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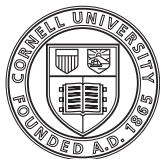
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Correction: *In the Spring 2013 issue, we inaccurately listed Daniel Thomas Nolan III as the Managing Editor. In actuality, the Managing Editor was Daniel Thomas Nolan II. We deeply regret this error.*

Editor's Note

It is my great pleasure to present the 2014 issue of *The Cornell Policy Review*. Many of the articles in this issue examine the theme of polarization, which is particularly timely as increasing social and political divisions impact party politics, policymaking, and the daily lives of global citizens.

It is our honor to open this issue with a feature by Professor Gary Fields, the John P. Windmuller Chair of International and Comparative Labor, on his approach to decision-making through a five-part policy framework that each of his students encounter. Alexandra Hensens, William Nielsen, and Lucas Ackerknecht explore the environmental and economic implications in the politically contentious debate around the development and regulation of shale gas in the United States. Ivi Demi discusses the abuse of eminent domain laws through loosening definitions of public use that unfairly displaces citizens and communities. Dana Westgren explores the potential of third party development as US political parties continue to polarize, while Luis Ferreira Alvarez illustrates the relationship between economic inequality and political instability in Brazil and France. Our final article, written by Matthew Fisher-Post, presents policy options that address the problem of agricultural soil degradation in Mexico. The issue concludes with an interview with President of Panama, Ricardo Martinelli, who discusses public-private partnerships, infrastructure development, and the economic policies that sustained Panama in the shadow of the global recession.

I am grateful to our editorial staff, board members, and writers, for their time and commitment to the print publication and our newly launched blog at cornellpolicyreview.com. I am also thankful to our advisor Professor Nancy Chau and the Cornell Institute for Public Affairs staff for their continued support and guidance. You have all made my tenure at *The Review* memorable and rewarding. I would like to especially thank Managing Editor Olinda Hassan for her enduring support as ally, partner, and friend. I hope you enjoy this issue and engage further with *The Cornell Policy Review* through our blog or by submitting a piece of your own.

— **Jennifer Shin**, MPA 2014, Editor-in-Chief

Aid, Growth, and Jobs: A Five-Part Policy Framework

Gary S. Fields

ABOUT THE AUTHOR

*Gary S. Fields is the John P. Windmuller Professor of International and Comparative Labor and Professor of Economics at Cornell University and a member of the CIPA core faculty. His most recent book is **Working Hard, Working Poor** (Oxford University Press, 2012). This article is reproduced here by permission of UNU-WIDER, which commissioned the original research and holds copyright thereon.*

Introduction

It has been my distinct pleasure to teach literally hundreds of (Cornell Institute for Public Affairs) CIPA students in the last few years. In each course I teach, in the public policy work I do in the United States and around the world, and in my personal life, I use a five-part policy framework to decide what to do. In this article, I share that approach with you.

Picking the Policy Area to Work On

I work in the area of economic development, which I define as improving people's economic well-being. Various economic development objectives are worthy, but to my mind, one objective dominates all others: reducing the scourge of absolute economic misery in the world. In my teaching, research, and policy work, I focus on an important but relatively underemphasized approach to poverty reduction: helping the poor earn more in the labor market for the work they do, so that they can buy the goods and services they need to move up out of poverty.

Choosing the Most Promising Interventions

Assuming that *a* priority for economic development, though not necessarily *the* priority for economic development, is to improve labor market outcomes for the poor, how should country governments and aid organizations choose among policies aimed at this objective? Policy-makers face two broad policy decisions: choosing *among* broad policy areas and choosing *within* a broad policy area.

Choosing *among* broad policy areas means deciding whether to allocate more development resources to one area (e.g. stimulating economic growth) or to another (e.g., increasing paid employment). Similarly, choosing *within* a policy area means, for example, deciding to try to raise the returns to self-employment by increasing the availability of affordable microcredit or by investing in education and training. The do's and don'ts presented in this section are equally applicable to both.

Before suggesting how to choose, let me suggest some ways not to choose. Consider the choice between helping the poor where they are and helping the poor get out of where they are:

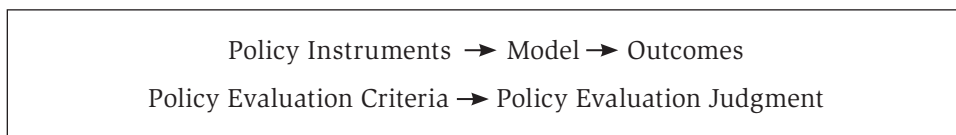
- Line of argument 1: We want to help the poor. The poor work mainly on family farms and in family businesses. Therefore, we should invest our development resources in improving incomes where the poor are, on family farms and in family businesses.
- Line of argument 2: We want to help the poor. The poor will remain poor as long as they remain in poor sectors. Family farms and family businesses pay poorly relative to wage employment, particularly when the wage employment is in enterprises registered with the government (what is sometimes called the ‘formal sector’). Therefore, we should invest our development resources in creating new wage employment in registered enterprises so that the poor can move to the parts of the economy where earnings are higher.
- Line of argument 3: We want to help the poor. It is good to help the poor where they are, and it is also good to help the poor get out of where they are. Therefore, we should invest our development resources by using some to help the poor where they are and using the rest to help the poor get out of where they are.

I hope you noticed that these three lines of argument led to precisely contradictory conclusions. Yet many so-called ‘policy implications’ offered in the literature are just like this: if a certain policy action would produce benefits if undertaken, it should be done. The problem is that none of the preceding arguments recognizes that to use more of the available resources for one purpose implies having less available for another. Economists use the term ‘opportunity cost’ to recognize the budgetary trade-offs — in this case, the cost of using resources to help the poor where they are is to not have those resources available to help the poor get out of where they are. To decide that something is good to do without also weighing the value of what is not getting done is a bad way to choose.

Let us turn our attention to how to choose.

A Five-Part Policy Evaluation Framework

The following policy evaluation framework is one I have been using for a long time. I present it here for others who may also find it useful.



The first step in the framework is to specify the action or alternative actions under consideration. These could be a law that might be passed, a regulation that might be imposed or removed, a tax, or a public expenditure.

The second step is to specify an analytical model. The best ones involve interplay between theory and empirics, capturing the essential aspects of reality while leaving aside the less essential ones.

The third step is to use the model to predict the likely outcomes. In a labor market model, these outcomes might be changes in the number of workers in each type of job and the amounts they get paid.

The fourth step is to specify the policy evaluation criterion or criteria to be used. An example of a single policy evaluation criterion would be to analyze a proposed policy solely in terms of its effect on reducing poverty. Alternatively, an evaluation might be conducted in terms of multiple policy evaluation criteria such as increasing both employment and earnings. Some evaluators are comfortable using efficiency and equity as their criteria.

The fifth and final step is to evaluate the outcomes in terms of the policy evaluation criterion or criteria and reach a judgment about whether the proposed policy would have positive, negative, or ambiguous consequences.

In practice, these steps are better thought of as being developed simultaneously rather than sequentially, with considerable back and forth movement between them. Let us examine some of these steps in more detail.

Specifying the Policy Evaluation Criteria

The best kind of policy analysis is one that starts with specifying an objective function: that which is to be maximized or minimized. The objective function sometimes has a single argument and sometimes multiple arguments. ‘Maximize the firm’s profit’ is a familiar example of a single-argument objective function. ‘Maximize the individual’s utility, where utility is a function of goods and leisure’ is a familiar example of a multiple-argument objective function. When the objective function has multiple components, *none of the components* is maximized; all components are *optimized* so that the *objective function* is maximized. Maximizing a multi-argument objective function therefore involves trade-offs on the policy

side. These policy trade-offs are in addition to the budgetary trade-offs described above, which always arise.

Many development recommendations I have seen are made without any explicit policy evaluation criteria at all. It is stunning that those who do this are often surprised to be asked to make their policy evaluation criteria explicit.

Other development recommendations are made on the basis of presumed goods—for example, it may be presumed good to reduce a country’s budget deficit, maintain a realistic exchange rate, or let supply and demand reign. Here too, it is worth asking those who make such recommendations what they think would be the effect on poverty of putting their recommendations into effect.

And still, other policy recommendations are based on merit goods: education is socially meritorious, and therefore we should allocate more development resources to it. The problem with a merit goods argument is that many other things—health, housing, the arts, and many others—are also socially meritorious, which takes us right back to the point about budgetary trade-offs: to use resources for one purpose means not to use them for another. What one gives up is as important to the decision as what one gets.

Specifying the Model

Policy interventions need to be analyzed using a model. Supply and demand is a model. ‘Firms maximize profits’ is a model. ‘The poor have many needs’ is not a model; it is a fact.

A good model involves the interplay of theory and data. It seems to me that the empirical reality of a developing country is that labor markets have multiple segments and multiple strata. By ‘multiple segments,’ I mean some jobs are better than others for workers of any given type. And by ‘multiple strata,’ I mean workers differ in their type along some sort of hierarchy—for example, according to level of human capital or occupation.

A comprehensive labor market model would be one that recognizes multiple segments and multiple strata, models how each labor market segment and stratum works, and specifies how the various segments and strata link to one another via the migration of workers and the movement of firms.

Some features of a comprehensive labor market model are fairly generic. I would say that human capital plays an important role throughout the world in the sense that workers with more skills, often acquired through education and training, have the ability to perform certain jobs which those in the lower strata of the skills distribution lack. I would say too that a general feature of labor markets around the world is that they are segmented in the sense that (1) some jobs are better than others and (2) there are not enough of the good jobs for all who want them and are capable of performing them.

Beyond that, the right labor market model for a developing country might entail country-specific factors that vary from place to place. Examples are China's household registration system (in Chinese, *hukou*) and the essential differentiation of India's labor market between the peak and slack seasons in agriculture. It would be good to build such country-specific features into our analytical models.

Many development recommendations, including recommendations about employment and earnings in the developing world, suffer from one or another of these problems. I don't know which is worse: to have an *inapplicable* underlying model or to have *no* underlying model. It would be good if analysts could try to avoid them both.

Using Social Benefit-Cost Analysis in Formulating Policy

A unified way of bringing together the foregoing considerations is to aim for as comprehensive a social benefit-cost analysis as time and knowledge permit. *Social* benefit-cost analysis entails looking at the *social benefits* (versus the private benefits) and comparing them with the *social costs* (versus the private costs). Let me illustrate.

The economics columnist for *The New Yorker*, James Surowiecki, has written, "Just fourteen percent of Americans, for instance, are running (or trying to run) their own business. That percentage is much higher in developing countries—in Peru, it's almost forty percent. That's not because Peruvians are more entrepreneurial. It's because they don't have other options. What poor countries need most, then, is not more microbusinesses. ...To be sure, for some people the best route out of poverty will be a bank loan. But for most it's going to be something much simpler: a regular paycheck."¹

What Surowiecki leaves out is the fact that it is much more expensive to create a steady, regular paid job than it is to make a microloan to a microenterprise owner. Given the difference in costs, it is by no means clear that those who argue as Surowiecki does have necessarily reached the right conclusion (which does not imply that they have reached the wrong conclusion either).

Thinking in terms of social benefits and social costs can be done as follows. The easier question is to decide whether to do one single thing or not do it. In this case, we can ask three related questions:

1. What are the extra social benefits if the activity is undertaken?
2. What are the extra social costs of the activity?
3. How do the extra social benefits and extra social costs compare?

When more than one option is possible, similar questions can be asked:

1. What are the extra social benefits from each possible use of a development budget?
2. What are the extra social costs from each possible use?
3. For each possible use, how do the extra social benefits and extra social costs compare?
4. For which activity is the difference between benefits and costs the greatest?

(Note that I have used the word ‘extra’ rather than the word ‘marginal,’ lest some readers understand ‘marginal’ in the sense of something that is unimportant. *Social* benefits and costs have been used throughout; many analysts neglect to distinguish social from private.)

The questions posed in the preceding paragraphs are not easy ones to answer. However, it is better to answer the right questions approximately than the wrong questions exactly.

Finally, we may not have a good sense of the sizes of the social benefits and/or the social costs of various policy interventions, and so research may be needed in order to find out. Some researchers favor statistical and econometric approaches^{2,3,4} while others favor experimental approaches.^{5,6} No researcher today can afford to ignore either approach.

Practical Questions to Be Asked

Imagine that you are an external advisor formulating a policy proposal, which you propose to take to a client country's government. Or imagine that you are a government official formulating a policy proposal, which you plan to take to a higher-level official in your organization. When you make such a proposal, it would be good to be prepared to answer the following three questions to the best of your ability:

- What specific policy objective or objectives are you trying to achieve and by what welfare economic criterion or criteria will you decide if your objective(s) is/are being achieved?
- What theoretical model are you using to analyze the effects of the proposed policy?
- What is the empirical evidence favoring one view of how things work over another?

These three questions are the ideal. They define what we want to strive for. My advice: When you go out into the world, prepare the best answer you can to these three questions. The more skills you have and the more thoughtful your answers, the more valuable your advice will be.

Good luck.

(Endnotes)

- 1 Surowiecki, James. "What Microloans Miss." *The New Yorker*, March 17, 2008.
- 2 Deaton, Angus. 1997. *The analysis of household surveys: a microeconomic approach to development policy*. Baltimore, MD: Published for the World Bank [by] Johns Hopkins University Press.
- 3 Heckman, James J. 2001. "Micro Data, Heterogeneity, and the Evaluation of Public Policy: Nobel Lecture," *Journal of Political Economy* 109(4): 673-748.
- 4 Ravallion, Martin. 2008. "Evaluating Anti-Poverty Programs" in T. Paul Schultz and John Strauss, eds., *Handbook of Development Economics, Volume 4*. Amsterdam: North-Holland.
- 5 Banerjee, Abhijit V., and Esther Duflo. 2011. *Poor Economics*. New York: Public Affairs.
- 6 Karlan, Dean and Jacob Appel. 2011. *More Than Good Intentions*. New York: Dutton.

Implications of Shale Gas Development in the United States

*Lucas Ackernecht, Alexandra Hensens,
and William Nielsen*

ABSTRACT

The process of hydraulic fracturing has significant potential economic benefits; however, it is only now becoming clearer that serious environmental, social concerns must be addressed before the extraction of shale gas can be considered a viable energy source for the US. Insofar as public and private sector actors are working with key stakeholders to close knowledge gaps and mitigate and manage the risks, the imperative is that these gas schemes do not undermine public health, local and regional environmental integrity, and citizens' rights. While the United States continues to foster financial growth from associated economic activities, the drilling continues with little regulation and law enforcement. Policymakers must investigate and understand the associated social and environmental impacts of hydraulic fracturing in counterbalance to the appealing economic benefits of the growing natural gas industry.

ABOUT THE AUTHORS

Lucas Ackerknecht is a second-year Master of Public Administration and Environmental Finance and Impact Investing fellow with a concentration in economics and financial policy at the Cornell Institute for Public Affairs. Prior to graduate school, he received a B.S. in natural resources at Cornell University. Lucas has worked with several environmental non-profit and scientific research organizations.

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William Nielsen is second-year Master of Public Administration and Environmental Finance and Impact Investing fellow at the Cornell Institute for Public Affairs. William received his B.S. in applied economics from the University of Minnesota, Twin Cities, with a concentration in natural resource economics. His work experiences span the public, private, and non-profit sectors, working as a consultant for Mesoamerica Investments, conducting research for the Minnesota Department of Revenue, improving the sustainability of Team Ortho Foundation, and assisting with various triple bottom line projects for the consulting firm Social Enterprise Associates.

Introduction

Natural gas has been used as a domestic and industrial fuel source for over a century. It contains significantly more energy per pound than coal and burns cleaner—it produces almost none of the sulfur dioxide, mercury, and other particulates that are released when burning coal. In addition to being a cleaner source of energy, natural gas could help the United States achieve energy independence and boost local economies.

In response to the ongoing hydraulic fracturing debate, there are multiple recommendations for making shale gas extraction safer and more consistent across corporations and states over time. Decisions, guidelines, and standards that will regulate hydraulic fracturing in the future must balance public health and safety while inevitably taking politics into consideration. In particular, the safety and understanding of hydraulic fracturing could benefit from: 1) better-coordinated scientific and economic research; 2) an extensive review of health issues related to methane releases, contamination of community water sources, and destruction of aquifer systems; 3) an industry-driven approach that will develop best practices for extraction technologies and equipment; 4) stronger and increased state and federal regulation; and 5) public disclosure of the chemicals of hydraulic fracturing fluids.

The growth of horizontal drilling with hydraulic fracturing in the United States has increased the ability of producers to profitably extract natural gas and oil from low-permeability geologic formations such as shale. Hydraulic fracturing is the propagation of fractures in a layer of rock called shale, using pressurized fluid pumped thousands of feet below the surface through a drilled well. The fluid consists of water, a proppant to keep fractures open, and chemical additives to improve the effectiveness of the fracture. Natural gas flows from fractured shale into the well, which is then recovered on the surface, stored in tanks, and piped to the market for sale. The average depth of a well is 5,000 to 7,000 feet, and varies depending on the development area.

The technological advancements in horizontal drilling have resulted in rapid extraction of US shale gas resources. However, the responsible development of drilling the wells has been called into question. There are many unknowns re-

garding the environmental impacts of hydraulic fracturing and the methods companies use to contain their risks.

In some areas, development of shale gas is bringing drilling and production to regions that have previously not seen any oil and gas activity. Although various gas basins exist within the United States, each shale basin is different and has a unique set of technical, operational, and environmental challenges. As a result, states must design regulations with that particular basin in mind. A standard federal policy may not adequately address the challenges of all basins and stronger state-level regulations are needed to complement federal policies. However, despite this variation, shale gas is a valuable economic resource that can supply the country's energy needs, and many industry experts believe that shale gas will become a significant component of natural gas production in the coming years. Indeed, some estimate that hydraulic fracturing already increased US recoverable reserves of oil by at least thirty percent and of gas by ninety percent.¹ Although hydraulic fracturing offers potentially large economic benefits to the United States, these benefits should be balanced against social, environmental, and political costs associated with shale development. These costs include community destabilization, groundwater contamination, and ecological degradation.

Environmental Concerns

Perhaps the most common critique of hydraulic fracturing is its potential environmental impact. At the local level, developing shale gas requires a range of environmentally damaging construction activities, including the construction of roads, parking, and vehicle maintenance areas that fragment ecosystems and undermine environmental integrity.² In addition, millions of gallons of water must be mixed with chemical additives and pumped under high pressure into the well to fracture the shale before its removal and disposal. At a global level, climate change impacts have been brought into question based on recent estimates of methane leakage (methane lost to the atmosphere during extraction). It is quickly apparent that there are several important environmental risks to evaluate.

One of the major advantages of natural gas is that, when burned, it releases about half the carbon dioxide of coal. Natural gas has therefore been viewed as a bridge fuel that will help the US transition towards an energy portfolio with more low- and no-carbon energy sources, helping reduce the use of coal.³ This path is

particularly promising since natural gas can be used similarly to coal as a base-load energy source.

However, the leakage of methane from well sites has raised fears that the benefits in carbon reduction attributed to switching to natural gas are questionable. Methane emissions from drilling operations account for about one-third of all US methane emissions and more than three percent of the total US greenhouse gas emissions.⁴

Tom Wigley, a senior research associate at the National Center for Atmospheric Research (NCAR), demonstrates that methane leakage rates must be kept below two percent for natural gas to be effective in reducing the impacts of climate change in the future. However, Wigley also notes that at current coal-to-gas substitution rates, global warming impacts from methane releases are small, at less than 0.1°C by 2100.⁵

Given the widespread acknowledgement of the impact of methane leakage, the Environmental Protection Agency (EPA) created a series of new regulations in April 2012 called the New Source Performance Standard (NSPS) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP), which focus on reducing Volatile Organic Compounds (VOCs) and other toxic emissions, including methane. As a part of this study, the World Resources Institute (WRI) looked at potential ways of curbing methane emissions and found various promising technologies. Given the new EPA regulations and assuming the use of three of the most cost-effective technologies, the estimated methane leakage rate falls close to one percent of all gas extracted.⁶ This results in a net reduction of greenhouse gas emissions when switching from coal to natural gas. While methane leakage has the largest implications for global climate change, aquifer contamination by hydraulic fracturing fluid is arguably the greatest localized environmental concern, particularly as groundwater regulations in the US are generally lacking.

