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The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks



Energy Security in a Context of Hyper-Social Mobilization: Insights from Bolivia

David R. Mares, Peter R. Hartley and Kenneth B. Medlock III



THE JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY RICE UNIVERSITY

THE GLOBAL ENERGY MARKET:

COMPREHENSIVE STRATEGIES TO MEET GEOPOLITICAL AND FINANCIAL RISKS

THE G8, ENERGY SECURITY, AND GLOBAL CLIMATE ISSUES

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STUDY AUTHORS

JOE BARNES DANIEL BRUMBERG MATTHEW E. CHEN DAVID BRYAN COOK MAHMOUD EL-GAMAL MALCOLM GILLIS JORGE GONZALEZ GOMEZ PETER R. HARTLEY DONALD HERTZMARK AMY MYERS JAFFE YOON JUNG KIM NEAL LANE DONGCHAO LI DAVID R. MARES KIRSTIN MATTHEWS KENNETH B. MEDLOCK III RONALD SOLIGO LAUREN SMULCER RICHARD STOLL XIAOJIE XU

ABOUT THE GLOBAL ENERGY MARKET STUDY

The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks—The G8, Energy Security, and Global Climate Issues examines a variety of scenarios for the future of global energy markets. Some of these scenarios evaluate factors that could trigger a regional or worldwide energy crisis. The study assesses the geopolitical risks currently facing international energy markets and the global financial system. It also investigates the consequences that such risks could pose to energy security, pricing, and supply, as well as to the transparent and smooth operation of the global market for oil and natural gas trade and investment. By analyzing these threats in depth, the study identifies a series of policy frameworks that can be used to fortify the current market system and ensure that it can respond flexibly to the array of threats that might be encountered in the coming years. The study also looks at the impact of emerging climate policy on the future of world energy markets.

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The James A. Baker III Institute for Public Policy

Rice University – MS 40 P.O. Box 1892 Houston, TX 77251-1892 USA

http://www.bakerinstitute.org bipp@rice.edu

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The Institute of Energy Economics, Japan

Inui Building Kachidoki 10th, 11th, and 16th Floor 13-1, Kachidoki 1-chome Chuo-ku, Tokyo 104-0054 Japan

http://eneken.ieej.or.jp/en/

ABOUT THE AUTHORS

DAVID R. MARES, PH.D.

BAKER INSTITUTE SCHOLAR FOR ENERGY STUDIES, JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY PROFESSOR OF POLITICAL SCIENCE, UNIVERSITY OF CALIFORNIA, SAN DIEGO

David R. Mares is the Baker Institute Scholar for Energy Studies at the James A. Baker III Institute for Public Policy and a professor of political science and an adjunct professor at the Graduate School of International Relations and Pacific Studies at the University of California, San Diego. Mares was previously profesor-investigador at El Colegio de México (1980-82), Fulbright Professor at the Universidad de Chile (1990) and a visiting professor at the Diplomatic Academy in Ecuador (1995). He has been a visiting scholar at the Weatherhead Center for International Affairs, Harvard University; a fellow at the Japan External Trade Research Organization (JETRO); a fellow at the Center for Advanced Study in the Behavioral Sciences (CASBS), Stanford University; and held a Pew Faculty Fellowship in International Affairs. Mares is the author of five books, and he has prepared reports for the Carnegie Commission on Preventing Deadly Conflict, the Stockholm International Peace Research Institute, the Arias Foundation for Peace and Human Progress (Costa Rica), Centro Paraguayo para la Promoción de la Libertad Económica y de la Justicia Social (Paraguay), Netherlands Institute of International Relations (The Hague), and the Conflict Prevention Network (Berlin). He is an associate fellow of the Inter-American Dialogue (Washington, D.C.), a fellow of the academic forum of the Summit of the Americas (Montreal, Canada), and a member of the Tri-national Academic Group on Governance in North America (Monterrey, Mexico). He earned his Ph.D. from Harvard University in 1982.

PETER R. HARTLEY, Ph.D.

BAKER INSTITUTE RICE SCHOLAR, JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY GEORGE AND CYNTHIA MITCHELL CHAIR AND PROFESSOR OF ECONOMICS, RICE UNIVERSITY

Peter R. Hartley is the George and Cynthia Mitchell chair and a professor of economics at Rice University. He is also a Rice scholar of energy economics for the James A. Baker III Institute for Public Policy. Hartley has worked for more than 25 years on energy economics issues, focusing originally on electricity, but including also work on natural gas, oil, coal, nuclear and renewables. He wrote on reform of the electricity supply industry in Australia throughout the 1980s and early 1990s and advised the government of Victoria when it completed the acclaimed privatization and reform of the electricity industry in that state in 1989. Apart from energy and environmental economics, Hartley has published research on theoretical and applied issues in money and banking, business cycles and international finance. In 1974, he completed an honors degree at the Australian National University, majoring in mathematics. He worked for the Priorities Review Staff, and later the Economic Division, of the Prime Minister¹s Department in the Australian government while completing a master's degree in economics at the Australian National University in 1977. Hartley obtained a Ph.D. in economics at the University of Chicago in 1980. He came to Rice as an Associate Professor of Economics in 1986 after serving as an Assistant Professor of Economics at Princeton University from 1980-86.

KENNETH B. MEDLOCK III, PH.D.

FELLOW IN ENERGY STUDIES, JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY ADJUNCT ASSISTANT PROFESSOR OF ECONOMICS, RICE UNIVERSITY

Kenneth B. Medlock III is currently research fellow in energy studies at the James A. Baker III Institute for Public Policy and adjunct assistant professor in the department of economics at Rice University. He is a principal in the development of the Rice World Natural Gas Trade Model, which is aimed at assessing the future of liquefied natural gas (LNG) trade. Medlock's research covers a wide range of topics in energy economics, such as domestic and international natural gas markets, choice in electricity generation capacity and the importance of diversification, gasoline markets, emerging technologies in the transportation sector, modeling national oil company behavior, economic development and energy demand, forecasting energy demand, and energy use and the environment. His research has been published in numerous academic journals, book chapters and industry periodicals. For the department of economics, Medlock teaches courses in energy economics.

ENERGY SECURITY IN A CONTEXT OF HYPER-

SOCIAL MOBILIZATION: INSIGHTS FROM BOLIVIA

DAVID R. MARES, BAKER INSTITUTE SCHOLAR FOR ENERGY STUDIES

PETER R. HARTLEY, BAKER INSTITUTE RICE SCHOLAR

KENNETH B. MEDLOCK III, FELLOW IN ENERGY STUDIES, BAKER INSTITUTE

INTRODUCTION

Energy markets, be they national, regional or international, are currently and for the foreseeable future experiencing significant volatility due to a variety of factors. Among those factors are important nonviolent political movements in major energy producing nations that, even if they do not specifically target energy installations, raise the costs of investment, disrupt exploration and production, and generally interfere with the flow of primary commodities.¹ Although we may be interested in the consequences of a particular set of policies that determine national output of energy resources and trade, we need to understand why those policies were chosen. In short, we need to understand that the political economy of energy is a subset of the politics of governing.

¹ This paper examines social movements that are largely non-violent. The analysis of the dynamics of social conflict can also help explain why civil war develops since civil war erupts only after failed efforts to find a peaceful resolution of important disagreements. However, it is important to note that the dynamics of politics can change once a movement degenerates into a full fledged civil war.

Hyper-social mobilization is political participation by those who have lost faith in their government's willingness and/or ability to govern in their name. The 'hyper' characteristic comes from the fact that it overwhelms the existing institutions for political participation. 'Power in the streets' is a clear indication of hyper-social mobilization. It has brought left-leaning governments into office in two energy exporting countries in Latin America (Bolivia and Ecuador – where two and three presidents, respectively, were forced to resign after violent street demonstrations and new constitutions are being developed. Hyper-social mobilization also saved the government in Venezuela (in 2002 a military coup against Hugo Chavez fizzled in the face of massive street protests). These social movements have created new political risks which have had negative consequences for international energy investment. They have also curtailed energy supplies in the region and, by denying new supplies to the regional market, have increased pressure on the international market.

The current politics of indigenous populations protesting against resource development is not a stable situation for either energy markets or national governments. Left-leaning governments in Latin America will still need to confront the problem of how to profitably develop national resources (for which they will need foreign capital and a profitable domestic use of the resource) and still satisfy the demands of the people who voted them into office. Stable, long term deals cannot be negotiated when bullhorns rally angry people, the symbols of state power [police & army] agitate the population, and leaders aren't accountable for actually delivering the goods. Any efficient solution for both national and global interests, consequently, has to find ways to re-direct political power in the streets back into stable, institutionalized channels of interest representation.

In the 1990s, important reforms were undertaken to consolidate democracy after the collapse of the elite-dominated democracies. Latin American leaders and their international advisors understood that increased participation and a sense of empowerment by previously excluded citizens were fundamental to successful democracies. The challenge was to channel the demands of these groups into existing political institutions (political parties, established unions, etc.) in ways that strengthened, not threatened, the political system. Brazil and Chile have clearly succeeded; Mexico and Peru are struggling to make the transition. But Venezuela and Bolivia (Ecuador, to a lesser degree) are increasingly proving incapable of accommodating the demands of the dispossessed in ways that create the context for expanded political and economic development. The result is political instability and radicalization of policy, both of which have proven detrimental to the development of regional energy sectors. An in-depth analysis of the Bolivian case gives us insights into the policy failures that produce this kind of situation.

This paper begins with a discussion of the political economy of the 'resource curse' and the concept of 'hyper-social mobilization' to highlight the key role that exclusionary politics plays in the polarization of a political system and deterioration of its institutions for effectively channeling political participation. The next section examines the level of social and economic exclusion, as well as a history of failed political reforms, that make Bolivia a good case study to examine these kinds of political risks to energy supply. We then discuss the efforts of the political leadership to reform Bolivia's political economy under a liberal democratic framework. We next turn specifically to energy policy in a context of hyper-social mobilization that developed as a result of the failure of liberal democracy to effectively incorporate important segments of the previously excluded population. A final section examines Bolivian natural gas export performance given these political factors, using scenario analysis from the Rice World

Gas Model. The conclusion draws insight from the Bolivian case for resource rich countries with historically disenfranchised populations that are sufficiently empowered to effectively refuse to submit to elite-determined rules.

THE POLITICAL ECONOMY OF THE 'RESOURCE CURSE'

The contrast between mineral wealth and social-economic poverty is addressed by the "resource curse" literature. Unfortunately, the label "curse" suggests to some an inevitability of the outcome. Yet Ross' review of the economic literature demonstrates that the negative economic side effects of a resource boom can be significantly mitigated by government policy. He distinguishes three types of political arguments: "cognitive explanations, which contend that resource booms produce a type of short-sightedness among policymakers; societal explanations, which argue that resource exports tend to empower sectors, classes, or interest groups that favor growth-impeding policies; and state-centered explanations ... which contend that resource booms tend to weaken state institutions." Ross demonstrates that cognitive limitations should be overcome by the availability of expert advice and the rationality of policymakers. He shows that ownership of natural resources by the nation should empower governments against societal forces and that the weakness of state institutions is more a result of how the rents are appropriated rather than the existence of rents themselves. Hence the search for why a country suffers from a resource boom must examine the political aspects of the resource curse.²

If the resource curse is not inevitable and depends upon the quality of government policy, the question becomes whether countries with a history of poor governance can be helped to transform their policymaking. The World Bank³, Catholic Relief Services⁴ and many academics⁵

² Michael L. Ross, "The Political Economy of the Resource Curse" World Politics 51.2 (1999) 297-322

³ cf. the discussion of political institutions, inequity and development in World Bank, *World Development Report* 2006: *Equity and Development*. Washington, D.C. 2006

certainly believe so and point to three characteristics of government institutions that determine the quality of government policy: transparency, accountability and fairness. Attaining these characteristics requires empowerment of citizens (mainly through social mobilization) and the commitment of private investors and inter-governmental organizations (IGOs).

But the experience of the World Bank in Chad indicates that good projects and expert advice are not sufficient to achieve economic development and social justice, especially if governing elites believe that third parties could help them outmaneuver the reform advocates.⁶ This experience suggests that the specifics of reform have to be embedded in an overall context that makes it difficult for government to marginalize or undermine the reformers. Once again, Ross can help us think about the components of that general context. He suggests that two specific channels are key to implementation of sound policy associated with resource booms. These are the institutional means of appropriating rents (state or private ownership) and the enforcement of property rights. If the argument is correct, attempting to reform public policies without addressing these two will fail to mitigate the resource curse.

"...in settings where the rule of law is already weak, the presence of resource firms may help these groups form (or enable preexisting groups to expand) by giving them lucrative opportunities for extortion. Just as the presence of monopoly rents tends to foster rent-seeking behavior, the presence of resource rents may foster the rise of extralegal organizations that seek out "protection rents." ... If the growing strength of these groups further inhibits the state's ability

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⁴ Ian Gary and Terry Lynn Karl, *Bottom of the Barrel: Africa's Oil Boom and the Poor*. Catholic Relief Services, June 2003 http://www.puaf.umd.edu/faculty/rosencranz/Week1/oil_report_full.pdf

⁵ see the review of the economic and political science literature in Michael L. Ross, "The Political Economy of the Resource Curse" *World Politics* 51.2 (1999) 297-322.

⁶ Scott Pegg, "Can Policy Intervention Beat the Resource Curse? Evidence From the Chad-Cameroon Pipeline Project" *African Affairs*, 105/418, 1–25 December 2005.

to enforce property rights impartially, then the rise of nonresource firms would become less likely. The result would be a violent form of the resource curse, in which the rise of resource industries indirectly leads to further destabilization of property rights and hence the decline of nonresource industries...⁷

Ross' analysis suggests that ultimately we need to examine the political system, and in particular the marginalization of the poor in that system, in order to explain why transparent and accountable institutions fail to develop. In this case study on Bolivia, we focus on hyper-social mobilization because it is a response to perceived failures of past policies conceived and implemented in political systems in which a significant portion of the population previously had little voice.

Social mobilization is a positive characteristic of a modern democratic system, whether one is discussing existing liberal democracies or the potential in 'participatory democracies.' Through social mobilization groups define, articulate and seek support for their demands; hence, social mobilization can be an important pillar of a democratic system because it permits government to know what citizens want and indicates to citizens that they can influence their government.

The claims that social mobilization is 'overwhelming' political institutions or creating a 'crisis of governability' embody the idea that groups of people in society are articulating their demands on the political system in a way that surpasses the ability of the system to respond effectively. That inability to respond, in turn, stimulates greater demands on the system, with the

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⁷ Ross, "Political Economy of the Resource Curse" p. 321.

⁸ Deutsch, Karl W. "Social Mobilization and Political Development" The American Political Science Review, Vol. 55, No. 3 (Sep., 1961), pp. 493-514; Tavits, Margit. "Making Democracy Work More? Exploring the Linkage between Social Capital and Government Performance" Political Research Quarterly, Vol. 59, No. 2 (Jun., 2006), pp. 211-225.

danger that it will ultimately collapse. These adjectives are all dramatic because we are not referring to simple political change, which every modern democratic political system is expected to offer in the event that voters seek it.

Protest can be a form of social mobilization. Protest is a right and can be an indication that a political system is functioning well. The utility of the concept 'hyper-social mobilization' lies in whether or not it can help us distinguish between social protest that can make a democratic political system more responsive to its people and that which can destroy it, purposefully or not. Such protest doesn't have to be violent: a peaceful blockade of a major transportation route can render a city hostage to the protesters.

Measuring levels of mobilization and determining when they cross the line into 'hypermobilization' depends on two characteristics: the target of the demand (government or system) and the nature of the protest (conventional or non-conventional). The distinction between whether the protest is directed against the government in office or the political system itself helps us deal with sporadic or short-lived protests without attributing to it the specter of indicating 'governability' threats. Democratic governments fall via impeachment, early elections, parliamentary votes of no-confidence, and resignation. But the political system provides an institutionalized manner of choosing a successor government, and thus the protests, conventional or non-conventional, should stop long enough to assess the new government. But a democratic political system is likely to be more resilient than a government and thus protest against the system will be longer lasting.

