

THE STATE AND OCEAN POLLUTION: AN ECONOMIC ANALYSIS

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1. Introduction

Even though we humans spend most of our time on land, we are often admirers of the resource that covers the vast majority of our planet. Yes, perhaps as long as we have existed, we have been admirers of the ocean. Our knowledge of it and its inhabitants is still in its infancy; it is home to more than likely millions of species still yet to be discovered. But when it comes to the ocean, another topic seems to come up in conversation as of late: pollution. Whether it is a snappy article on Buzzfeed, an underwater scene from off the coast of California in “Finding Dory”¹, or a National Geographic video, marine and plastic pollution are inhabiting more and more mental space on the part of a growing number of commentators. This present paper seeks to address the important question of what can be done? In section II we briefly discuss a portion of the ocean pollution problem. In section III we consider the role of the government. In section IV we explain why the State cannot be the solution. In section V, different market responses are proposed and evaluated. We conclude in section VI.

2. The Problem

One problem is a slow but staggering rise in mercury levels. As Lamborg (2014) demonstrated, mercury levels in the upper levels of the ocean have tripled since the onset of the Industrial Revolution. The anthropogenic mercury in the ocean is now at 290 million moles, mainly in the Arctic and Atlantic oceans. The aqueous global conveyor belt has thus far successfully reduced the impact of this increase, but Lamborg speculates that we are reaching the end of this ameliorative path. This would mean an increase in mercury content in marine life, including species we consume, which would be detrimental to humans. In fact, we are already seeing mercury increases manifest in people. A study by Kathryn Mahaffey, Robert Clickner, and Rebecca Jeffries showed that mercury concentrations in the United States female population varies by region, but not randomly; rather, with levels of fish consumption. “In multiple regression modeling, women from the Atlantic ($p < 0.01$), Pacific ($p < 0.0001$), and Gulf ($p < 0.0001$) coasts had higher BHg concentrations compared with women from the inland West, whereas women from the inland Northeast and inland Midwest had significantly lower BHg levels ($p < 0.0001$) (Mahaffey, Clickner and Jeffries 2008).” Rises in human exposure to mercury must be closely monitored lest we suffer an increase in casualties.

Another mode through which the ocean is being polluted is by the dumping of plastic into the sea. This is an issue that had gotten a lot of press in recent years, whether it concerns plastic bags or straws. One Pacific garbage agglomeration found in the South Pacific is the size of México.² A team of American and Australian researchers, headed by environmental engineer Jenna Jambeck from the University of Georgia, found that roughly 275 million metric tons of plastic waste were produced in 2010. Of that ginormous size, 4.8 to 12.7 million metric tons entered the ocean (Jambeck 2015). The “Great Pacific Garbage Patch” has a Wikipedia page, and we are still discovering just how vast it is.

¹ A quality movie.

² More about it can be read here: <https://news.nationalgeographic.com/2017/07/ocean-plastic-patch-south-pacific-spd/>

3. Is Government the Solution?

With the pollution of the ocean an obvious problem that must be solved, how ought we go about fixing it? The government is often assigned this role.³ As pointed out in *Science*, “In the United States, at least 20 federal agencies implement over 140 federal ocean-related statutes (Crowder 2006).” Gladly, this is not viewed as a positive in the article, but the proposed solution is not much better. For Crowder, et al., the problem is simply *how* the government is overseeing the ocean, not that fact that it *is*. They propose that the United States government introduce marine spatial zoning to manage its oceans properly and efficiently, while maintaining marine life. But can the government serve as protector?