The fluid that is used for hydraulic fracturing consists of water, sand, and additional additives, proprietary fluids of unknown makeup and composition. In response to increasing controversy across the US, some companies have begun to disclose the composition of hydraulic fracturing fluid. In addition, websites such as fracfocus.org, managed by the Ground Water Protection Council and Interstate Oil and Gas Compact Commission, have tested several fracking fluids and determined that eighty to ninety-five percent consists of water and sand, with the remaining portion consisting of tens to hundreds of chemicals that are used

to improve extraction performance of the well. To better handle this situation, it will be important for an industry-driven approach to make public disclosure of chemicals the standard procedure.

Despite improved disclosure, the depths of various aquifers may be too great to adequately mitigate environmental damage. Given the slow rates of groundwater flow, aquifer contamination could persist for centuries. Vulnerability to potential contamination is high since many populations of towns and cities throughout the country are dependent on groundwater for potable water. For example, about half of state residents outside New York City rely on groundwater for potable water.⁷ Some aquifers are located and contained in unconsolidated (sand and gravel) material, which have highly permeable soils and are highly susceptible to surface contamination.

Contamination of surface water also presents a significant risk. Tank ruptures, piping failures, overfills, vandalism, accidents, drilling and production equipment defects, and improper operations are reasonably likely events that may occur during hydraulic fracturing development.⁸ Gelling agents, surfactants, radionuclides, and chlorides that comprise flowback water are of great environmental concern and may be released through tank or transportation leakage.

It is critical to coordinate scientific research efforts to produce an extensive review of the health and environmental issues associated with fracking due to the known threat of accelerated climate change as well as aquifer and surface water contamination. The focus should be on methane releases and water supplies. In addition to this better understanding of environmental threats, it is important to have strong federal and state level policies. An industry-driven best practices approach could help facilitate the development of these policies. However, moving forward has become unfortunately difficult due to considerable political uncertainty and opposition.

Political Analysis

The political implications of hydraulic fracturing are threefold. First, the process of vertical drilling is exempt from several pieces of federal legislation, making it possible for oil and gas companies to extract natural gas without adhering to policies such as the Safe Water Drinking Act, potentially undermining the entire legislation.⁹ Second, as major oil and gas companies extract gas from different states

throughout the United States, it becomes increasingly challenging for producers to keep track of regulations and adapt their equipment to meet regulations that may vary on a state-by-state basis.¹⁰ Third, as hydraulic fracturing expands at such a rapid pace, many states lack proper funding and staffing resources to enforce existing policies let alone develop new ones.¹¹

Despite Congress' power to set policies pertaining to the oil and gas industry, hydraulic fracturing benefits from many federal exemptions. Over the last few years, the technology has been exempt from the *Safe Drinking Water Act*, the *Clean Water Act*, the *Clean Air Act*, the *National Environmental Policy Act*, and several other important federal laws.¹²

The most contentious of these exemptions is that from the *Safe Drinking Water Act*, given the direct impacts hydraulic fracturing could have on drinking water supplies and storage. Congress enacted the *Safe Drinking Water Act* in 1974 to protect the quality of public drinking water in the US. The act refers to all waters, including both above-ground and underground sources that are meant for human consumption. The EPA is responsible for the implementation and enforcement of this law. Additionally, the EPA must establish requirements for minimum State Underground Injection Control programs, which require companies to have a permit for underground injections and make the EPA responsible for inspection, monitoring, and enforcement of the rule. The *Safe Drinking Water Act* defines injection as “the subsurface emplacement of fluids by well injection.”¹³ This program was specifically set in place to prevent underground injections that could endanger drinking water sources, and yet, underground injection is precisely what hydraulic fracturing does without regulation.

The EPA considers hydraulic fracturing to be exempt from the *Safe Drinking Water Act*, despite many questions about its detrimental environmental impacts. Congress established two exceptions to the definition of “underground injection” — firstly, for “the underground injection of natural gas for purposes of storage,” and secondly, for “the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.” That is, even though hydraulic fracturing uses a mixture of toxic chemicals, the practice is exempt from the *Safe Water Drinking Act* because it does not use diesel fuel.¹⁴ Over the last few years, state governments, environmental groups, and residents brought a number of lawsuits against hydraulic fracturing companies. The US Court of Appeals even ruled “hy-

draulic fracturing activities [to] constitute underground injection.”¹⁵ Legal issues are increasingly unclear.

As different states develop different regulations, companies that operate in multiple states must satisfy all of the different regulations. In response to concerns raised by different stakeholders, including non-governmental organizations and other state and federal agencies, the EPA conducted several studies to analyze whether hydraulic fracturing caused any harm to public water supplies. These reports have been referred to as “unsupportable” and “scientifically unsound.”¹⁶ Further studies are necessary to determine potential risks and damages.

Since 2005, two bills have been proposed in Congress to end the exemption for hydraulic fracturing in the *Safe Drinking Water Act*. The first was in the House of Representatives in 2008, where a bill was introduced to protect drinking water from oil and gas development. The second came in 2009 when members of both houses of Congress introduced the Fracking Responsibility and Awareness of Chemicals Act (also known as the “FRAC Act”). However, neither of the two bills passed into law, and the FRAC Act is unlikely to make it out of the congressional committee.¹⁷

Little progress has been made in regulating fracking as a result of the powerful and wealthy interest groups that have a stake in fracking’s success. Its exemption from the *Safe Water Drinking Act* is famously referred to as the “Halliburton Loophole” after the exemption was added at the request of former Vice President Dick Cheney, also previously a chief executive at Halliburton, one of the world’s largest oilfield service companies. Known, quantifiable variables such as financial revenues and progress towards energy independence carry political heft that environmental and social interest groups have difficulty competing with. With unknown costs and fairly well known benefits in the form of profits, governments are under significant pressure to balance public health and economic growth.

While hydraulic fracturing companies are subject to federal regulations, they are also subject to state regulations. States are free to regulate hydraulic fracturing themselves, as long as they meet the minimum requirements of any federal regulation. This freedom has complicated matters for oil and gas companies that operate in different states. Some states have regulations in place for the general oil and gas sector, while other states have specific rules and regulations in place for hydraulic fracturing.

Hydraulic fracturing is particularly contentious in local communities in New York State. New York State conducted studies for more than four years on whether to allow hydraulic fracturing in the Marcellus Shale formation—a large part of which is included in the New York City Watershed. New York State Governor Andrew Cuomo stands by his initial decision to not allow hydraulic fracturing in the state unless studies prove it to be safe. Any decision on whether to allow hydraulic fracturing is a dilemma for the governor, who must weigh the prospect of extensive economic growth as seen in Ohio and Pennsylvania against the protests from environmental groups that say drilling will damage drinking water supplies and make farmland unusable. The argument for economic development is itself contentious, but estimates have shown that state tax revenues produced by fracking approach \$100 million per year.

New York State has carefully reviewed the effects of hydraulic fracturing on public health and the environment. However, the state has granted extensions to the Department of Environmental Conservation (NYSDEC) to continue reviewing environmental impacts and has made clear it will not make a decision regarding hydraulic fracturing until review of the environmental impact statement is complete.¹⁸ In comparison, the NYC Department of Environmental Protection's (NYCDEP) position has stated that “while DEP is mindful of the potential economic opportunity that this represents for the State, hydraulic fracturing poses an unacceptable threat to the unfiltered water supply of nine million New Yorkers and cannot safely be permitted with the New York City watershed.”¹⁹ As a state-level department, the NYSDEC's recommendation would force Governor Cuomo to make a decision, while an opinion held by the NYCDEP has little influence.

Governor Cuomo has not decided whether the state should allow hydraulic fracturing. As hydraulic fracturing is regulated in nearly thirty other states, Governor Cuomo may fear that his planned “toughest-in-the-nation” regulations and low natural gas prices will combine to make it unlikely for major gas companies to invest in developing new wells in New York State. Cuomo has stated that “science and not the politics” will guide his decision on whether to make hydraulic fracturing legal, and now awaits a final recommendation from NYSDEC Commissioner Joseph Martens and NY Health Commissioner Nirav Shah.²⁰

Cuomo is likely trying to weigh the potential economic development engine that extraction could be in New York's depressed upstate areas against the potential harm to the New York City watershed. It is particularly difficult for Cuomo as

he faces re-election in November 2014, and sees this as a partisan issue between a conservative upstate New York and a democratic New York City. Cuomo's hands are perhaps conveniently tied. The politics of the situation are increasingly controversial. With state commissioners appointed by the governor, the trajectory of their careers are dependent on Cuomo's and if Cuomo wants to avoid a controversial topic such as fracking, it is in their best interest to avoid a decision.

Economic Analysis

The development of domestic reserves of shale gas has significant economic potential. However, the magnitude of economic benefits generated from shale development is uncertain. Econometric models, which can estimate benefits, are complex and accurate only insofar as the validity of their assumptions. These assumptions are under constant debate as economists decide the best models to use. In addition, as with any form of extrapolation, longer time horizons involve the greater degrees of uncertainty, especially when calculating economic benefits that depend on political and geologic considerations. Any estimation of economic benefits should therefore be evaluated with a high degree of skepticism and careful methodological investigation. Furthermore, local economies that do wish to expand shale production should be wary of repeating West Virginia's pattern of boom and bust resource-intensive economic growth. There are also advantages and disadvantages of Liquefied Natural Gas (LNG) exports from the United States, and natural gas price suppression impacts renewable energy parity. The geopolitical landscape is just as complex, and a clear economic conclusion is not yet apparent. Further studies are necessary to establish a better understanding of economic impacts and the variables involved.

There is no question that the national economic impacts of hydraulic fracturing in the US are profound. Gas production from now accessible gas reserves account for over fifty percent of US gas production. The increase in production also resulted in decreased natural gas imports. From 2007 to 2012, natural gas imports decreased by thirty-two percent in the US.²¹

Hydraulic fracturing for both oil and gas can potentially provide US energy independence in the near future, an accomplishment not achieved since 1952.²² Energy independence, however, does not mean that all energy is domestically produced; it simply means that the amount of energy exported is greater than the amount imported. Trade on a global level will continue to occur. For example, the

US still imported oil in 1952, but its exports of coal were large enough to offset the amount of imports. In 2010, the US reversed a two-decade decline in energy independence. By 2012, demand met by domestic sources had increased to an estimated eighty-one percent, according to data compiled from the US Department of Energy.²³

With an estimated reduction of oil imports of four million barrels a day by 2020, rising energy independence could also reduce the US trade deficit by \$145 billion. Energy independence would not only reduce the trade deficit but also significantly impact national security due to decreased dependence on oil from the Middle East. Persian Gulf countries accounted for fifteen percent of US imports of oil products in 2010, down from twenty-three percent in 1999.²⁴

In addition to increased energy independence, the development of large energy production creates a considerable number of jobs. In 2012, Information Handling Services (IHS) estimated that the hydraulic fracturing industry directly and indirectly created 1.7 million jobs, driving \$238 billion in economic activity and \$62 billion in taxes.²⁵

Despite impressive macroeconomic benefits, shale gas development is more complicated at the local and regional level. On one hand, energy extraction can create major local economic gains. For example, McDonald's offered \$300 signing bonuses to new employees in Dickinson, North Dakota, signaling the profound effect of the economic boom due to the Bakken shale site development. Unemployment for North Dakota was 3.3 percent in 2011, the lowest of any state.²⁶

Furthermore, both local and state governments can benefit from additional tax revenue generated from drilling in their jurisdiction, as well as from the increased spending that occurs. Tax revenue accrues through an increase in both property tax and sales tax revenues for local governments. Based on estimates for employment and local economic value generated, and assuming a thirty-year life of a horizontal well, local governments could benefit from a total of \$1.45 million in tax revenue.²⁷

The high wages that accompany the gas sector could also result in increased revenue streams from personal income taxes for the state government. Depending on wages and the level of development, additional income tax receipts could be between \$31 and \$125 million per year for New York State.²⁸ The state could also

receive direct revenues through the leasing of state land for horizontal drilling. Of course, this does not account for the increase in demand for governmental services that is likely to occur. Examples of such demand include increased road repair work and emergency services to address the inherent safety risks of drill sites.²⁹

Comparing New York's estimates of possible development with Pennsylvania's realized development reveals a considerable difference in estimation procedures. The IHS estimates that shale gas gave the Pennsylvania economy a \$14 billion boost last year. This figure is expected to increase to almost \$27 billion in 2020. All the extra economic activity generated nearly \$3 billion in taxes for the state.³⁰ This additional economic activity includes both direct and indirect growth from gas development, whereas New York estimates of \$31 million to \$125 million are based only on direct growth and spending from gas development. As a result, effective comparison of these values is difficult. Methods for estimating indirect benefits are highly contested but the primary understanding is that indirect benefits are potentially large, and significantly larger than the direct benefits.

While the previous figures are impressive, it is worth noting the relatively short time frame being considered and potential side effects of sudden rapid growth in an economy. Natural resource extraction industries usually play only a small role in state economies because their employment impact is small when compared to larger industries such as health services or retail.³¹ However, extraction industries may have a large impact within the region where production takes place, creating economic "booms" within that region. According to the boom and bust theory, as shale gas industries move into a community, large inflows of capital from increased production and employment investment raise expenditures on community goods such as food, automotive care, and other services. Landowners who lease their land for shale development are paid royalties, new jobs are created in hotels and retail, and per capita wealth within the community generally increases.³² As one might expect, anticipated economic "booms" resulting from hydraulic fracturing are welcomed in many regions struggling under challenging economic conditions.

Behind the theory of booms are the econometric models developed to measure specific quantifiable impacts. Timothy Considine, an economics professor from the University of Wyoming, wrote a paper published by the American Petroleum Institute, which analyzed the economic benefits of shale development on a regional level in Pennsylvania, New York, and West Virginia.³³ Using an

IMPLAN input-output model, Considine estimated the short- and long-term economic impacts of shale gas extraction. The IMPLAN model is commonly used to understand the direct, indirect, and induced economic linkages between various sectors within a particular economy; the output of one industry, after all, may be the input of another. Data was collected through industry surveys, which detailed industry spending in several broad categories (lease/bonus spending, exploration costs, drilling expenses, gas processing, and royalties). Considine then used this data as input for the IMPLAN model.

Considine estimated 1,121 wells were drilled in West Virginia and Pennsylvania, output of natural gas and petroleum liquids increased to over 600 million cubic feet per day (cfd), and total value added to the gross regional product was \$4.8 billion during 2009. Hydraulic fracturing consequently generated 57,357 jobs and \$1.7 billion in local, state, and federal tax collections that year. Acknowledging several uncertainties (such as the moratorium on drilling in New York), Considine also made several future projections.³⁴ Under a low development scenario, he predicted that natural gas production for Marcellus would reach four billion cfd by 2020, generating \$9 billion in value added and 100,000 jobs by 2020. Under a high development scenario, he predicted development would generate \$25 billion in value added, create more than 280,000 jobs, and produce over eighteen billion cfd by 2020. Under this scenario, Marcellus would become the second-largest producer of gas, behind Texas, by 2020. After 2020, over ninety percent of remaining reserves would be left for future production.

However, a fellow economist, David Kay,³⁵ critiques several assumptions made by Considine.³⁶ First, Considine calculated industry expenditures through survey data but failed to consider variations in expenditures year to year.³⁷ For instance, overall industry expenditures rose by forty-one percent from one year to the next from increases in lease payments, bonus payments, and royalties.³⁸ Second, although this IMPLAN model attempted to account for shale drilling technology and purchasing patterns, the data comprising these patterns are only from a portion of the entire industry. Third, this model assumes that increases in disposable income from Marcellus development will be spent during the year that those payments are received. This assumption may be incorrect because large increases in income are spent differently than small increases in income. Finally, although this analysis was more sophisticated than other analyses, Kay³⁹ asserts that Considine⁴⁰ did not sufficiently control for regulatory and geologic considerations over

time. However, although Kay argues that Considine overestimates the economic benefit of hydraulic fracturing, the potential economic gains are still significant. Thus, discounting the economic benefits as minimal or insignificant is not a valid argument.

In boomtown models, there are several challenges that local governments must be cognizant of when considering rapid forms of economic growth. The first challenge to local governments is jurisdictional unevenness. Energy development causing population growth can take place in a jurisdiction that is different from the one that bears costs associated with that population growth.⁴¹ Second, booms may produce a severity-of-growth challenge.⁴² A large influx of people, even assuming adequate housing, may overburden public services and reduce overall service quality. Third, industries have a monopoly of information than regulators that decreases the likelihood of adequate long-term planning.⁴³ This problem is especially true for environmental regulators who need industry chemical data to adequately protect municipal water supplies. All of these challenges might be thought of as a function of growth thresholds, implying that a town can only grow at a certain rate before populations overstress institutional capacity. Community governments should evaluate the capacity of existing community institutions and learn to plan proactively rather than reactively before problems emerge.

Despite strong economic advantages, energy-intensive local or regional economies have historically experienced busts. West Virginia's mining development may serve as a lesson for future shale gas development. One study by Leary and Boettner illustrated risks associated with energy intensive economies in West Virginia.⁴⁴ During a boom in energy development during the 1970s, West Virginia counties that focused heavily on mining enjoyed an economic surge. However, the economic bust during the 1980s seriously impacted these counties. Leary and Boettner⁴⁵ examined various measures of economic health and found that median household incomes were lower, family poverty rates higher, and health outcomes worse in mining counties, and that these counties were disproportionately "distressed."⁴⁶

The authors propose that lack of economic diversity creates an economy that is less resilient and more sensitive to industry fluctuations, a condition that may be responsible for these trends. Furthermore, drilling and extraction jobs require lower education levels, resulting in inflexible labor markets once a bust occurs. Only nine percent of the population over twenty-five had a bachelor's degree in

mining counties. The authors conclude that positive long-term economic growth can only come from a diverse economy and highly educated workforce. Future shale development must consider these issues associated with the development of energy-intensive local economies to prevent persistent economic devastation after a potential bust.

While local economic and social impacts are continually debated but undoubtedly significant, the extent of the impact will depend in part on US exports of LNG. The immediate impact of shale gas development in the US has been an oversupply of LNG, declining US gas prices, and growing pressure to export LNG locked in regional gas markets to international gas markets in Europe and Asia. Such exports also offer the potential for additional energy security for transatlantic partnerships, lower-cost energy, and perhaps lower carbon emissions relative to coal. However, these exports are subject to extensive federal, state, and local permitting requirements, particularly the Department of Energy (DOE)'s interpretation of the *Natural Gas Act* and the Federal Energy Regulatory Commission (FERC)'s licensing of export facilities. Exports also raise concerns about domestic energy prices, free trade, and uncertain international market conditions. The impact of shale gas could increase demand for labor and products associated with shale gas development and reduce domestic electric power generation costs, thereby reducing electricity prices. However, to achieve these benefits, the price of energy will have to remain low. Increases in exports will reduce domestic supply and raise prices on energy and chemical feedstock.⁴⁷

LNG prices also impact the balance of trade. Although US exports of LNG could reduce the trade deficit, paradoxically, the resulting increase in energy prices could hurt exports for the manufacturing sector by increasing production costs and reducing international competitiveness, particularly in energy intensive industries.⁴⁸ LNG exports also have a geopolitical role. According to Dotten and Till, LNG potential export limitations might also go against international trade obligations detailed in the General Agreement on Tariffs and Trade (GATT).⁴⁹ LNG exports from the United States could provide allies with alternate supplies—specifically in Europe where Russia has used natural gas exports as political leverage. Japan, which dramatically increased LNG imports after the Fukushima Daiichi nuclear disaster, also has a growing interest in US LNG.