The second characteristic distinguishes the nature of the protest. Since democracy requires the rule of law and protects the rights of groups and individuals in disagreement, it is important to distinguish between protest that uses legal means (e.g., a peaceful demonstration

that while communicating its protest or calling for others to protest, does not forcibly keep others from going about their business) and that which breaks the law (e.g., a demonstration that forcibly keeps opponents from expressing their disagreement). Conventional protest gives 'voice' to grievances in a manner that calls attention but does not obstruct the ability of a government or a political system to function. But when protestors are willing to shut down the government or render the political system incapable of functioning, they are stepping beyond the bounds of democratic politics and thus can be described as non-conventional.

Hyper-social mobilization is thus a description of a condition that threatens the ability of a democratic system to function. There is nothing in the concept of hyper-social mobilization that predicts civil war, however; political instability can lead to civil war, more political instability or a decision on the part of opposing forces that the time has come for compromise.

Table 1. Social Mobilization and Hyper-Social Mobilization in Democratic Polities

	Against Government	Against System	
Conventional Protest	Short term legal activity	Long term legal activity	
Non-Conventional Protest	Short term illegal activities	Long term illegal activities (Hyper-Mobilization)	

Hyper-social mobilization developed in Bolivia because significant sectors of the population no longer trusted or expected the government to use the country's resources to improve their lives. In such cases, regaining trust and confidence in government can entail a major reform of the government or even a complete restructuring of the political system. It is a dynamic process and along the way, many actors will be tempted to create enclaves in which

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⁹ Albert O. Hirschmann, Exit, Voice and Loyalty. Cambridge: Harvard University Press, 1970.

they can monopolize rents or even divert the process into new forms of elite rule. Hence, transparency and credibility will be key elements in rebuilding democratic systems.

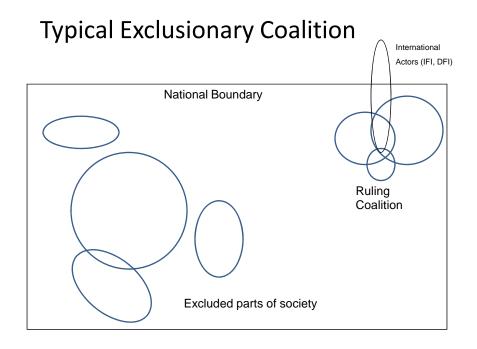
The dynamics of governing are best understood if we examine the 'ruling coalitions' behind a political system. ¹⁰ The ruling coalition consists of the groups in a country that give their allegiance to the political system; those groups might also include foreigners (e.g., investors, non-governmental organizations). Governments operate within the parameters of the political system, and therefore their general behavior is fundamentally determined by the characteristics of the political system. Figures 1-3 present three basic versions of ruling coalitions: one excludes a majority of the population; another excluding specifically those who hold allegiance to a prior coalition; and a coalition best characterized by its broad inclusionary nature, even if a few groups still find themselves in a situation in which their interests are excluded. Inclusion and exclusion are defined not in terms of who the system claims to represent, but in terms of who has the ability to influence the selection of a government and its policies.

Most natural resource-rich countries began with a ruling coalition that is heuristically represented in Figure 1. Here the political system is not representative of the vast majority of the people in the country. Instead, the political system is structured to reflect the needs and interests of an elite group and their international partners. These international partners might include foreign oil companies and the IMF, not because they select government officials or dictate government policy, but because they influence what policies are adopted given the importance of their views to the success and survival of the existing government.

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¹⁰ Gourevitch, Peter. Politics in Hard Times. Cornell: Cornell University Press, 1986; Rogowski, Ronald. Commerce and Coalitions. Princeton: Princeton University Press, 1989.

Figure 1. Typical Exclusionary Coalition



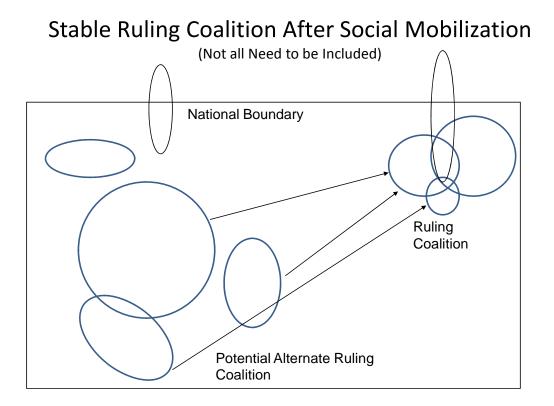
The typical exclusionary ruling coalition is stable as long as the vast majority remains disorganized and demobilized. Ideally, leaders would be able to gauge the increasing demands from the excluded portions of society for participation and distribution. It may be the case that foreign actors (e.g., NGOs, IGOs or even agencies of a foreign government such as USAID) play a role in helping to organize and mobilize these disaffected sectors of the population. A point should come where the leadership of an exclusionary ruling coalition perceives that the political system that provides them with significant benefits will be overthrown in the absence of incorporating a significant portion of the previously excluded. At that point, the once-exclusionary political coalition will either reform the political system, incorporating the interests

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¹¹ On the dynamics of coalition building, see, Laver, Michael J., and Kenneth A. Shepsle. 1990b. "Government Coalitions and Intraparty Politics." British Journal of Political Science 20:489-507; Strom, Kaare. "The Presthus Debacle: Intraparty Politics and Bargaining Failure in Norway" American Political Science Review Vol. 88, No. 1 March 1994.

and demands of a sufficient number of those previously excluded so as to re-stabilize the political system or it will repress the opposition. Figure 2 illustrates the process in which the ruling coalition is enlarged; it could be the case, nevertheless, that a group previously in the ruling coalition is discarded in the process of accommodating the new interests.

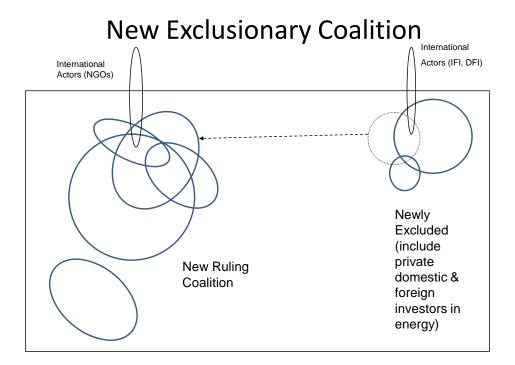
Figure 2. Stable Ruling Coalition after Social Mobilization



If the old leadership does not respond in time or if repression is incapable of demobilizing the incipient opposition, a significant socio-political movement can develop to overthrow the existing political system. This doesn't necessarily imply a violent revolution; certain leaders in Latin America have been able to pursue the creation of an alternative ruling coalition with minimal violence. Figure 3 maps out a new ruling coalition that excludes most of

the forces that supported the prior exclusionary ruling coalition but incorporates previously disaffected groups. In this example, the reformist group abandons its old allies and joins with those advocating significant change (e.g., intellectuals); consequently, they become part of the new ruling coalition that excludes their old partners. The new coalition can exclude not only some members of the old exclusionary coalition (which might include private domestic and foreign investors in the nation's natural resources), but also some of the old excluded sectors as well.

Figure 3. New Exclusionary Coalition



Governing is always a complicated process. But severe political disputes and multiple changes in the laws regulating the economy and determining property rights create uncertainty,

in turn generating risk and frightening investment. Under such conditions, existing investors may decide to leave the country altogether or require higher returns in order to stay. Alternatively, some investors will choose to limit their exposure to what is already captive and cease to make additional investments while maintaining existing programs. Potential new investors may either invest elsewhere or demand greater returns to enter. In any of these cases, the outcome is suboptimal for the country as well as for international markets.

WHY BOLIVIA IS A GOOD CASE

A focus on ruling coalitions gives us a context in which to analyze why and how opposition outside of the established policymaking channels develops and how it impacts government policy. The argument presented here about hyper-mobilization is not limited to energy issues but is relevant to any product the national political culture identifies as inherently "national" – e.g., water, education (cf., the contemporary dispute in Oaxaca, Mexico). To the degree that any of these products or services has international investment, is traded across borders or has externalities that affect the process of globalization, its disruption by hypermobilized social movements should be of concern to analysts of international markets.

Analyzing national cases requires an interdisciplinary approach, bringing together history, sociology, economics and politics. The history that oil and gas, as well as other natural resources, have played in the country's political economy is a fundamental starting point. The interaction among an array of domestic factors that drive internal politics (racial inequalities, government corruption, the cocaine trade and local autonomy) need to be systematically analyzed and mapped. International pressures from non-governmental organizations encouraging 'democracy from below', international financial institutions promoting market reforms, and unstable regional natural gas markets further exacerbate internal politics. The paper will clarify

how these internal and external factors came together to generate hyper-mobilization and the resultant loss of real market opportunities.

Bolivia's unfortunate history illustrates how and why great mineral wealth failed to translate into sustained economic growth, improve social welfare or generate political stability. Bolivia is one of the poorest countries in Latin America, ahead only of Haiti and Nicaragua. Almost seventy percent of the economy is in the informal sector, characterized by artisan technology and semi-wage relations. In 2006, its population of just over nine million had an annual per capita income of only \$1,153. About 65 percent lived in poverty, and almost 40 percent lived in extreme poverty. To add insult to poverty, the country's Gini coefficient of 0.6 (the top 10 percent of the population has over 40 percent of total income), makes it one of the most unequal in South America. The World Bank reports that 90 percent of Bolivians believe this inequality to be unfair.

Social welfare did not prosper during the natural gas boom. Poverty rates went up 2.34 percentage points from 1999 to 2002.¹⁴ To make matters worse, as Table 2 indicates, by a variety of different measures inequality went up; in short, in Bolivia the poor really did get poorer while the rich got richer.

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¹² IDB, "Evaluación de programa de país (CPE): Bolivia 1999-2002" Washington, D.C., 2004, as cited in International Crisis Group, "Bolivia at the Crossroads: The December Elections" *Crisis Group Latin America Report* 15:8 December 2005, p. 5.

¹³ World Bank, *Bolivia: Country Brief*, http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/BOLIVIAEXTN/0,,menuPK:322289~pagePK:141132~piPK:141107~theSitePK:322279,00.html accessed 4/30/08

¹⁴ United Nations Development Program, (UNDP), *Informe temático sobre Desarrollo Humano: La economía más allá del gas* La Paz, Bolivia: October 2005.

Table 2. Indices of Inequality¹⁵

	1999	2000	2001	2002
Gini	0.53	0.56	0.56	0.57
P90/P10	13.08	15.2	12.8	11.5
Índice de Atkinson	0.40	0.44	0.43	0.44
Theil	0.54	0.64	0.65	0.67

A comparative study of South American economics suggests that in 1996, at the beginning of its natural gas boom, Bolivia ranked last among the ten countries in household consumption per capita. A decade later, in 2005 Bolivia remained last, significantly behind Paraguay, which has no mineral wealth.¹⁶

Table 3. Household Consumption Per Capita¹⁷

Table 1 - Household Consumption per capita

Country	Per capita		
Argentina	161,3		
Chile	148,0		
Uruguay	143,5		
Venezuela	108,7		
Peru	91,6		
Brazil	90,5		
Ecuador	88,5		
Colombia	84,1		
Paraguay	69,8		
Bolivia	52,7		

Note: Regional Average = 100.

Results are presented in the form of an index, where 100 corresponds to the average results for the 10 South American countries. Thus, the index of 161 for Argentina indicates that its real household consumption *per capita* is 61% higher than the average for the South American region.

¹⁵ Fernando Landa, *Pobreza y distribución del ingreso en Bolivia entre 1992 y 2002*. Mimeo UDAPE, 2004, as cited in UNDP, 2005, p. 60.

¹⁶ International Comparison Program Latin America, *First results from the International Comparison Program in South America: Household Consumption in 2005* Instituto Brasileiro de Geografi a e Estatística – IBGE, Ministério do Planejamento, Orçamento e Gestão, Rio de Janeiro, 2006 p. --. The study notes that it extrapolated estimates from a 1996 study for 2005 and compared them with actual figures for 2005. In both cases Bolivia ranked last.

¹⁷ International Comparison Program Latin America, *First results from the International Comparison Program in South America: Household Consumption in 2005* Instituto Brasileiro de Geografi a e Estatística – IBGE, Ministério do Planejamento, Orçamento e Gestão, Rio de Janeiro, 2006 p. 8.

Examining household expenditures with more detail is also revealing. Using a measure of actual household consumption that includes both private consumption plus public health and education, Bolivians consume less than half of the next worse off country in South America in the following categories: clothing and footwear, communications, and recreation and culture; their 34 percent of continental average consumption for health is about 22 percent below that of Paraguay, the next worst off country. In terms of private household consumption, Bolivia's figure of 25 percent of the Latin American average for durables is again less than half of the next worst, Peru with 52 percent.¹⁸

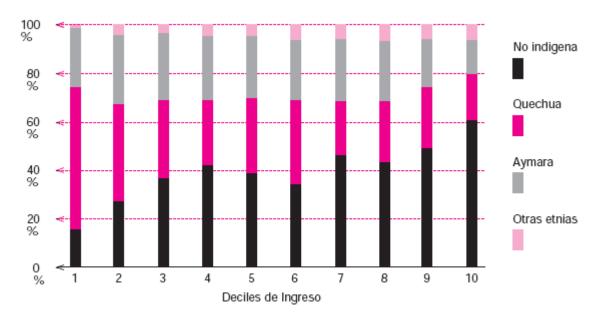
About two-thirds of Bolivians are indigenous.¹⁹ Although the World Bank indicates that it is poverty and not ethnicity or race that determines whether one lives on the margins of society,²⁰ it is clear from Figure 1 that in Bolivia, indigenous peoples are more likely to find themselves at the lower ends of the income scale. It is this correlation that has a political impact on those at the bottom who are feeling empowered for the first time in their lives.

¹⁸ IBGE, 2006 p. 19 Based on indices of per capita real expenditure.

¹⁹ Political Database of the Americas, "Indigenous Peoples, Democracy and Political Participation, Demographic Distribution" Edmund A. Walsh School of Foreign Service & Center for Latin American Studies, Georgetown University http://pdba.georgetown.edu/IndigenousPeoples/demographics.html accessed 5/2/08.

²⁰ Gustavo Márquez, Alberto Chong, Suzanne Duryea, Jacqueline Mazza, Hugo Ñopo, coordinators, *Outsiders?: The Changing Patterns of Exclusion in Latin America and the Caribbean* Economic and Social Progress in Latin America, Inter-American Development Bank, Washington, D.C., 2008.

Figure 4. Distribution of Income by Ethnic Group²¹



It's no wonder the World Bank summarized the situation in Bolivia in 2006 in such a challenging manner:

"... many severe problems remain in force. Malnutrition and infant and maternal mortality are the highest in the region and high levels of malaria, chagas and tuberculosis persist. Bolivia still faces several deficiencies in basic services coverage, such as water, sewerage and electricity. Additionally, progress in some indicators has not been equal. For instance, child mortality rates in children under 5 years fell 27% of those homes with more resources and only 5% amongst the poorest. Access to health care services amongst indigenous and non-indigenous groups is significantly unequal."22

²¹ UNDP, 2005 p. 59.

²² World Bank, *Bolivia: country Brief*

This poor social and economic situation did not develop naturally, or in a vacuum. Bolivia has passed through multiple political systems and experienced important reforms applauded at the time by analysts and activists. It has seemed many times to be starting on the path to prosperity and stability. But each time the country has faltered. The current opportunity Bolivia encounters with its natural gas resources is therefore neither unique internationally or for Bolivia. Thus, Bolivia is representative of a class of resource rich but politically unstable countries; and analyzing the country is instructive in understanding the political risks confronting the global energy market today.

