# Slaying the White Horse:

## Public Choice Theory and Environmental Regulation

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There is a glorious allegory of government riding in on its pure white horse to fight the behemoth industries with their vile smoke stacks rising out of the immaculate green earth, belching toxic pollution and suffocating Mother Nature. Our protagonist, government, chains and slays the industries to foil their plan to defile the environment, and in doing so, saves the princess, analogous for the public health and welfare. As government and the public ride off into the sunset, the evil villains of industry fume in their ominous black towers because their plans were thwarted by the benevolent politicians. The plot twist, however, is that environmental regulation is frequently supported by big industry, and most of the time government cares neither for the environment nor the public interest. The hag of self-interested politics is unveiled through public choice theory, especially with regards to environmental regulations, producing, in the words of Buchanan, "politics without romance."[1]

This paper will first lay out the foundation of the theory of public choice, then apply the theory to different political exchanges between politicians and voters, and finally, apply the theory to interest groups, showing how public choice theory makes sense of environmental regulations in a manner incongruent with a benevolent view of government regulations.

**I. Public Choice Theory**

Public choice theory fundamentally is about applying the neoclassical economic theory usually applied to individuals engaging in economic exchange on the market, and instead applies said theory to political exchange in the public sphere of politics.[2] An individual's decision making process does not change when he or she switches from being a consumer, purchasing goods, to a citizen in the voting booth. Similarly, politicians are still rational and self-interest

[1] James MacGill Buchanan, "Politics without Romance: A Sketch of Positive Public Choice Theory and Its Normative Implications," in *The Theory of Public Choice: II*, eds. James MacGill Buchanan and Robert D. Tollison, 11. University of Michigan Press, 1984.
[2] Buchanan, "Politics without Romance," 13.

human beings when they vote for legislation or enact regulation and do not magically become altruistic benevolent actors.

When politics or public decisions are usually discussed it is assumed that one is talking about collective actions, either about the public, the electorate, the administration, Congress, etc. The media will go as far as to say 'Washington' has made x or y decision, as if the capricious district had a homogeneous will. Public choice theory, however, sees collective action as a composition of individual distinct actions.[3] Thus, a theory of collective action must emerge from analysis of individual decision making, and one cannot then begin from a theory of collective action. This type of analysis is referred to by both Austrians economist and public choice theorist as methodological individualism.[4] The 'public' does not have a will. The 'government' does not act. In Austrian and public choice theory, all decisions—to lobby, to vote, not to vote, to regulate, how to regulate—are made by individuals acting according to their subjective preferences.[5] Neoclassical consumer behavior theory also assumes people act according to self-interest and seek to maximize their utility.[6] This model is then applied to all individuals involved in the public decision making process, and the result is not pretty.

Another essential component of public choice theory is the difference between market exchange and political exchange. In the unhampered market economy, voluntary economic exchange between two individuals is mutually beneficial, thus utility maximizing, and is isolated to the individual parties involved.[7] In political exchange, transactions are still mutually

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[3] Ibid.
[4] James M. Buchanan and Gordon Tullock, *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (University of Michigan Press: 1965): 13.
[5] Thomas J. DiLorenzo, "The Subjectivist Roots of James Buchanan's Economics," *The Review of Austrian Economics* 4 (1990): 181.
[6] Edwin Mansfield and Gary Wynn Yohe, *Microeconomics*, 11th ed. (New York: Norton, 2004): 44.
[7] Murry N. Rothbard, *Man, Economy and State with Power and Market*, 2nd ed. (Auburn: Ludwig von Mises Institute, 1962), 101.

beneficial, however, by nature of being political, they "necessarily involve all members of the relevant community rather than the two trading partners that characterize economic exchange" (Buchanan 1979: 14). This means that voluntary transactions, in the context of politics, can potentially leave both the society and individuals worse off.