Of course, the spread between domestic and international LNG prices will ultimately determine the viability of LNG exports. There are also limitations to

LNG export facility construction due to competition with other export facilities internationally. The economic benefits from LNG are as much a question of supply as they are of acting first, before other countries increase production.

Overall, the economic argument for hydraulic fracturing in the short run is strong. Direct and indirect economic benefits of gas development at the state level have been measured in the billions of dollars for states such as Pennsylvania and New York. These benefits include millions of dollars of tax revenue for local and state governments, thousands of jobs created, and higher incomes for area residents. While these local economic benefits can be profound, empirical evidence shows that economic busts can occur in energy-intensive localities. At the national level, increased exports of LNG have the potential to improve the US trade balance and geopolitical position. More and better-coordinated scientific and economic research is needed to better understand these economic impacts, especially over the long term.

Policy Recommendations

Policy decisions in the area of hydraulic fracturing can be challenging, as policy makers must weigh the economic benefits acquired from hydraulic fracturing against potential negative environmental and social effects. There are five main recommendations that will facilitate improvements in the hydraulic fracturing process. In addition, there are multiple policies to be implemented that would help mitigate issues associated with hydraulic fracturing. These recommendations should be jointly adopted in order to ensure the highest possible level of environmental safety while still realizing the economic potential of hydraulic fracturing.

1) Better-coordinated scientific and economic research

As is apparent from the current debates around the economic and environmental impacts of hydraulic fracturing, there is a significant need for more and better-coordinated research that incorporates a variety of parties, such as industry leaders, academics, and government agencies.

2) An extensive review of health issues related to methane releases and the contamination of drinking water

In addition to better-coordinated research, it is also important to review the potential impacts of hydraulic fracturing on human health.

3) An industry-driven approach that will develop best practices for extraction technologies and equipment

Requirements for hydraulic fracturing vary from state to state and the technology and type of equipment used varies by corporation. The US government should identify best practices in the areas of engineering controls, work practices, protective equipment, product substitution, and worker training in order to minimize the risk inherent in hydraulic fracturing. Selecting best practices and implementing requirements and standards will reduce the spills and leakage rate through mechanical advances.

Suggested requirements include:

- Integrity tests or casing requirements
- Wastewater transportation requirements
- Baseline water requirements
- Wastewater recycling requirements
- Use of closed loop drilling fluid systems
- Use of “green” fracturing fluids and “green” well completions
- Use of infrared cameras for leak detection
- Use of natural gas rather than diesel fuel to power rigs
- Public disclosure of violations

4) Increased and strengthened state and federal regulation

Polluter-Pays Principle

Oil and gas companies continually pursue hydraulic fracturing and short-term actions need to be undertaken in order to regulate drilling and to limit damage. Implementing a “polluter-pays” principle will require oil and gas companies — not communities — to pay the price for the damage they create. One way to implement the polluter-pays principle is by using chemical identifiers in fracking fluids, an approach mentioned as one of the “Ideas to Watch in 2013” by The New York Times.⁵⁰ These harmless chemical “I.D. tags” would be different for every gas well drilled and would have a specific technology to allow regulators to track down the corporations responsible whenever a spill or damage occurs. This invention could potentially end disputes concerning the source of any contamination of groundwater in an area where a well is drilled.

Severance Tax

States impose a severance tax on the removal of nonrenewable resources such as crude oil, condensate and natural gas, coal bed methane, and carbon dioxide. Severance tax has historically worked as important sources of income for states. States charge severance tax to producers, or anyone with a working or royalty interest, in oil or gas operations. They can charge severance tax to such organizations even if the company does not realize a net profit on its investment.

All states should impose a severance tax in order to fund projects that alleviate environmental damage caused by hydraulic fracturing. Suggested taxes range from 1.5 to five percent of the gross value of the natural gas.⁵¹ Interestingly, Pennsylvania, which remains the largest natural gas-producing state, has no severance tax for hydraulic fracturing.

Regulate Hydraulic Fracturing Under the Safe Drinking Water Act

Revive the FRAC Act, which would amend the *Safe Drinking Water Act* and remove the exemption for hydraulic fracturing. The EPA should require states to implement programs that prohibit the underground injection of fluids that could endanger drinking water. Inclusion of hydraulic fracturing in the Safe Drinking Water Act would strengthen public confidence in hydraulic fracturing and natural-gas extraction. Additionally, it would increase and enforce regulation of hydraulic fracturing fluids.

5) Public disclosure of the chemicals of hydraulic fracturing fluids.

The most frequently discussed policy recommendation is to require disclosure of fracking fluid additives. Currently, some states (e.g. Texas, Colorado, and Wyoming) already require oil and gas companies to publicly disclose the chemicals and their concentrations. However, companies are not legally required to disclose the ingredients and identity of chemical additives used in hydraulic fracturing fluid under federal law or most state laws.

New regulation that would require oil and gas companies to fully disclose the composition of fracking fluid should strike a balance between respecting the intellectual property rights of corporations and protecting people, the environment, workers at drilling sites, and homeowners from contamination.

Fracfocus.org is a national online registry set up for corporations to volun-

tarily disclose the components of fracking fluid. As of May 11, 2012, it included more than 17,000 disclosures from 135 reporting companies. Even though Fracfocus.org is a voluntary disclosure method, Jason Marshall, Chief Deputy Director of the State Department of Conservation, encouraged oil and gas companies to use the registry. Marshall called the website an “off-the-shelf-available-to-use-now tool” as it would take years for any governmental department to build its own database.⁵²

Conclusion

The US has used natural gas as a domestic and industrial fuel source for over a century. It contains significantly more energy per pound than coal and burns cleaner than other energy sources. Recent technological advancements allowed for extraction of significant gas reservoirs that were previously inaccessible. This could lead to significant potential economic gains but many unknowns exist, regarding long term economic impact, local and global environmental impact, and social impacts.

Decisions and standards that will regulate hydraulic fracturing in the future must balance public health and safety. The safety of hydraulic fracturing can be improved through five main initiatives: 1) better-coordinated scientific research; 2) an extensive review of health issues related to methane releases and the contamination of drinking water; 3) an industry-driven approach that will develop best practices for extraction technologies and equipment; 4) stronger and increased state and federal regulation and 5) public disclosure of the chemicals of hydraulic fracturing fluids.

As the world is continuously developing new methods for drilling for natural gas and hydraulic fracturing becomes an increasingly common technology, policymakers must develop a comprehensive approach that increases oversight and regulation of the industry. If this data is incorporated in the appropriate federal and state legislation, it will provide a positive path for the future of hydraulic fracturing.

New York State continues to make little to no progress regarding hydraulic fracturing. Governor Cuomo did not allocate any funding for fiscal year 2014 to regulation of fracking, which assumes no plan for fracturing activities for at least another year in New York. Cuomo stated his final decision to legalize hydraulic fracturing will rely on the outcomes of Health Commissioner Shah’s research since 2011. However, as Governor Cuomo seeks re-election in 2014, he will likely avoid taking a stance in this controversial issue, and clear legislative action in New York State will not occur before 2015.⁵³

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Building Barclays:

The Obscurity of Eminent Domain in New York City

Ivi Demi

ABSTRACT

This paper delves into the nature and intent of the eminent domain statute of New York State law. By definition, eminent domain is the seizure of property by the state or a private entity to exercise functions of a public nature after what is considered a just compensation to the owner of the property. Though the language of eminent domain laws has been set in stone for the last few decades, it still remains one of the most ambiguous laws featured in state constitutions. There is rarely ever a case when a city or state government has declared eminent domain over a region when public action groups or local citizens have not had some form of outcry or filed legal action against the seizing party. This paper will dissect some of the language of public eminent domain laws in the State of New York by focusing in particular on a case in New York City: the construction of the new Brooklyn sports complex, the Barclays Center. This project was riddled with conflict and controversy ever since its original proposal in 2004. The arena and its developers, who had to receive backing from the City Government of New York to declare eminent domain on the site they had chosen for construction, had to handle numerous lawsuits, public demonstrations, and media backlash as they tore down residential buildings and in many cases unfairly compensated displaced citizens. This paper will examine the obscurity of eminent domain laws in New York City while breaking down the language of the statute to understand how and why New York courts side with developers in many cases such as this.

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Introduction: Origins of the Barclays Center

Few development projects exemplify the internal struggles and public backlash surrounding the implementation of eminent domain quite like that of the Barclays Center and Atlantic Yards project in Brooklyn. In late 2012, its grand opening brought welcoming news for developers and local politicians, who looked forward to the revenue boost that the sports and entertainment complex would bring to the greater New York community. However, the outcries and protests, for the citizens displaced as a result of the center's construction, did not stop with its completion.

The initial proposal for construction of the center came in early 2004, when real estate development firm Ratner Group purchased the New Jersey Nets National Basketball Association franchise as part of an ongoing plan to create a new venue for the team. In order to provide economic and residential incentives for construction of the arena, the plan was scaled up to include residential and business components under an overarching development project known as Atlantic Yards. This plan would lead to the construction of a sports arena as well as several apartment complexes and commercial centers. As with most cases in which eminent domain is declared, some initial public backlash was expected. Adding to the unrest were the effects of the 2008 financial crisis, which halted much of the construction plans alongside the many lawsuits that would arise in the local community.¹

The Barclays Center project represents the culmination of a decade-long legal debate in New York State regarding the language of eminent domain statutes. While the public sector seizes private property for public use or public benefit, courts debate the legality of economic development as a proper motive for seizure. Such actions prompt the question of states should be allowed to seize private property for private use. While numerous states balk at the notion and strengthen their laws to exclude this type of eminent domain practice, New York State favors private development spurred by the state's ability to seize private property.

The construction of the Barclays Center provides the context against which to examine the judiciary's interpretation of eminent domain law. The Barclays Center's controversial development and proceSSION, and its implications for future property rights law are crucial to understanding eminent domain proceedings in New York State. In addition to these implications, the Barclay's Center reveals the functional flaws inherent in New York State's stance on eminent domain. New

policy recommendations can help alter legislative perception of the language of eminent domain and perhaps make the process of private property seizure more applicable to those it affects the most: private citizens.

Defining Eminent Domain

The legal practice of government property seizure falls under the definition of eminent domain. It is a term which describes the state's right to acquire private property in order to "exercise function[s] of a public nature" after what is considered to be a "just compensation to the owner of the property."² Although the property may be taken for government use, a third party often seizes the property instead. Typically, a state government, government subdivision, or private corporation will devote the property to public or civic use, or use it to provide a source of economic development for a neighborhood. The property seizure is a result of a procedure of property valuation and litigation between developers and private citizens. A verdict is rendered on whether eminent domain is justified and if necessary, what compensation is adequate.³

Kelo v. City of New London:

Broadening Eminent Domain Interpretation

The *Kelo v. City of New London* case examines the seizure of public lands by the City of New London, Connecticut, for private development projects under an economic revitalization plan passed by the city in the early 2000s. Although parts of these projects allow free public access, many of the proposed sites may be limited to paying members or residents. Accordingly, the major issue becomes whether or not the proposed plan by the city truly satisfies the statutory definition of public use, or whether the entire development project is simply a means for the state to provide private benefits to a particular group.

The Supreme Court upheld the development project in the *Kelo* case, concluding that economic development is a valid function of local governments. This decision allows for a broader interpretation of public purpose in eminent domain cases. Moreover, it makes clear to private citizens that the state would be able cite economic development through private transfer of property as a valid reason for seizure of their land.

Following the Supreme Court decision on *Kelo* in 2005, state governments became divided on the debate between private property rights and economic development. Some states seek to prevent the distribution of eminent domain properties into the hands of private entities. Preventing distribution leaves local governments enough power to enforce the statute in cases where the general public has unrestricted use of the property. Furthermore, the property is managed by a government agency. Such state actions would provide stronger property rights for private citizens. The majority of states choose to curtail the practice of eminent domain in some shape or form following the decision, as a response to public opinion, whether drastically or in some small measure.⁴ However, states that traditionally support public project developers are beginning to support those entities whose projects are of a private corporate nature. These decisions are being made on the understanding that a public good can readily come from a privately owned property as from a public land development project.⁵ The issue then becomes how the state and its citizens reach consensus on the suitable application of eminent domain law in terms of private or public development.

New York State's Path in Defining its Own Eminent Domain Policy

The history of New York State eminent domain practice diverges from the path that other states have taken in the last decade around the time of the *Kelo* Supreme Court Case verdict. The strong public outcry against the verdict influences many state legislatures to include clauses into their state constitutions that prevent the use of eminent domain for purely economic development purposes. Some states take similar measures while still listing blight as a plausible mechanism for state seizure of private property.⁶

Despite the wave of legislative change by a majority of its counterparts, New York State remains one of only seven states to make no modifications to its eminent domain statute in the wake of the *Kelo* case. Many felt this inaction betrayed the rights of citizens and showed the policy stance of New York politicians who often side with developers. The reasons behind this standstill may be more linked to judicial deference than many might expect.⁷ The initial decision to maintain the status quo may be linked to US legislators' preference for economic development projects. However, the New York Court of Appeals, the highest court in the state, later overturned decisions based on unconstitutionality, in cases infringing upon the Fifth Amendment. The courts translate the New York State legislators'

inaction as an unspoken mandate that eminent domain decisions will not be “reined in by the judiciary.”⁸ This interpretation may account for why the courts show deference to “determinations of state agencies vested with the condemnation power” in New York State.⁹

While it may be inappropriate to blame New York State for the decision in the *Kelo* case, the decision could represent courts’ respect for agency decisions. If that is the case, only an overturning of the *Kelo* decision by the US Supreme Court could possibly force the New York State Legislature to act, a process currently being pursued by a number of advocacy groups both in New York and across the country.¹⁰

As shown in the New York State Eminent Domain Procedure (EDP) clause, the language of the law contains the practice of seizure for the benefit of public “use, benefit, or purpose.”¹¹ *Use* generally constitutes a fairly understandable outcome for the general public, but *benefit* and *purpose* prove to be much more difficult to legally proclaim or disprove under a court of law. Many claim that if the public is not allowed access or use the proposed property then eminent domain cannot be declared, while others feel that a private entity can still provide a purpose for the general public that may improve upon the current state or value of a property.

New York State legislators left a very broad interpretation of public use in place. For the Ratner Group and the Barclays Center project, this flexibility in interpretation allows for a broader analysis of a sports complex as an economic development project that could be seen as necessary for the greater public good, despite its very private nature.

The Empire State Development Corporation: A Biased Authority

The New York State Legislature made it clear that developers have an advantage in situations where they can justly prove a sense of purpose for the public good. The New York State government made even bolder moves to leverage the power of these developers by enacting the *New York State Urban Development Corporation Act* (UDC). The Act creates an authoritative body known as the Empire State Development Corporation (ESDC), an organization as obscure as the facets of eminent domain it is entrusted with upholding.¹² By authorizing a public organization to judge or condemn eminent domain cases based on the criteria set out by the EDP statute, the New York State Legislature creates obstacles for private citizens to defend against the seizure of their property in high priority cases.

Set up as a public authority to help finance state projects through tax-exempt bonds, the ESDC is the government-appointed authority for eminent domain development projects in New York. The chairmen are appointed by the governor and confirmed in the New York State Senate. Since its primary purpose is to oversee job creation and economic growth in New York State, the ESDC tends to be a routinely used public authority in eminent domain cases. Its main duties include helping to oversee the research processes that condemn sites as blighted and provide an unbiased opinion on matters relating to private property seizure. However, since their representatives are political appointees, their unbiased opinions tend to be questioned by the public.¹³

With avenues for development project approval now stretched beyond a purely public system, certain proposed condemnations based on public use might find success with gaining approval through the ESDC when other avenues might seem implausible. As a way of creating this objective board, the state legislature can also disseminate and disperse any of the public backlashes by holding more parties accountable. The ESDC can state that decisions were made by an organization that did not have a financial stake in the matter and thus their decisions were made without a real or perceived conflict of interest.

In the Barclays case, the ESDC examined research on blighted neighborhoods. Blight refers to the “deteriorated condition” of city structures, which causes a negative effect on property values within a neighborhood or region.¹⁴ The Ratner Group pushed for private seizure of dilapidated or under-occupied buildings to clear ground for the Barclays Center. In ESDC proceedings, the Ratner Group contends that the development area qualified as blighted based on the low proportion of occupied buildings within the future grounds of the Barclays Center.

Residents define the value of their living by the population that they surround themselves with, whether it is a specific ethnic group, cultural group, or religious sect. Initiating eminent domain practices in these neighborhoods can have the unintended consequence of breaking apart cultural beliefs and practices by forcing the relocation of hundreds of citizens.¹⁵ Though historical sentiment may not be economically viable standards for the state to consider in its decision-making process, there is value that is often overlooked in these cases, a value that the language of the state and the statute does not address in any form to this date.¹⁶

While society as a whole may benefit from many of the public projects being advocated by development cases, individuals, particularly low-income individuals, will be at the mercy of the state in any eminent domain case brought up in the New York State Legislature.¹⁷

In Return for Support

During construction of the Barclays Center, the initial steps involved making peace with local residents by creating benefit funds for research and advocacy, as well as signing agreements that provided economic opportunities for individuals being displaced. For the Ratner Group, the fund took the name of the Community Benefits Agreement (CBA), which proctors multiple concessions with community organizations in order to gain public favor for the project. The EDP in New York State thus far has turned a blind eye to this matter in eminent domain procedures. The CBA has funded and established many of the same community organizations and groups it was attempting to sway in favor of the Barclays project. With so many disputing organizations now being directly funded by the developer, challenging the construction process would be near impossible in the long run.¹⁸

A number of these organizations are brought on to support the project with deals that subsequently promised the establishment of affordable housing units and creation of job quotas throughout the project, to fill employment needs of those being displaced. Mostly due to financial stresses from the recent economic crisis and failure to have many of these CBA agreements fully notarized, many of these promises may not be kept. Only a small percentage of the jobs promised to displaced citizens have been offered thus far to the community. Completion of the residential housing units is not foreseen in the near future and their construction may last another decade. There is also no legitimate effort being made to ensure that at least a particular section of these units will be kept strictly for low-income housing development.¹⁹

What these benefits fail to address is the poor socioeconomic state of those citizens, which are removed from blight-condemned neighborhoods. They may receive the monetary compensation mandated by the statute, but payment often times has been shown to be inadequate.²⁰ Additionally, they do not benefit from the civic projects put in place for society's growth or from the corporate projects that promote businesses, since these operations do not necessarily hire employees with the general skill sets of those citizens that have been displaced. Yet these

projects and developers will place a lot of these promises behind their campaign to push for the declaration of eminent domain on a property.²¹ Thus, a whole new chapter of the eminent domain debate begins as people start to question whether the societal benefits of a project should outweigh the benefits to those citizens being displaced with development projects.

Completion of the Barclays Center

In analyzing the steps taken to construct the Barclays Center and the legislative measures taken in defending its completion, three details surface multiple times in the history of eminent domain in New York State. First, the declaration of eminent domain for the Brooklyn sports complex is done through the legislative authority of the ESDC, since citizen approval was far from one hundred percent at the outset of the proposal. Second, there are major disagreements on what constitutes a proper definition of blight severe enough to be considered condemnable. Third, those displaced are still frustrated with the manner in which they are dealt with throughout the proceedings.²²

The New York State Supreme Court votes down initial lawsuits placed by the opponents of the arena. Eminent domain constitutes a legitimate civic project in this case, which upholds a strong public purpose.²³ The area is also cited for blight by the ESDC, particularly with the proportion of buildings populated coming up as the major indicator for the justification of declaring blight.²⁴ This argument is refuted by the public, which claims that the number did not suffice nor capture the true state of the local community.