Bolivia is a country that has been buffeted by civil strife and international conflict since its independence.²³ The core conflicts defining Bolivia's political economy have revolved around race/ethnicity, federal v. centralized systems of government, and foreign exploitation of the country (Spaniards, international investors, Chileans, Peruvians, Paraguayans, Brazilians and Argentines). These core conflicts play out in the context of the country's wealth of natural resources (silver, guano, tin, petroleum and natural gas).

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²³ This brief history is synopsized from Klein, Herbert S. Bolivia: The Evolution of a Multi-Ethnic Society. Oxford: Oxford University Press, 1982; Malloy, James M. Bolivia: The Unfinished Revolution Pittsburgh: Pittsburgh University Press, 1970.

Map 1 and 2. Bolivia and Bolivia in South America





The country has been socially polarized since the days of the Spanish conquest, when a small European minority subjugated, killed and exploited millions of indigenous peoples in the high Andes. The end of the colonial era centuries later didn't produce a harmonious society, as an elite descended from the colonizers took control of the country and sought to bring it into the modern era by exploiting indigenous labor in the tin mines and in a disastrous war of conquest against neighboring Paraguay (Chaco War, 1932-1935 in which approximately 100,000 Bolivians perished). A nationalist revolution in 1952 insisted upon viewing society from a class perspective, and attempted to remake the indigenous majority into *campesinos* (peasants) and small scale miners. Both eras had political systems dependent upon *mestizo* elite controlling the government and an economy increasingly dependent upon modern agriculture developed by foreign immigrants to the eastern regions away from the indigenously populated zones. The

overthrow of the revolution in 1964, the authoritarian interlude to 1982 and the adoption of democracy have fared no better at erasing the historical legacy of racism and paternalism.

The country's natural resources drew the attention of foreigners who took advantage of weak governments to plunder the wealth and leave little behind. In the colonial period, silver attracted the Spanish; in the mid-19th century. Then, Chileans coveted the guano wealth and took the country's coastal province in a lop-sided war (War of the Pacific 1879-1884). By the turn of the century, Brazilians desired to control the rubber trade and forced Bolivia to sell it the Acre province in 1903. Tin became the driver of the economy in the late 19th century and was dominated by a local oligarchy [disparagingly known as la Rosca (the screw)] which blocked the use of export revenues to relieve the country's grinding poverty. Petroleum was discovered and when it failed to generate sustained growth, Bolivians blamed its foreign ownership; Standard Oil of New Jersey properties were nationalized in 1937 and those of Gulf Oil in 1969. In the 1980s, the US taste for cocaine produced a new boom for a Bolivian primary product, coca.

Despite its long experience with such mineral and agricultural wealth, Bolivia remained a poor country with one of the most unequal distributions of income in Latin America. While exporting natural resources propels Bolivian growth, the production of natural gas, which began in the 1970s, utilizes relatively low levels of labor. People are thus forced to seek work in the labor-intensive informal sector. Yet that sector is characterized by low productivity, which results in limited growth of employment and low wages. Because the poor also suffer from low levels of human capital and the country's educational system has been inadequate to promote the development of human capital, the poor have little opportunity to move into better-paying jobs. ²⁴

²⁴ World Bank, "Bolivia Poverty Assessment: Establishing the Basis for Pro-Poor Growth" http://go.worldbank.org/PVQ19OO4U0 accessed 2.10.08.

THE POLITICS OF POLICY IN BOLIVIA'S LIBERAL DEMOCRACY

The new political system created in the wake of the successive collapses of the political system dominated by the Movimiento Nacional Revolucionario (MNR) party (1952-1964) and the subsequent military governments (1964-1982, with two brief civilian governments in 1979 and 1980), was fundamentally unstable. Electoral laws facilitated a proliferation of political parties (about seventy during the transition phase), which turned policymaking into a cobbling together of multiple parties on the basis of pork. Because politicians were preoccupied with building and maintaining those coalitions, political parties fractured (the MNR had thirty factions), and looked increasingly irrelevant to most Bolivians. The citizens thus gave their allegiance to other mechanisms of interest articulation and representation -- regional 'civic' committees, new labor, peasant and business organizations, and multiple indigenous movements -- all of which put pressure directly on the President.²⁵

Hernán Siles Zuazo (1982-1985) This administration was simply unable to put together a coherent economic program to confront an economy collapsing under the weight of thirty years of failed state-led development and the international debt crisis. (Indicative of the severity of the crisis, inflation exceeded 24,000 percent in 1985 and growth rates were falling at a 10% clip. Siles Zuazo was pressured to leave office a year early and give someone else an opportunity to save Bolivian democracy. In the elections, former dictator General Banzer, now head of the right wing party (Acción Democrática y Nacionalista, ADN), won a plurality, but Congress brought the old centrist MNR leader Victor Paz Estenssoro back to office for his fourth time.

²⁵ Eduardo A. Gamarra and James M. Malloy, "The Patrimonial Dynamics of Party Politics in Bolivia" in Scott Mainwaring and Timothy R. Scully, eds., *Building Democratic Institutions: Party Systems in Latin America*. Stanford: Stanford University Press, 1995 pp. 409-413; Pilar Domingo, "Democracy and New Social Forces in Bolivia" *Social Forces*, June 2005, 83(4):1727–1744; Forrest Hylton and Sinclair Thomson, "The Chequered Rainbow" *The New Left Review*, 35 September-October 2005, pp. 41-64.

²⁶ Library of Congress: *Bolivia: Country Study*.

Victor Paz Estenssoro (1985-1989). Paz Estenssoro, like many leftist and populist presidents in Latin America at this time (Carlos Andres Pérez in Venezuela, Carlos Saúl Menem in Argentina, Alberto Fujimori in Peru, Fernando Henrique Cardoso in Brazil) adopted economic stabilization and market opening policies that were advocated by his conservative opponent. These policies (dubbed *Nueva Política Económica*, NEP, New Economic Policy in Bolivia) set the context for politics and policy for almost twenty years until riots in the streets overthrew it.

The NEP included economic policies that were all likely to have been rejected by Paz Estenssoro's supporters, had they been given the opportunity to decide. They included currency devaluation, adoption of a floating currency, increases in prices charged by the public sector, a wage freeze and cuts in employment in the public sector, trade liberalization, the freeing up of prices, reform of labor regulation, tax reform, and an IMF stand-by agreement. But Paz Estenssoro didn't present the program to his supporters. Instead he prepared it in secret, adopted it by decree shortly after taking office (Decree Law 21060) and presented his party with little option but to follow when he negotiated a legislative pact with Banzer. The Pact for Democracy exchanged ADN support in Congress for a number of positions in government; a secret addendum added Paz Estenssoro's support for Banzer's candidacy in the 1989 elections. This pact among the major parties of the center and right worried the chief party on the left, Jaime Paz Zamora's Movimiento de Izquierda Revolucionaria (MIR), and in order not to be left out of the benefits of governing he made his own pact with Paz Estenssoro, who also happened to be his uncle.

Although these pacts among the party elites and rule by decree were enacted by the NEP, they couldn't guarantee implementation in the face of opposition by those who believed they were paying the brunt of the costs. The government responded here with both the carrot and the

stick. An Emergency Social Fund was created to provide temporary jobs, and for those who insisted upon protest, the government offered states of siege and removal to isolated parts of the country for their leaders.²⁷

The shift in public policy was also helped by structural changes already occurring in the economy. The mining sector had been opening to the private sector and when tin prices collapsed in 1985, the government moved to dramatically restructure the state-owned mining company COIMBOL. Mines were shut and thousands lost their jobs; but the striking miners had no economic clout with which to bring the government to its knees. The miners lost significant support from a public that was beginning to see state ownership as an important cause for the current economic crisis. Unfortunately, this structural shift would create future problems for the government, as now-unemployed miners with a long history of organization and dissent moved into the Chapare region to grow coca or to the urban informal sectors.

Another issue that was percolating but received no significant attention was that of decentralization. Bolivia's political system was significantly centralized, with departmental (states with virtually no autonomy) and municipal officials appointed by and under the control of the national government, and finances overwhelmingly directed by the central government. But as the lowland eastern sections of the country became colonized (largely by non-indigenous migrants from around the world) and agriculture flourished, they sought significantly more autonomy from the center. Paz Estensorro's government attempted to deflate some of this pressure by decentralizing some functions to the level of the municipio (county). The 1985 municipio reform permitted the election of councilors and mayors, but candidates had to be

²⁷ Melissa Jane MacLean, "Decentralization, Mobilization and Democracy in Mature Neoliberalism: The Bolivian Case" PhD dissertation, University of Toronto, 2005.

²⁸ MacLean; Harry Sanabria "Resistance and the Arts of Domination: Miners and the Bolivian State" *Latin American Perspectives*, Vol. 27, No. 1, (Jan., 2000), pp. 56-81.

registered with an officially recognized national political party and the reform was limited to urban municipios. Local elites at the department level, organized into Civic Committees, thus continued to see their aspirations for departmental autonomy frustrated.²⁹

The NEP was extremely successful at the macro-economic level and all major candidates in the 1989 elections pledged to continue it. Despite his pledge to Banzer, Paz Estensorro retired from active politics and did not endorse anyone. His successful Planning Minister, Gonzalo Sánchez de Lozada ("Goni") ran as the MNR candidate. Abstention by the voters resulted in 8 percent lower turnout than in 1985, indicating an increasing level of dissatisfaction with the political parties, but the elites paid little attention. Once again no candidate received a majority of the vote, and the parties in Congress were tasked with electing the president themselves. This situation provided the country with another glaring example of how politicians stood for nothing except gaining office. Goni won the plurality by a bare 0.3 percent over Banzer, and the third place finisher was Paz Zamora of the MIR. Paz Zamora had important credentials on the left: he had been a radical activist as a young man, exiled during Banzer's dictatorship and served as Siles Zuazo's vice-president for two years. Nevertheless, in order to gain the presidency, he entered into the "Patriotic Accord" with Banzer, which was formalized with a bi-party council to oversee the agreement. Congress selected Paz Zamora and Banzer seemed to operate as the power behind the throne and had the promise of Paz Zamora's support for his next presidential bid.³⁰

Jaime Paz Zamora (1989-1993). Politics over principle was the ruling motto in governing as well as elections. Although Paz Zamora's administration was guided by the economic policy

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²⁹ MacLean, "Decentralization, Mobilization and Democracy..." pp. 109-111.

³⁰ Eduardo A. Gamarra and James M. Malloy, "The Patrimonial Dynamics of Party Politics in Bolivia" in Scott Mainwaring and Timothy R. Scully, eds., *Building Democratic Institutions: Party Systems in Latin America*. Stanford: Stanford University Press, 1995 pp. 399-433.

logic of the NEP, Goni's MNR attempted to block its economic policies in Congress and, when that failed, at the Supreme Court. Of course, the MIR-ADN pact operated the same way, impeaching eight Supreme Court justices who supported the MNR accusations. The administration was also confronted by significant popular opposition to speeding up the pace of reform or moving ahead on privatizing state companies, as well as demands for autonomy from indigenous communities (including a massive march in 1990), and the eastern departments, led by the Civic Committee of Santa Cruz. The accomplishments of Paz Zamora, therefore, were few and achieved largely through imposition of states of siege and use of extra-constitutional means.³¹

For the 1993 presidential elections, Goni took a dramatic step: he selected as his running mate an Aymara Indian. Víctor Hugo Cárdenas was well educated and had run for president in 1989 as the candidate for the Túpac Katari Revolutionary movement (MRTKL). Cárdenas' presence on the ballot allowed Goni to win a sufficiently large plurality this time (14 percent more than Banzer) that Congress had to select him.

Gonzalo Sánchez de Lozada (1993-1997). Goni's presidency represented an important opportunity for the political system as well as for economic policy. His administration sought to decentralize both policy and finances to the local municipio level, particularly in the poor rural areas. In this fashion, empowerment of local people would coincide with an increase in resources, allowing them to decide on which projects to spend those resources and to appreciate both the need for social stability to generate more resources and the relative difficulty of mitigating the structural bases of poverty. The administrative reforms were also designed to strengthen the links between parties and citizens and to undermine the growing influence of the departmental autonomy movement. In short, the reforms were expected to pull people away from

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³¹ Gamarra and Malloy, "The Patrimonial Dynamics..." pp. 416-417.

anti-systemic forces and turn them into stakeholders in the market-oriented development program and the political parties.³²

Sanchez de Lozada's approach to governing was an intriguing combination of paternalism, decentralization and social progressivism. His legal reforms were significant and included the incorporation of indigenous legal traditions, but he operated through a closed process. Aymara representation was achieved only via the participation of Vice President Cárdenas, aided by a number of anthropologists, but without indigenous representatives from Congress or organized groups.³³

Among Goni's most significant reforms were those on political participation and administrative decentralization. Under these laws over 300 autonomous municipalities were created (this time including in the rural areas), and endowed with certain decision-making powers; all traditional organizations based on territory (read 'Indians') were given special recognition and required to be involved in management of their municipality (including in controlling its finances); and by law, 20 percent of central government revenue was to be distributed to municipalities on a per capita basis. The administration did not just claim that it would be in the interest of locals to buy in to these reforms; the legislation was succinct, easy to understand and required automatic, transparent and irreversible transfer of funds – thereby generating credibility with a skeptical public.

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³² MacLean, pp 118-120; Rubén Ardaya S. and Laurent Thévoz, "Promoting Popular Participation: Lessons to be Learned from the Bolivian Decentralization Process" *Mountain Research and Development* 21:3 August 2001" 215-220

³³ Donna Lee Van Cott, "A Political Analysis of Legal Pluralism in Bolivia and Colombia" *Journal of Latin American Studies*, Vol. 32, No. 1, Andean Issue, (Feb., 2000), pp. 207-234.

The growth in municipal activities and investments was impressive: 3700 projects in 1994 and over 18,000 in 1997, while total funding from the central government increased from \$2 million in 1993 to \$118 million in 1998 and \$200 million in 2000.³⁴

The Popular Participation and Administrative Decentralization Laws of 1994 and1995, however, again blunted the autonomy aspirations of the departments. While further empowering municipios, the law attempted to turn the departmental bureaucracy and the Prefect (appointed by the President) into the central government's direct link with the municipios. Municipal authorities were even given advisory functions in a department council, further emphasizing the growing ascendency of the local over regionally based elites. The negative reaction of the regional elite in Tarija was the strongest, with a short-lived popular assembly threatening to secede.³⁵

"Capitalization" was another major innovation to promote reform. Privatization of stateowned enterprises was being implemented throughout Latin America at this time, stimulated
both by the ideological principles behind the Washington Consensus and by the debt crisis facing
many countries. It was not entirely a popular strategy among the poor who had benefited from
the below market pricing (albeit with inefficient service). The platform was also tainted by
widespread allegations of corruption accompanying the sale of the formerly state-run companies.
Goni's privatization program was designed to get buy-in from the average, and therefore poor,
Bolivian but it failed to live up to these expectations.

³⁴ Ardaya S. and Thévoz, "Promoting Popular Participation."

³⁵ MacLean, p. 141-143; Logan, Samuel. "Bolivia's Energy Nationalization Causes Concern in Brazil and Argentina" *Power and Interest News Report* 08 May 2006 http://www.pinr.com/report.php?ac=view report&report.id=485;

Under capitalization, 50 percent of the shares of the company were sold to private investors and they were given managerial control over the enterprise in return for commitments to invest in their new companies. The other 50 percent of the shares were transferred to a pension fund available to all Bolivians over 65 years of age (Bonosol, Bono de Solidaridad). Nine companies were sold, including the national airline, the telecommunications company, the railroad, and the oil and gas company, YPFB (Yacimientos Petrolíferos Fiscales de Bolivia). The program did attract significant investment (new foreign investment rose from \$35 million in 1990 to \$520 million in 1996), buying the government time.³⁶

Important electoral reforms were adopted during Goni's administration. The presidential term was extended from four to five years, and Congress was limited to choosing among the top two finishers if no one gained a majority. The House of Deputies was now elected one half by a party list (voters vote for a party, with individuals getting offices according to their place on the party list) and half as individual candidates. This mixed system of electing the lower house of Congress was an effort to modify but not replace the centralized political system; voters could now vote for some candidates who were independent of parties. In addition, reformers expected that this new system would "curb some of the patronage power of the central party apparatchiks, and to enhance constituency affiliation and responsiveness as a factor in parliamentary behaviour." ³⁷

Goni's reforms of 1993-1997 should have set the basis for growth and distribution in 1997-2003 and facilitated a progressive incorporation of an important segment of the previously marginalized. On balance, his government was perceived as positive;³⁸ halfway through his term

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³⁶ James Dunkerley, *The 1997 Bolivian Election in Historical Perspective* Institute of Latin American Studies, University of London, Occassional Papers No. 16, 1998 p. 22-23.

