agendas can corrupt long-term management decisions. Additionally, as the nationalized sector grows, the response is often to increase public dependency and, over time, the risk of mismanagement increases.[12] Provided the resource remains abundant (as in the case of a canal or strait), a basic equilibrium prevails because the underpinnings of the enterprise remain static. In cases of a volatile or exhaustible resource (minerals, oil, gas, fish) fluctuations in supply may pose a significant threat to the public good if government operations depend on steady profits.[13] Importantly, the relationship between GDP growth and stability described above is somewhat indirect, while the collapse of a government owned industry would be much more severe since it could directly undermine the revenue used to fund basic government services and programs. Even in cases where the failed industry can be isolated from a negative effect in GDP, the effect on stability can be profound.

## Mexican Industry

Industry accounts for 32.6% of Mexican GDP with the largest contributors being construction (25.6%), machinery (19.9%), food and beverages (19.2%), and oil (9.8%).[14] However, given the relationships between industrial policy, GDP growth, and stability described above, initial analysis must go beyond the mathematics of size or growth rate for each sub-sector to understand which one poses the most risk to stability. It is more important to identify cases where heavy regulation combines with size and dependency to undermine

[12] Ibid, 694-696.
[13] Haque, Rethinking Industrial Policy, 7.
[14] Central Intelligence Agency, *CIA World Factbook*, last Modified October 18, 2011, https://www.cia.gov/library/publications/the-world-factbook/geos/mx.html.

stability directly (by threatening government revenues) or indirectly (negative growth). An understanding of these factors determines the overall risk to stability, and focuses plans for action.

In 1921, Mexico was the second largest producer of oil in the world and, until 1938, foreign oil companies dominated the industry. During the intervening years, Mexico's oil policy evolved significantly. This included the establishment of state agencies for exploration and development of additional reserves operating in parallel with commercial enterprises. However, in 1925 government policy began to blur the lines between social programs, politics, and the oil business that still exist today. Petroleos de Mexico S.A. or Petromex, was created in 1925 to take comprehensive control of the oil resource, to include price controls and distribution. Importantly, while Petromex was a publicly traded company, only Mexican citizens could own equity in it. The company ultimately failed as a public-private venture. Between 1936 and 1938, in response to what it believed to be unfair labor practices and poor stewardship of Mexico's oil resources by foreign corporations, the Mexican government gradually mustered the political will to nationalize the oil industry. What followed were several management schemes that culminated in the creation of Petroleos Mexicanos (Pemex). It is currently the second largest company in Latin America and the seventh largest producer of oil in the world.[15]

More important than the origins of Pemex is the relationship between the population of Mexico and its oil industry. The majority of Mexican citizens associate the natural resources of the country almost as a birthright and the constitution explicitly assigns

[15] U.S. Department of Energy. *Country Analysis Briefs, Mexico*, 1.

ownership of all oil and subsoil resources in the country to the people.[16] While the associated constitutional articles change occasionally, generations of Mexican citizens have become accustomed to the idea that the oil resource is the property of the people and should be managed primarily (and directly) for their benefit. Dating back to before World War I, successive Mexican governments have exploited oil reserves to underwrite everything from wars to social programs. While not a complimentary metaphor, the nation of Mexico has a parasitic relationship with its oil industry: it has sustained development by tapping into the "host" personified by Pemex, and sustains itself at Pemex's expense.[17]

Pemex is unique among nationally owned corporations. Viewed from one perspective it is simply an oil company, concerning itself with the exploration, extraction, and transportation of oil and petroleum products for profit. However, Pemex also functions as an arm of government, maintaining a revenue stream for social programs, and providing jobs and retirement benefits for a large segment of the population. These two functions are fundamentally at odds with one another. For instance, corporate taxes and surcharges consume nearly all net profits from the oil business, leaving only a fraction for investment in the long-term health of the industry.[18] Because Mexico depends on oil sales for nearly one third of its annual government revenues, changes in the oil market or production shortfalls represent significant risks. When oil prices fall, Pemex makes up the profit shortfalls through budget cuts and borrowing to satisfy the government's thirst for revenue.[19]