On November 24, 2009 the State Supreme Court sided with the developers, citing no evidence of unconstitutional behavior on the part of the ESDC or the interpretations of the UDA and the EDP. In March 2010, Brooklyn Supreme Court Justice Abraham Gerges ended the public lawsuits against the site by ruling the use of eminent domain constitutional.²⁵

The Barclays Center is complete and hosts games for the Brooklyn Nets franchise of the National Basketball Association. The lawsuits subsided, but the public outcries against the construction of the Center continue. Though it has been seven years since the *Kelo* case set the precedent for eminent domain laws in New York State, the statute in New York remains unchanged and one of the strictest, developer-centric eminent domain models in the United States. The Barclays case

suggests economic advancement, increase in taxes, and general growth in job creation, no matter what kind, are strong reasons why the implementation of eminent domain laws remains constitutional.²⁶

The struggles of the populace during the Barclays case are in lawsuits filed separately and under varying neighborhood organizations during the construction process. The Develop Don't Destroy Brooklyn neighborhood organization filed a claim against the ESDC for failing to account for the lack of environmental impact required by the Ratner Group prior to development.²⁷ While the organization seeks a stronger assessment of environmental impact prior to the second phase of housing development for the Atlantic Yards neighborhood, the use of eminent domain in the case is still found to be constitutional. Once again, the public is left to squabble as construction continues.

Key Takeaways and Policy Recommendations

If steps are to be taken in the near future to alter New York State's stance on the eminent domain debate, the following areas must be addressed.

The first recommendation is to develop a more precise interpretation of eminent domain. New York State needs to move forward in including subsections in its eminent domain law that clearly define the following issues: to what extent economic development factors into decision-making on projects and how the state and the public can be assured that the benefits of the project outweigh the negative repercussions of displacement. Instead of attempting to simply expand the definition of *public use*, the state should focus on creating a more in-depth definition under the law.

New York has thus far handled accountability for any and all eminent domain proceedings by utilizing multiple authoritative entities for research and approval. With the creation of the ESDC and the continued appeals being heard by state courts, those responsible for the language of the policy can easily defer decisions to others while stating that they cannot solely be responsible for the manner in which eminent domain cases are carried out. The increased use of lateral power allows accountability to be easily shifted or shared among multiple parties, adding even more equivocalty to the legislative process.

The second recommendation is that the state consider staffing the public authority organization differently, allowing stakeholders outside of the state govern-

ment to participate in board determination. While the ESDC can remain a powerful entity in terms of financing and helping push economic development projects, their input in research and analysis of eminent domain case studies seems counterintuitive, given the fact that board chairs are appointed by the government. There may be a conflict of interest evident wherein the members of the ESDC will consistently have the interests of the state at heart and not necessarily that of the public. The state must alter the role or structure of the ESDC moving forward.

There is an unspoken relationship forged between the language of the state and the authoritative power of the ESDC. Each party seems to know and understand the needs and concerns of the other. The influential partnership between the two parties, especially during high priority cases allows the process of claiming eminent domain easier. Under this system, there is little incentive to oppose developers' plans. As long as the ESDC is allowed to openly interpret the meanings of blight and public purpose without intensive scrutiny from an impartial third party, the politics that result from this policy will become even more difficult to overcome.

The third recommendation is defining a new system for eminent domain case proceedings, potentially outside of the current realm of the ESDC. Public policy officials need an impartial mechanism to determine and investigate issues such as blight and economic viability. The ESDC, though labeled as a third party organization, is clearly politically motivated. Research into eminent domain cases should be carried out by unbiased organizations, which can only be accomplished if legal procedure and language in the statute is altered to identify and prevent any conflicts of interest, as seen in the Barclays example.

The criteria for declaring eminent domain seems to focus on the long-term economic and societal benefits that a project may have on the city. Meanwhile, the situational impact on those currently residing in the area is ignored. There are drastic repercussions when a neighborhood deemed as blighted is forced to uproot immediately with very limited compensation paid for their removal. Even if compensation is sufficient, it does not account for the cultural impact of displacement on the neighborhood or the targeted economic impact on local residents in the long run.

The fourth and final recommendation is that future policymakers must account for the aforementioned impact on cultural heritage in examining eminent

domain law. In determining economic impact on neighborhoods of private property seizures and displacements, developers and the state could be mandated to run more advanced impact studies regarding the demographics of the regions and the income levels of those displaced. Due to the State's strict price ceilings in the housing market, it may not be easy for residents to find affordable housing quickly, regardless of the compensation received. Policymakers may also choose to tackle this issue through adjusting legal language. Changes can be made to affirm that eminent domain must be warranted beyond what is deemed just compensation, to include mandatory aid on the part of the developer to help relocate displaced residents. While promises made by developers often address this displacement and affordable housing dilemma, the current statute does not provide the mechanism necessary to enforce these claims.

Conclusion

Large-scale economic and societal considerations of eminent domain seizures can be important to consider, but it is unjust to disregard the direct impact on the population living in the displaced region, particularly in a cultural and historical context. Offering negotiable benefits other than money to displaced parties must be more than just an obligation for developers. The legislators and courts must also understand the needs of the locals and work with them in an unbiased and efficient manner. However, the state must also act as the catalyst, in order for these partnerships and understandings to grow. Any changes to these observations are useless without some state effort to redefine New York's eminent domain language, not just for the sake of clarity but for the benefit of all its citizens as well.

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Third Parties in American Politics

Dana Westgren

ABSTRACT

Recently, party polarization has been a focal point of US political discussion. As the parties appear to draw apart, it appears there may be space for the development of a third party in United States politics. However, there has never been a successful, long-lasting third party in this country. A review of the literature and legislation shows there are several roadblocks to third party development, including the country's electoral structure and campaign finance laws. However, there is more to the discussion. Through analysis of historical times of party flux—the Civil War, the rise of Populism, and civil rights—it becomes clear that large parties absorb fledgling third parties by adopting their policy platforms. Third parties are able to attract both new voters, as in the case of African Americans when they gained suffrage, and voters who have become disenchanted with their party in the case of Southern Democrats. A combination of theory and historical research points to this outcome across history, including examples of recent third party candidates such as Ross Perot and Ralph Nader. Modern Democrats and Republicans have become overarching parties that essentially stifle third party growth.

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Introduction

As Republicans and Democrats continue to polarize on the federal stage, questions arise as to whether a new political party can exist in the United States. Despite the minor successes of Ross Perot and a few other third party candidates over the past hundred years, the United States has struggled to maintain a viable third party. According to the work of many political scientists, there are obstacles, beyond the electoral ones, to the development of a strong third party in the United States. These include institutional impediments, most notably plurality elections and ballot laws. There are also more informal reasons for this claim, including a national lack of trust for independent parties.

In the 1950s and 1960s, French sociologist Maurice Duverger developed a theory for legislative branch elections indicating that the United States' electoral framework inhibits the growth of third parties at the federal level. His theory states: "An almost complete correlation is observable between the simple-majority single-ballot system and the two-party system: dualist countries use the simple-majority vote and simple-majority vote countries are dualist."¹ The United States' political system fits this theory's parameters: its legislative elections are single ballot, majoritarian, and pluralistic. According to Duverger, it is almost impossible for the country to develop strong independent parties. This theory has persisted in American history: the United States has never successfully maintained a party system with more than two major parties. Rosenstone et al., in their work *Third Parties in America: Citizen Response to Major Party Failure*, point out this law also holds in presidential elections, wherein "the only way a minor party can hope to gain any power is to secure enough electoral votes to throw the election into the House of Representatives."² Third parties cannot hope to gain enough electoral votes to win the Presidency outright.

Beyond the electoral laws outlined by Duverger, there are many aspects of the United States' political system that block third parties from success. These include legal obstacles, such as ballot laws, and cultural hindrances that make it near impossible for unknown parties to gain the electorate's trust in elections. Even if new parties are able to get some national recognition, the two party system is so ingrained in the US political experience that they seldom gain legitimacy and are eventually absorbed into existing majority party rhetoric.

Ballot access restrictions are major barriers to third parties in the American

political system that may support Duverger's assertions. As Rosenstone et al. describe it: "The Democrats and Republicans have constructed a maze of cumbersome regulations and procedures that make it difficult for minor parties... to gain a spot on the general election ballot."³ Major parties created these laws in an attempt to limit competition in federal elections. They automatically appear on the ballot in elections, while third parties must petition in every state in order to be listed. States have different requirements for ballot inclusion, a factor that is even more challenging to third parties. Petitions must be circulated in different states at varying times; for example, they must be distributed between June and August in California and between August and September in Nevada. Filing dates also differ across states. These differences make it challenging for third parties to appear on all ballots across the country. Robert LaFollette, in his 1924 run, had to run under four different labels (Progressive, Independent, Independent-Progressive, and Socialist) in order to appear in the national campaign. It is also difficult to build strong third parties if third party candidates must run under several different guises to even participate in an election.

Ballot access laws eliminated fusion candidacies — a unique tool third parties used to garner electoral strength before the turn of the century. These were jointly sponsored candidacies supported by both minority and majority parties. Each party that supported the candidate would list them, creating electoral coalitions that would give independent candidates more power and visibility. For example, in 1856 both the Know-Nothing and Whig parties supported Millard Fillmore's third party candidacy. Williams Jennings Bryan was also a fusion candidate in 1896, supported by the Democrats and Populists.⁴ Fusion candidacies existed at all levels of government, including state races, congressional races, and the presidency.

Fusion candidacies were a unique way for third parties to support candidates in conjunction with majority parties. This practice was common before ballot reform at the turn of the century and, though it still existed after, was much less effective. Before the adoption of the Australian ballot, parties could print their own ticket (or combination of tickets), which were distributed on Election Day.⁵ At that time, a party listed whatever candidate it desired. Fusion candidacies could thus exist without compromising the integrity of individual parties, as parties retained autonomy during the ballot process. The Australian ballot, introduced in the late 1890s, spurred a number of ballot reforms. These laws differed across states, but many included provisions that a candidate's name could only appear once on a

ballot. Some legislation even indicated only one party could be listed with each candidate.⁶ Using these ballot laws, fusion candidacies were effectively smothered in many states, eliminating a powerful tool for third parties to further involve themselves in the electorate.

Fusion candidacies appear to be a potential loophole to Duverger's Law and arguably, a solution to the third party problem in the United States. These candidacies undermined majority party power and created splintering within parties. Legislatures that saw this were able to leverage their strength to outlaw the practice in several states. Plurality elections put these legislatures in power, thus allowing them to enact legislation limiting third party growth. Lipset et al. state: "The electoral system, the separation of the executive branch from the legislature, and the primary nomination system have combined to encourage major parties to undercut third ones by adopting parts of their platforms."⁷ The end of fusion candidates further demonstrates how majority parties are able to effectively block third party growth and absorb their agendas into existing majority party rhetoric.

The difficulties minority party candidates face in the US are exacerbated by social norms that stop them from achieving success. These are aspects inherent in the very nature of the United States political system, and thus beyond the law. Some of these aspects include media coverage, which often does not acknowledge third party electoral participation. As a result, there is often distrust for third parties in the United States. Many Americans see the two-party system as almost sacred. According to Rosenstone: "Third party candidates are seen as disrupters of the *American* two-party system. Thus, minor parties do not start out on an equal footing with the Democrats and Republicans; they must first establish their legitimacy."⁸

Furthermore, nearly eighty-five percent of Americans have leanings to one of the two major parties; undecided voters may consider with the idea of voting for a third party early in political campaigns, but voter support for third party candidates declines quickly right before the election. It appears people believe the *wasted vote* thinking, as perpetuated by the media and perhaps validated by electoral rules. This trend may also indicate the ability of majority parties to alter their rhetoric to absorb that of fledgling parties, given their relative flexibility resulting from the laws and norms that support the current two-party system.

Due to the laws and norms inhibiting third party development, the United States has developed a two party system, in which the larger parties absorb small-

er and fledgling third parties. This absorption is evident across the United States' political history, from the parties of the Civil War to populist and workers parties, all of which were absorbed into either the Republican or Democratic Party. History suggests that the same processes that caused the Know-Nothing Party to later join the Republican Party are also responsible for the People's Party's absorption into the Democratic Party in the early 20th century. These examples, among others, imply that this party system makes it unlikely that any third party will gain significant power on the national stage in the United States.

The United States: A Historical Perspective

There are several historical examples of majority parties adopting third party platforms: both with existing electoral groups—such as Populist and Worker's Parties—and groups that gained suffrage. Some third parties developed in existing groups as they faced new economic or political challenges, as in the case of Populists, who were later absorbed into major parties. Additionally, previously marginalized groups began to gain suffrage, which introduced new demands and issues to existing electorate groups. These previously disenfranchised groups, however, seldom created their own parties. Dobell points out: “As blacks, Hispanics and overseas immigrants have entered the political system, they have encountered sufficient accommodation that forming a particularist party presented an unnecessary risk.”⁹ The existing two parties were so inclusive in nature they were able to absorb new groups as they gained suffrage.

Civil War

One clear example of this absorption is in the alliances formed around African Americans before and after achieving suffrage. Before the Civil War, as the states began debating the future of slavery, several minority parties gained national recognition. The Republican Party unified several smaller parties, including Know-Nothings, Whigs, and Free-Soilers. The Democrats were further split into two camps: Democratic and Southern Democratic, representing the differing beliefs of the North and South during that time. The Constitutional Union and Southern Democratic candidates received 12.6 and 18.1 percent of the vote respectively.¹⁰

The absorption of smaller parties into the newly developed Republicans is evident through an analysis of congressional-level data from the 1850s. The Know-Nothing Party originally developed as an anti-immigrant movement. The party was deeply divided, however, between the North and South, as members

fundamentally disagreed about slavery.¹¹

The Know-Nothing Party's decentralization and resulting inability to coalesce into one group allowed it to be absorbed into the Republicans in the North. Congressional elections in the mid-1850s clearly demonstrate this. The majority in the 34th House, from 1855 to 1857, was made up of a unique coalition of those who opposed the Democrats, including the Know-Nothings, the Opposition Party, and the newly developed (and quite small) Republican Party. At this point, the Know Nothing Party had fifty-two members, while the Republican Party had one member by the end of 1857. The 35th Congress was incredibly different: the coalition was all but gone, with Republicans acquiring ninety-two members. By the next Congress, the party had 113.¹²

State membership in Congress exemplified the shift from Know-Nothing to Republican, as addressed in Kenneth C. Martin's *Historical Atlas of Political Parties in the United States Congress*. At the onset of the 34th Congress, Massachusetts's eleven delegates to the House were all members of the Know-Nothing Party; during the 35th, Massachusetts's members were all Republican.¹³ Several, such as Robert Hall, James Buffinton, and Linus Comins switched party affiliation from Know-Nothing to Republican; other Know-Nothings were simply replaced by newly elected Republicans. Connecticut saw similar party realignments. The two House members who were re-elected in the 35th Congress, Ezra Clark and Sidney Dean, switched alliance from Know-Nothing to Republican Parties. Similar trends can be found in other Northeastern states, such as New York and Rhode Island.¹¹ Though the Know-Nothing Party remained in the 35th Congress, it was slowly losing members to the new Republican movement.

This absorption of small, independent parties into the Republican movement is also clear in votes on specific issues, such as the 1854 Kansas-Nebraska Act and the Kansas-Nebraska Bill. The Kansas-Nebraska Act, HR 236, which created Kansas and Nebraska as territories, opened the lands for expansion and for sovereign decision on whether slavery should be allowed in the settlement or not. Democrats, who supported state sovereignty in slavery expansion, overwhelmingly supported the act. Those who voted against the act represented the anti-slavery coalition that would later form the Republican Party. When Congress voted on HR 236, which would admit Kansas into the Union as a free state, the representatives who voted against HR 236 overwhelmingly voted for HR 236 under the Republican moniker.

Massachusetts again provided a clear example of this shift—nearly the

entirety of this state, save one “Nay” vote from Whig William Appleton, voted against The Kansas-Nebraska Act in 1854.¹⁴ These representatives were of different parties, from Whig to Free Soil, voting along coalition lines based on the singular issue of slavery. In 1861, during the vote for HR 236, Massachusetts’ members unanimously voted “aye,” all under the Republican name. Both representatives from Rhode Island had a similar transition, as did some Democrats from northern states. Two of three Democrat representatives from New Hampshire voted “Nay” on the Kansas-Nebraska Act. By the time of the vote for HR 236, New Hampshire was all Republican and voted “aye.” It appears the disparate parties representing northern anti-slavery sentiments in 1854 had coalesced into one unifying Republican Party.

Populist Movements

As workers attempted to gain rights through unions, they did not create a distinctive labor party. Unions worked with existing parties, which limited the development of socialism across the United States. Socialism also experienced the obstacles all third parties face, most notably that of majority party flexibility. Socialism was therefore represented in the United States’ political development primarily through the populist movement, which was a movement that grew from rural farmers against the *elite*.

The growth of this movement came as a result of economic tribulations faced by farmers in the mid-1800s. In 1892, the United States experienced a major agricultural depression as a result of a drought in 1890. This period of agricultural decline created a movement to support the rights of those in agricultural states who felt ignored by the government. Farmers tried to support both parties initially, but “after both major parties had tried and failed to alleviate the farmers’ economic plight...farmers set on a minor party course.”¹⁵ Most of the populist platform centered on limiting federal government debt, a graduated income tax, and enhancing the amount of money coined that was directly given to United States citizens.¹⁶

Populism had some minor success in the late 1800s and early 1900s with the People’s Party, but the Democrats eventually absorbed this party by accepting populism and nominating William Jennings Bryan for president.¹⁷ In 1892 there was a separate Populist Party that ran James Weaver for president. Though he only achieved 8.5 percent of the popular vote, Weaver succeeded in rural areas

through a growing coalition of voters concerned with rural issues. Weaver carried Colorado, Idaho, and Nevada, while earning an electoral vote in both Oregon and North Dakota.¹⁸

In the 1896 election, the Democrats ran Nebraska's William Jennings Bryan, which effectively ended the Populist Party.¹⁹ Bryan carried all of Weaver's states and won traditional democratic bastions, such as Kansas, Louisiana, and Virginia.¹⁶ Though Weaver had some success with his initial run, the Democrats saw the potential danger of a new party rising in the West and were able to run a candidate who placated some of the Populists' requests while maintaining party control in other states.

At the Congressional level, the Populist Party gained eleven Congressional seats in the 1892 election. These included a seat in California and two in Colorado.²⁰ Surprisingly, as Democrats adopted the populist standard and nominated William Jennings Bryan in 1896, Congressional support for populism continued to grow, with the party gaining seats in Kansas, Montana, North Carolina, and South Dakota.²¹ In 1898, however, the Populist Party lost all of its seats, to both Republicans and Democrats across various states. The seats returned to the party that held them before 1890. This was an example of a party growing around a specific issue, which was addressed on the national stage, and then was pushed to the background as other issues became important to the general populace.

Civil Rights Realignments

The party realignments around African American suffrage were slow-forming and continue to develop today. For groups who had to struggle to simply get the right to vote, it was far too much work to try and create a new party when the existing parties provided protection. As described in R.W. Apple's piece in the *New York Times*, the African American population began as a part of the Republican Party. This was an obvious transition, as the Republicans were credited with freeing the slaves and giving African American voters suffrage.