³⁷ Dunkerley, *The 1997 Bolivian Election* p.6.

³⁸ Dunkerley, 1997 Bolivian Election... pp.24-27.

60.8 percent believed corruption had decreased, and only 28.9 percent believed they were worse off than the year before (22.6 percent said better and 47.5 percent the same). Table 4 demonstrates little opposition to some of his important reforms (participation and education) but also that his capitalization program and the possibility of improving relations with Chile were areas of concern.

Table 4. Public Perceptions of Important Public Policy Issues,* 1994 Survey in La Paz³⁹

Issue	Agree w/Goni	Oppose Don't	Know/No Answer
Popular Participation Law	50.5	23.1	26.4
Educational Reform	55.5	23.4	21.1
Capitalization	17.8	50.0	32.2
Relations with Chile	36.2	45.7	18.1

^{*}Mares interpretation; exact questions are found in the survey.

Still, despite the improvements, Goni's behavior in the lead-up to the Cochabamba Water War of 2000 (see below) demonstrated that autonomous behavior that offered alternatives to his economic policy was neither welcome nor tolerated. In addition, the failure of economic reform to significantly reduce poverty and the continuation of patronage politics among party elites permitted radical leaders to take center stage. Lack of infrastructure investment also came back to haunt the elites. A main highway into the capital La Paz traversed a marginalized community and provided radical leaders with the opportunity to hold the capital city captive by blocking the highway. Negotiations to meet their demands set precedents, but the alternative of using the

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³⁹ Instituto de Encuestas, Universidad Católica Boliviana (UCB), "Encuesta de Percepción Política VIII- Ciudad de La Paz" December 1994. Questions 12-15, pp. 14-15.

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police and army to dislodge them not only produced riots but indicated a loss of control by the central government and willingness to use repression.

THE COLLAPSE OF THE LIBERAL DEMOCRATIC SYSTEM

Hugo Banzer (1997-2001) & Jorge Quiroga (2001-2002). Banzer finally reached the presidency with his selection by Congress in 1997 at age 71. In a very crowded field of ten, the top five candidates ranged from 16 percent to 22 percent of the vote and he was the plurality winner. Banzer put together a "mega-coalition" of four parties to govern. Three major issues confronted Banzer: reform of the state bureaucracy, eradication of coca production and privatization of water distribution. Banzer, whose ruling coalition appeared in the eyes of the dispossessed to include broad influence from the US government and international multilateral financial institutions, was unsuccessful in each issue.

Transformation of the Bolivian state bureaucracy from a patronage to a professional base was believed by the World Bank to constitute a fundamental building block for reform of the public sector. The Inter-American Development Bank (IDB) and World Bank identified corruption and the poor quality of public services as major impediments to Bolivian political and economic development. The international financial institutions (IFIs), supported by the Dutch, Danish and Swedish governments, designed an Institutional Reform Project (IRP) to complement the Banzer administration's National Integrity Plan (NIP). Yet the reformers who had been able to open up the economy to private investors could not progress on this front, an indication that patronage continued to be the currency of the political system. The implementation of mechanisms that the World Bank and others believed would increase the transparency of government operations also lagged. 40

Coca production, practiced in the Andes since pre-Conquest days, became a contentious issue after the dramatic increase in US cocaine consumption in the 1980s. Bolivian governments

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⁴⁰ World Bank, *Bolivia: From Patronage to a Professional State*. Bolivia Institutional and Governance Review, Report No. 20115-BO (In Two Volumes) Volume I: Main Report August 25, 2000 Poverty Reduction and Economic Management, Latin America and the Caribbean Region, pp. I, II.

understood the domestic difficulties raised by eliminating one of the few remunerative crops that Bolivian peasants could grow, particularly as the numbers of coca growers increased due to layoffs in the mines and austerity measures. Consequently, Bolivian governments would pursue eradication erratically, moving aggressively only when under significant US pressure. To defend themselves, coca growers organized themselves and demonstrated.

Banzer, however, made coca eradication into his personal crusade. Named the "Dignity Plan," Banzer put the full weight of his government behind efforts to eliminate all non-traditional areas of coca production. With what many critics considered an excessive use of police and military force, Banzer virtually achieved his goal of "zero coca" in the Chapare region by 2000. The cost in terms of human rights was high, however, and contributed to the mercurial rise of the leader of the coca growers union, Evo Morales. The decline in production also proved to be short-lived.⁴¹

The third issue that befuddled the Banzer administration was the privatization of urban water distribution systems, particularly that of Cochabamba. This issue began under Goni's administration when it authorized the privatization of the woefully inadequate and poorly run Cochabamba water supply. Municipal leaders wanted an opportunity to reform the public company now that the Popular Participation Law had given them resources and authority, so they proposed an alternative, the Misicuni project. But Sánchez de Lozada refused to accept local autonomy on this decision. Before the sale could be transacted, Goni's term ended and Banzer came to office.⁴²

The Banzer administration was swayed by the World Bank's argument that privatization needed to move faster in order to begin to generate the benefits that would ensure popular

⁴¹ Kathryn Ledebur, "Bolivia: Clear Consequences" in Coletta A. Youngers and Eileen Rosin, eds., *drugs and Democracy in Latin America* Boulder, CO: Lynne Rienner, 2005, pp. 143-184.

⁴² MacLean, "Decentralization, Mobilization..." p. 200.

support for the liberal economic reforms. In 1998, a new agreement with the IMF brought a structural adjustment loan of \$138 million and a requirement that the government privatize "all remaining public enterprises." The World Bank also insisted that water rates should not be subsidized and that farmers, who had traditionally just drawn water from wells, needed to pay for their irrigation.⁴⁴

The sale of the system to a subsidiary of the US corporation Bechtel, International Water Limited, with minority participation by four Bolivian firms, which renamed the local company, Aguas del Tunari, provoked protests. These protests took on added anger and urgency when the new company increased water rates by up to 150 percent as compared with rates charged by the municipal water supply. Banzer initially stood his ground, sending police and military forces to disperse the months-long protests. Although the so-called "Water War of 2000" was not a total rejection of government policy by the population as a whole, nor by all indigenous groups, it did serve as a magnet for those opposed to other government measures. The police went out on strike ("mutinied") the day after the state of siege was declared, students protested in La Paz, and coca growers from the Yungas region demonstrated against forced eradication of their crops.

The eruption of violence forced Banzer, now deeply associated with the controversial advice from international institutions, to retreat. The success of the violent Water War in forcing the government to overturn its privatization had a major impact across Bolivia, and even internationally.⁴⁷ No one seemed to care that the result was continued inadequate investment and

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⁴³ Sheraz Sadiq, PBS, Frontline/World, "Timeline: Cochabamba Water Revolt" http://www.pbs.org/frontlineworld/stories/bolivia/timeline.html accessed April 28, 2008.

⁴⁴ World Bank, *Bolivia: Public Expenditure Review*. Report No. 19232-BO, June 14, 1999 Country Management Unit, Country Department VI, Latin America and Caribbean Report.

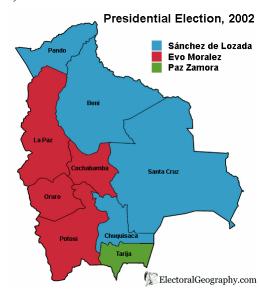
⁴⁵ see discussion in Appendix "A Note on the Indigenous Movements and Political Protest."

⁴⁶ Willem Assies "David versus Goliath in Cochabamba: Water Rights, Neoliberalism, and the Revival of Social Protest in Bolivia" *Latin American Perspectives*, Vol. 30, No. 3, (May, 2003), pp. 14-36.

⁴⁷ For Bolivia, Roberto Laserna, *Conflictos Sociales y Movimientos Políticos: El Año 2000 en Bolivia* Cochabamba, Bolivia: Centro de Estudios de la Realidad Económica y Social, 2001. Books, movies, internet blogs all were used to

therefore, service. 48 Suffering from lung cancer, Banzer resigned and his Vice President, Jorge Quiroga, completed the remaining year of his term. At this time the 2001 National Dialogue Law came into effect, requiring municipalities receive the majority of funds that the country received under the World Banks HIPC debt relief program.

Gonzalo Sánchez de Lozada (2002-2003). Goni returned to the presidency in the 2002 elections in a very close election that revealed that Bolivia was becoming increasingly polarized.⁴⁹ Although six candidates ran, for the first time the country was essentially equally divided between two candidates, Evo Morales and Goni (Map 3, Tarija is the home state of Paz Zamora). Morales had become such a popular figure that the US Ambassador felt it necessary to warn Bolivians of the danger to US-Bolivian relations if the leader of the coca growers union were elected president.



Map 3. Presidential Election, 2002

disseminate the story of 'people's empowerment' all over the world. Cf., the movie The Water Is Ours, Damn It! 1WordCommunication, Amherst, MA.

⁴⁸ John Crabtree, Patterns of Protest: Poltics and Social Movements in Bolivia London: Latin America Bureau, 2005

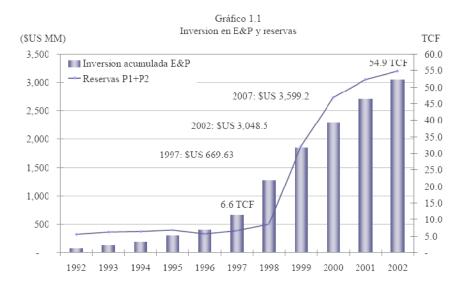
p. 29.

49 René Antonio Mayorga, "Crisis de descomposición del Sistema de Partidos Políticos" Los partidos políticos ente la crisis La Paz: Fundación Boliviana para la Democracia Multipartidaria, 2004 pp. 9-36.

Although Goni's victory was narrow, he pushed ahead with major efforts. Bowing to US pressure, in January 2003 he resumed massive coca eradication efforts; up to 30,000 coca growers marched in protest. In February 2003, units of the National Police mutinied against the Sanchez de Lozada administration. Spurred by a government proposal to introduce income taxes, mutinous police units fought loyal military units and, with the police absent, rioters looted and burned government buildings and private businesses. Although order was restored, the death toll in La Paz was over 70 with 200 wounded.⁵⁰

In the midst of this significant disruption, Sánchez de Lozada's capitalization of YPFB had produced great dividends in terms of Bolivia's proven and probable natural gas reserves, which increased from 6.6 trillion cubic feet (tcf) to 54.9 tcf in 2002 while investment increased to over \$3 billion. (Graph 1) The GasBol pipeline to Brazil was completed, creating a new and large market for Bolivian natural gas. Goni sought to capitalize on what looked like a new opportunity and proposed to export natural gas to the US (via a Mexican port) through a pipeline that would reach a liquefaction facility on the Pacific Ocean. The private investors who would finance the project believed that only a route through Chile was economically viable, despite an offer by Peru to facilitate pipeline construction to a Peruvian port.

⁵⁰ Hylton and Thomson, "Checkered Rainbow" pp. 52-58; Crabtree, *Patterns of Protest* pp. 93-105.



Graph 1. Reserves and Investment in Exploration and Production⁵¹

Exporting natural gas to the US and sending it through Chile was extremely controversial in part because of a history of ill-felling dating back to the 19th Century when Chile took territory from Bolivia. Moreover, Goni's political power had been undermined by the violence in January and February, leaving him in a weakened position that made the wisdom of engaging in such an unpopular plan suspect. The benefits of exporting natural gas hadn't been observable for vast sectors of the poor and therefore they had no stake in its success, and Goni's move towards a new export plan further accentuated his unpopular top-down style of governing; opposition leaders argued that the natural gas exports would benefit the central government elites while leaving any negative environmental consequences of resource development in the backyards of

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⁵¹ Carlos Alberto López, "Del Gas Sus Digresiones" La Paz: Fundación Milenio, 2007.

⁵² In 1883, as a consequence of its defeat by Chile in the War of the Pacific (1879-83), Bolivia lost its maritime province, and with it significant wealth generated by the guano deposits. Between 1899 and 1903, Bolivia's central government skirmished with Brazilian adventurers seeking to lay claim to the rubber-rich Acre province; when Brazil dispatched troops to the area the Bolivians were forced into a relatively cheap sale of the territory. In the Chaco War (1932-35) Bolivia lost 65,000 lives, US\$200 million and their claim to extensive territory, mistakenly believed to have large oil deposits, to Paraguay. David R. Mares, *Violent Peace* New York: Colombia University Press, 2001, pp. 62-72; This historical section is largely drawn from James M. Malloy, *Bolivia: The Uncompleted Revolution* Pittsburgh: University of Pittsburgh Press, 1970 and Library of Congress, *Bolivia: A Country Study* https://lcweb2.loc.gov/frd/cs/botoc.html accessed May 4, 2008.

the poor. Voting patterns in the 2002 elections demonstrated that the poorest regions of the country opposed Goni, and his hard line in January and February had strengthened that opposition. Capitalization had not yet produced significant benefits and the opposition was criticizing not only the policy of selling YPFB to the private sector, but also the terms of the sale; Bolivians believed that they were not getting fair prices for their natural gas resources and anger mounted. Capitalization had been opposed by half of the population in the 1994 La Paz survey cited earlier, while 46 percent opposed Goni's efforts to improve relations with Chile. Bolivians learned about the plans to export more natural gas and to do so through Chile via press accounts that claimed Goni had already signed the deal. To the people already opposed to Goni, the purported natural gas deal confirmed that his personal interests were taking precedence over those of poor Bolivians.

In this context of increasing polarization, Goni took actions that further convinced many Bolivians that he would compromise on whatever was necessary to remain in power. In August, he entered into a pact with a rival political party that had previously been his intense critic, once again suggesting that Bolivian political parties represented only their own interests to control government. In September, a demonstration by indigenous and peasant protestors, who held a group of US tourists hostage, was violently suppressed by the government; six protestors died. Three weeks later, residents of El Alto, the poor community of 750,000 outside La Paz, blockaded the highway into the capital as a means of protesting against the natural gas export deal. Goni and his Minister of Defense ordered the army to break the blockade; in the ensuing violence, scores of people died. Called the "Gas War," it convinced Goni to suspend the natural gas export project. But Goni could not survive the accumulated violent conflicts as even the

small middle class became convinced that Goni had to resign,⁵³ and Vice President Carlos Mesa announced he could no longer support the President.

Carlos Mesa (2003-2005) & Eduardo Rodríguez (2005). President Sánchez de Lozada resigned on October 17, 2003 in the face of a new wave of massive protests. As Vice President, Carlos Mesa, succeeded Goni. He was an historian and journalist without a political party, and sought to govern based on principles of national reconciliation rather than party coalitions.⁵⁴ He adopted as the guidelines for his government the "October Agenda" promoted by the violent opposition that toppled Goni: a national referendum on gas policies, the development of a new Hydrocarbons law, and a Constituent Assembly to write a new constitution.

Without support from the parties in Congress and with an expectant sense among those who had forced out Goni, Mesa's administration moved slowly and contradictorily. While polls indicated that large majorities were satisfied with his performance, ⁵⁵ street demonstrations continued, partly because protestors opposed to coca eradication or natural gas sales to Chile or a radical restructuring of the political system feared that Mesa would backtrack from his promises, and partly because in his desire to avoid repression Mesa quickly sent his Ministers to negotiate. ⁵⁶

The national referendum on current and future natural gas policies was originally scheduled for March 2004, despite the fact that there was no legal provision sanctioning national

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⁵³ Aaron M. Mihaly, ?Por qué se ha caído Goni?: Explicando la renuncia forzada del Presidente Sanchez de Lozada en octubre de 2003" in Nicholas A. Robins, ed., *Conflictos políticos y movimientos sociales en Bolivia* La Paz: Plural, 2006 pp. 95-120.