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[16] Whitehead, *The Future of Oil in Mexico, Coping with Adversity in the Mexican Oil Industry: Como Pemex no hay dos*, 13.
[17] Ognen Stojanovski, "The Void of Governance: An Assessment of Pemex's Performance and Strategy," Stanford University Program on Energy and Sustainable Development, April 12 2008, 62.
[18] Patrick Corcoran, "Mexico's Pemex Struggles to Overcome Years of Mismanagement," *Future Challenges*, last modified on September 8, 2011. http://futurechallenges.org/local/mexicos-pemex-struggles-to-overcome-years-of-mismanagment.
[19] Ibid.

In an atmosphere where powerful unions and their lobbies oppose business decisions, Pemex cannot make simple investments to improve productivity. In the past, the parties have managed to maintain a balance between competing interests during fluctuations in the oil market.[20] However, the capacity to weather these economic storms is finite, and cannot compensate for uncontrollable structural disruptions in Mexico's ability to produce. Many of the problems facing Mexico today constitute such a gathering storm. Despite efforts to reform the sector initiated in 2008, the ability of Pemex to maintain its position as one of the world's largest oil producers remains uncertain. If current trends remain unchanged, experts estimate that Mexico may be a net oil importer by 2015.[21] Compared to all other Mexican industry, the oil industry in its current government-owned incarnation represents the biggest risk to stability.

## Enduring and Emerging Threats to Pemex and Stability

The burden on Pemex is growing. Some of the challenges have been present for several years, while others are new or looming on the horizon. The following list of examples illustrates the scope and scale of these problems, and the role government ownership plays in each. Viewed separately, the areas also represent a potential threat to stability in their own right, which simply underscores the necessity to undertake comprehensive corrective action.

Corruption. There are several sources of corruption within the Mexican oil industry. One of the most sinister and far-reaching originates from the powerful unions. Perhaps symbolic of the relationship between the Mexico's population and her oil industry, these unions maintain a workforce on Pemex's payroll far exceeding the number required to run the business.

[20] Silvana Tordo, Brandon S. Tracy, and Noora Arfaa. "National Oil Companies and Value Creation." The World Bank, Energy Sector Management Assistance Program, March 2011, 42-53.
[21] Rodriguez, *Pemex's Proved Oil Reserves Decline for 12th Year in a Row*.

Infrastructure investments designed to improve productivity (partly by reducing the number of workers required) fail to achieve savings because the unions protect the jobs. For instance, "In most oil companies, average employment at a refinery that processes 200,000 barrels of oil a day is eight hundred people...But a Pemex refinery of the same size and capacity employs - through no choice of management - over four thousand workers."[22] Union leaders also leverage strong political ties to head off government intervention. Oddly, this practice does not comport with the generic definition of corruption because it is, generally, legal. Nonetheless, the process is "corrupting" even if it fails to meet the legal standard of corruption and it contributes to the inability of Pemex to make rational business decisions.

Corruption and graft are also present in other parts of the oil enterprise, especially in relation to contractors hired by Pemex. Pemex acknowledges that while it has a corruption problem within its workforce, foreign contractors are also adept at manipulating the Pemex system to maximum advantage. Corruption within the industry extends all the way to individual service stations that are routinely discovered overcharging customers for gas. While subsequent reforms have since diminished irregular gasoline sales, in 2006 the government estimated the cost to Mexican consumers at $2 billion. Whether the corruption is institutional or a purely criminal enterprise is immaterial. The key issue is that both types trace directly back to the state ownership that prevents Pemex from running a successful business.[23]

Security. As with the rest of Mexico, the oil industry must deal with the drug cartel threat. Oil theft has become a growth industry in Mexico, partly due to the expansion of drug cartels