Democrats, long the party of the South, did not allow African Americans to their conventions until 1924.²² Historically, Democrats depended on the 'Solid South' contingent: white, Southern voters who were against African American civil rights advancements.²³ This voting bloc allowed Democrats to hold the South without much competition throughout the post-Civil War era. Even before secession, Confederate states were overwhelmingly Democratic.

This 'Solid South' strategy began to change in the mid-20th century. Strom Thurmond's run for office in 1948 precipitated several independent candidates who hoped to combat government control over civil rights issues. Thurmond's candidacy began in protest against President Harry Truman's inclusion of civil rights in the Democratic Party platform of 1948. Thurmond and other Southern Democrats walked out of the convention, and Thurmond moved to run for the newly created States Rights Democratic Party. Thurmond hoped to "draw enough votes away from the major parties to force the election into the House of Representatives, where a block by segregationist Southern and Midwestern congressmen could prevent Truman's re-election."²⁴ Though he did not thwart Truman's re-election, Thurmond did carry four Southern states (South Carolina, Alabama, Mississippi, and Louisiana) that were previously solidly Democratic.

In 1960, President John F. Kennedy began intervening on behalf of civil rights activists like the Freedom Riders. 'Solid South' Democrats were livid that a president they helped elect was not only incorporating himself into the segregation debate but was also supporting reform. Alabama governor John Patterson, who originally endorsed Kennedy in his presidential race, later severed ties with the Democrat government, saying he had gone fishing rather than take the President's call.²⁵

Despite the beginnings of a rift between Southern Democrats and the rest of the party, Democrats were still able to hold the White House, with Lyndon B. Johnson winning the 1964 election with an overwhelming sixty-one percent of the vote.²³ He did not carry several historically Democratic southern states however, such as Louisiana and Mississippi. These states instead voted for Republican Barry Goldwater, a states' rights activist from Arizona. Once re-elected, President Johnson signed the Civil Rights Act in July 1964. This act ended Jim Crow laws, striking down the "separate but equal" doctrine. Southern Democrats overwhelmingly opposed this legislation, voting "nay" in the House 87-7 and in the Senate 20-1.²⁶ When President Johnson signed this legislation, he reportedly told his press secretary, "We have lost the South for a generation."²⁷

Discrimination was not removed from Democrat Party lines until its major reforms in 1964 and 1968, the latter spearheaded by the Commission on Party Structure and Delegate Selection, led by Senator George McGovern and Representative Donald M. Fraser. This commission, commonly referred to as the McGovern-Fraser Commission, worked to broaden participation and enhance minority

representation. Southern Democrats were unhappy with this change, as well as with the party's new stance on civil rights. They continued to disengage from the party. In 1968, another third party, the American Party, threatened the Democrats' stronghold on the South.

The American Party ran George Wallace in the presidential election that year. Wallace, the governor of Alabama, spoke of states' rights to decide their own policies on topics such as schools and segregation.²⁸ Wallace had strong support across the Deep South, due to his strong campaign supporting segregation practices. Because of this support, he was able to carry Louisiana, Arkansas, Mississippi, and Georgia in 1968, becoming the last third party candidate to ever win an entire state's votes.²⁹ States such as Louisiana and Mississippi overwhelmingly voted for Barry Goldwater, a Republican, in 1964.³⁰ Goldwater also campaigned on states' rights, but Republicans did not continue with this strategy and a third party entered that niche space.

President Nixon recognized that the rise of these new third party contenders in the South indicated a gap in policy between Democrats and Republicans and was able to capitalize on this as he beat George McGovern in the 1972 election. He knew that capitalizing on this gap would give his Republican Party more potential constituents in the future. In the South he launched what was known as his "Southern Strategy" in 1972. Nixon worked to distance himself from desegregation efforts, indicating he did not support compulsory federal rulings for things like busing or school integration. Nixon himself stated: "We are opposed to segregation...but our opposition to segregation does not mean that we favor compulsory or forced integration; and we remain opposed to the use of Federal funds to bring about some arbitrary racial balance in the public school system."³¹ This rhetoric appealed to Southern states that had been fighting against federal compulsory integration efforts, and gave Republicans political strength in the South. In 1976, however, Democrats won again in the South. There is no telling whether this would have happened if Nixon's presidency had not ended in impeachment; what can be gleaned from this is a clear attempt by a majority party member to win over third party votes by specifically acknowledging their issue of concern.

It took time for Republicans to fully gain the support of the Southern white voter. There were several close elections in key Southern states as the majority parties hoped to win back southern favor, such as in 1980, where Reagan and Carter were near 50-50 in their election.

Independent Candidates

There have been few marginally successful third party presidential runs in America's recent political history. George Wallace (1968), John Anderson (1980), H. Ross Perot (1992), and Ralph Nader (1996, 2000, 2004, 2008) are some of the most famous examples. These four individuals had relatively large impacts on the electoral outcomes of these elections. Wallace won fourteen percent of the popular vote, Anderson polled 6.6 percent (taking a majority of these votes from Jimmy Carter), and Perot garnered nineteen percent of the vote.³² Ralph Nader secured a small percentage of the vote every year he ran, but he is best known for securing 2.7 percent of the popular vote in the 2000 election, which may have given George W. Bush an advantage.³³ None of these candidates, however, represented a large, organized party. They were popular individuals representing specific issues important to the American populous at that time, such as segregation, political reform, economic issues, and the environment.

These candidates often did not represent a new movement or the interests of a unique demography: instead, third-party candidates historically arose due to discontent with the existing government. Rosenstone states:

“Nationally prestigious third party challengers do not just pop up at random... These candidates emerge when they perceive weaknesses in the two major parties. They run either when the major parties have disappointed a large minority faction, when the major parties do not pay sufficient attention to the issues of concern to the voters, when there is an incumbent president on which to focus discontent, or when the previous election suggests that one major party may be too weak.”³⁴

Often, as was the case with the Greenbacks and Populists in the late 1800s, parties run on specific issues (such as agricultural adversity) that are not adequately addressed by existing parties. Though historically these parties have had some minor success, they were quickly absorbed into existing parties, who recognized the need to please a voter base they may have lost. Once candidates lost major elections and the existing parties re-focused on the issue causing discontent, the two-party system returned to normal.³⁵

Ross Perot was able to attract similar voter groups as the Populists in the late 19th century. Perot is known for running on two key issues: economic nationalism (or the fear that the American economy was in decline due to international-

ism) and populism/libertarianism.³⁶ Perot favored trade protection, immigration limits, and the regulation of foreign direct investment (FDI) in the United States. Perot's populism and libertarianism is not unique in the United States' political history, but, as with the Populist Party, he was able to capitalize on citizens' concerns with his anti-government policies. Many Americans saw Washington politicians as focusing more on big business and lobbying interests than the interests of the people.

Though Perot did not attract any electoral votes, he had success with non-college educated, young, middle-income white voters.²⁴ Perot, however, did not have lasting success. In 1996, he ran again but, as the United States economy improved, his niche grew smaller. Again, an independent candidate represented a niche concern that, once handled by one of the major parties (in this case Clinton's Democrats), no longer fueled constituents to vote for a third party. It is clear, however, that these economic issues did not truly disappear, and the rise of Ron Paul in recent years shows a resurgence of young people expressing concern for today's government and economy.

Ralph Nader attracted a different subsection of the United States population as a response to the Clinton administration's policies, which many did not see as liberal enough in the late 1990s. Nader represented the Green Party in his first two elections, and then ran independently in 2004 and 2008. Not only did he support increased environmental regulation, having been credited with helping develop the Environmental Protection Agency, but he also advocated for consumer rights and increased business regulation. He also criticized the majority parties for "preserving a campaign finance system that makes them both dependent on wealthy contributors."³⁷ Nader met with success in states with very liberal populations, especially in 2000 when he was dubbed a "campaign spoiler" for attracting so many Democrat Party votes. Though he did not gain any electoral votes in 2000, Nader earned almost three percent of the popular vote nationwide. He especially saw success in Alaska (ten percent of the popular vote) and Vermont (6.92 percent), where his environmental protection messages were especially pertinent.³⁸

As with previous examples, these independent candidates represented discontent with the current government's treatment of certain issues. Though neither Perot nor Nader gained strong electoral numbers, they brought to the forefront discussions of both government operations and policy, which are now part of both parties' vernacular—the role of business in government, the need for environ-

mental protections, and the enhancement of consumer protection standards being a few. Ron Paul's campaign in the Republican primary in 2012 was based around libertarian ideals similar to those Perot espoused in 1992, namely the need for an exceedingly small government to aid in economic development.

Recent Trends Analysis

As described throughout this paper, the United States' political climate as a whole is not amenable to third party development. Between the electoral rules, as described by Duverger's Law, and other institutional laws and norms, the American party system has effectively prohibited third parties, which are often absorbed by the large, powerful majority parties. The American political system, however, is currently enduring massive change. The parties are becoming stronger and far more polarized. There is a prominent shift to the right, with the Republican Party's rhetoric and policies becoming more conservative. Where parties previously overlapped programmatically, there is space forming as the Democratic Party has maintained relatively the same policies over the past few decades, and the Republican Party has moved further right. As Thomas Mann and Norman Ornstein state in their book *It's Even Worse than it Looks*: "the degree of overlap between the parties in Congress is zero."³⁹ As parties continue to separate on the left-right divide, a major programmatic space will appear where moderates previously sat. According to research outlined by Mann and Ornstein, "All the evidence on parties in government in recent years points to very high unity within and sharp ideological and policy difference between the two major parties."⁴⁰ What remains is a policy space that is not represented adequately by either party.

It is possible a third party could develop within that space. The moderate Republican base has been faced with an increasingly rightward-moving conservative party. This shift is personified by the Tea Party Movement, which arose in 2009 in response to the economic crisis. Tea Partiers represented a unique coalition of the conservative movement: highly religious, highly conservative, and lower middle class.⁴¹ This group solidified around the 2010 midterm elections and has captured House seats as well as media attention. It is important to note, however, that the Tea Party is not a true third party. It instead represents a conservative subsection of the existing Republican Party. This underlines how majority parties can embody a variety of ideologies; they are able to represent broad coalitions of people that may otherwise splinter into minority parties.

As this socially conservative ideology pervades the Republican Party however, moderate or “market” Republicans may seek other party options. When the major parties have historically failed to serve all of their constituents, specifically in addressing economic concerns, third party candidates have been mildly successful. Distrust in the government led to the rise of George Wallace, John Anderson, and Ross Perot, among others. According to Peterson and Wrighton, “As voters continue to feel that the major issues are not being addressed, they may be more likely to support third party candidates in upcoming elections.”⁴² It is possible that as US politics continue to become more partisan and perhaps less representative of the broad Republican populace, third party candidates will gain electoral strength.

Overall, third parties face unique challenges in the United States that make it very difficult for them to develop a strong base. Though there is current discontent with the existing parties, it is still structurally difficult for the United States to develop a powerful third party. As outlined by Duverger, America’s plurality electoral structure will nearly always breed a two-party system. Beyond pluralism, many rules and institutional norms continue to block minority parties from maintaining a strong foothold in the United States. These include ballot access restrictions, majority-party flexibility, and several entrenched beliefs that handicap minority party development. Clearly, these obstacles stopped the traditional leftist minority parties from emerging, even during the age of mass union development. The Democratic and Republican parties have deep roots in the political hearts and minds of the American citizens. Due to this majority party strength and flexibility, Republicans and Democrats have historically adopted the ideologies of potentially powerful third parties. This ideological absorption allows Democrats and Republicans to attract potential voters into their existing parties. As such, Democrats and Republicans have become overarching parties that effectively block third party growth in the United States.

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Inequality and Political Breakdown:

A Case Study of Brazil and France

Luis Ferreira Alvarez

ABSTRACT

Economic inequality not only affects a country's economic performance, but also its political regime. While previous studies have shown the correlation between economic inequality and political instability, a detailed case study is lacking. The Brazilian and French experiences with this phenomenon illustrate in detail the relationship between inequality and instability. The paper shows that if economic inequality is left unchecked, it can lead to political breakdown.

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Introduction

While in exile in Uruguay after the coup that deposed him, Brazil's former President João Goulart (1961-1964) stated that although he had been aware of the impending coup against him, he had refused to arm his supporters, because he did not want to go down in history as the president that caused unnecessary bloodshed in Brazil.¹ Protests became a daily occurrence throughout Goulart's administration as the economy slowed and the gap between the rich and poor widened. Cities across Brazil saw marches from both supporters and critics of Goulart, and the president found himself governing a country in which most of the landowners were conspiring against his rule.² Knowing that the military was taking steps towards a coup d'état, Goulart gave a speech on March 13, 1964 at the Automobile Club, where he announced an executive decree that would distribute farmland to rural Brazilians within 60 days.³ This speech was intended as an act of defiance against the incoming military coup.⁴ On March 25, sailors of the Brazilian Navy led a revolt against Goulart that many critics saw as a parallel to the Potemkin mutiny that preceded the Bolshevik Revolution in Russia.⁵ Five days later, Goulart would participate in a celebration organized by navy sergeants in which he asked for the navy's support.⁶ Alarmed by the rising polarization, the Brazilian military took action between March 31 and April 1 by overthrowing Goulart and ushering in 21 years of military dictatorship.

Economic inequality affects countries around the world. While the consequences of inequality are discussed from economic and political points of view, their effect on governmental regimes remains unexplored. The relationship between inequality and political instability is important because of its policy ramifications. As long as inequality does not destabilize the political regime, governments may adopt liberal economic policies; however, if inequality is destabilizing, it creates an incentive for governments to retreat from liberal economic policies and pursue greater market regulation and social policies such as unemployment benefits and healthcare.⁷

The current literature shows the effect income inequality has on political instability, and that a correlation exists between income inequality and economic crises. Kumhof and Ranciere (2011) argue that income inequality triggered the Great Depression and the Great Recession.⁸ Similarly, income inequality has shown to be harmful for economic growth. Alesina and Rodrik (1994) both pro-

vide support for this idea.⁹ In regards to political instability, Alesina and Perotti (1994) found that income inequality fuels social discontent and political instability for a sample of 71 countries from 1960-1985.¹⁰ Sachs (1989) argues that income inequality increases pressure on governments, causing bad policies and further economic problems.¹¹ Despite these findings in the literature, explaining the process of income inequality to political instability has lagged behind. While Sachs (1989) discusses the cases from Latin America, the article is constrained by the number of nations discussed. The specific cases of Brazil and France are helpful in illustrating the effects of income inequality on political instability and the eventual collapse of preexisting regimes. Greater levels of economic inequality can result in political paralysis and instability. In turn, this can allow for regime change through non-democratic means by enabling third parties to take advantage of the power vacuum.

It is important to note that not all economic recessions cause a breakdown of the political system or an illiberal response. Economic differences can be resolved through peaceful compromise-based agreements that include all crucial sectors of society. In these cases, nations are able to prevent political breakdown by creating new systems in which all the important players are included. The best examples are corporatist regimes,¹² as in the Scandinavian nations, or through integrative party systems such as the ones in Mexico (1929-2000) and Venezuela (1958-1998).¹³ Yet these are rare cases, as most nations are unable to create a new political system without conflict.

Among the numerous causes of inequality, a traditional elite sector, their co-optation of the rising middle class, and liberal economic ideology jointly increase inequality, thereby creating a breeding ground for political instability. The existence of an elite sector dominated by landowners and capital owners prevents workers and members of the middle class from participating in the policy-making process. In addition, a rising middle class, co-opted by the elites into the political system, can allow governments to control workers through institutions and laws. Although this process incorporates workers into the political realm, it does not give workers power, while the state continues to make all decisions for them. By giving sectors of the middle class token political powers, the elites avoid calls for a drastic reform of the system.

The cases of Brazil and France are used to explore the connection between economic inequality and political instability, specifically the French Third Repub-

lic (1870-1940) and the Brazilian Second Republic (1946-1964). The French Third Republic and the Brazilian Second Republic show that relatively high economic inequality leads to political paralysis and instability, creating an opening for regime change through non-democratic means. The causes of economic inequality and triggers of political instability lead to polarization of the political system and subsequent non-democratic responses by third parties. Initially, however, three factors contribute to inequality: the traditional elite class, the co-optation of the middle class by the elites,¹⁴ and the influence of economic liberalism.

The rationale behind this selection of case studies is twofold: first, it allows for comparison across development levels with France representing a developed state, and Brazil a developing state. Additionally, the countries illustrate two different ways in which inequality can lead to illiberal outcomes. In the case of France, inequality led to a slow erosion of trust in the government, subsequently succumbing to external forces. In Brazil, inequality prompted an internal faction to take action against the government. Although Brazil and France are different in many respects, the differences are not crucial, as neighboring countries with similar characteristics faced equivalent difficulties in the same period. For example, Spain fell into a civil war in the 1930s because of inequality and political paralysis, while Argentina suffered a coup similar to Brazil's in 1976. Other nations outside Europe and South America, such as Angola and Cambodia, have also had their governments deposed due to high levels of inequality.

Traditional elites' continuous hold on power, through the ownership of land and capital, exacerbates inequality in the country. As the lower classes are unable to own land to produce and sell their own goods, they enter into clientelist relationships, increasing elites' control over the political system, and increasing inequality.¹⁵ As a result, lower classes are unable to make independent decisions because they are more concerned about their economic security than the country's political situation.

Co-optation of the middle class leads to persistence in inequality marked by the partnership between elites and the growing middle class, which in essence, is an extension of the traditional elite-dominated regime. Although the size of the middle class plays a role in the depth of the political compromise with the elites, the general trend is for a coalition between these two groups to maintain dominance over their country through a clientelist relationship with the rural population.¹⁶

The influence of economic liberalism is another factor that contributes to rising inequality. Economic liberalism pushes for individual responsibility and a limited role for government in the social sphere, leaving individuals to take care of themselves. Furthermore, middle-class cohesion reinforces liberalism, and successful individuals legitimize the ideology within the middle-class consciousness.

Case 1: Brazil

The case of Brazil illustrates the clientelist system. Since its independence in 1822, the country's landowners have dominated the country's political landscape. As Brazil became more integrated in the world economy because of its export-led economy of raw materials, landowners gained more political power, which allowed them to coerce peasants through a clientelist exchange.¹⁷ In fact, political actors agreed upon the presidential candidate by manipulating elections to ensure that their states got a share of the economic profit.¹⁸ Despite opposition to the clientelist system by reformist Getulio Vargas when he first ran for president, the system continued to operate through the industrialization period of Vargas's first term and the *Estado Novo* (1930-1946). During this period, the clientelist system became a national policy that allowed workers to retain their jobs by supporting government policies.¹⁹ The First Republic (1889-1930), established after the fall of the Empire (1822-1889), saw the middle class obtain political power at the exclusion of the lower class.²⁰ As their economic wealth and power increased, the middle class were included into the clientelist system and began to use it for political gains by using coercive actions, such as conditioning employment for their vote for a friendly candidate to control workers and peasants. With limited suffrage and restricted social mobility, the First Republic provided a means by which the traditional elites and the middle classes could dominate the political arena.²¹

The Second Republic was also a negotiated regime, in which political power was divided between the elite and the middle class. Unlike its predecessor, the Second Republic did give workers the right to vote, albeit through a corporatist mechanism in which the government controlled workers' voting patterns through coercion and not by having secret ballots.²² Brazilian landowning exporters of raw materials were the main proponents of liberalism. Coffee growers, in particular, promoted liberalism because they believed that a small government would provide the basis for an export-led economy. This would give coffee growers more political power; with government intervention being non-existent, exporters could produce coffee at low prices.²³ In fact, coffee was such a crucial element of Brazil's

exports that by the 1920s, it comprised 75 percent of total exports.²⁴ However, exports were not limited to coffee alone; sugar and other raw materials also contributed to a large portion of exports for Brazil. As exports grew, so did the wealth and political power of the landed elites who pushed for a small government and decreased regulations to further expand their overall power. In fact, this system increased inequality, as landowners (*fazendeiros*) would preside over their land as powerful patriarchs, with authority over all affairs within their land holdings.²⁵

Case 2: France

Although not as agrarian as Brazil, France also illustrates the power that traditional aristocracy gains through economic resources. Although the French Revolution (1789-1799) dismantled the traditional aristocracy, it was soon replaced. French industrialists dominated the political and economic arenas, while government institutions excluded peasants from power. Additionally, French peasants were heavily conservative, thus forming the base for anti-Republican support. The worst rebellions against the First Republic (1792-1804) took place in peasant-dominated regions²⁶ of France. Farmers continued to be conservative throughout the Third Republic (1870-1940), in which peasants continued to form half of the electorate. Politicians could not afford to ignore them.²⁷ With a large, conservative electorate, the French government could not take drastic measures to support workers with social policies. The French elite saw the restoration of the monarchy as inevitable after the collapse of Napoleon III's Empire (1852-1870). The election of a monarchist National Assembly in 1871 made the restoration unavoidable.²⁸ Yet, disunity between the elites, primarily monarchists, when combined with the pressures created by the heavily republican middle class, prompted a compromise regime under a transitional republic that had monarchical aspects, such as strict control over the political system and the president acting as a figurehead.²⁹

French industrialists during the Third Republic were liberal in the sense that they supported the expansion of industrial plants to increase production and maintain their political power. They believed that individual freedom was a cornerstone of the Republic's future.³⁰ However, the liberal economic regime would sow the seeds of its own destruction. Increased industrialization meant an increase in the number of workers through the migration of rural farmers, which made the lower classes more difficult to control. Once the lower classes mobilized, they demanded political and economic reforms, which posed problems for the traditional political system.