⁵⁴ René Antonio Mayorga, "Crisis de Descomposicion del Sistema de Partidos Politicos" pp 26-31 in Corporación Andina de Fomento, *Los partidos políticos ante la crisis No. 2* La Paz, 2004.

⁵⁵ Polls tracking his performance began extremely high and fell over time to just under 50%. Cf. the series of polls tracked by Angus Reid Global Monitor, http://www.angus-reid.com/ Even after Mesa resigned in the face of massive street protests, he initially led all candidates for the 2005 election. Angus Reid Global Monitor: Polls & Research, "Quiroga Leads in Bolivia, Only Without Mesa" July 04, 2005 http://www.angus-reid.com/polls/view/7924/quiroga_leads_in_bolivia_only_without_mesa

⁵⁶ cf. the discussion in Evar Luis Fernández and Yuri Torrez, eds., *El Presidente Imprevisto: Diagnóstico del primer año presidencial de Carlos Mesa en la óptica de analistas y periodistas* La Paz: Verbo Divino, 2004.

referenda. Congress adopted the legislation but too late for a March date and the referendum was finally held in July 2004. Although it was approved (see next section), the street protests by social forces demanding total nationalization or distrustful of Mesa, continued.

The forces in favor of departmental autonomy and opposed to the growing demands for reversing the privatization in the energy sector reacted as well. Mesa responded by favoring the direct elections of Prefects in the departments and proposed legislation that would enable the vote to be held in August 2005.⁵⁷ In February 2005, the Santa Cruz Civic Committee presented the National Electoral Court with 300,000 signatures demanding an autonomy referendum.⁵⁸

In the spring of 2005, Mesa threatened to resign because of the disorder, but Congress refused to accept the resignation. After the renewal of massive protests in June 2005, Mesa resigned; protesters kept the leader of either the Senate or the Deputies from becoming President because they represented the old political parties. Supreme Court justice Eduardo Rodriguez took over as interim president with the task of organizing national elections that same year rather than serving out the term to 2007. His tenure was brief, but intense and highly significant for Bolivia. Provisions were made for the national elections to begin an entirely new term and to include the first ever elections of Prefects. The Rodriguez government also approved holding an election for a Constituent Assembly in July 2006. ⁵⁹ The government adopted the Direct Tax on Hydrocarbons (IDH, *Impuesto Directo a los Hidrocarburos*) to ensure a broad distribution of some of the bonanza from the energy sector. One of the noteworthy elements of the IDH is that it provided departments and municipalities with guaranteed shares of the gas revenues coming to

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⁵⁷ Salvador Romero Ballivián, *El Tablero Reordenado: Análisis de la Elección Presidencial de 2005* La Paz: Unidad de Análisis e Investigación del Area de educación Ciudadana de la Corte Nacional Electoral, 2006 pp. 23-24.

⁵⁸ European Union, "Final Report on the Constituent Assembly Election and the Referendum on Regional Autonomy" p. 5 September 2006.

⁵⁹ U.S. Department of State, "Bolivia: Investment Climate Statement 2007" http://www.state.gov/e/eeb/ifd/2007/80681.htm accessed May 8, 2008; Crabtree, *Patterns of Protest*" pp. 98-105; Romero Ballivián, *El Tablero Reordenado* pp. 24-25.

the central government, and provided departments which produced gas (Santa Cruz and Tarija) with a greater share than others.⁶⁰

Evo Morales (2005-present). The Movimiento al Socialismo (MAS) party has elements of both a social movement (incorporating coca growers and indigenous communities) and a political party (promoted by former members of the radical left and urban middle class professionals). Morelas and his party MAS ran on a platform of total repudiation of both the neo-liberal economic policies implemented since 1985 and of the party coalitions that ran government. In their place MAS offered not only the re-nationalization of the energy sector but the leadership of the state in the economy and a new Constitution that would empower the indigenous people of Bolivia. MAS also highlighted the fact that their candidates for President and Congress had never formed part of the prior governments.

The opposition to MAS centered itself in the new party of ex-President Jorge Quiroga. PODEMOS (an acronym for Poder Democrático y Social but also meaning 'We Can'). In recognition of the national discontent with the nation's political economy, PODEMOS offered to supplement the neo-liberal economic policies with social welfare promoting policies and to call a Constituent Assembly to write a new Constitution; the new Constitution would make the system more representative via direct elections for many departmental and municipal offices as well as providing for departmental autonomy.

Although Quiroga began his campaign high in the polls, his standing fell in September when PODEMOS revealed its entire list of candidates: virtually all had previously been members of the discredited political parties and served in government. The issue of departmental

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⁶⁰ Mauricio Medinaceli Monrroy, *Impuesto Directo a los Hidrocarburos: Origen, Destino y Usos* International Institute for Democracy and Electoral Assistance, November, 2007 pp. 3, 8, 26.

⁶¹ International Crisis Group, "Bolivia's New Constitution: Avoiding Violent Conflict" August 2007 p. 13 http://www.crisisgroup.org/library/documents/latin_america/23_bolivia_s_new_constitution_avoiding_violent_confrontation.pdf

autonomy also pushed itself into the spotlight in the fall when the National Electoral Court agreed with Santa Cruz politicians that the distribution of Chamber of Deputies seats needed to be in accordance with the most recent census. Because Santa Cruz stood to gain seats (3, with Cochabamba getting 1) and the Altiplano departments of La Paz, Oruro and Potosí lose them (2, 1 and 1 respectively), Congress couldn't decide and President Rodríguez implemented the revised representation by decree.

The December 2005 vote was a watershed event in multiple ways. For the first time in Bolivia's democracy, a candidate won more than 50 percent of the vote. Evo Morales came to power as the first indigenous president of Bolivia. Abstention was at historic lows (dropping to just over 15%), though the purging of voter registration rolls of dead and those who had moved undoubtedly overstated the improvement. Blank ballots were slightly below the average from 1979-2002, at 4% compared to 4.4%. Since blank ballots increased in conservative areas and fell in areas won by MAS, they indicate that even in the traditional parties were abandoned even by conservative voters. The election was also the first in which Prefects were elected, thus giving regional elites the expectation of further progress on autonomy.⁶²

Voting results not only virtually destroyed the old political parties (MNR, MIR and ADN) but since Morales advocated a form of indigenous socialism for Bolivia, they also represented a repudiation of the entire strategy of the New Economic Policy initiated by the Paz Estenssoro administration twenty years earlier. The election thus validated the judgment of even the U.S. Agency for International Development (USAID), which in February had noted, "Surveys of Bolivian public opinion . . . repeatedly reveal a broad public disdain and contempt for Bolivia's traditional political class, and a perception that the economic system is rigged against all but the

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⁶² Tablero Reordenado, pp. 43-45; 78-81; Matthew M. Singer, "The presidential and parliamentary elections in Bolivia, December 2005" *Electoral Studies* 26 (2007) 196-231.

minority European-descended traditional elite and foreign interests, particularly large multinational corporations. These sentiments, combined with widespread despair and frustration over the lack of real economic growth and a government seemingly incapable of decisive or effective action, have led to a crisis of basic legitimacy for the Bolivian political and economic system."

Table 5. Presidential Election Results 2005⁶⁴

Presidential candidate	Party or coalition	Percentage of valid vote
Evo Morales	MAS	53.7%
Jorge Quiroga	PODEMOS	28.6%
Carlos Dabdoub	UN	8%
Michiaki Nagatani	MNR	6.5%
Felipe Quispe	MIP	2.2%

Chamber of Dep	uties, 130 seats
MAS	72
PODEMOS	43
Unidad Nacional	8
MNR	7
Senate, 27 seats	
PODEMOS	13
MAS	12
UN	1
MNR	1

The margin of MAS' victory for the presidency and in the Chamber of Deputies convinced Morales and his partisans that he had been elected to implement radical reforms which would be the equivalent of a "refounding" of the republic.⁶⁵ Morales moved quickly in areas where the Executive had decision-making power, announcing a week after assuming office the replacement of a "zero-coca" strategy with one to find legal outlets for the leaf while still

⁶³ Making Democracy Work, p. 506 citing USAID, Bolivia Country Strategic Plan, 2005–2009, p. 5.

^{64 &}lt;a href="http://www.boliviainfoforum.org.uk/inside-page.asp?section=3&page=30">http://www.boliviainfoforum.org.uk/inside-page.asp?section=3&page=30; Inter-Parliamentary Union, "Bolivia: Cámara de Diputados" http://www.ipu.org/parline-e/reports/2037 E.htm

⁶⁵ cf. Laurence Whitehead, "Conclusion: Bolivia's Latest "Refoundation": How Original?" in John Crabtree and Laurence Whitehead, eds., *Unresolved Tensions: Bolivia Past and Present* University of Pittsburgh Press, 2008.

fighting the cocaine trade.⁶⁶ On May 1, he decreed the "nationalization" of natural gas at the well-head and sent the military to occupy the relevant installations; though he attempted to nationalize the mining sector, he pulled back when Bolivian cooperatives that had supported him protested.⁶⁷

Nevertheless, there are two major issues in which a "refounding" requires bringing the opposition along: the adoption of a new constitution and restructuring the relationship between the central governments and departments. These two issues, which incorporate many points of contention, have slowed the rate of change and brought the country to the verge of civil war as thousands on all sides of these issues take to the streets rather than compromise on their goals.

A Constituent Assembly to write a new Constitution was elected half a year after Morales' assumption to power, thereby signaling that a new ruling coalition was creating a new political system. MAS sought to have the Assembly work on the basis of a simple majority to pass decisions, but the opposition recognized its irrelevancy in such a case and was able to hold out for a two-thirds majority vote of those present.

Although Morales' side won 54% of the delegates, fourteen political groups were represented in the Assembly. The effort at refounding would not compromise on controversial issues such as the extent of indigenous rights, agrarian reform, natural resource policy, and departmental autonomy, so not a single article was adopted in the Assembly's one year term. In

⁶⁶ In its first year Morales government claims some 5,000 hectares of coca crops were eradicated through local community measures and 107 tons of marihuana, twelve tons of pasta base of cocaine and one ton of cocaine were seized. Agencia Boliviana de Información (ABI), 19 December 2006, as cited by International Crisis Group, "Bolivia's Reforms" p. 13.

⁶⁷ Andean Information Network, "Part III: Bolivia's Mining Rollercoaster: Negotiating Nationalization" August 16, 2007 http://ain-bolivia.org/index.php?option=com_content&task=view&id=94&Itemid=52; Andean Information Network, Part 1: Cooperative Miners in the Nationalization Process: Explosive Politics" May 29, 2007 http://ain-bolivia.org/index.php?option=com_content&task=view&id=98&Itemid=52

August 2007 its mandate was extended until December 14amid increasing mobilizations by supporters and opponents of the refounding but only. ⁶⁸

Fall saw two more issues burst onto the scene. First, the IDH tax on hydrocarbons was modified by the Morales government to the detriment of the departments. That tax had distributed a share of the central government's gas generated revenues to departments, municipalities, universities and indigenous communities. The October reform altered the distribution in favor of municipalities and social programs at the expense of the departments. While Morales supports perceived the reform as making the IDH more progressive, advocates of departmental autonomy saw it as another in a myriad of attacks by Morales and his indigenous allies. Demonstrations against the central government now included demands for the 'rightful' return of the departments' shares of the IDH.

A second issue revolved around Sucre, capital of the department of Chuquisaca, which had been the nation's capital until civil war in 1898 and remains today the seat of the Supreme Court. The Constituent Assembly met there and MAS considered the occasion appropriate for unifying the capital in La Paz; locals, nevertheless, saw this as an opportunity to unify the capital once again in Sucre and took to the streets in protest.

In November, desperate to push the constitution through without compromises, the Morales government turned to its allies in the streets. Thousands came to Sucre to block access of the opposition to the site in which the Constituent Assembly was meeting; the police attempted to keep the two sides apart, contributing to the inability of opposition delegates to

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⁶⁸ John Crabtree, "Bolivia: the battle for two-thirds" http://www.opendemocracy.net/democracy-protest/bolivia_twothirds_3910.jsp; International Crisis Group, "Bolivia's New Constitution: Avoiding Violent Conflict" Latin America Report N°23 – 31 August 2007

http://www.origisgroup.org/library/documents/latin_america/23 holivia s new constitution avoiding violent

http://www.crisisgroup.org/library/documents/latin_america/23_bolivia_s_new_constitution_avoiding_violent_co_nfrontation.pdf

⁶⁹ Medinaceli Monrroy, *Impuesto Directo a los Hidrocarburos* pp., 28, 37-41.

enter the sessions. Without the opposition, MAS was able to approve the document in a very brief role call vote.

Outside in the streets violence erupted, leaving three dead and 200 wounded. The mayor of Sucre, Savina Cuellar, had been a MAS delegate to the Assembly but broke with the Morales government after the violence. She was shortly thereafter elected Prefect of Chuquisaca, beating the MAS candidate by 10 points.⁷⁰

The Morales government pushed ahead, despite the violence in Sucre. The new constitution had to be approved twice by the Assembly before it could be submitted to a national referendum. In early December the Assembly moved its meeting to Oruro city on short notice, citing concerns about the situation in Sucre. Since the department of Oruro is stridently pro-Morales, the opposition was concerned about its safety and boycotted the meeting. With no pressure from the opposition, the Assembly spent hours reading, but not debating, the articles in a ceremony televised nationally. To the surprise of no one, the document was approved. Morales pledged to bring the new Constitution to a national referendum in 2008, the final step in the process of creating a new political system.

The other key issue confronting Bolivia today, departmental autonomy, is linked to the constitutional debates but not limited by them. The government and opposition agreed in Congress to put the two issues on the July 2006 ballot. Since the referendum stipulated that if autonomy won it had to be implemented according to the articles in the new constitution, the government perceived an opportunity to both get support from the lowland eastern departments of Santa Cruz, Tarija, Beni, and Pando (known as the 'Media Luna' because they form a half moon on Bolivia's map, north to south) for the Constituent Assembly and determine the exact

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⁷⁰ Patrick J. McDonnell, "Bolivia's Morales faces new critic; Indigenous activist's split with her former ally is another rip in the nation's fabric" *Los Angeles Times* September 7, 2008, Pg. 7.

nature of autonomy in a forum it expected to dominate. The Media Luna focused on the fact that the referendum stipulated that autonomy would be granted to the departments in which it won a majority even if it lost at the national level. As the election date neared, however, the central government began to worry about its ability to control implementation and decided to campaign against the autonomy referendum.⁷¹

The issue of departmental autonomy has taken on added urgency for the traditional regional elites of the Media Luna. The Morales government has put forth their own ideas on autonomy to be included in the new Constitution. These ideas clash with those of regional elites because Morales balances departmental autonomy with autonomies granted to municipalities and indigenous communities as well. The Caucasian and mestizo regional elites now fear the implications of a refounding that embodies indigenous values and resentments. In addition, the combination of large rural estates, often parceled out with unclear titles by military governments, and years of migration from the altiplano to the rich agricultural east has made the region the prime target for land reform benefiting the poor indigenous at the expense of a wealthy Caucasian and mestizo elite. And finally, the natural gas reserves are located in these departments; under the old laws they have been able to garner the lion's share of revenue, but the Morales government is clearly in favor of a significant redistribution of those resources to the poor departments. Tarija and Santa Cruz, the two richest regions (excluding sparsely)

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http://www.crisisgroup.org/library/documents/latin america/b13 bolivias reforms the danger of new conflicts.