**II. Politicians & Voters as Rational Actors**

Much government expansion in the 20th century emerged from theoretical welfare economics of the 1930s and 1940s, centered on supposed 'market failures'. Market failure is the concept that certain characteristics of the marketplace, like externalities and information asymmetries, result in the market failing to maximize social utility. For example, take environmental pollution: a company pollutes to produce. The company gains profits, but now all the other individuals in a society bear the cost of the externalities and are less healthy. Buchanan states that public choice theory is analogous to market failure, but instead of the market it is all about government failure because public choice theory examines politicians and voters acting as rational actors.[8]

When politicians vote for regulation or legislation, they are weighing the cost and the benefits and seek to maximize their self-interest. Ideally, it is in a politician's personal best interest to care what is best for their constituents, because supposedly politician will be voted out of office if they do not pay attention to the needs and interests of voters. Unfortunately, voters are rationally ignorant, according to Downs.[9] Each vote is so statistically insignificant, and voting 'correctly' really does not mean anything for the voter. Downs goes as far as to say "it is

[8] Buchanan, "Politics without Romance," 11.
[9] Anthony Downs, "An Economic Theory of Political Action in a Democracy," *The Journal of Political Economy* 65.2 (1957): 135-150.

irrational for citizens to acquire political information for the purpose of voting".[10] They can rationally acquire such knowledge to appear smart at dinner parties, but not for the purpose of fulfilling their public duty. This leads to apathy among citizens towards elections, ignorance of the political issues at hand, a two party system and other political woes. Downs states, "Any normative theory that regards them [uninformed voters] as signs of unintelligent behavior in politics has failed to face the fact that information is costly in the real world".[11] Downs theory is linked back to Ronald Coase's theory about how important transactions costs are for explaining the nature of the firm.[12] This theory of the firm can then be applied to individual voters. For voters, political knowledge becomes a costly factor of production necessary to supply an informed vote. However, when it comes to the voter, there is little to no demand for an informed voter and thus little to no profit to be had.

If voters do not vote according to the issues, how then is public opinion formed? Brennan and Lomasky demonstrate that voters feel a moral obligation to make statements about significant political issues, even if they believes that their vote will not make any difference, which they call "expressive voting".[13] When lobby groups, politicians or the public forum informs—or in many cases, misinforms—voters about unfairness or injustice in the society, it creates resentment or envy about the unjust transfer. Environmentally, this could be the transfer of polluting the environment in exchange for industrial profit. That resentment becomes a consumption good, which is alleviated through political activity. Such a political exchange precludes any necessity to be aware of the actual issues or the financial costs.[14] What the public

[10] Downs, "An Economic Theory of Political Action," 147.
[11] Ibid.
[12] Ronald H. Coase, "The Nature of the Firm," *Economica* 4.16 (1937): 386-405.
[13] Geoffrey Brennan and Loren Lomasky, eds., *Democracy and Decision: The Pure Theory of Electoral Preference* (Cambridge University Press, 1997), 176.
[14] Ibid, 106.

is aware of, and what unjust transfers are in their limited set of issues they feel strongly about, can be sourced in politicians pursuits of self-interest.

Public choice theory emerged from and is based upon neoclassical economic theory, of which the Austrian School of Economics has some beneficial critiques.[15] DiLorenzo applies the theory of entrepreneurship, a uniquely Austrian contribution to the field of economic, to otherwise ridged public choice theory, where preferences can be held constant.[16] In the market, entrepreneurs create and react to changes in prices and preferences, acting as an unpredictable and immeasurable actor. With public choice, DiLorenzo talks about political entrepreneurship. In the marketplace, entrepreneurs do not simply react to changing consumer demand, entrepreneurs also create demand by means such as advertising, offering product samples, etc. "Similarly, political entrepreneurs do not just passively respond to" interest-group pressures they also try to stimulate the demand for their 'services'".[17] Public adverting facilitates the process of rent seeking. For example, bureaucrats who head up environmental regulatory agencies, like the EPA, need to stimulate a perceived need for their regulations. As already discussed, voters are rationally ignorant and because being as informed about political affairs as one is about personal affairs is without its reward, it creates an opportunity for political entrepreneurs to fabricate a false 'will of the people.' DiLorenzo draws upon Schumpeter:

> Human Nature in Politics being what it is, they are able to fashion and, within very wide limits, even to create the will of the people. What we are confronted with in the analysis of political processes is largely not a genuine but a manufactured will. ... the will of the people is the product and not the motive power of the political process.[18]

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[15] Thomas J. DiLorenzo, "Competition and Political Entrepreneurship: Austrian Insights Into Public-Choice Theory," *The Review of Austrian Economics* 2 (1988): 59.
[16] Ibid, 66.
[17] Ibid.
[18] Joseph A. Schumpeter, *Capitalism, Socialism and Democracy*, (New York: Harper and Brothers, 1942).

Politicians use the apathy to create a will that demands policies that either increase rent seeking behavior, as will be discussed later on in the paper, and sometimes their potential for reelection.

For politicians, maximizing utility, the assumed desire of all people, requires winning elections and then winning reelections. The monetary gain from being catered to by various lobbies and interest groups requires holding political authority. As Mayhew puts it, politicians are reelection maximizers.[19] For politicians aspiring to high national positions, such as the presidency, they need to gain public recognition as a "serious political leader throughout the United States".[20] As Elliott, Ackerman and Millian highlight, a politician cannot gain such a reputation from sprinkled home district projects, dams, post offices, farm subsidies. "similar goodies," and returning "to the district for weekend orgies of baby-kissing and speechifying".[21] A national reputation comes from perceived serious concern for the entire nation's general welfare, a prime example of which being national environmental regulations. Who could ever disagree with a politician that wants to save the environment, fighting the "invisible, yet anxiety-provoking, evil of mass pollution"?[22]

This type of political strategy, however, can create a predicament such that politicians pursuing their own self-interest compromise the collective interest. "[P]oliticians find themselves expending unnecessary political capital in their competition to claim credit for making public policy".[23] Farber provides the example of Richard Nixon and Senator Muskie vying for environmental protection as one of their signature policies.[24] The politicians ended up expanding

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[19] David Mayhew, *Congress: The Electoral Connection*, (Newhaven, CT: Yale University Press, 1975).
[20] E. Donald Elliott, Bruce A. Ackerman and John C. Millian, "Toward a Theory of Statutory Evolution: The Federalization of Environmental Law," *JL Econ. & Org.* 1 (1985): 313.
[21] Ibid, 334.
[22] Ibid.
[23] Daniel A. Farber, "Politics and Procedure in Environmental Law," *JL Econ. & Org.* 8, (1992): 71.
[24] Ibid.

market interventions far beyond what both of them individually preferred in order to claim the credit for landmark public policy.[25] If neither Nixon nor Muskie went after public approval for environmental regulation, only the environmentalist would have been sad, but neither candidate was willing to risk the other claiming credit.[26]

The public choice literature calls such a predicament a Politicians' Dilemma, based on the classic game theory model of the Prisoners' Dilemma. In the Prisoners Dilemma, hypothetical partners in crime are interrogated separately. The criminals are the only two witnesses, so if they both refuse to testify, the worse they could get is one year each for illegal possession of firearms. A clever prosecutor offers both prisoners a deal separately: if neither confesses, they both get one year in prison, if one confesses and their partner doesn't, that criminal will go free and their partner will get life. If they both confess, they both get six years.[27] If the deal is offered to both partners in isolation and if the prisoners are rational and self-interested—as the neoclassical consumer preference model assumes all people are—then they would both confess. By pursing individual self-interest they both will behave in a way that is contrary to their collective interest.[28]

## II. Interest Groups as Rational Actors

### A. Rent Seeking

While elections and voter preferences are an essential part of public choice theory, the other source of political exchange is between politicians and interest groups. Considering that voters are rationally ignorant when it comes to most regulation details, that leaves the three remaining relevant actors: industry, regulators and environmental groups.