Triggers of Political Instability

Increased industrialization and economic growth led to increasing levels of urbanization and education among the lower classes in Brazil's Second Republic and the French Third Republic. The combination of these factors and the political system led to a demand for economic and political rights by workers, triggering political instability.

However, as tensions rose due to the increase in the number of workers, political elites and the middle class took steps towards solving this social question. Members of the middle-class soon began to question economic liberalism and searched for ways to alleviate the workers' suffering.³¹ This led to the rise of ideologies such as socialism, social democracy, and Christian democracy within sectors of the middle class.³²

Prior to the rise of left-wing governments, the elites' policy of excluding and co-opting other segments of society was successful. This is not to say that the liberal system was destined to break down. In fact, countries that avoided major triggers of political instability were able to do so not only because their regimes accommodated the working class, but also because the workers accepted the existing political and economic systems.³³

Although the economies of both Brazil and France grew, so did inequality. From 1936 to 1960, Brazil's average GINI coefficient was 0.61.³⁴ France also saw a rise in inequality levels; by 1866, the GINI coefficient was 0.66, the same as in pre-revolution France.³⁵ Once recessions hit (Brazil in 1961; France in 1931), the restricted democratic orders found themselves opposed by all sectors of society. Liberal policies were blamed for the economic crisis and a crisis of legitimacy followed.³⁶ High unemployment and the governments' failure to help the poor and assure richer citizens that their properties would survive the crisis encouraged opposition toward both the French and Brazilian regimes.

Case 1: Brazil

The Brazilian middle class faced many of the same problems that its French counterpart did, including a growing working class that wanted more political and economic rights. Unlike France, the Brazilian landed elite was still powerful; however, their attempts to exclude the workers failed when the military installed Getulio Vargas, a reformist and later populist leader, as president in 1930.³⁷ Var-

gas' first government saw the repression of a communist uprising, providing him with an excuse to form a quasi-fascist regime, the *Estado Novo*. Throughout Vargas' administration, Brazilian workers were incorporated into the political system through a co-optation mechanism by which the government would promote a single, subsidized labor movement that would be tightly monitored by the regime. This provided the government with a support base to mobilize through the Ministry of Labor when necessary, and prevented the creation of an independent and politically active labor movement.³⁸

The Second Republic maintained this co-optation mechanism by continuing the workers' inability to gain full rights. At the same time, the government maintained an interventionist policy to control its budget.³⁹ However, industrialization led to large-scale rural-urban migration, which resulted in the expansion of the urban population and the working class.⁴⁰ The expanding working class received political power through co-optation by Vargas' regime, which meant it would not hesitate to challenge reforms against its gains. Although minimal, the raising of the minimum wage, the affiliation of unions with international labor movements, and the expansion of collective bargaining rights were crucial victories for the Brazilian working class.⁴¹ The workers' power peaked when João Goulart won the vice-presidency in 1956, and ascended to the presidency in 1961.⁴³

In Brazil, the 1950s and 1960s saw the economy experience a series of bottlenecks created by the import-substitute industrialization (ISI) model.⁴⁴ The economy stagnated and began to tumble. The GDP growth rate dropped from 10.3 percent in 1961 to 1.5 percent in 1963.⁴⁵ This occurred because the ISI model came to a halt, since the domestic market did not have enough capital to invest in the heavy industrial capacities that Brazil needed.⁴⁶ The bottlenecks were accompanied by an observable rise in inequality.⁴⁷ Brazil began borrowing money to invest in industry to remedy this, but Brazil was unable to pay back its loans as the balance of payments grew, which amounted to more than \$2 billion by the early 1960s.⁴⁸ With no other options, the government printed more currency to make its payments and stimulate consumption. This only increased inflation, which cut into workers' salaries, thus further increasing their resentment. Although all groups would have opposed any attempts to reduce inflation and stabilize the economy, these economic problems had become unavoidable for the government.⁴⁹

The economic stagnation prompted the government to push for austerity measures to steer the economy back toward growth. Under President Jânio Quad-

ros, the government lowered subsidies on essential imports, tightened credit, froze wages, and cut social welfare benefits.⁵⁰ Although financial markets welcomed the news, these policies prompted strikes against President Quadros, who resigned in late 1961. With his resignation went the last chance of any lasting reform.⁵¹

Case 2: France

The exclusion of workers from politics in France's Third Republic took different forms, ranging from voting restriction and literacy tests, to the prevention of union influence on policy, and even the harassment of socialist parties. Throughout much of the Third Republic, French workers were unable to have their voices heard in the country's political process, since voting rights were restricted.⁵² The Radicals and the Conservatives, the dominant factions throughout the Republic, consisted of middle-class individuals who believed in political and economic liberalism. The country's future was vested in the actions of individuals and the wealth they could generate. Thus, leaders took no actions to incorporate workers into the political system because they believed that the government should not interfere in the economy.

However, there were some victories for the workers. Alexander Millerand, who was then the Labor Minister, attempted to change the state's social policies.⁵³ Millerand believed that the government could play the role of a moderator between workers and business, and acted as such with the reorganization of the *Conseil Supérieur du Travail* and the *Office du Travail*, providing workers representation in the government. But the rest of the political elite soon turned against Millerand, and the government halted any social agenda by making its objections known. It even went so far as to reject claims by workers.⁵⁴ This failure, combined with the heavy-handed response to strikes in Martinique and Chalon-sur-Saône, caused heavy resentment within the working class.⁵⁵ However, as the percentage of workers in the economy increased and the electoral victory of the left became first a possibility, the middle-class had to allow the workers to participate. The left's electoral power came to fruition when Léon Blum and the Popular Front came to power in 1936.⁵⁶

The Great Depression hit France in 1931, with the unemployment of 50,000 people that spring, and an estimated 2 million people unemployed at the beginning of 1935.⁵⁷ The French government, following the liberal economic view, did

not take action until 1932. Furthermore, Paris decided that the strong value of the franc had to be maintained following the devaluation of the pound sterling in 1931 and the US dollar in 1933.⁵⁸ As a result, French exports collapsed, leading to a budget deficit. In response, the government implemented the Tardieu plan to sell off public property to raise money for lowering unemployment. Soon, further austerity measures that relied on price leveling mechanisms such as duties and tariffs were implemented. The government also cut salaries and pensions of its employees, deepening the recession.⁵⁹ This, however, did not help, as the Bank of France continued to lose gold reserves at a rapid pace.⁶⁰ The inability to resolve the crisis, and the fact that it was getting worse, prompted strikes and violence, and fueled feelings of disdain for the political system.⁶¹

Thus, with no real voice in the political arena, French workers used an exit strategy from the political system by taking to the streets to protest the austerity measures. Workers were trying to protect their living standards as the elite tried to shrink government spending.⁶² The increased polarization made victories and losses very symbolic, fueling resentment on both sides. This also meant that the political system was losing legitimacy and becoming less effective, as both workers and the elites began to see minimal gains.

Response to Paralysis and Polarization

The left's efforts to protect workers' living standards led to a counter-mobilization by elites, who, together with businesses and the middle class, put pressure on governments to follow through with austerity measures. The regimes therefore faced pressure from both the left and right, leading to the polarization and paralysis of the political system.⁶³ Faced with such tensions, the administrations in Brazil and France found themselves trying to give workers full political rights while also appeasing the traditional elites.

At the same time, the international context also became an important aspect of the response to the governmental paralysis. Since the 1917 Russian Revolution, Western elites worried about the influence of the Soviet Union in their respective countries. The fear of a "red" revolution in their own countries prompted them to restrict the left's mobilization.

Case 1: Brazil

João Goulart's accession to the presidency in 1961 meant the ultimate inclusion of

workers into the political system, as one of their supporters had finally attained the highest political office. However, opposition against him began to grow immediately, due to his previous populist actions as Labor Minister and his support for labor unions and tribunals.⁶⁴ However, it was evident that Goulart needed the support of the middle class to govern the country.⁶⁵ At first, Goulart was able to maintain a check on the workers while he halfheartedly continued the austerity measures that Quadros began, which only ended in failure.⁶⁶

Unable to resist the demands of labor leaders, Goulart decided to scale back on austerity measures and push for a number of laws called the Basic Reforms.⁶⁷ These reforms would have reshaped the education system, housing projects, the tax system, and distribution of land. Goulart signed two executive decrees to secure workers' support. One decree nationalized all private oil refineries and the other expropriated "underutilized" properties within federal highways or projects.⁶⁸ However, these decrees and the campaign for the Basic Reforms did not calm the workers, who demanded even more radical laws, while the elites saw the reforms as threats against them. As workers continued to mobilize, the elites came to understand that the workers could break their hold on power, which prompted them to form a coalition against Goulart and began calling upon the military to restore order.⁶⁹ This open call for a putsch increased the pressure on Goulart, who found himself with a highly polarized population and a paralyzed political system.⁷⁰

In the international arena, Goulart's presidency came after the Cuban Revolution (1953-1959), in which a communist regime was established. Brazilian elites feared that Goulart's reforms were the beginning of a similarly communist revolution in Brazil.⁷¹ Furthermore, after Cuba's move to communism, the United States favored any form of non-communist regimes within the Western Hemisphere, giving their tacit consent to any actions taken against Goulart's administration by the Brazilian elite.⁷²

Case 2: France

France also found itself in the midst of political paralysis and polarization. In 1936, Léon Blum and the Popular Front won the parliamentary election. As in Brazil, this was the ultimate inclusion of the working class into the political system, as its main supporters now lead the government.⁷³ However, the coalition government relied on the Radical Party and their middle-class voters, hindering any chances of a Marxist agenda.⁷⁴ The Blum government soon passed a series

of pro-labor laws known as the Matignon agreements, which saw a 12 percent increase in wages, collective agreements, paid holidays, and limited work to a maximum of 40 hours per week.⁷⁵ The new government also increased its spending to stimulate an economic revival.⁷⁶

However, these policies came under attack from the traditional elite, who thought the government was unfriendly to their interests. They did everything within their power to make their factories unproductive, which, combined with the new 40-hour work week and the shortage of skilled labor, resulted in a drastic decrease in production capacity.⁷⁷ The losses in productivity led to further capital flight, which resulted in the Bank of France's loss of 50 billion francs in September of 1936.⁷⁸ As the Great Depression continued, Blum found himself having to promote austerity measures due to inflation and the flight of capital.⁷⁹ He implemented policies such as banning strikes without first asking for arbitration, abandoning pension schemes for the elderly, and other cuts to social spending. Eventually, Blum also devalued the franc, which gave way to a short-lived recovery. Nevertheless, his policies failed to produce an economic recovery since eventual inflation reduced people's purchasing power, and resulted in more strikes.⁸⁰ These strikes undermined the government's control over workers, which eventually led to a split between the parties in the Popular Front, especially between the Radicals and the Communists. The Radicals did not like the increase in workers' strikes and the inability of the government to control them, and the Communists saw the government as a traitor to the proletariat cause.⁸¹ Yet the right maintained control over the French Senate, increasing polarization and political gridlock.⁸²

In the international realm, the Popular Front ruled during the era in which fascist regimes rose against communism, as illustrated by the Spanish Civil War (1936-1939). French elites were therefore concerned that Blum's government would turn communist. This was exacerbated by the participation of the French Communist Party in Blum's cabinet, which served as another reason for the right wing to oppose Blum.⁸³

Reactionary Responses

Faced with high political instability and polarization, the democratic orders were unable to cope with the demands of the working class and the backlash by the traditional elites. In this context, the political system was paralyzed, causing a power vacuum. The vacuum left the state vulnerable to coups and invasions by foreign

powers. In the end, the inability of the workers and elites to come to an agreement brought down the democratic order and ushered in a reactionary response.

Case 1: Brazil

In Brazil, the response to the power vacuum came from internal sources, specifically, the Brazilian military. Having maintained an active role in politics where they saw themselves as guardians of the nation, the Brazilian armed forces were alarmed by the instability of the Second Republic. Furthermore, since the early 1950s, the military had begun to view politicians as being unable to deal with the country's development, a belief reinforced by the *Escola Superior de Guerra* (ESG, or Superior War College), whose new military doctrine of *segurança nacional* (national security) tied national security to national development. Thus, they feared that the failure of the civilian government could undermine Brazil's national security strategy.⁸⁴ In other words, the armed forces began to recognize that Brazil's main threat could come from internal sources rather than external foes, and the extreme polarization of the political system and the paralysis of the government were seen as potential internal threats. As a result, the armed forces launched a coup d'état against Goulart in 1964 and installed a bureaucratic-authoritarian regime, the goals of which were to stabilize and deepen industrialization to create economic growth without having to face political obstacles.

Case 2: France

France's example illustrates how external rivals can utilize deep internal divisions as a means to defeat their enemies. With the fall of the Blum government in 1937, the French political system remained highly polarized, with the succeeding governments being unable to retain power for more than a year.⁸⁵ France did not have a government during the international crisis of the Anschluss, the German annexation of Austria in 1938.⁸⁶ Although France began a policy of rearmament in 1935, the highly polarized society and the perception of corruption in the government hindered social cohesion and hampered France's preparation for the rising threat of Nazi Germany. Consequently, when Germany invaded France in 1940, the French political system was unable to harness support for its survival and collapsed, leading to the occupation of Northern France and the formation of an illiberal regime, the French State in the South (Vichy France), whose goal was to end all republican reforms put in place by the Third Republic.⁸⁸

Conclusion

Economic inequality can have profound effects on the stability of a political regime. If unchecked, it can provide an opening for an anti-democratic option. Throughout their histories, Brazil and France provide examples in which high levels of inequality lead to political paralysis and the breakdown of regimes. In these cases, right-wing illiberal forces took power. However, this does not exclude the possibility of the left using economic paralysis as a means to power.

Income inequality can have a “domino” effect on political instability. The literature has shown that a relationship exists between these two variables, but fails to detail the process by which the concepts are connected. A quantitative approach would complement the theory and provide empirical support. While finding correlation and/or causation through a quantitative approach is vital, understanding how the effects happen is equally critical since it enriches the quantitative results. Further qualitative research on specific economic policies and their effects on political instability could provide solutions to this problem and further support the hypothesis.

Explaining the past is difficult, particularly without primary sources. Additionally, in many countries, dictatorships produce strong views on both sides. Given that countries also have different policies on declassifying documents, allowing for full access to documentation in most cases could avoid speculation, and lead to settlements of conflicting arguments surrounding the event.

As countries develop, they also become more urbanized and educated. This development gives rise to a new working class that begins demanding political and economic rights, and challenging the elite class. At first, the elite either repress or control the lower classes, but soon lose control as they gain political power. Thereafter, polarization expands radically between working and the elite classes, paralyzing the political system and providing an opening to armed forces and foreign powers to take advantage of the instability and fill the power vacuum.

(End notes)

- 1 Robert J. Alexander, *The ABC Presidents: Conversations and Correspondence with the Presidents of Argentina, Brazil, and Chile* (USA: Praeger, 1992), 159
- 2 Marieta de Moraes Ferreira, *João Goulart: Entre A Memória E A História* (Brazil: Fundação Getulio Vargas, 2006), 138
- 3 João Goulart, “1964 Speech to Automobile Club” (Speech, Rio De Janeiro, March 13, 1963), *Carta Maior: Política*, <http://www.cartamaior.com.br/?/Editoria/Politica/O-discurso-de-Jango-no-comicio-da-Central-do-Brasil%0D%0A/4/16826>
- 4 Alexander, *The ABC Presidents*, 159.
- 5 Ferreira, *João Goulart*, 141.
- 6 Ibid
- 7 Liberalism will be defined as an economic definition, in which individual freedom is emphasized and self-regulating markets are critical for economic growth.
- 8 Michael Kumhof and Romain Ranciere, “Inequality, Leverage, and Crises,” Working Paper 10/268 (International Monetary Fund 2010).
- 9 Alberto Alesina and Dani Rodrik, “Distributive Politics and Economic Growth,” *Quarterly Journal of Economics* Vol. 109, Issue 2, (1994)
- 10 Alberto Alesina and Roberto Perotti, “Income Distribution, Political Instability, and Investment,” (1994)
- 11 Jeffrey D. Sachs, “Social Conflict and Populist Policies in Latin America,” Working Paper Series (National Bureau of Economic Research 1989).
- 12 A corporatist system or coordinated market economy, are defined by Peter A. Hall and David Soskice as regimes were “firms depend more heavily on non-market relationships to coordinate their endeavors with other actors and to construct their core competences”. The Scandinavian countries and Germany are primary cases of these forms of regimes. Peter Hall, and David W. Soskice, eds. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Vol. 8. (Oxford: Oxford University Press, 2001), 8.
- 13 Mexico is a perfect example of an integrated party system: for 71 years, the Institutional Revolutionary Party (PRI) dominated Mexican politics by being an umbrella party for every group in society. This meant that it ruled without much opposition through a carrot and stick policy - if you followed the system, you were rewarded, if you dissented, it led to marginalization. Hall, and Soskice, *Varieties of capitalism*, 8.
- 14 Elites are those individuals who control key economic resources and thus dominate the economy of a country. This means that the composition of elites will differ in each case considered.
- 15 Clientelism is a system in which goods and services are traded for political favor.
- 16 Gregory Luebbert. *Liberalism, Fascism, or Social Democracy: Social Classes and the Political Origins of Regimes in Interwar Europe*. (USA: Oxford University Press, 1991), 2.