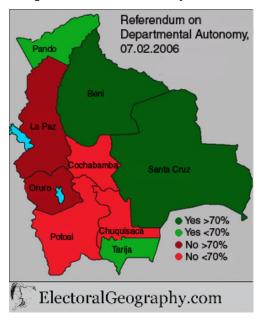
⁷¹ European Union – "Election Observation Mission Bolivia 2006" p. 5 http://www.eueombolivia.org/english/xxdefault.asp?id=1&show=28&m=0; International Crisis Group, *Bolivia's Reforms: The Danger of New Conflicts* January 2007 p. 6.

⁷² Since the municipalities and indigenous communities lie inside departments, Morales is proposing to weaken departmental influence within the department itself even as it gains some degree of autonomy from the central government.

⁷³ Mares interviews in Santa Cruz and La Paz, November 2007; International Crisis Group, "Bolivia's New Constitution."

⁷⁴ International Crisis Group, "Bolivia's Reforms: The Danger of New Conflicts" Latin America Briefing N°13, 8 January 2007

populated Pando), received 65 percent of all state royalties in 2004 even though they have only 29 percent of the population. In contrast, the four poorest areas, where 74 percent of Bolivia's extreme poverty cases are to be found, received only 12 percent of hydrocarbon revenue."⁷⁵



Map 4. 2006 Referendum on Departmental Autonomy⁷⁶

The July 2006 election results on departmental autonomy illustrate the polarization of contemporary Bolivian politics on territorial, economic and ethnic grounds. The prosperous white, energy and agricultural exporters in the eastern lowlands favored autonomy, while the poor, mostly indigenous Andean highlands opposed it. The autonomy proposal won in the Media Luna, with over 70% of the vote in Santa Cruz and Beni but it lost in the highlands, where La Paz and Oruro rejected it by over 70%.

pdf; John Crabtree, "Santa Cruz's referendum, Bolivia's choice"

http://www.opendemocracy.net/article/democracy power/politics protest/santa cruzs referendum farewell bolivia ⁷⁵ Seth Kaplan, "Making Democracy Work in Bolivia" Orbis Summer 2006 pp. 505-506, citing USAID, Bolivia Country Strategic Plan, 2005–2009 (Feb. 22, 2005), p. 1; George Gray-Molina, "Exclusion, Participation and Democratic State-building," in John Crabtree and Laurence Whitehead, eds., Towards Democratic Viability: The Bolivian Experience (New York: Palgrave, 2001), p. 66.

⁷⁶ http://www.electoralgeography.com/new/en/countries/b/bolivia/2006-parliament-elections-bolivia.html

After their regional victories in the July referendum and fearful of the MAS plans for multiple autonomies in the new Constitution, the Media Luna Prefects called for implementation of autonomy in their departments right away. The government refused, arguing that the Constituent Assembly had to determine the terms. In November Morales tried to get Congress to impeach the rebellious prefects, but failed. The following month the departmental autonomy forces organized themselves into the "Democratic Autonomy Committee" and created a national commission to draft an autonomy statute; Morales denounced it.

After the controversial first stage approval of the constitutional project, the prodepartmental autonomy forces took the offensive once again. In December 2007, an estimated one million people demonstrated in support of autonomy in Santa Cruz city, and in January, the Media Luna departments threatened to hold their own referenda on autonomy statutes. Coca growers, labor unions, and neighborhood associations from the Altiplano issued their own threat to march east if the departments moved toward de facto secession.⁷⁷

Congress, meeting without the opposition which had been forcibly blocked from entering by pro-MAS demonstrators, revoked departmental rights to hold referenda; the next month the National Electoral Court ruled that only Congress can call autonomy referenda, but also limited the Morales government by ruling that no referenda can be held without following Constitutionally-mandated procedures (see below on Constitutional referendum). Santa Cruz declared that it would proceed with its referendum anyway, and the four Media Luna departments held referenda in May and June 2008 in which autonomy won overwhelmingly. ⁷⁸

In an effort to break the increasingly tense stalemate by forcing their opponent to back down, Morales and the opposition Prefects agreed, (except for the Prefect of Cochabamba, who

⁷⁷ International Crisis Group, January 07, p. 11.

⁷⁸ Andean Information Network, "Illegal Autonomy Referendum Deepens Division in Bolivia" April 17, 2008 http://ain-bolivia.org/index.php?option=com_content&task=view&id=116&Itemid=32

had been elected as a Morales supporter but subsequently broke with him), after months of haggling, to a referendum on whether the President, Vice-President and Prefects (except for that of Chuquisaca who had recently been elected), should remain in power. The terms of the referendum were disputed even after the idea was approved; initially, an official would have to poll better than he had when elected, but ultimately the standard became one of a simple majority.

The vote of confidence in August resolved nothing. Morales won decisively, but so did the prefect of Santa Cruz and Beni. Two opposition prefects lost, but even if MAS or its allies win those elections five of the nine departments will still be led by anti-Morales forces.

Table 6. Vote of Confidence Referendum, August 2008

Position	Pro or Anti- Morales	Candidate	% against recall	Result
President Vice President	PRO	Juan Evo Morales Ayma Álvaro García Linera	67.41%	Survived
Prefect of Potosí	PRO	Mario Virreira	79.08%	Survived
Prefect of Oruro	PRO	Alberto Luis Aguilar	50.86%	Survived
Prefect of Santa Cruz	ANTI	Ruben Costas	66.43%	Survived
Prefect of Tarija	ANTI	Mario Cossío	58.06%	Survived
Prefect of Beni	ANTI	Ernesto Suárez	64.25%	Survived
Prefect of Pando	ANTI	Leopoldo Fernández	56.21%	Survived
Prefect of Cochabamba	ANTI	Manfred Reyes Villa	35.19%	Recalled
Prefect of La Paz	ANTI	José Luis Paredes	35.48%	Recalled
Prefect of Chuquisaca	ANTI	Savina Cuéllar	WAS NOT SUBJECT TO REFERENDUM	

Tensions rose after the vote of confidence and Morales' announcement that he would submit the new Constitution to a vote at the end of the year. Anti-Morales protestors blocked highways, ransacked government buildings and sabotaged gas pipelines in early September 2008, and pro-Morales supporters also took to the streets. ⁷⁹ Morales put Pando under martial law and the military arrested a few civic leaders, with some allegedly having 'stockpiles' of weapons. ⁸⁰ The government also ordered the arrest of Pando Prefect Fernández on charges of organizing an ambush that killed 15 government supporters and expelled the US Ambassador for meeting with the eastern Prefects and allies. ⁸¹

The scale of violence shocked both sides, temporarily at least. All sides in the Bolivian conflict have previously called for compromise but taken intransigent positions, even when mediators (the Catholic Church and the Organization of American States) have attempted to find common ground. The leaders have again agreed to meet and search for a way out of the impasse under the auspices of UNASUR (an organization of South American presidents), the OAS, the UN, EU and Catholic Church.⁸²

The streets have been used to express dissent as well as to demonstrate a vehement commitment to positions. Unfortunately, the vote of confidence referendum produced results that indicated to supporters of both Morales and departmental autonomy that their respective constituencies believed they were proceeding appropriately. Violence has also been utilized by

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⁷⁹ *The International Herald Tribune*, "President meets foes in bid to contain unrest" September 16, 2008 Pg. 6; Patrick J. McDonnell, "Bolivia imposes martial law on eastern province; Morales moves after a day of clashes in which at least nine people are killed and warns that 'patience has a limit.' *Los Angeles Times*, September 13, 2008 Pg. 3; Simon Romero, "Bolivia Orders U.S. Ambassador to Leave, Accusing Him of Supporting Rebel Groups" *The New York Times*, September 11, 2008.

⁸⁰ "Bolivian army raids civic leaders' homes, seizes weapons" Supplied by BBC Worldwide Monitoring, September 16, 2008 Text of report by Bolivian newspaper El Deber website on 15 September 2007.

⁸¹ The Guardian (London) "Bolivia: Governor held after death of Morales supporters" September 17, 2008. Pg. 23. ⁸² Bolivia Information Forum, "Dialogue Follows Pando Violence" Bolivia Information Forum Bulletin, Special Edition, September 2008, No. 2 http://www.boliviainfoforum.org.uk/; Television Nacional de Chile, "Chilean president reads Unasur declaration in support of Bolivia" Supplied by BBC Worldwide Monitoring, September 16, 2008.

the different sides to press their points. From the middle of 2007 to the present, observers increasingly worry that the country is spiraling towards civil war. Pulling back from the precipice, however, will require leaders to limit their constituency's appeal to power in the streets and articulate their interests through institutions that have legitimacy across camps – an increasingly rare phenomenon.

ENERGY POLICY, 2004-2008

A nation's energy policy is a subset of its general public policy, which reflects the terms of the alliances within the political coalition that dominates the political system. Because Bolivia's ruling coalition has been dramatically altered after a period of growing disenchantment by social forces willing to take to the streets to press their views, it should come as no surprise that energy policy underwent a period of intense instability as the NEP consensus collapsed and subsequently reflected an entirely distinct perspective.

The riots of 2003 and the referendum of 2004 set the terms of the debate over energy policy, leading to Hydrocarbons Law 3058 of May 2005, and the nationalization decree in May 2006. Governments now realized that whatever policies were adopted, they would have to give priority to quickly meeting the needs of the poor who were no longer politically marginalized.

Mesa's gas referendum was held on July 2004 and all five provisions were approved, three of them overwhelmingly so.

Table 7. Gas Referendum, 2004⁸³

The five questions on the referendum were:

- 1. Do you agree that the Hydrocarbons Law (No. 1689), enacted by Gonzalo Sánchez de Lozada, should be repealed?
- 2. Do you agree that the Bolivian State should recover ownership over all hydrocarbons at the wellhead?
- 3. Do you agree that Yacimientos Petrolíferos Fiscales Bolivianos [the state-owned oil company privatized under Sánchez de Lozada] should be re-established, reclaiming state ownership of the Bolivian people's stakes in the part-privatized oil companies, so that it can take part in all stages of the hydrocarbon production chain?
- 4. Do you agree with President Carlos Mesa's policy of using gas as a strategic recourse to achieve a sovereign and viable route of access to the Pacific Ocean?
- 5. Do you or do you not agree that Bolivia should export gas as part of a national policy framework that ensures the gas needs of Bolivians; encourages the industrialization of gas in the nation's territory; levies taxes and/or royalties of up to 50% of the production value of oil and gas on oil companies, for the nation's benefit; and earmarks revenues from the export and industrialization of gas mainly for education, health, roads, and jobs?

Regions	Question	YES*	NO*	Blank**	Spoiled**
Bolivia	Question1	86.64%	13.36%	10.82%	12.10%
Bolivia	Question2	92.19%	8.81%	9.75%	12.51%
Bolivia	Question3	87.31%	12.69%	12.34%	10.73%
Bolivia	Question4	54.79%	45.21%	17.14%	10.72%
Bolivia	Question5	61.74%	38.26%	16.69%	11.72%

In May 2005, responding to popular sentiment, the Morales administration adopted Hydrocarbons Law 3058, which dramatically changed the rules under which private investors can operate in Bolivia and asserted for Bolivia greater control, and thereby a higher share of the rents, from resource development and export. The Constitution, in Law 1689, had stipulated that hydrocarbon reserves belonged to the nation. The new Hydrocarbon Law now gave ownership of what was produced from those reserves to the nation as well. Articles 6.5 and 7.4 require that the holder of an operating contract present YPFB with its production and budgetary plans annually;

⁸³ Alexey Sidorenko, "Bolivia. Gas Referendum, 2004" *Electoral Geography 2.0*. http://www.electoralgeography.com/new/en/countries/b/bolivia/2004-referendum-bolivia.html

changes can only be made if approved by YPFB. The company must also provide YPFB with its development plans for all of its fields. Under the requirements of Article 86, YPFB will be the aggregator and/or seller for all natural gas production, assigning required volumes to the companies producing natural gas. If companies negotiate sales contracts for export, they must work with YPFB to determine from which sources the natural gas will be supplied.

The Hydrocarbon Law was followed by nationalization of all hydrocarbon fields in May 2006. While foreign capital, including that of Brazil's national oil company Petrobras, can remain, the Bolivian government must now have majority share of the profits. The government's share of the fields varies by size: the larger the field the greater the government's share. Petrobras had the largest field and it was faced with an 82 percent take (includes royalties, taxes and direct stakes) for the government.⁸⁴ The nationalization also served to create a context for Bolivia to seek a renegotiation of export prices, which Argentina accepted but Brazil has refused.⁸⁵

Bolivia's taxation policies put it at the upper end of the scale for government share. The average tax for gas exported over long distances to its final destination ranges from 48 percent to 57 percent, but Bolivia charges a 65 -75 percent tax, varying by the size of the field (larger pay more) from which the gas is produced. Even Hugo Chávez' Venezuela charges less.⁸⁶

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⁸⁴ Simon Romero and Juan Forero, "Bolivia's Energy Takeover: Populism Rules in the Andes" *New York Times* May 3, 2006 http://www.nytimes.com/2006/05/03/world/americas/03bolivia.html?r=1&oref=slogin

August 14, 2006 http://www.canalenergia.com.br accessed August 14, 2006; Logan Samuel, "Bolivia's Energy Nationalization Causes Concern in Brazil and Argentina" *Power and Interest News Report* 08 May, 2006 http://www.pinr.com/report.php?ac=view_report&report_id=485; Jimenez Gerardo, "Argentina's Natural Gas Shortage" *Energy Tribune* April 22, 2008 http://www.energytribune.com/articles.cfm?aid=872

⁸⁶ 2006 figures. Van Meurs Associates, as cited in López, Del Gas sus Digresiones p. 4.

Gráfico 1.3 Participacion estatal en el gas natural (%)(Van Meurs Associates - Diciembre 2006) 80.00 65% para campos menores III \$US 2.5 / Mpc 75% para grandes campos \$US 3.5 / Mpc 70.00 \$US 4.5 / Mpc ■ \$US 5.5 / Mpc 60.00 50.00 40.00 30.00 20.00 10.00

Trinidad

Qatar

Venezuela

Bolivia

Graph 2. Government Take in Natural Gas

Alaska

Canada

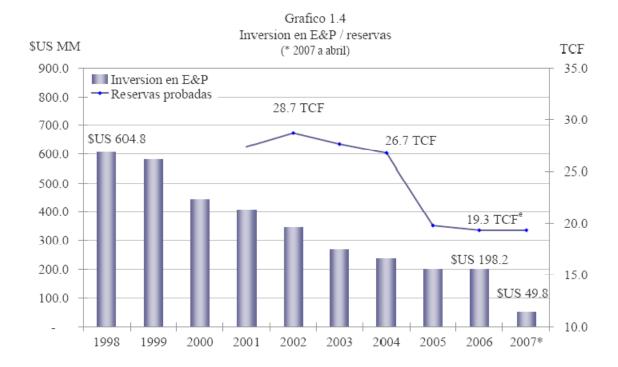
This new energy policy has had a predictable effect on activity. The number of wells drilled in 2006 and in 2007 averaged only 10, a decline from the 64-65 that were drilled annually between 1998 and 2000. These numbers also compare unfavorably with those for Argentina (1594), Brazil (230), Colombia (241) and Peru (85) in 2006. The number of drilling rigs also demonstrates the decline in Bolivia's energy sector. In November 2007 there were only 3 operating in Bolivia, in contrast to 9 in Peru, 36 in Brazil, 73 in Venezuela, 84 in Mexico and 85 in Argentina. These statistics indicate that investors are not interested in expanding Bolivian output, but rather seek to minimize losses from sunk investments by producing a minimal production from their existing fields, as illustrated in Graph 3.87

Indonesia

Australia

⁸⁷ López, *Del gas sus Digresiones* p. 6.