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[25] Farber, "Politics and Procedure in Environmental Law," 71.
[26] Elliott, Ackerman and Millian, "Toward a Theory of Statutory Evolution," 333.
[27] Ibid, 324.
[28] Ibid.

First, industries as rational actors: the traditional base public choice theory says that special interest groups will make payments to politicians in exchange for rent-creating regulation. McChesney outlines that "[p]oliticians' personal gains are a function of the rents they create: recipients will pay more for greater rents."[29] The rent sought can be both direct monetary pork spending, such a subsidies, or, as is seen in environmental public choice, cartelization supporting regulations that raise rivals costs. Scheffman and Higgins provide a detailed overview of Raising Rivals' Cost (RRC) analysis: the predator firm raises the cost of their competitors, reducing the supply curve of their competitor, thus shifting out the demand curve for the predator.[30] Where RRC gets interesting is that raising the costs of ones rival in the predators' industry through legislation usually also affects the predator. Scheffman and Higgins explain that focusing on RRC "will be profitable if, by raising rivals' costs, the dominant firm can raise the market prices at the current level of output by more than the firm raises its average cost (keeping output constant)."[31]

Assume a coal company produces a homogeneous good with its competitor. The predatory company instigates regulations on coal plants affecting both itself and its competitor. The rivals supply curve will decrease by the amount of the increase in costs, assuming the rivals have a very elastic supply curves. If the predatory firm keeps its output the same, "the market price will shift up by the increase in the rivals' incremental costs".[32] The predatory coal plant will have succeeded if its average cost increase less than the rivals incremental cost, in this case: the market price. The political exchange is mutually beneficial: the industry gets a competitive

[29] Fred S. McChesney, "Rent Extraction and Rent Creation in the Economic Theory of Regulation," *The Journal of Legal Studies* 16.1 (1987): 55.
[30] David T. Scheffman and Richard S. Higgins, "Twenty Years of Raising Rivals' Costs: History, Assessment, and Future," *George Mason Law Rev.* 12 (2003): 375.
[31] Ibid, 376.
[32] Ibid.

edge over its rival through legal enforcement and the politician gains lobbying benefits and/or constituents approval for cracking down on evil polluters. However, as discussed earlier, political exchanges affect the relevant community. Lack of competition produces inefficiencies, reducing output and social welfare, according to the neoclassical assumptions.[33]

The alternative to fixed cost regulations as described above is taxes to reduce unwanted 'externalities', like pollution. Economics agree, for once, that taxes to curb environmentally undesirable emissions are more efficient than command-and-control regulations, according to Buchanan and Tullock.[34] Taxes allow firms to use technology and innovation to maintain greater levels of output when faced with a higher cost. When a tax is imposed, the losses are only in the short run, and normal returns, where a firm breaks even, are retained after an ample number of competitors shift resources out of the newly taxed industry.[35] However, firms will "always prefer regulation to the tax" as a means to reduce pollution. That is because regulations serve as cartel formation, "provided that the individual firm's assigned quota falls within the limited range over which average cost falls below price".[36] Output restrictions serve as a substantial barrier to entry and expansion, limiting competition within and outside of the industry and securing predictable returns for the firm. Ultimately, the industry suffers and "new entrants that might bring lower cost pollution controls are ushered away from the industry door".[37] While taxes are socially optimal, industries acting rationally, according to their self-interest, hinder their use as a means to reduce unwanted pollution.

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[33] Mansfield and Yohe, *Microeconomics*, 324.
[34] James M. Buchanan and Gordon Tullock, "Polluters' Profits and Political Response: Direct Controls Versus Taxes," *The American Economic Review* 65.1 (1975): 139.
[35] Ibid, 141.
[36] Ibid, 142.
[37] Ibid, 142

As explained in Yandle's work, in examining the 1977 amendments to the Clean Air Act proposing stricter standards on geographic regions that had cleaner air, Pashigian found that environmental amendments that were passed matched business interest far more than public health interest.[38] While one might normally assume that stricter standards would be applied to dirtier cities, Pashigian discovered instead that environmental factors, such a pollution levels, were surprisingly not independent from enacted environmental regulations. Instead, "industrialized regions systematically supported tighter standards for competing regions that were beginning to attract new industrial plants".[39] Such regulations created more barriers to entry, creating legal backing to cartelization, favoring business interest over public health.