Recall the enormous amount of plastic dumped into the ocean. Who is the largest polluter? Is it the United States? Is it a country with a high level of economic freedom (i.e., a country with a small government)? No – it is China. 8.8 million metric tons of plastic are attributable to China. Adding Indonesia’s 3.2 million metric tons, and these two countries alone account for over one third of the plastic in the oceans (Jambeck 2015). Moreover, the Top 5 biggest contributors (China, Indonesia, The Philippines, Thailand, and Vietnam) are responsible for more plastic pollution than the rest of the world combined (Merkl and Stuchtey 2017). None of these countries are beacons of free market capitalism. According to the Heritage Economic Freedom Index, not one of the five countries above are even in the Top 50.⁴ But is the issue simply what is being implemented by governments? *Could* the government ever come up with an effective and efficient plan?

4. Inherently and Necessarily Inefficient

The short answer? No – the State cannot. Markets are necessarily more efficient than government. To continue in the tradition of Franz Oppenheimer, let us begin with the fact that there are only two means by which one can acquire wealth. One may either work for it, or one may accrue wealth through theft. The former Oppenheimer coined the “economic means”, and the latter the “political means” (Oppenheimer 1926). One can either produce wealth, or one can take the wealth produced by another.⁵ The former grows the economy, and the latter drains the economy. It cannot be denied that everything the government possesses, due to its coercive nature, it acquired through robbery, or was purchased and/or built with money gathered coercively. The “economic means” requires one to produce something of value in order to gain wealth, whereas the “political means” merely steals its wealth, and perhaps offers services – services which you will pay for whether you want or utilize them, or not. Governments, then, add no value to the economy. Not only that, governments are inefficient due to the inability to calculate economically, the nature of bureaucracy, the lack of a price mechanism, and lack of and misguided incentives.

It is quite literally impossible to calculate the benefit of government’s actions, even if we assume pure intentions for every actor. With governments, the price system is not present, rendering economic calculation impossible.⁶ The price system simultaneously allows for all to know the exact circumstances surrounding something and only tells the individual the bare minimum it needs to know. Prices form out of supply and demand, which means that any and all information is taken into account regarding the good or service in question, while allowing individuals to make the right decisions without knowing all the information. One doesn’t necessarily know, or even has to know, that the reason the price of wood has increased is because there was a forest fire that dwindled the supply of wood. But the rise in price tells the individual that for whatever reason, wood has increased in value (in this case due to its increased scarcity), and this price signal will alter the consumption of wood, in that it will direct wood to where it is most direly needed.

The price system miraculously does all of this. In the words of economist F.A. Hayek, “I am convinced that if it were the result of deliberate human design, and if the people guided by the price changes understood that their decisions have significance far beyond their immediate aim, this mechanism would have been acclaimed as one of the greatest triumphs of the human mind (Hayek 1945).”

³ It is often the wont of many to assume the State can solve any and all problems.

⁴ China is 110th, Indonesia 69th, The Philippines 61st, Thailand 53rd, and Vietnam 141st. Entire list at: <https://www.heritage.org/index/ranking>

⁵ For further analysis of the State, I would recommend, *The State*, by Franz Oppenheimer, as well as, *Anatomy of the State*, by Murray Rothbard.

⁶ For a deeper explanation, *Economic Calculation in the Socialist Commonwealth* and *Socialism* by Ludwig von Mises are highly recommended.

This marvelous tool is missing in the realm of government. Since it acquires compensation for its services coercively, even with the assumption of benevolence, it is impossible to determine if these services are valued by the populace, for the only way to see this would be to calculate net revenue. But the government determines how much money it will receive by legislating the amount it deems necessary for providing these services, making it impossible to determine costs of business. With compulsory compensation, income cannot be accurately determined since the number one would reach would be purely arbitrary. With both costs of business and gross revenue distorted due to the nature of government, net revenue will consequently be distorted and wholly distorted.