[22] Stojanovski Ognen, *The Void of Governance: An Assessment of Pemex's Performance and Strategy*, 50.
[23] Ibid, 62.

into this lucrative business. Since 2005, illegal pipeline taps increased from 136 to 712 at a cost of between $2 billion and $4 billion annually. Some cases are particularly brazen, and lucrative. During 2009, the U.S. Justice Department reported that a drug cartel siphoned several hundred million dollars' worth of oil from a pipeline and smuggled it to the United States.[24] Even small-scale thefts of gasoline for sale on the black market add up, especially since most of the gasoline running through Pemex's pipelines is imported at significant cost. While it may not be possible to tie these security shortfalls to government ownership, there is an element of corruption contributing to the problem.

Taxes. Taxation is the means by which the government generates revenue from the sale of oil by Pemex. While this excerpt is from 2008, it illuminates the extent of Pemex's typical tax burden:

> Over the past 5 years, Pemex has paid out over 60% of its total revenues in royalties and taxes. The taxes imposed on Pemex for most of the last 15 years (from 1994-2005) fell into three main categories: duties for hydrocarbon extraction and other similar taxes, a so called "excess gains duty," and a special tax on gasoline known as "IEPS." The largest - by far- of these were the hydrocarbon duties (87% of all tax payments in 2005), followed by the excess gains tax (10%) and the IEPS (3%). These taxes rose with revenue, which meant the effective tax rate on Pemex increased as oil prices rose.[25]

Since 2008, the government has taken modest steps to decrease Pemex's staggering tax burden to allow the company to reinvest more of its profits in additional exploration and infrastructure recapitalization.[26] However, what is most relevant is not the actual rates but that, due to government ownership and reliance on the oil industry, taxation is sized first to generate income for the government, and only secondarily to ensure the long term health of the oil industry.

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[24] Ioan Grillo, "Stolen Oil: A Gusher of Cash for Mexican Drug Cartels," *Time*, March 9, 2011.
[25] Ognen Stojanovski, *The Void of Governance: An Assessment of Pemex's Performance and Strategy*, *62*.
[26] Corcoran, *Mexico's Pemex Struggles to Overcome Years of Mismanagement*.

Government Dependency. The importance of oil sales to the Mexican government cannot be overstated. As a newly industrialized nation (with a significant percentage of the population living below the poverty line), there is a limit to the amount of revenue that direct taxation can generate. Concurrently, the government has been compelled to make significant investments to oppose the threat posed by drug cartels. These and other national priorities only increase Mexico's reliance on oil sales that have historically accounted for over one third of all government revenues.

Beyond the reliance of the government on Pemex for revenue, there is an additional aspect of employment. Despite the negative implications of the union sponsored make-work jobs within Pemex, people ultimately *have* jobs and participate in the economy. Retirees drawing Pemex pensions are also a stabilizing force in the population. As a result, Mexico's ownership and management of the oil resource has created a revenue and employment engine that is "too big to fail." The consequences of a Pemex failure would cripple the government, eliminate the income of millions of people, and likely cause civil unrest on a national scale.

Diminishing Reserves. Monthly crude oil production in Mexico has been in steep decline since 2004. This is because the Cantarell field, which began producing in 1978 when it was one of the world's top mega-reserves, has passed peak production. While Pemex has struggled to maintain Cantarell's production, to include installation of a nitrogen injection system, it has been unable to reverse the trend due to a combination of market forces and its high tax burden. While most experts believe Mexico has additional oil reserves, the experience after 2004 is relevant to the perils of government ownership.[27]

[27] Lawrence Whitehead, *The Future of Oil in Mexico, Coping with Adversity in the Mexican Oil Industry: Como Pemex no hay dos*, 9-11.

Most private oil companies develop long-range exploration and exploitation plans for new reserves based on estimates of future production. However, the government ownership and tax structure surrounding Pemex has historically curtailed these types of long-term investments and, consequently, the country was unable to replace capacity after Cantrell started to fall off. Pemex failed to replace the oil it was producing with new sources, and it failed because the long-term interests of the company were secondary to short-term political agendas, and the government's thirst for tax revenue.