Graph 3. Reserves and Investment in E&P 1998-2007



Despite the Morales' government's aggressive moves against foreign investors, ironically Morales remains under pressure from non-institutionalized interests. The first contracts with the companies under the nationalization decrees were rejected by Congress, which believed the terms were too generous to the prior owners. The price at which Bolivia exported its natural gas to both Argentina and Brazil was also an issue, with demands for renegotiation voiced even by Morales' supporters. In early 2008, citizens from the natural gas rich Camiri took to the streets to back up their demands. These demands represented a combination of specific material interests (800 jobs, milk processing plants, a tanning facility, implementation of a strategy for processing agricultural and livestock products, the transfer of the offices of YPFB's Vice Presidencia to Camiri, and economic aid for disruptions attributable to the El Niño phenomenon) and national interests (nationalization of all hydrocarbons, the 'effective' refounding of YPFB, reversion of the Camiri gas field to the state, expulsion of the Andina company from Camiri, and the

development of infrastructure to industrialize the natural gas currently exported to Brazil).⁸⁸ Thus the appetite for more muscular action seems to be whetted rather than slaked by Morales' initial policies.

SCENARIOS USING THE RICE WORLD GAS TRADE MODEL

This qualitative analysis we have just presented of Bolivia's political economy and its impact on energy policy has implications for the country's natural gas exports. In this section, we use a quantitative exercise to speculate more carefully about the likely scenarios that could confront Bolivia and its gas trading partners as the country deals with its refounding in a context of hyper-social mobilization.

As noted above, privatization in the mid 1990s stimulated a rapid increase in foreign investment in the Bolivian natural gas sector. As exploration spending grew, proven natural gas reserves increased more that six-fold through the early 2000s. But, the exploitation and export of Bolivia's natural gas, and especially the distribution of rents, has been controversial among groups within the country, creating a situation which mitigates against the development of these resources. Re-nationalization has in turn affected developments regarding pipeline exports to Argentina and Brazil with negotiations on the export price becoming particularly contentious.

Currently, Brazil is the largest export market for Bolivian natural gas, with more than two-thirds of total natural gas exports (over 25.5 mmcm/d (900 mmcf/d) in 2006) primarily serving power generation facilities in Brazil. Bolivia also exports natural gas to Argentina. Although Argentina has domestic supplies of natural gas, more than half of its electricity is generated from natural gas, so demand is high. As of 2006, Argentinean imports from Bolivia were about one-third the volume exported to Brazil, but there is a contract in place to increase exports to almost the same level as Brazil by 2010.

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^{88 &}quot;Camireños rompen el diálogo y anuncian la toma de campos" La Razón, (La Paz) March 30, 2008.

Bolivia continues to express interest in expanding its role as a natural gas provider to Argentina and Brazil in the future but domestic politics remains a substantial risk factor. Chile, Paraguay and Uruguay also are connected via pipeline to Argentina and would indirectly benefit from Bolivian exports of natural gas to Argentina. As the demands of those countries grow, in particular for power generation, Bolivia may be able to extract increasing rents for the natural gas it can provide, thereby seeming to confirm current internal drivers to squeeze potential investors and foreign customers. However, the extent to which this can be done on a long-term basis is somewhat limited because Argentina, Brazil and Chile all have plans to access international LNG markets.

Bolivia has several interesting export options to consider in thinking about monetizing its natural gas resources. Since the natural gas being exported to Argentina and Brazil is being used primarily to meet increasing power generation requirements, Bolivia could instead use its gas domestically to generate electricity for export. This option would also allow Bolivia to capitalize on its vast untapped hydroelectric potential. As of 2005, Bolivia had 960 MW of conventional thermal power plants that primarily burn natural gas, and 460 MW of hydroelectric capacity. According to the U.S. Department of Energy, since Bolivia contains headwaters for both the Amazon and the Paraguay/Parana rivers, it has vast untapped hydroelectric generation potential, estimated to be almost 39,000 MW. The Morales government has encouraged further development of the electricity industry, including for export. Just three companies own virtually all of Bolivia's current hydroelectric generating capacity, although the government recently signed an agreement with the Korea Electric Power Company to build a new 120MW hydroelectric power plant. The only practical way of capitalizing on Bolivia's vast hydroelectric potential would be to export power to Brazil, Argentina or other countries in the

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⁸⁹ Reported in the *Korea Times* January 22, 2008.

southern cone. The distance between Santa Cruz Bolivia and Sao Paulo is around 1800 km, while Santa Cruz is a little over 1900 km from Buenos Aires, Santa Cruz or La Paz are a little under 1900 km from Santiago and La Paz is slightly under 1100 km from Lima. Other long distance high voltage direct current (HVDC) lines including the Pacific Intertie on the US west coast (3100 MW over 1300 km), the Inga-Shaba line in Zaire (560 MW over 1700 km), Gezhouba to Shanghai in China (1200 MW over 1100 km), and Quebec to New England (2000 MW over 1100 km) suggest that a link between Bolivia and major electricity demand centers in South America would be technically and economically feasible. 90 However, energy security concerns present one potential problem with trading electricity rather than natural gas. Brazil and Argentina may be reluctant to purchase electricity instead of natural gas from Bolivia because it would widen their exposure to political disruptions in Bolivia. While a disruption in natural gas supplies from Bolivia would reduce the ability of Brazil and Argentina to generate power, other supply options including alternative generating capacity and/or other sources of natural gas supply such as LNG, could lessen the negative consequences. On the other hand, a loss of Bolivian exports of electricity in addition to natural gas could be much more damaging, particularly if the losses exceed domestic generation capability.

We use the Rice World Gas Trade Model (RWGTM) to analyze options for the use of Bolivian natural gas. The RWGTM proves and develops reserves, constructs transportation routes and calculates prices to equate demands and supplies while maximizing the present value of producer rents within a competitive framework. By developing both pipeline transportation routes and LNG delivery infrastructure, the RWGTM provides a framework for examining the

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⁹⁰ Arrillaga (1998) presents some rough calculations for the cost of two "green fields projects" (that is, two systems designed simply to move energy from point A to point B with no other issues involved). His analysis suggests that for transmitting 2,000 MW over 1,000 km via HVDC, the electricity transmission alternative is likely to be slightly less costly. Of course, electricity exports are the only way Bolivia could capitalize on its hydroelectric potential.

effects of critical economic and political influences on the global natural gas market within a framework grounded in geologic data and economic theory. It also allows an examination of the economic rents associated with any project development, so that reasonable measures of forgone profits can be incorporated into an analysis of proposed competing alternatives. Of particular interest is the case of Bolivia is the demonstration of the huge economic costs extracted by the continuing inability of social forces and leaders to agree on the characteristics of the new political and economic order.

The resource data underlying the model are based on the World Resource Assessment of the United States Geological Survey (USGS) as well as data for existing reserves from the Oil and Gas Journal Database. Long and short run capital and operating cost curves for resource development were derived using data from the National Petroleum Council (NPC). Demand for natural gas is determined endogenously as the equilibrium price of natural gas adjusts, although there are also exogenous influences such as the level of economic development, the price of competing fuels, and population growth. The data used in estimating the demand relationship were obtained from the U.S. Energy Information Administration (EIA), the International Energy Agency (IEA), the World Bank, and the OECD. The costs of constructing new pipelines and LNG facilities were estimated using data on previous and potential projects available from the EIA, IEA and various industry reports. The extent of regional detail in the model varies based primarily on data availability and the potential influence of particular countries on the global natural gas market. For example, large consuming and producing countries, such as China, the U.S., India, Russia, and Japan, to name a few, have extensive sub-regional detail in order to understand the effect that existing or developing intra-country capacity constraints could have on current or likely future patterns of natural gas trade. In sum, there exist over 280 demand regions

and more than 180 supply regions. Output from the model includes regional natural gas prices, pipeline and LNG capacity additions and flows, growth in natural gas reserves from existing fields and undiscovered deposits, and regional production and demand.

For this study, we consider a total of four scenarios or cases. The first is the Reference Case, so named because it is the case to which the other three scenarios will be compared. In the reference case, economic efficiency is the main driver of supply solutions and political factors are largely ignored. In case 2, the Bolivian Investment Constrained Case, we assume that the required rate of return on upstream investments is twice that of the Reference Case. The higher return is consistent with the qualitative study presented earlier in this paper and captures the notion that resource nationalism in Bolivia will raise the risk premium required to attract foreign capital. Since Bolivia is potentially a major hub for regional gas trade, we are also interested in the interaction between it and its major gas trading partners. So we move away from politics once again and focus on economics to explore regional trade in two other scenarios — one in which Brazilian demand for natural gas in power generation is higher and one in which Bolivian demand for natural gas is higher. Table 6 lists the scenarios we considered.

Table 6. RWGTM Scenarios

RWGTM Scenarios		
Case 1	Reference Case	
	Bolivian Investment	
Case 2	Constrained	
Case 3	High Brazilian Demand	
Case 4	High Bolivian Demand	

Note, in discussing the scenarios below, we focus primarily on the model output for Bolivia and the immediately affected countries. A more complete set of results is available upon request.

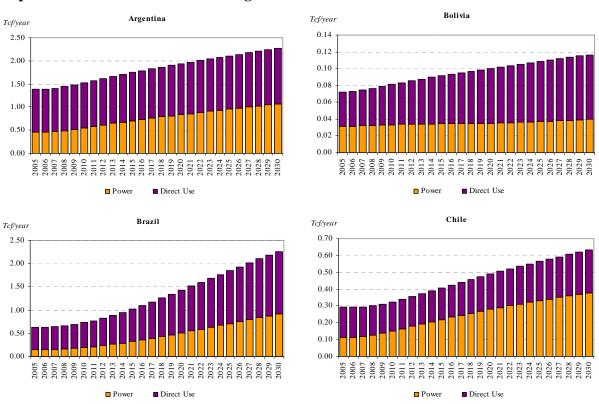
Case 1: Reference Case

The Reference Case assumes that only geological and economic factors determine investments and flows in the natural gas market. In particular, no political considerations are allowed to impose additional costs to market developments. Unrealistic as this assumption may be in the current context, it provides a benchmark against which to appreciate the costs of risk premiums deriving from political factors. In general, the Reference Case indicates increasing interconnectedness in the global gas market. This arises largely due to expansion of LNG trade. In fact, global LNG trade comprises an increasing proportion of total international natural gas trade, rising by a factor of five from 2005 through 2030 in terms of total volume traded. LNG facilitates arbitrage of price differences between regions because waterborne supplies provide a high degree of destination flexibility. In fact, in recent years the volumes of LNG traded in spot markets has been increasing, and new LNG contracts have begun to allow destination flexibility, while parties bound by pre-existing contracts are increasingly agreeing to swap arrangements when the net benefits are sufficiently positive. An implication of the increasing interconnectedness of markets is that events that affect one region will tend also to influence all other regions.

Our results suggest that South America, as a whole, is not likely to have a major presence in the global gas market through 2030. Nevertheless, Brazil, Argentina, and Chile all become LNG importers, while Venezuela and Peru join Trinidad and Tobago as LNG exporters. The fact that Brazil, Argentina, and Chile all become LNG importers indicates that those waterborne supplies are close substitutes for Bolivian gas. This point is particularly salient when the scenarios are considered. The majority of LNG imports into South American countries originate from South American and West African LNG exporters.

Graph 5 indicates total demand for natural gas in Argentina, Brazil, Chile, and Bolivia through 2030 separated into demand for power generation and for all other uses. We focus on these four countries because Bolivian exports of natural gas directly affect them. Demand growth in Brazil is the strongest of the four countries pictured, averaging 5.2 percent per year, with growth in demand for power generation at 7.7 percent per annum. Growth in Chile is also strong at 3.3 percent per year, driven by the 5.0 percent per year growth in gas demand for power generation. While growth in Brazil has direct implications for Bolivia, the effect of growth in Chile is indirect. In particular, since Chile imports much of its gas from Argentina, growth there will place greater demands on the available supplies to both Argentina and Chile. In turn, this could mean that Argentina will have to increase its imports of natural gas from Bolivia, or turn to other sources of supply.

Graph 5. Natural Gas Demand through 2030



Graph 6 indicates the disposition of Bolivian natural gas through 2030. Bolivian exports are projected to grow substantially, almost doubling from 2010 through 2030. The majority of these exports are projected to go to Brazil, which also happens to be projected as the fastest growing natural gas market. In fact, for the majority of the time horizon, more than half of Bolivia's natural gas production is projected to be consumed by end-users in Brazil. This occurs despite the fact that Brazil also begins to import LNG and sees its own production grow (see Graph 7).

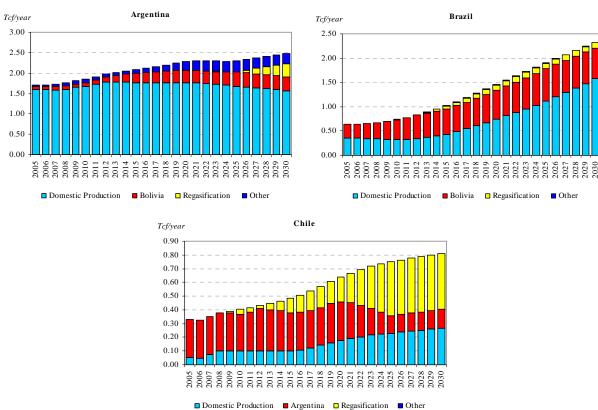
Graph 6. Disposition of Bolivian Supply

Brazilian demand growth eventually pushes it to diversify into its own deepwater domestic production as well as LNG, as indicated in Graph 7. Thus, those supplies are readily identifiable as close substitutes for imported natural gas from Bolivia. This is an important point to which we will return below.

Bolivian exports to Argentina are also projected to grow rapidly, particularly beyond 2010. In the case of Argentina, however, expanded imports serve to offset declines in domestic production in the face of growing demands (see Graph 7). Argentina also begins to import LNG in the mid 2020s, again signaling that waterborne supplies are a close substitute for additional

imports from Bolivia. Notably, the LNG imports into Argentina are in the south, so they effectively serve to back-fill delivery infrastructure that is being evacuated by declining domestic production and displacement of exports to Chile.

Chile, an importer of natural gas via pipeline from Argentina, begins to import LNG in 2009. In fact, by the mid-2020s LNG is projected to serve up to half of Chilean demand. Much of the LNG that is imported into Chile originates from Peru. These supplies serve to displace pipeline deliveries from Argentina, effectively easing the demand for further Bolivian exports into Argentina. As noted above, the reduced Chilean demand also leaves some infrastructure unutilized in Argentina, making it readily accessible to imported LNG.



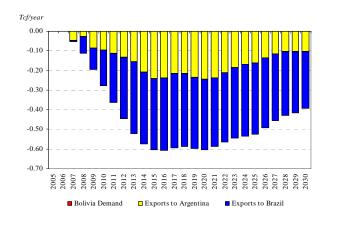
Graph 7. Sources of Supply to Argentina, Brazil and Chile through 2030

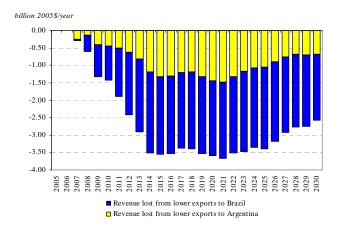
Case 2: Investment constrained in Bolivia

The first variant from the Reference Case is one in which political uncertainty substantially raises the required return on investment in developing natural gas reserves in Bolivia and reduces the flow of foreign funds to finance the development of natural gas supplies. The case is compared to the Reference Case in order to assess the value lost as a result of political uncertainty.

Graph 8 captures the net effects of such a political cost. Exports from Bolivia to both Argentina and Brazil fall dramatically. In fact, the fall in exports represents as much as a 75 percent drop in the middle of next decade and just over 50 percent near the end of the reported time horizon. Given a long-term average gas price forecast of \$6/mcf, the lost revenue due to Bolivia's inability to attract foreign capital is enormous. It peaks in 2021 at \$2.67 billion (in real 2005 dollars), and the net present value (assuming an interest rate of 8.5 percent) of the losses from 2005 through 2030 is just under \$21 billion. Given Bolivia's GDP in 2007 was \$12.8 billion (using the official exchange rate), the revenue cost of this amount of political uncertainty is undeniably large.