- 17 Werner Baer, *The Brazilian Economy: Growth and Development*, 5th ed. (Westport, Connecticut: Praeger, 2001), 12
- 18 John Wirth, "Tenentismo in the Brazilian Revolution of 1930", in *The Hispanic American Historical Review*, Vol. 44, No. 2(Durham, North Carolina: Duke University Press, May 1964), 162.
- 19 Thomas Skidmore, *Politics in Brazil, 1930-1964: An Experiment in Democracy*. (New York: Oxford University Press, 1967), 3-4.
- 20 Rex Hudson, *Brazil: A Country Study*. (New York: Claitor's Publishing Division, 1998,), 56.
- 21 Riordan Roett, *Brazil: Politics in a Patrimonial Society*. (Westport, Connecticut Praeger Pub Text: 1999), 8
- 22 Ibid, 10.
- 23 Ibid, 149.
- 24 Ibid, 146.
- 25 Baer, *The Brazilian economy*, 17.
- 26 Charles Tilly, "State and counterrevolution in France." *Social Research* (1989): 71-97, 84-87.
- 27 Bernard, Philippe, Henri Dubief, and Anthony Forster. *The decline of the Third Republic, 1914-1938*. Vol. 5. (Cambridge: Cambridge University Press, 1988), 236.
- 28 Serge Berstein , Pierre Milza, *Histoire de la France au XXe Siècle: 1900-1930*. Vol. 1. (Editions complexe, 1999), 18-19.
- 29 Mayeur, Jean-Marie, and Madeleine Rebirieux. *The Third Republic from its Origins to the Great War, 1871-1914*. Vol. 4. (CUP and Editions de la Maison des Sciences de l'Homme, 1988),77.
- 30 David Landes, "French Entrepreneurship and Industrial Growth in the Nineteenth Century," *The Journal of Economic History*, Vol. 9, No. 1 (May, 1949), 56.
- 31 Mayeur and Reberieux, *The Third Republic from its Origins to the Great War, 1871-1914*, 68
- 32 Ibid, 148-149.
- 33 Luebbert, *Liberalism, Fascism, or Social Democracy*, 192-193.
- 34 The GINI coefficient measures inequality among a frequency distribution, usually income. The closer the coefficient is to zero, the more equal a country is.
- 35 Christian Morrisson and Wayne Snyder, "The Income Inequality of France in Historical Perspective." *European Review of Economic History* 4, no.1 (2000): 59-83, 78-81; World Bank. *Inequality and Economic Development in Brazil 2004*. (Washington DC: World Bank), 199; the absence of concrete statistics on inequality for 19th century France makes it hard to calculate the exact level of inequality, but according to Morrison and Snyder, inequality in France followed the Kuznets theory that early industrialization leads to high inequality, but later decreases.
- 36 Luebbert, *Liberalism, Fascism, or Social Democracy*, 194.

- 37 Skidmore, *Politics in Brazil, 1930-1964*, 5.
- 38 Roett, *Brazil: Politics in a Patrimonial Society*, 75.
- 39 Hudson, *Brazil: A Country Study*. Claitor's Publishing Division, 1998, 168- 169.
- 40 Baer, *The Brazilian Economy*, 53 & 67.
- 41 Roett, *Brazil: Politics in a Patrimonial Society*, 76.
- 42 João Goulart was Labor Minister under the second Vargas administration (1951-1954). Under his tenure, labor rights and influences expanded drastically, and workers even became militant. Goulart was seen as a champion of the working class, and became a threat to the traditional elites.
- 43 Hudson, *Brazil: A Country Study*, 75.
- 44 Import-Substitute Industrialization (ISI) is an economic policy that aims for economic self-sufficiency through the protection domestic firms through tariffs and quotas.
- 45 Baer, *The Brazilian Economy*, 73.
- 46 David Collier "Overview of the Bureaucratic-Authoritarian Model." *The new authoritarianism in Latin America* 12 (1979): 1-4, 25.
- 47 Roett, *Brazil: Politics in a Patrimonial Society*, 148.
- 48 Baer, *The Brazilian Economy*, 69.
- 49 Skidmore, *Politics in Brazil, 1930-1964*, 111-112.
- 50 Baer, *The Brazilian economy: growth and development*, 73.
- 51 Roett, *Brazil: politics in a patrimonial society*, 148-149.
- 52 Luebbert, *Liberalism, Fascism, or Social Democracy*, 62.
- 53 Millerand attempted to introduce reforms during his tenure in the Waldeck-Rousseau government (1899-1902). He would later serve as Prime Minister (June-September 1920) and President (1920-1924) of France, but his conservative shift made his influence decrease in the French left.
- 54 Julian Jackson, *The politics of depression in France 1932-1936*. (Cambridge: Cambridge University Press, 2002), 12.
- 55 Mayeur and Rebérioux, *The Third Republic from its origins to the Great War, 1871-1914*, 235-238
- 56 Jackson, *The politics of depression in France 1932-1936*, 203-204.
- 57 Bernard and Dubief, *The decline of the Third Republic, 1914-1938*, 179 & 190.
- 58 Bernstein, Serge, and Pierre Milza. "Histoire de la France au XX e siècle, tome II, 1930-1945." (1990), 22.
- 59 Bernard and Dubief, *The decline of the Third Republic, 1914-1938*, 186-188.
- 60 Jackson, *The politics of depression in France 1932-1936*, 80.
- 61 Bernard and Dubief, *The decline of the Third Republic, 1914-1938*, 221-222.
- 62 Jackson, *The politics of depression in France 1932-1936*, 207.
- 63 Luebbert, *Liberalism, Fascism, or Social Democracy*, 309.

- 64 Marieta de Moraes Ferreira, *João Goulart*, 130.
- 65 Skidmore, *Politics in Brazil, 1930-1964: an experiment in democracy*, 214-216.
- 66 Hudson, *Brazil: A country study*. Claitor's Publishing Division, 1998, 74.
- 67 Baer, *The Brazilian economy: growth and development*, 74.
- 68 Roett, *Brazil: politics in a patrimonial society*, 112-113.
- 69 Collier, "Overview of the bureaucratic-authoritarian model," 28; Roett, *Brazil: politics in a patrimonial society*, 37
- 70 Skidmore, *Politics in Brazil, 1930-1964: an experiment in democracy*, 226.
- 71 Hudson, *Brazil: A country study*, 76.
- 72 Ibid
- 73 The Popular Front was an alliance of left wing parties, which included the French Communist Party, the Socialist Party (SFIO), and the Radical Party.
- 74 Bernstein and Milza. "Histoire de la France au XX e siècle, tome II, 1930-1945.", 181.
- 75 Bernard and Dubief, *The decline of the Third Republic, 1914-1938*, 311; Bernstein and Milza. "Histoire de la France au XX e siècle, tome II, 1930-1945.", 164.
- 76 Jackson, *The politics of depression in France 1932-1936*, 113 & 121.
- 77 Bernard and Dubief, *The decline of the Third Republic, 1914-1938*, 315; Jackson, *The politics of depression in France 1932-1936*, 206.
- 78 Bernstein and Milza. "Histoire de la France au XX e siècle, tome II, 1930-1945.", 177.
- 79 Jackson, *The politics of depression in France 1932-1936*, 203.
- 80 Jackson, *The Politics of Depression in France 1932-1936*, 209.
- 81 Ibid, 216; Bernard and Dubief, *The Decline of the Third Republic, 1914-1938*, 316.
- 82 "French Senate," *Sydney Morning Herald*, October 22, 1935, in *Trove Digitized Newspapers and More*, <http://trove.nla.gov.au/ndp/del/article/17238578>.
- 83 Bernard and Dubief, *The Decline of the Third Republic, 1914-1938*, 306.
- 84 Roett, *Brazil: Politics in a Patrimonial Society*, 110-111.
- 85 This was a normal occurrence for the Third Republic, but it was fatal for France on the eve of the Second World War. From 1936 to 1940, there were four Prime Ministers each ruling for a maximum of a year.
- 86 Berstein and Milza, *Histoire de la France au XXe Siècle: 1900-1930*, 192.
- 87 Bernstein and Milza. "Histoire de la France au XX e siècle, tome II, 1930-1945," 106; Jackson, *The Politics of Depression in France 1932-1936*, 211.
- 88 Berstein and Milza, *Histoire de la France au XXe Siècle: 1900-1930*, 322-323.

Public Policy Options for Sustainable Agricultural Land Management in Mexico

Matthew Fisher-Post

ABSTRACT

In Mexico, an estimated sixty percent of the 31 million hectares of agricultural land is affected by erosion. Thirty-one percent of that potential agricultural land has entirely fallen out of productive use. This policy dilemma involves the question of whether the effects of soil degradation on land productivity represent a failure of markets to account for the full future costs of present-day resource degradation. If the free market cannot solve this problem, the government must act. Two current soil conservation policies in Mexico seek to alter land-use practices. However, weaknesses of the “volunteerism” approach to soil conservation present an opportunity for different policy options. A range of policy options along with probable enforcement and compliance costs, and overall effectiveness illustrate ways to confront the problem of agricultural soil degradation. In the end, an official policy of cross-compliance that ties soil conservation best practices such as conservation agriculture to the receipt of direct payments from the government, could effectively address the problem of soil degradation.

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Introduction

In Mexico, erosion affects an estimated sixty percent of the 31 million hectares of agricultural land. Thirty-one percent of potential agricultural land has entirely fallen out of productive use.¹ Significant failure in the market for topsoil (both a finite resource and a public good) occurs even while some private incentives exist for on-farm soil conservation. Although some policies are currently in place, they are not sufficient to stem the current loss of topsoil. Policy measures can correct this externality and market failure.

Two major soil conservation policies in Mexico seek to alter agricultural land-use practices: one is an extension program to promote conservation agriculture; the other, a program to build terraces, bunds, and other small-scale infrastructure intended to prevent and divert the flow of soil loss. However, these policies are not sufficient to confront the magnitude of the problem. Further public policy reform is necessary to manage, mitigate, or ideally reverse the loss of agricultural soils in Mexico.

Overview of Soil Degradation in Mexico

Soil degradation, in its various forms, affects an estimated forty-five percent of the surface of Mexico, equating to approximately 88 million hectares.² Agricultural activities cause seventy-seven percent of the total erosion, including the upstream (on-site) and downstream (off-site) effects of soil runoff.³ Soil degradation can be categorized into four types: water erosion, wind erosion, chemical degradation, and physical degradation. In Mexico, water erosion, wind erosion, chemical degradation, and physical degradation cumulatively affect a total of 88 million hectares of soil.

Given the extent of agricultural land damage, Cotler et al. (2011) calculate the cost of soil degradation to producers. Reviewing 140 studies spanning 1960 through 2006, they estimated that soil degradation costs a producer in Mexico between an estimated \$38 and \$54 per hectare in foregone productivity and the cost of replacing lost nutrients. This cost corresponds to more than five percent of total maize output, and is equivalent to fifty percent of the total government subsidy that farmers currently receive.⁴

Justification for Policy Intervention

Soil degradation is an unequivocal problem in Mexico, but there are different interpretations of whether a public policy intervention is justified. In order to rationalize a public policy intervention, the effects of soil degradation on land productivity must represent a failure of markets to account for the full future costs of present-day resource degradation. An exploration of the values set forth by the market on the true cost of soil erosion reveals that private farm decisions reflect an underinvestment in future soil quality.

Differentiating Between Off-Farm and On-Farm Externality Costs of Soil Degradation

The neoclassical economic perspective on soil conservation holds that soil degradation is neither a market failure, nor an externality problem. The following view distinguishes between on-site and off-site effects of soil conservation:

Two kinds of problems may be caused by soil erosion: (1) the additional on-farm costs due to lower soil productivity, and (2) the off-farm costs due to sedimentation...The basic reason why on-farm costs due to erosion probably do not necessitate government intervention is because a market exists for topsoil, namely the market for farmland...The argument heard on occasion that the needs of future generations are not given sufficient weight in 'mining' farmland overlooks the role played by land speculators, by people who invest their money in land ownership in anticipation of future price movements.⁵

Under this conception of the soil degradation problem, private household decision-making on soil conservation measures is adequate to maintain the stock of productive topsoil for future use. All private benefits and costs are weighed at the farm level, and farmers invest in conservation in order to prevent the current abuse of a resource that will provide future benefits. Farmers do so out of consideration for the value of the land, which is retained insofar as productivity is maintained. Under this conception, no justification for on-farm government intervention exists, and current market prices appropriately value future soil resources.

Soil erosion has many downstream costs at the watershed, regional, and even global levels. These may even exceed the cost of productivity loss upstream at the farm level. Even a strict neoclassical framework justifies policy intervention to correct these downstream costs. This approach is known as internalizing the externality costs of a production process. A policy solution would be a simple

tax that would dis-incentivize the marginal production of downstream damages. Transfer payments from the producer of excess soil runoff to those the soil runoff affects could compensate for the damages.

*Two Ways of Understanding Private (On-Farm)
Underinvestment in Soil Conservation*

In order to justify a government role in the market for topsoil, any proposed policy intervention must be defended against the neoclassical conception of soil degradation. It is the on-farm costs of soil degradation that are more controversial, to a neoclassical economic way of thinking. Nonetheless, the notion of “perfect markets” does not hold for the topsoil market because the future benefits of soil conservation are not often fully accounted for private landholders and speculators. Currently, market price for fertile soil fails to signal the appropriate value of this resource to future generations. To explain the reasons behind these conditions succinctly:

The main issue is therefore society’s valuation of land as opposed to farmers’ valuation of land. The need to control erosion reflects the fact that the value of land as perceived by the user is different from the value as perceived by society. There are several possible reasons for the difference:

1. Farmers do not realize the long-term economic consequences of erosion.
2. The market misjudges the future demand for food and fibre and thereby underestimates the value of land.
3. The market over-estimates the rate of development in erosion control measures is less than the private cost.
4. The maintenance of land to ensure ample supplies of food and fibre is valued more highly by society than by land users...

The final value of land will depend on the extent of the remaining stock of land.⁶

If actors in the free market lack adequate information regarding the damages caused by erosion, this alone would justify policy intervention to correct those damages. The difference that Sfeir-Younis and Dragun⁷ refer to is between market valuation and social valuation of marginal erosion damages.

The difference between private and social valuations can be attributed either to the lack of information in the market about erosion's true costs, or to the privately underestimated net present value of future sustainability. In either case, it is clear that private farm decision-makers underinvest in future soil quality. This is especially true when farmers face significant livelihood pressures. If the private discount rate for soil conservation undervalues the social discount rate, then public policy must correct for the market's failure.

Current Policies and Their Shortcomings

In Mexico, the Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA, the federal executive branch agency for agriculture and rural development) runs two of the most important public programs in soil conservation: Sustainable Modernization of Traditional Agriculture (MásAgro) and Conservation and Sustainable Use of Soil and Water (COUSSA). Only three percent of SAGARPA's budget is dedicated to soil conservation projects, which reveals the very marginal significance of the problem within the agency's and the nation's political agenda.⁸ The national environmental agency (Secretaría de Medio Ambiente y Recursos Naturales, or SEMARNAT) spends an additional three percent of its budget on soil conservation projects, but its programs focus mainly on forested or non-agricultural lands.⁹

Since there are few other national political programs that address soil conservation, an examination of MásAgro and COUSSA offers a general picture of soil degradation policy in Mexico. Both programs employ a voluntary approach to soil conservation.¹⁰ Thus, individual producer compliance with soil conservation measures is completely voluntary. Private compliance is based on incentives, not rules. To understand and influence these incentives, and to influence producer behavior by extension, policies emphasize education and information dissemination more than subsidies and taxes. In a volunteerism approach, there are neither penalties nor regulations against socially costly, soil-degrading practices.

Sustainable Modernization of Traditional Agriculture (MásAgro)

SAGARPA implemented MásAgro (Sustainable Modernization of Traditional Agriculture) in 2010 with more than \$50 million in funding from the Gates Foundation. The program operates from hubs in several states in the north, south, and central regions of Mexico. Among a group of public sector stakeholders for this

program, the International Maize and Wheat Improvement Center (CIMMYT, the Mexico-based giant of the CGIAR) acts as the primary implementation partner agency for SAGARPA's MásAgro program.

To implement MásAgro, CIMMYT conducts research and organizes participatory demonstration trials among farmers' groups. Since its inception, the MásAgro program has scaled up technical extension activities, in conjunction with the recently moribund PROMAF (Program of Support to the Productive Chain of Maize and Bean Producers) national extension agency. During the first three years of the initiative, they jointly trained over 2,500 trainers in agricultural extension.¹¹

Despite the increasing number of extension trainings, the program only trained 250 of the first 2,500 PROMAF participants in conservation agriculture techniques.¹² This would suggest that even the MásAgro program, which states its primary objective as sustainable production, did not prioritize soil conservation as highly as it could be. Moreover, initial reports suggest that few farmers are adopting conservation agriculture.¹³ Farmer constraints to adoption are due to several causes, and it is difficult to generalize because each region of the country—and even each farm—is characterized by diverse factors, including: a particular profile of traditional crop management practices, institutions, climate, and farmer socioeconomic status. Still, a general pattern exists among maize-livestock systems, which comprise the majority of the agricultural value chains in which the MásAgro program operates.

Within maize-livestock systems, farmers are hard-pressed to retain crop residue for future soil fertility. Doing so would represent a significant economic tradeoff and opportunity cost. Producers require their crop residue for livestock forage or for revenue in the local hay market.¹⁴ The fundamental significance of crop residue as an output in the farmers' production function prevents them from using it as an input, or as an investment, in future productivity. Farmers cannot recycle post-harvest maize crop residue because they must sell it or use it as feed.

This reluctance to invest in soil fertility shows a short-term focus of farmers' private cost-benefit analysis. It does not matter that the soil-conserving practice of residue retention would improve, or at least maintain, soil fertility for future generations. Loss of this revenue stream presents a challenging opportunity cost. Under this constraint, some farmers find that the medium- and long-run benefits of the new practices do not outweigh their short-run costs. In addition to the op-

portunity cost of crop residue retention, other risks include the uncertainty associated with transitions in agronomy, such as increased incidence of plagues, and the need to apply unfamiliar pesticides or mechanical laborers.

An extension campaign of information dissemination and education about farm management is not enough to entirely change farmers' behavior. Without a restructuring of costs and benefits at the farm level, there is not enough incentive for many private producers to take up a socially optimal practice in soil conservation. Until these farm-level risks are accounted for, the socially optimal level of soil conservation does not necessarily coincide with the privately optimal farm management practice.

Conservation and Sustainable Use of Soil and Water (COUSSA)

Although the COUSSA program is of a lower public profile than the MásAgro initiative, it possesses an annual budget between \$80 and \$100 million, principally aimed at the conservation of soil and water resources in agricultural production.¹⁵ COUSSA seeks to achieve its goals in soil conservation through rural investments in small-scale infrastructure, constructing earthworks such as terraces and bunds, or hydraulic projects for water capture.¹⁶ If well-designed and considered integrally, these works and best practices are particularly effective in preventing soil runoff at both the farm and watershed levels.

The program's implementation strays from its design. Like MásAgro, COUSSA assumes that private producers would take up soil conservation measures of their own accord, if such measures were properly promoted. Therefore, this program also aims for private adoption of socially optimal resource conservation. The underlying assumption is that only a lack of information impeded farmers from conserving their soil. Once they learn how to conserve their soil, they would do so. The SAGARPA official at the head of the program's national implementation admitted however, that this is not the case. In contrast to what was envisioned, private investment has been null.¹⁷

Straying further from the program's original intent, COUSSA's public investment in resource conservation suffers from program capture. COUSSA resources are used to conserve water resources for human consumption, not for soil. The Colegio de Postgraduados' engineers for the COUSSA program have proposed varieties of water harvesting structures. These structures are technically sound and are either engineered to prevent soil loss by water erosion, or to provide increased

irrigation capacity, restoring arid zones against the threats of wind erosion. The COUSSA program installs these works on a massive scale and with great success from a technical standpoint. But the structures are not built for agriculture, much less for soil conservation. The majority of these hydraulic works provide water either for livestock or for people.¹⁸

According to the Mexican constitution, public water resource law prioritizes human consumption first, followed by farm animals and subsequently, agricultural crops.¹⁹ While people in COUSSA's target communities suffer from the negative effects of on-farm soil degradation, they are more greatly affected by a lack of access to safe drinking water. To the extent that COUSSA's resources (for small-scale, local infrastructure construction) are the only public resources available to these communities, it is very difficult for government officials to withhold or re-divert the resources being used for human consumption. While it is not technically SAGARPA's role to provide safe drinking water—there are other government agencies with precisely that mandate—rural communities do not care. This quandary in program implementation highlights the difficulty of addressing one policy problem (urgent though it may be) when an even greater social ill has not been addressed.