While reforms instituted after 2008 provided Pemex more flexibility to invest in exploration, there is a significant delay between finding oil and bringing it out of the ground, especially in deep water projects. Most analysts believe Mexico's prospects to increase production in the near term are poor, and over the long term, uncertain.[28] However, the uncertainty is not the result of the probabilities of finding oil, but of the possibility that Pemex's behavior will change due to political agendas unrelated to the oil business.

Stalled Reforms. After his election in 2008, Mexican President Calderón initiated a process to reform Pemex. The resulting congressional legislation partially addressed Pemex's tax burden, but the main goals were to improve transparency and corporate governance.[29] The rationale for these seemingly inconsequential changes was that a full and fair audit of the company would serve as proof that Pemex urgently needed to be reformed. Unfortunately, after Mexico took this important step, oil prices began to decline and the country suffered a significant downturn: not an environment capable of sustaining large scale reform. Since that

[28] Miranda Wainberg, "Hydrocarbon Production Update: Colombia, Brazil, Mexico and Venezuela." (International Association for Energy Economics, Second Quarter 2011), 22-23.
[29] Tordo, Brandon S. Tracy, and Noora Arfaa. *National Oil Companies and Value Creation*, 42-45.

time, the issue has not moved to the forefront of the political agenda, and little has changed in the basic relationship between Mexico and her oil industry.[30]

## Conclusions and Recommendations

Mexico's oil industry serves no other purpose than to underwrite the operations of the government, and suffers from security and corruption problems because of government ownership. The taxation and political agendas that come with government ownership entangle the entire industry and prevent it from operating as a rationale business in even the most basic sense.

The current relationship between Mexico and her oil industry is serving neither well. Decades of government ownership have prevented Pemex from operating in the best long-term interests of the nation because it is impossible to sustain production without funding exploration and reinvestments in infrastructure. Successive national governments have tolerated an increasing reliance on oil revenues to fund the federal budget, without addressing the long-term viability of such a strategy. Even if Mexico develops substantial new oil reserves, it will not restore stability to the nation without comprehensive reforms. Even if Mexico is able to reduce its risk exposure to fluctuations in oil process and supplies, it will never escape the conflicts of interests residing within Pemex. Even if Mexico is able to diversify its energy sector beyond oil and gas, it will be uncompetitive if government ownership intrudes into fundamental business decisions as in the past. The common thread holding this sector back is government ownership.

[30] Jeremy Martin, "Oil in Mexico & the Future of Pemex," Institute of the Americas interview with Alma Rosa Moreno, Senior Advisor to the CEO, Pemex, uploaded October 29, 2010. http://youtu.be/yiePRCOW6Nc.

Within Mexico, the government understands the problems with Pemex. However, in a complicated global economy and with legitimate domestic issues to deal with, the solutions are not easy or quick. Long-term plans to reform the energy sector and unwind the government's outsized dependency on it are required. The best way for the United States to promote stability in Mexico is to remain ready to assist with what will undoubtedly be a challenging process.

In the near term, Mexico must allow Pemex to retain a sufficient percentage of its profits to fund long-term explorations and infrastructure recapitalization plans. This effort must insulate Pemex from annual budget cycles to provide certainty about growth estimates for the company. To offset any losses to revenue, the government should be prepared to borrow on the capital market: an area where the United States could provide assistance. It is far better to borrow at a predictable cost than to siphon money from Pemex without fully understanding the future implications. The second major near-term investment must be in the area of security, an aspect of the Mexican energy industry that can and should remain under government control. The infrastructure to refine and transport oil and gas around the country is a national asset, and squarely in the domain of government responsibility. By improving security, the government will block a major source of cartel funding, diminish oil trading outside the economy, and set the conditions for future foreign direct investment. The United States can provide technological, training, and financial assistance in this area as well.