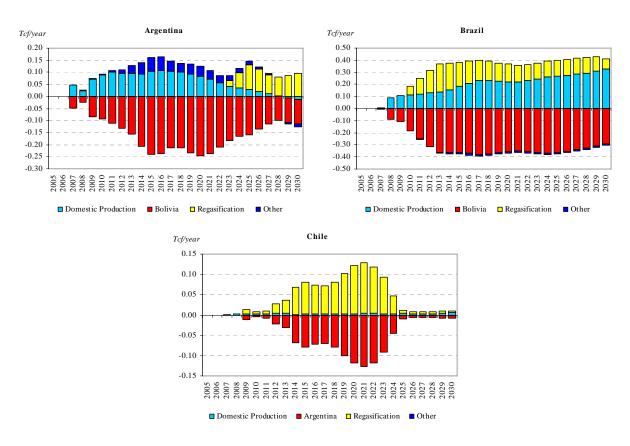
Graph 8. Change in the Disposition of Bolivian Supply and the Associated Lost Annual Revenue (Base Run: Constrained minus Reference)





In Argentina, Brazil and Chile, LNG and domestic supplies serve to replace the reduced imports of natural gas from Bolivia. As Graph 9 indicates, LNG is the largest beneficiary of Bolivia's reduced ability to develop its gas sector. Argentina begins importing LNG a full three years earlier and its import volumes are, on average, about 200 mmcf/d higher. Brazil also imports substantially more LNG, with its import volumes averaging an increase of about 400 mmcf/d through 2030. Chile too sees its LNG imports rise by as much as 350 mmcf/d, but beyond 2025 the volume increase is not substantial. This is an artifact of Chile's large dependence on LNG in the Reference Case after 2025. Thus, there is little substitution opportunity remaining for LNG in Chile relative to the Reference Case beyond the mid-2020s.

Graph 9. Changes in Sources of Supply to Argentina, Brazil and Chile through 2030



Domestic production in both Argentina and Brazil also makes substantial gains. In the case of Argentina, production increases in the near term, but gradually falls back to the Reference Case level as LNG imports accelerate. In Brazil, the lack of Bolivian imports signals higher prices and production responds in large sustained increases. Thus, just as LNG is a close substitute for imported natural gas from Bolivia, domestic production can also respond dramatically. This is indicative of relatively elastic domestic supply, especially in the case of Brazil.

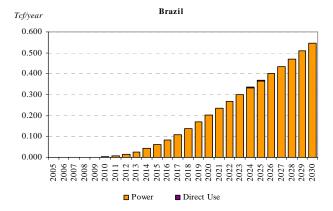
Case 3: High Brazilian Demand

The third case we consider is one in which the demand for natural gas for power generation in Brazil grows at an accelerated rate. Although hydropower currently accounts for around 80 percent of Brazil's power generation, Brazil also has around 2,000 MW of nuclear and 7,000 MW of natural gas capacity. The latter in particular is called upon to supplement supply in dry years, but is unnecessary when Brazilian economic factors dampen demand for electricity or hydroelectric capacity is ample. With economic growth comes increased demand for electricity. This could push Brazil to more heavily utilize its natural gas generation capacity, and even expand its existing fleet. Thus, the scenario presented here considers such developments, overand-above what is present in the Reference Case.

In the Reference Case, power generation demand for natural gas grows at a rate of 7.7 percent per year from 2005 to 2030. In the High Brazil Demand Case demand for power generation grows at a rate of 9.7 percent per year. In both cases, demand for natural gas in all other uses grows at the same rate of 4.1 percent per year through 2030. Total demand grows at an average annual rate of 5.2 percent in the Reference Case and 6.1 percent in the High Brazil

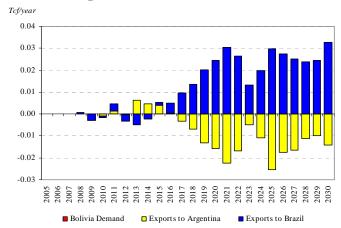
Demand Case. Graph 10 indicates the magnitude of the change in demand in Brazil across the two cases after allowing for the dampening effects of induced price increases.

Graph 10. Change in Brazil demand through 2030

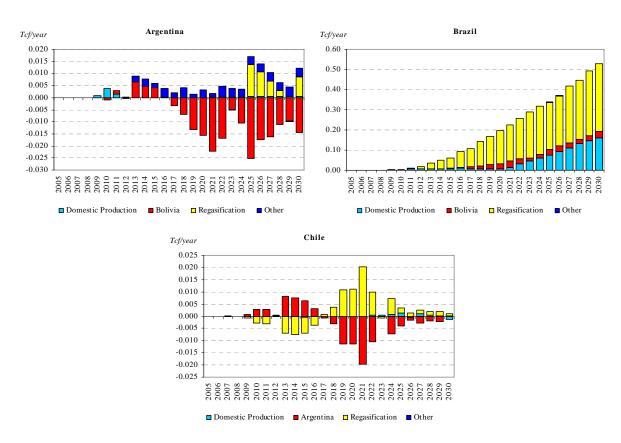


The higher growth rate of Brazilian demand has implications for Bolivian exports. In particular, Bolivia shifts its exports toward Brazil, and away from Argentina (see Graph 11). Nevertheless, the increase in imports from Bolivia is not enough to match the increase in demand, so Brazilian domestic production and imports of LNG both increase as well (see Graph 12). Argentina responds to lower imports from Bolivia by increasing its imports of LNG. The increase in the "Other" category reflects higher Chilean production in the Magallanes Basin that is imported into the southernmost region of Argentina. In Chile, LNG and imports from Argentina offset each other, with the former growing relative to the Reference Case post 2016.

Graph 11. Change in Bolivian exports relative to the Reference Case



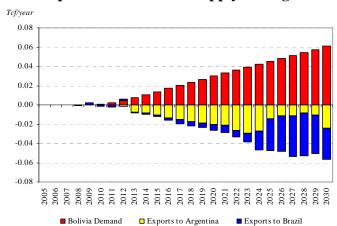
Graph 12. Change in Sources of Supply to Argentina, Brazil and Chile through 2030



Case 4: High Bolivian Demand

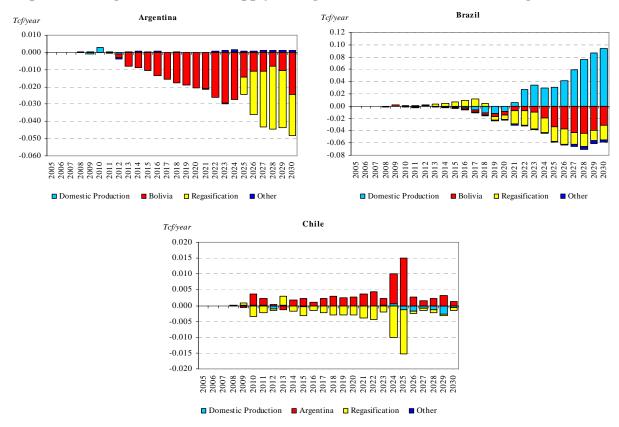
The final scenario is one in which the demand for natural gas for power generation in Bolivia grows at an accelerated rate. Under this scenario, it is assumed that demand growth for power generation in Argentina and Brazil is lower in order to reflect the idea that those countries opt to import electricity from Bolivia instead. Such a development could eventuate if, for example, Bolivia seeks to expand its electricity export capabilities. As noted above, such a strategy could provide an added benefit in that it would allow Bolivia to capture value from its vast hydro generation potential, although we assume in this scenario that declines in Argentinean and Brazilian demand for natural gas in power generation match the Bolivian increases.

Graph 13 indicates the change in the disposition of Bolivian supply, inclusive of the domestic increase, and Argentinean and Brazilian decreases, in demand. If this scenario were to unfold, the sources of supply for Argentina, Brazil, and Chile would be altered relative to the Reference Case (see Graph 14). The lower demand in Argentina specifically translates into greater availability of supply for export to Chile. Thus, the entire region actually becomes less dependent on imported LNG.



Graph 13. Change in the Disposition of Bolivian supply through 2030

Graph 14. Change in Sources of Supply to Argentina, Brazil and Chile through 2030



The RWGTM indicates growing interconnectedness of the global market for natural gas. This has implications for the ability of any single producer to extract excess rents from any single demander or group of demanders. Moreover, delays in investment undertaken in an effort to extract additional rents can actually have the adverse effect of leaving the supplier without a market outlet for a long period of time. For example, if Bolivia withholds supply in an effort to renegotiate prices, much in the way Russia has done with Ukraine and other near neighbors, Brazil, Argentina and other southern cone countries can seek supplies elsewhere, such as from LNG imports. Restricting Bolivian supply would certainly lead to a short period of very high prices in these consuming countries. Once the investments are made to bring alternative supplies, however, Bolivian natural gas must either be discounted enough to make it worthwhile to leave the new LNG import infrastructure idle, or the gas must simply remain in the ground. Thus, the

principle of first mover advantage is very important in attempting to maximize the value of the gas resource.

CONCLUSIONS

Bolivia is a nation that is resource rich, socially and economically poor and politically unstable. Decisions taken by elites and social groups created this situation and perpetuate it. If Bolivia is ever able to escape this situation, an inclusive political system must be created by elites and social groups working together.

The end of the 1990s was probably the moment in which Bolivia had the best opportunity to move towards an inclusive democratic political system. Natural gas exports were on the verge of generating income that could have been invested in employment and social welfare. Those empowered by the Popular Participation law were ready to take control of their destiny and demand that government be accountable. One of the ironies of the reforms of Gonzalo Sánchez de Lozada is that his efforts to create transparency and accountability of government to citizens from the top down created a context for political instability as hyper-mobilization and empowerment of the poor proceeded at a pace that outstripped the reform of the parties and the political system.

Bolivian elites, including Sánchez de Lozada, wanted to manage the process of inclusion from above, as had been done with the worker and peasant movements in the 1930s-1960s. Goni's refusal to accept municipal control of the Cochabamba water system, Banzer's insistence on 'zero coca' and Goni's efforts to push an export project through Chile without addressing the national phobia about an outlet to the sea, all smacked of international influence but at the expense of and without the consensus of Bolivia's dispossessed poor. These unpopular programs provided fuel for social mobilization against the government. The political parties undermined

efforts to professionalize the state bureaucracy, preferring to maintain the inefficient and corrupt patronage structure, even though it dramatically reduced the ability of the state to provide the infrastructure and social welfare that could effectively incorporate the newly empowered and mobilized. The World Bank is not without blame; in light of the failure of the political and social reforms, they might have promoted slower rather than faster movement on economic reforms that were clearly going to create severe adjustment costs for the marginalized sectors of Bolivian society.

The people were ready to take to the streets once again, but this time with some new ideas about who they were and what they wanted. The ideological differences arise from both the reform efforts of Goni and the development of an international human rights movement. Indigenous peoples are now perceived to have the right to live a traditional lifestyle and control their environments. The revolutionary movements of the early 20th century, in contrast, sought to turn the indigenous people into 'workers and peasants', in the process losing their identity as indigenous and subordinating themselves and the natural resources in their communities to the national government, ostensibly for the good of the nation. In today's version, the nation is the one that must accommodate the indigenous by changing its nature (becoming 'pluri-national') and recognizing the rights of indigenous people to veto exploitation of natural resources in their community if their notions of social and economic justice (not only of price but also of outcomes) are not met.⁹¹

These new ideological concepts made capture from above more difficult at the same time that access to independent resources for organizing, mobilizing and articulating their demands

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⁹¹ Donna Lee Van Cott, "A Political Analysis of Legal Pluralism in Bolivia and Colombia" *Journal of Latin American Studies*, Vol. 32, No. 1 (Feb., 2000), pp. 207-234.

was increasing. The radical opponents of globalization were prepared to lead them, to the detriment of the reform process.

Power in the streets has brought Morales to power and is creating a new political system by fits and starts. But that new political system is developing with a character that is pushing to exclude domestic and foreign groups whose human and financial capital not only mean they will be formidable opponents of the new system, but also that any government which represents this new political system is unlikely to have the resources to deliver the sustained social and economic improvement sought by the poor and indigenous. Morales is already feeling pressure to go faster and farther with overt government control of economic activity. Infighting could also lie ahead as the competition over a smaller pie intensifies among the newly empowered. 92The new exclusionary political system is consequently unlikely to be stable, to the detriment of both Bolivians and those who depend upon or could benefit from Bolivian natural gas.

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⁹² Landless *mestizo* peasants were reported angry over the collective land titles that have been created only for indigenous communities. International Crisis Group, "Bolivia's New Constitution: Avoiding Violent Confrontation" *Latin America Report* N°23 31 August 2007 http://www.crisisgroup.org/home/index.cfm?id=5044 accessed May 4, 2008.

APPENDIX. A NOTE ON THE INDIGENOUS MOVEMENTS AND POLITICAL PROTEST

Identities are negotiated at the individual, local, national and international levels; most individuals share multiple identities, calling forth the appropriate ones for the context (e.g., father, husband, Californian, American, human being). 93 The 1952 Revolution had sought to incorporate the rural indigenous people into 'modern Bolivia' by focusing on their 'peasant' nature. The Agrarian Reform law of 1953 provided land to members of peasant unions, thereby creating an incentive for poor rural inhabitants to identify along class lines.

Identity politics is helped along by a number of international NGOs and IGOs that provide aid specifically for groups promoting indigenous identities rather than for class based movements that promote union structures. In addition, some IGOs, including the World Bank, promote and support legislation that provides incentives and creates opportunities for rural inhabitants to switch their ideational and organizational structures from peasant unions to indigenous communities ("ayllus"). 94

The failure of the 1952 Revolution created a new current among those seeking to represent the mass of poor Bolivians. Their indigenous nature was now to be emphasized rather than assimilated away into class consciousness. One approach was to link race and class into an anti-colonial and socialist struggle; those pursuing this approach drew inspiration from an Aymara chief who led a rebellion against the Spanish in 1781, Túpaj Katari. The kataristas founded the United Union Confederation of Working Peasants of Bolivia (CSUTCB), among other organizations. In contrast to Kataristas, other groups rejected class entirely and focused on race as the organizing principle for developing Bolivia.

⁹³ David D. Laitin, *Identity in Formation: the Russian-speaking Populations in the Near Abroad* Ithaca: Cornell University Press, 1998.

⁹⁴ José Antonio Lucero "Representing 'Real Indians': The Challenges of Indigenous Authenticity and Strategic Constructivism in Ecuador and Bolivia" Latin American Research Review Vol. 41, No. 2, June 2006 pp. 46-47.

In 1991 the administration of Paz Zamora ratified an International Labor Organization convention that recognized the existence and collective rights of indigenous peoples. Communities that opposed some of the economic reforms, such as new taxes, now found an additional incentive to develop their ethnic identities since many communities and their international advisors believed that colonial titles exempted them from many forms of state regulation. Further incentives were provided in the Law of Popular Participation (1994) which requires communities to have only one legally registered identity; they cannot function as both a union and an ayllus. A new agrarian reform law, passed in 1996, created a new category (original communal lands), but these were only available to communities identified as indigenous.

The question of whether these indigenous organizations are representing 'authentic' indigenous demands cannot be answered because we cannot know what an 'authentic' Aymara or Quechua wants after 500 years of contact with non-indigenous peoples. In addition, the indigenous leadership is responding to both their domestic and international constituencies and it is not clear what amount of direction is exerted by international benefactors given the level of resources provided from abroad. For example, CONAMAQ supported Banzer during the Cochabamba water war in 2000. But two of the organization's international supporters, Oxfam and IBIS, declared that further aid was dependent upon the election of new leadership. After new leaders were installed, CONAMAQ became an anti-system player, demanding in 2002 that a new constitution be written, and subsequently participating in the protests that overthrew both Goni and his successor Mesa.⁹⁶

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⁹⁵ ILO, *Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries* Adopted on 27 June 1989 by the General Conference of the International Labour Organisation at its seventy-sixth session; entry into force 5 September 1991 http://www.unhchr.ch/html/menu3/b/62.htm

⁹⁶ Lucero, "Representing Real Indians..." pp. 50-51.