With the lack of the price mechanism, governments must rely on another form of determining success and failure, as well as another form of managing activities, which leads us now to bureaucracy. Without a price mechanism, a government agency is left in the dark as it pertains to budgeting. They cannot know if they are being wasteful, if they are being efficient, because there is no market check on their activities. Their success cannot be determined in monetary terms. Thus, as Ludwig von Mises wrote in *Bureaucracy*, “the criterion of good management is not the approval of the customers resulting in an excess of revenue over costs but the strict obedience to a set of bureaucratic rules. The supreme rule of management is subservience to such rules (Mises 1996).” Without the application of the market, proper and good management is reduced to working one’s way down a check list, in place of allowing the accountancy method to determine the company’s progress.

Finally, people are driven by incentives. People generally speaking prefer leisure to work, and for this reason, only partake in an action if their marginal benefit exceeds their marginal cost. The livelihood of every company in a market rests on maintaining the belief in their customers’ minds that the benefits of their product or service outweigh their costs. The loss of this belief means bankruptcy. Businesses, then, have an incentive to satisfy their customers as well as possible, lest they are forced out of business. Such is not the case for governments. Should a government fail to satisfy its citizenry, it does not face the fate of an inefficient and unsatisfactory business; it stays in business. The ability to change companies is not possible. Moreover, governments receive payment for their services regardless of their performance, via taxation. The amount of which governments are compensated for their services isn’t even determined by the consumer, but by the government, meaning governments decide how much its citizenry will be taxed. With the threat of bankruptcy removed, the incentive to provide quality goods and services vanishes. And what are we left with? We’re left with only 31% of our roads considered to be in “good” condition (Cuneo, et al. 2015). We’re left with generally unsatisfactory police services, and even events of excessive force and brutality. We’re left with an education system that is failing its children. And why is this? You cannot take your money elsewhere, and you must give your money whether you like it or not. If one is not content with their Samsung smartphone, they are able to patronize Apple, LG, Motorola, etc. We are not coerced into giving any private company money.⁷ Private companies have an economic incentive to satisfy, while governments do not. It is for this reason that we are generally content with our private purchases and disgruntle with public goods and services.

5. Market solutions?

With the State removed as a possible actor, are there voluntary means to solve the pollution problem? Here we turn to Murray Rothbard and Walter Block. In 1956, Rothbard considered what to do with the oceans. With privatization in mind, Rothbard believed shipping routes were not scarce enough to warrant privatization⁸, but fisheries certainly ought to be privatized.⁹ Block took an even more radical approach. In keeping with his mantra¹⁰, he felt it best to privatize the entire ocean.¹¹

This present author questions whether privatizing the oceans in the way we privatized land (as Block argues) is feasible. More steps can certainly be taken on land, though, to prevent pollution from entering the water. The complete privatization of garbage disposal could be a good start. Turning garbage disposal over to the free market would allow for better accountability. Understanding that the market is more vigilant, it would

⁷ In a free market, to clarify.

⁸ Scarcity is a prerequisite.

⁹ The full letter can be read here: <https://mises.org/library/who-owns-water>

¹⁰ “If it moves, privatize it; if it doesn’t move, privatize it. Since everything either moves or doesn’t move, privatize everything.”

¹¹ Although not necessarily the entire thing all at once (for the same reason Rothbard argued). More can be read on Block’s opinion here: (Block 2015)

be a PR nightmare if it was discovered that one company dumped their trash into the ocean. It would also be in their interest to make a public pact to *not* dump into the ocean.

Moreover, as shown above, it is non-capitalist countries that are mainly polluting the water. Moving those countries away from state control and towards capitalism in general would serve as a great way to reduce the amount of pollution they cause. This change in economic policy would also allow for economic growth, making it much easier to move to more environmentally friendly, but perhaps costlier, products.

6. Conclusion

As the environment as a whole has gotten a brighter spotlight placed upon it, thus in tandem has the ocean. Water pollution carries with it negative side effects for humans and marine critters, making it an imperative issue to address. But as we have seen, the government is incapable of providing any amelioration. What must be done is have states shrink in size and power, so that the efficacy of the market can handle the harmful environmental issues that the state necessarily cannot solve efficiently.

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