Elliott, Ackerman and Millian note another reason why industries might be the ones who lobby for federal regulation. They note that the first major federal statutes regulating air pollution, the Motor Vehicle Pollution Control Act of 1965 (79 Stat. 992) and the Air Quality Act of 1967 (81 Stat. 485), were heavily lobbied not by the at the time politically weak environmentalist, but instead lobbied for by the powerful automobile industry and the soft coal industry.[40] The two industries were threatened by inconsistent and stringent state laws, and they decided instead of dealing with the cost of working on a decentralized local level to work out standards, they decided to petition for national regulations which, at the time, minimized their costs. Unbeknownst to the industries, those national regulations laid the groundwork for the larger acts of the National Environmental Policy Act in 1969, the Environmental Protection Agency, and the Clean Air Act in 1970, and the Clean Water Act in 1972. The industries as a collective would have been much better off battling local, decentralized regulations then the

[38] Bruce Yandle, "Public Choice at the Intersection of Environmental Law and Economics," *European Journal of Law and Economics* 8 (1999): 5-27.
[39] Ibid, 19.
[40] Elliott, Ackerman and Millian, "Toward a Theory of Statutory Evolution," 326.

federal restrictions, but, according to Elliott, Ackerman and Millian, they each rationally pursued their individual self-interest to the demise of their collective interest.[41] This is an example of an industrial application of the Politicians' Dilemma discussed above.

The second relevant actor when it comes to interest groups is the regulators themselves: Inefficient command-and-control regulations are also in the best self-interest of regulating bureaucrats. It is much easier for an agency, like the Environmental Protection Agency, to set a stringent regulation to enforce instead of complex emission taxes or marketable permits. Hahn provides as an example the present Superfund policy, which dictates toxic waste dumps must be cleaned according to a priority order.[42] This regulation ignores whether greater reductions in risk could be obtained through an alternative approach which could look at all sites, but it makes "sense if Congress wants to be perceived as doing the job 'right,' even if only a small part of the job gets done" and means less work for the regulators.[43] Yandle points out that command-and-control regulations, such as technology standards, require no extensive monitoring.[44] All the bureaucrats must do is specify a "engineering standard and then make certain the technology is installed and operated."[45] The public does not know or care enough and regulators seek to minimize their cost. Ultimately, it is the environment and social wealth that suffers.

The third and final relevant interest group is environmental organizations. Considering industry is in favor of regulation, one might think environmentalists would be opposed to what industry wants. However, this is far from the case. Rent seeking behavior through the lens of public choice theory can also explain why opposed interest groups, such as environmentalist and

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[41] Ibid.
[42] Robert W. Hahn, "Economic Prescriptions for Environmental Problems: How the Patient Followed the Doctor's Orders," *The Journal of Economic Perspectives* 3.2 (1989): 110.
[43] Ibid.
[44] Yandle, "Public Choice at the Intersection," 11.
[45] Ibid.

industry, do not counterbalance each other in the political process and actually advocate for the same thing in some instances. There is a curious, but classic, example in history where both illegal distributors of alcohol and religious temperance groups supported blue laws prohibiting the sale of alcohol on Sundays in some counties in the United States. The literature has coined this phenomena "bootleggers and Baptists": instances where two diametrically opposed interest groups end up working together for a common goal which maximized their self-interests.[46] Both the bootleggers, who were looking for ways to shut down legitimate competitors one day a week, and the Baptists, who believed banning drinking on Sunday was in the public interest, lobbied for regulations prohibiting the sale of alcohol, even though the two groups probably agreed on nothing else except the color of the sky on a clear day.[47]