Mid-term reforms should focus on decreasing the heavy dependency of Mexico's government on funding from oil sales. This should begin with an accurate forecast of Pemex profits and an agreement to make a percentage of those funds available to the company for reinvestment. Armed with an accurate assessment of "excess profits" over a five or ten year

period, the government can make strategic taxation and borrowing decisions to gradually compensate for the shortages. Additionally, the government should seek to broaden Mexico's energy portfolio beyond fossil fuels to insulate government revenues from shocks to the oil industry. This larger perspective on the sector will also stimulate private enterprise and speed the migration of the current government workforce to the private sector. This will require a significant investment in worker retraining and education and the United States can offer tangible support in the interests of stability.

The highest priority reform for Mexico is to privatize its energy sector. Implementation of the preceding recommendations will allow Mexico to create the necessary conditions for eventual privatization. This will require a carefully crafted political campaign to convince the public that it is in their best interests to reform the sector, and that doing so will not risk the economy or national dignity. Likewise, the governing class must determine the target end-state for the effort; it must find a way to remain faithful to the Mexican Constitution; avoid trading in a government owned monopoly for a private one; and recalibrate their expectations about what the energy sector can provide in terms of direct revenue. Several prototypes are available for study, including Brazil's Petrobras, which evolved from a company similar to today's Pemex to become one of the most successful companies in the world.[31] The United States can assist in this effort by providing planning expertise and training. However, compared to the other recommendations, the privatization

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[31] Andrew Smolski, "Petrobras and PEMEX: Opening Doors Through Oil," *Oilprice.com*, July 27, 2011, http://oilprice.com/pdf/Energy/Energy-General/Petrobras-and-PEMEX-Opening-Doors-Through-Oil.pdf.

of Pemex will be a sensitive area for Mexico, and the United States must avoid the perception of dominating the process.[32]

One possible criticism of these proposed solutions is that they focus too narrowly on the energy sector, excluding areas for improvement in other industries. While this would appear valid, the practical implications of the United States attempting to help with regulatory reforms across multiple sectors simultaneously could poison the relationship with Mexico. Furthermore, this type of approach fails to recognize Mexico is a functioning democracy, and completely capable of identifying and correcting regulatory problems on smaller scales. What makes the energy sector different is that it is a problem so large that the solutions fall partly beyond the government's capability.

Another line of criticism is that it is better to reform the industry without privatizing it. The basic premise of this line of reasoning is that government ownership does not preordain that Pemex will continue to struggle or eventually fail. However, ownership is not the central issue. The primary issue, and the one Mexico struggles with, is dependency. The political discipline to own the oil industry outright without overindulging on its profits has proven elusive, there is little to suggest it can be cultivated without significant structural reforms. It may be possible for Pemex to play a role as a government owned company, but it must be a role redefined to ensure stability for the long term.

**Policy Implications**

The reforms initiated in 2008 prove there is sufficient political will to reform Mexico's energy sector. However, the decline in oil prices, and the 2009 global economic

[32] Stephanie Grimmett, "Can Mexico's Pemex Be More Like Brazil's Petrobras?" *Seeking Alpha*. Last Modified April 3, 2008. http://seekingalpha.com/article/71063-can-mexico-s-pemex-be-more-like-brazil-s-petrobras?source=from_friend.

decline undercut plans to make Pemex more competitive and autonomous. Today, Mexico urgently needs a revised plan, focusing first on improving public confidence, to put Pemex back on the long road to near, or complete, privatization. While there are historical examples to inform the process, it is essential that the solution be entirely of Mexico's making: one that decreases risk without forfeiting national unity or pride. The recommendations above highlight areas where the United States can assist by providing analytical and planning assistance, security cooperation, and technology sharing. However, the key element in the U.S. approach should be to preserve a sense of empathy and awareness for what is an enormously challenging problem for the people of Mexico.

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