The COUSSA program is Mexico's largest initiative and best hope to directly confront agricultural soil degradation, but most of its resources are diverted to other ends. Ultimately, COUSSA and MásAgro both prove inadequate to their stated goals in soil conservation. The two largest federal programs in Mexico aimed at agricultural soil conservation fail to solve this problem. On the one hand, there are low levels of private incentives for farmers to adopt the socially optimal level of soil conservation practices, in the face of competing demands for on-farm resources. This is true to the degree that farmers value current benefits over future sustainability. Therefore, extension of information is not enough to bend current crop management practices toward sustainability. On the other hand, public sector interventions—from infrastructure projects to subsidy payment schemes—will be ineffective unless they are designed with precision. This is especially observed in political contexts where competing demands for public resources exist simultaneously and where program performance is hard to measure.

Government clearly has a role to play in the sustainability of on-farm soil resources. However, the Mexican experience in extension and voluntary measures for soil conservation call for further consideration of the available policy options.

Policy Improvements

Soil degradation is often a tradeoff between environmental quality and agricultural production, involving the present output and future production of food. If extension of conservation agriculture spread in Mexico to the extent it has in other countries like Argentina, Brazil, and Australia, the widespread problem of agricultural soil degradation would solve itself—and there would be no need for further government intervention. As the extension campaigns currently stand among private producers in Mexico, it is apparent that information alone does not transform farmer behavior. Incentives must also change. Additional soil policy alternatives include the following options, drawn from general OECD guidelines²⁰ to fit the Mexican context.

Extension

Extension and volunteerism require a strong institutional structure, and this strategy cannot be pursued without a long-term, regional- and community-level presence. In order to maximize the benefit that an extension agent can offer, farmers need an ongoing relationship of trust with that agent. However, it is expensive for public extension officers to build and maintain such relationships with private rural producers, particularly with isolated smallholders. To the extent that extension programs in Mexico have not fully achieved their goals in voluntary compliance and adoption of soil-conserving practice, this is not the most cost-effective policy solution. Moreover, to the extent that farmers do not adopt extension officers' recommendations on best practices, this is not a solution at all.

Land Titling

Mexico implemented land titling as a policy after the enactment of NAFTA (North American Free Trade Agreement).²¹ The central government's registry of landowners has allowed them to administer subsidies widely, under a direct payment scheme that is known as PROCAMPO. Within the context of soil conservation policy design, what is most important is the theory that land titling can improve incentives for soil conservation. Clear and documented ownership of land as an asset increases a producer's ability to invest in that asset, and raises their confidence in reaping the return on that investment. With a deed of title, no rival can legally claim ownership and strip the producer of their land. This reduces the major risk of investing in soil quality.

While it may be true that land-titling policy promotes soil conservation investment, it is hard to imagine what further land titling campaign could be instituted in Mexico—given that the previous effort during NAFTA implementation was so extensive.

Land Set-Aside

The theory of a land set-aside policy is that, by retiring land from productive use for years at a time—according to a set of compliance criteria for proper maintenance—farmers can preserve that land for long-term sustainability into future generations. Therefore, farmers are paid to retire their land. Land set-aside schemes are an enormous component of the US policy on soil conservation, the Conservation Reserve Program (CRP). However, the CRP is controversial because it can be wasteful and highly inefficient. In particular, it leads to adverse selection or moral hazard: forty-two percent of program beneficiaries in the US receive payments for land that they would not have been farming in the first place.²²

Paying landowners not to produce, on land that may not be agriculturally fertile (or, conversely, may not be in any jeopardy of soil degradation), is an inefficient policy, compared to alternatives. Paid land set-aside policy may be better viewed as a *de facto* quota on production and subsidy to support farmers. The actual conservation benefit of land set-aside is not practical because other land is substituted in place of the land set-aside. A subsidy payment either for crop rotation or for leaving land fallow at the appropriate moment is a more efficient policy for soil conservation. In the context of Mexico, given real budget constraints, a conditional subsidy for conservation agriculture would be far preferable to any conservation subsidy (such as land set-aside) that simply shifts intensive agriculture to other lands.

Land-Use Regulation

As a direct command-and-control measure, land-use regulation dictates and enforces the range of permitted production activities on specified parcels of agricultural (or other) land. Command-and-control measures in general are less expensive for the taxpayer than for the private producer, but both enforcement and compliance are considered expensive. Public enforcement costs for the government rise in proportion to the difficulty of monitoring and measuring compliance; however, the greater cost of land-use regulation is the private compliance cost,

which is often unknowable to the government. Command-and-control land-use regulations do not necessarily consider compliance cost among their criteria for design and implementation, but an overall analysis of their efficiency must do so.

Returning again to the US example of land-use regulation, some qualifications to the CRP policy have been made in recent years to improve its efficiency and effectiveness. The 1985 Conservation Title (the section of the Farm Bill in which the CRP is found) added the Highly Erodible Land provision, which placed stricter regulations on more than forty million hectares (or the entire arable land area of Mexico) spread among 1.7 million farms. These farms were declared to meet a definition of “highly erodible land,” or elevated vulnerability to soil loss. The US government made compliance with a set of CRP criteria for land protection mandatory for those farms.²³ Given that the CRP Highly Erodible Land provision does administer a subsidy to the farmers it impacts, it is not a strict command-and-control mechanism, but rather an instance of cross-compliance.

Cross-Compliance

Cross-compliance is an effective blend of binding regulation (command-and-control) and economic incentive (subsidy). The 2002 Farm Bill provision “Conservation Security Program”—by which the USDA Natural Resource Conservation Service (NRCS) tied some CRP payments to conservation performance and offered additional technical support—improved the cost-effectiveness of CRP.²⁴ If subsidies to farmers can be made conditional on soil conserving practice and performance, but also help farmers to implement those policies, then the policy can be both effective and efficient. Cross-compliance can be as effective as command-and-control regulation, but as efficient as incentive- and performance-based payments with a low producer compliance cost.

Auctions

Conservation auction is the third innovation in recent US CRP legislation and a gold-standard best practice by the OECD.²⁵ Conservation auctions address the issue of private compliance cost, which may remain unacknowledged by conventional land-use regulation policies. CRP recently adopted a conservation auction on a trial basis with some farmers. In this policy, farmers competitively bid among themselves for the right to a payment-for-environmental-services (PES) contract. In the case of the CRP, it is the payment for land set-aside that is auc-

tioned. The auction is a cost-effective policy measure because, in submitting their bids, farmers reveal their compliance costs. Farmers with the lowest compliance cost—the ability to conserve agricultural soil at least cost—will bid the highest, and the government ultimately spends less money in rent.

Such an auction structure does not entirely solve the problem of adverse selection because it does not ensure soil-conservation performance, only practice. After winning the auction, the farms that practice land set-aside are not necessarily those that conserve the best soil, nor are they necessarily the farms that conserve the most vulnerable soil. They are merely the farmers who find soil conservation cheapest. This may mean that these farmers' opportunity cost of foregone agricultural production is quite low. Therefore, the CRP setting aside very marginal agricultural land degradation of soil would not truly harm the public interest. Nonetheless, under the auction mechanism, the government pays the farmers less for this set-aside than they would have paid without an auction. The auction may ultimately encourage adverse selection, and is therefore not a solution for vulnerable fields in which soil-conserving practices are expensive to implement.

Performance-Based Subsidies

The US-based example of the CRP highlights the need for policies to minimize the enforcement cost on the part of the government, as well as the compliance costs on the part of private producers. The case study also indicates a need for a better measure of performance. When policies target only the practices or inputs of agricultural production, they do not guarantee precise results. Payments exclusively for practice can lead to disappointing or inefficient results. Therefore, payments on performance or output are, in theory, a more effective subsidy, to ensure greater conservation outcomes.

Measuring performance can be expensive. The difficulty lies in measuring and monitoring the actual effect of a practice. It is much easier to audit and enforce a change in producer practice as opposed to measuring the actual foregone soil erosion as an outcome of that practice. Even to establish baseline and benchmark measurements is complex. It is relatively easy for the farmer to informally and qualitatively catalog the symptoms and effects of soil degradation.²⁶ However, the difficulty lies in the government contractors' needs to quantitatively record and place a precise subsidy value on the extent to which these effects do not or no

longer occur. Such a measurement requires precision impervious to misinterpretation in order for it to be legally and officially binding. Due to these difficulties in measurement, performance-based payments are not a cost-efficient soil conservation policy. Improving geographic data and advances in computer modeling technology make enforcement possible at a lower cost, but there is a long way yet for the price to fall before governments can efficiently measure and enforce soil conservation performance.

Practice-Based Subsidies

In practice, payments for soil-conserving best practices (inputs) are more pragmatic than those for performance (outcomes). Since measuring performance benefits are so complex, a simpler payment scheme would compensate the implementation of farm management practices, as opposed to the tangible benefit of those practices, which are arguably impossible to measure precisely. Extension campaigns that advocate a certain practice are a practice-based subsidy. Government cost-sharing and loan guarantees on equipment purchase are other forms of subsidies. Both extension and cost-sharing are components of the MásAgro program discussed above. If these forms of practice-based subsidy were not enough to persuade adoption of soil conserving practice, then subsidy payments were potentially not high enough. Raising the level of subsidies for conservation agriculture could increase adoption of the practice.

Other Policy Instruments: Permits, Performance Standards, and Taxes

Neither permits, nor performance standards, nor taxes are discussed here as potential policy instruments for soil conservation. While these instruments may all be viable in other contexts of environmental conservation, they would be difficult to apply to soil conservation in Mexico.

Measurement issues remain an issue in regard to permits. Selling permits or licenses for point-pollution in clean-air policy, or a cap-and-trade-style policy are considerably less complex than establishing permits for a certain amount of soil loss or runoff, as a form of nonpoint pollution. The enforcement costs would be enormous, and the benefit debatable.

The same is true of performance standards. To set a fixed cap on soil degradation presents significant difficulties in measurement. The cost of establishing micro-level records of topsoil health is not realistic. Furthermore, the compliance

costs on the part of the farmer to reach these performance standards are potentially damaging to many vulnerable farmers.

Similarly, any tax on soil degradation, whether based on inputs (practices) or outcomes (performance/results), reduce the competitiveness of the farmers to whom it applies. This outcome is particularly damaging in the context of a globalized market for agricultural commodities. If the cost of production rises in one country because of a tax on soil degradation, exports and total production could decrease, but food imports could flow in from another country whose food is produced at a lower cost, without the tax. If international markets remain open and free, then governments could discuss a global tax on soil degradation. In effect, taxes are a negative subsidy; therefore a positive subsidy would be more favorable to producers.

Recommendation and Conclusion

Given the intense competition that Mexican maize producers face from their heavily subsidized American counterparts, policy initiatives for long-term soil conservation can also raise the short-term cost of farm production without a subsidy. The most cost-effective subsidy is cross-compliance. In the Highly Erodible Land provision cited above as “land-use regulation,” cross-compliance is a mixture of command-and-control legislation and economic incentive. In Mexico, cross-compliance could tie conditionality to the existing large-scale agricultural subsidy program: the PROCAMPO subsidy. Therefore, receipt of the subsidy would be conditional on compliance with soil conservation guidelines.

According to Cotler et al., the average Mexican farmer already loses, through declining soil fertility, one-half of what they gain through the PROCAMPO subsidy.²⁷ Cross-compliance, which would involve basing PROCAMPO subsidies on soil-conserving practices, adds an element of command-and-control to the existing extension-and-education voluntary compliance approach. Future generations and farmers in the present generation would be recipients of the benefits of sustainability measures. The subsidy may also mitigate costs to the producer.

In Mexico, an official policy of cross-compliance can tie best-practice soil conservation measures to the receipt of PROCAMPO direct payments. In order to keep compliance costs down for farmers, production competitive, and prices low on domestic foodstuffs, the PROCAMPO subsidy should be increased. As a policy

solution, cross-compliance subsidy and regulation is the most efficient and cost-effective compromise of the various options.

Ultimately, soil conservation is in the hands of those who farm. When soil conservation practice decisions are made at the farm-level, individual producers weigh benefits against costs. Soil-conserving practices are less likely to be adopted if farmers steeply discount uncertain long-term benefits against concrete short-term costs. A cost-benefit analysis of inputs versus profits must shift toward a calculation that is more conservation-friendly in order to motivate private producers to adopt soil-conserving practices.

Public policy for agricultural soil conservation must go beyond extension and education and information dissemination—the “voluntary” approach—in order to compel farmers to adopt conservation agriculture. Further adjustments to incentives are necessary to change private producer behavior. Extensive literature on adoption analysis shows that there are social and microeconomic determinants of soil conservation practices. It is not enough to run an extension program for soil-conserving practices, if current subsidy and tax policies favor soil-degrading practices.

If the extension of information alone does not solve soil degradation, then further intervention is an obligation incumbent upon the public trust. In other words, the public sector must directly correct for the market failure in preserving soil fertility. The government’s responsibility is therefore to correct the failure of the private market for topsoil, which has a direct effect on long-term soil degradation.

An official policy of cross-compliance would tie best-practice soil conservation measures, such as conservation agriculture, to the receipt of PROCAMPO direct payments. In order to receive PROCAMPO payments, farmers would switch their crop production systems to reduce tillage, retain crop residue and rotate their fields. Although sustainability is neither easy nor cheap, in general, it is the most cost-effective and least difficult policy measure given those constraints.

In order to incentivize the scale of soil conservation that is necessary for long-term sustainability of soil fertility in Mexico, the PROCAMPO subsidy should be increased. However, the nature of the cross-compliance policy measure will ensure that such conditionality on the farm subsidy will be both efficient and cost-effective—or at least more so than its alternatives.

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Ricardo Martinelli

President of the Republic of Panama

Interview by Sarah Gardner Evans, Daniel Nolan

Ricardo Martinelli has served as the 49th president of Panama since 2009. Martinelli has been committed to developing Panama's infrastructure through an extensive public investment program to advance the country's position as a global logistics hub and attract foreign direct investment. Prior to his presidency, Martinelli acted as President of the Board of Directors and Minister of Canal Affairs for the Panama Canal Authority from 1999 to 2003, and General Director of the Panama Social Security Authority from 1994 to 1996. Martinelli is also the president and director of the Panamanian supermarket chain Super 99. He earned a Bachelor of Science in Business Administration from the University of Arkansas, Fayetteville and an MBA from INCAE Business School in San José, Costa Rica in 1977. President Martinelli visited the Cornell Institute for Public Affairs as a speaker in its Colloquium series on April 11, 2013. As part of his visit, Cornell University and the Republic of Panama signed a Memorandum of Understanding that establishes a fellowship for Panamanian students to study infrastructure policy at the Cornell Institute for Public Affairs.

As graduate students in the field of public administration, we often discuss the growing partnerships between the public and private sectors. Given your background in business, how has your private sector experience influenced your presidency?

Martinelli: My business experience in the private sector gave me common sense and creativity. In government,

sometimes actors have difficulty moving forward. In the private sector, we are determined to come up with solutions and not settle for "no" answers. This is the kind of business sense I bring to politics. It's what drove rapid economic growth in Panama over the last three years. We now have low unemployment, solid growth, infrastructure investment, low debt, and a great many other things that establish Panama as a new frontier.

An article in Reuters recently illustrated Panama in the same light, noting that the “economy has largely evaded the global recession, expanding at double-digit rates for four of the past six years.”¹ What specific policies or strategies has your administration pursued to secure Panama’s economic growth and shield the country from the global recession?

Martinelli: Very simple. We concentrated on what we do best, and that’s logistics. We have the best connected airport in Latin America.² We also have the largest port and have taken full advantage of our economic position by expanding the Panama Canal. We have attracted multinational companies that serve the United States and Latin America by offering an attractive business environment, quality of life, safety and open-mindedness. For instance, one of the things we have done is to provide legal status to all illegal immigrants in Panama. We are promoting immigration because an economy is very difficult to grow without manpower to accommodate and attract new business endeavors in Panama. We are one of the largest recipients of foreign direct investment per capita. Last year, we received close to \$2.8 billion in FDI. These are very attractive figures considering that we are a country of 3.4 million people.

A significant part of your administration’s work has been the expansion of the Panama Canal, a \$5.2 billion construction project. What are some of the global partnerships you have made in developing the project? What are the implications of an infrastructure project like this for Panama?

Martinelli: We have used funds that were internally generated from the canal. And the canal is really going to change the global maritime industry. Especially in the US, where all ports will need to increase their drafts to fifty feet or they will otherwise be out of business.³ There is more money being invested in dredging US ports than in Panama. All the ports in Latin America and Europe are also being dredged to accommodate the [larger] ships that are sized to the Panama Canal.⁴ A container ship that can handle 3,500 containers can pass through the canal right now. New locks will allow ships that can handle 12,000 containers, so you can only imagine the size of ships that are now able to pass through. This requires us to increase the draft of the ports, which also creates new opportunities for the ports around the world and the shipping industry at large.

Another large infrastructure project your administration has undertaken is the development of a subway system. What do you hope to accomplish with the subway once it becomes operational in 2014?

Martinelli: It will change the lives of many people. In fact, we will also be changing our crumbling bus system. The old buses we call “red devils” were old community buses from the southern United States that were sold to local drivers [in Panama]. We have now compensated those bus drivers and will be contracting with a new company [for] modern buses with air conditioning and other amenities. We had some difficulties in the beginning because every system that comes into effect needs adjustments.

Right now we are doing a lot of public works in Panama. We are expanding major networks of roads within the city, expanding the sewer system, and many other new construction projects. We are spending close to \$2 billion just on roads in Panama City at the present time. If someone asked me what Panama was right now, I would say that it is a country under construction. For every dollar of our national budget, we spend 40 cents on infrastructure. That is a huge amount, but all the money we spend on infrastructure is required.

How have public-private partnerships emerged within this focus on infrastructure since you have been president?

Martinelli: It plays a big role. For instance, we contracted two toll roads from private companies that cost a little over \$1 billion, which is paid with toll revenue. We are also in the process of utilizing state assets for needed public works projects since the government does not have an unlimited amount of resources. You need to be very efficient in order to accomplish what you want. It’s the only way to promote and expand public works projects.

Foreign direct investment (FDI) is an important factor in the economies of Latin America as a whole. How do you see the role of FDI changing as Panama’s economy grows?

Martinelli: We hope it continues to grow, especially in the mining industry because there are untapped resources in Panama. There is a large mining project in Panama that brought over \$5 billion in investment. We hope to open more mines and have Panama known for mining in the future. We have ample resources of copper, gold and silver. Most importantly, Panama focuses its involvement in local communities. Panama is often envied by other Latin American countries for its unique position, quality of life, safety, good

schools, hospitals and transportation. We have many communities from other Latin American countries like Venezuela and Colombia, who have come to live and invest in Panama.

Do you have any insights or thoughts on public service that you would like to share with future public administrators?

Martinelli: I always recommend students go into government because most of the time people do not choose it because it's not highly paid. No one wants to run for public office anymore. Some people get elected, and those elected officials rule your life. But most of the time, these are people I wouldn't hire to run an ice cream parlor. But since good people don't want to enter politics, someone else fills the job. We need more good people to be elected to office. As long as you leave politics in the hands of people who are not the most qualified, we end up with the governments we have. Don't complain. Get in and fight from the inside.

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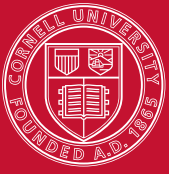
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