An environmental example of a bootleggers and Baptists situation that Yandle provides in later works is that of amendments to the "1977 Clean Air Act, which mandated sulfur-reducing scrubbers for electric utilities even if low-sulfur coal was burned".[48] Producers of high-sulfur coal, the bootleggers, were in favor of the amendments because they imposed higher unnecessary cost on their low-sulfur coal burning competition, and environmental groups, the Baptists, also were in favor because they could shut down more industry with command-and-control legislation, like the mandated scrubbers, than a sulfur pollution tax.[49]

**B. Rent Extraction**

While rent seeking behavior explains substantial portions of environmental regulation, McChesney expanded the theory to explain instances where "[p]oliticians can orchestrate

[46] Bruce Yandle, "Bootleggers and Baptists-The Education of a Regulatory Economists," *Regulation* 7 (1983), 13.
[47] Ibid.
[48] Yandle, "Public Choice at the Intersection," 17.
[49] Ibid.

responses from groups that feel threatened by the prospects of burdensome regulations".[50] McChesney calls this type of political exchange rent extraction.[51] Politicians in need of more funds will propose harsh regulation that no one will like, including the politician themselves, in hope that the industries harmed by the regulations will lobby against the controls producing monetary profits and political credit for defeating the malicious regulations that would harm constituents. Ultimately, it is a bluff, but politicians act upon such threats often enough to be taken seriously by industries, needlessly destroying private capital. In the end, the politician receives money for nothing, reducing social wealth; such behavior becomes nothing more than blackmail and extortion.[52]

Yandle also provides the example of the Kyoto Protocol to demonstrate how the same policy issue can have some industries provide politicians with profit as they seek rent and monopolistic protection, and others advocate reducing the costs, in the face of rent extraction.[53] The Kyoto Protocol addressed an international attempt to reduce greenhouse gas emissions. The United States signed the treaty but the Senate never ratified it for the 20 years of its life until it expired in 2010. During that time, the industrial benefactors of the Protocol, like the biofuel ethanol producers, successfully acquired higher rents in the form of subsidies based on the Kyoto discussions. On the other hand, the losers of the regulation, like the coal industry, lobbied against the Protocol being enacted, benefiting politicians.[54] Each organized interest group spent resources influencing politicians, while the regulation itself never actually took effect, creating a win-win scenario for rationally acting politicians, and a lose-lose for the rest of the relevant community, for politics always involves some actors who do not participate voluntarily.

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[50] Ibid, 15.
[51] McChesney, "Rent Extraction," 109.
[52] McChesney, "Rent Extraction," 108.
[53] Yandle, "Public Choice at the Intersection," 18.
[54] Ibid, 16

## III. Conclusion

Applying methodological individualism and neoclassical economic theory to political actions and decision makers shows that politicians, voters, industries and interest groups are rational actors. Their collectively damaging behaviors are individually rational in the context of political exchange. Voters are rationally ignorant, and thus politicians act entrepreneurially manufacturing the will of the people that suits their personal and political aspirations. This can create a Politicians' Dilemma, where politicians advance harmful regulations they do not even want to get ahead on the political ladder. On the industrial side, businesses advocate, instead of oppose, regulations that raise the cost of their rivals, producing artificial cartelization, reducing both competition and social wealth. Both the industries, regulators and environmentalists prefer innovation squelching command-and-control regulations, illustrating the phenomena of bootleggers and Baptists. At their worse, politicians threaten capital destroying controls no one wants just to extract rent with nothing less than extortion.

It is easy to become enchanted with public choice, holding idealistic beliefs about the intentions and values of collective action, as if somehow the sum could be greater than the parts. However, a public choice theory analysis of political exchange and examination of present environmental policy practices quickly disenchant the fairytale that benevolent regulators who are capable and willing to deal with supposed market failures through efficient environmental regulation. The white horse of government is not chaining the malicious industry to save the princess. Instead, the white horse is the antagonist of this story. In the end, the helpless victims terrorized and in need of salvation are the environment and the public health and welfare.

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