

Transcript:

Hello, my name is Tea Barndt and I will be discussing my project on the Japanese whaling industry and the international whaling commission. The issue of commercial whaling has been a controversial and emotionally fueled political topic for decades. Despite this, however, the whaling industry has been a consistently under researched field in economics.

In 2019, Japan officially withdrew from the international whaling commission, prompting international controversy. Since previous research into the whaling industry has been limited by data availability or influenced by political factors on both sides, independent academic research into this industry is needed. This project analyzes the affect of the international Whaling Commission on the whaling industry in Japan. In particular, I look at the effect the 1986 moratorium banning commercial whaling by the international whaling commission had on the quantity of whales harvested in Japan.

To give some context for this research, I'm going to start by discussing a timeline of events. In 1946, the International Whaling Commission or the (IWC) was established by its founding members to regulate whaling and conserve whale stocks. To begin with, this was basically a way for countries to communicate and coordinate whaling practices, since there had been some concern over the sustainability of whaling on a global level. Although not an original member of the International Whaling Commission, Japan joined in 1951. In 1982, members of the International Whaling Commission voted to implement a ban on commercial whaling, which came into effect in 1986. This moratorium applied to all whales in all waters, with few exceptions for aboriginal hunts and whaling for scientific surveys, which were to be conducted in order to estimate current stock sizes. Japan continued to hunt whales under scientific research permits, but the meat and blubber were ultimately delivered to fish markets and government programs for consumption.

In 2013, Australia challenged the legality of Japan's Antarctic whaling program at the International Court of Justice (ICJ), and in 2014 the ICJ concluded that the whaling was "not for the purposes of scientific research" and ordered Japan to immediately cease its Antarctic whaling program. Japan complied with the order, but relaunched the program in 2015 with slightly different research objectives; however, the program was clearly meant to meet a commercial objective and in 2017 the Japanese Parliamentarians and Fisheries Agency officials publicly acknowledged that scientific whaling is Japan's means to secure an eventual return to commercial whaling. In 2018, the IWC rejected Japan's proposal to resume commercial whaling, and in December of that year Japan announced its plan to withdraw from the International Whaling Commission. On June 30, 2019 Japan officially withdrew from the IWC and the next day, commercial whaling resumed.

As mentioned before, academic research into this field has been limited and often wrought with bias, from both sides of the ethical debate over whaling. Some papers have found

that whale stocks are likely to have been recovered to a point where sustainable harvesting could resume, but there are also criticisms of these papers claiming unrealistic estimations. Additionally, political influences on both sides of this argument prevent compromise between countries with opposing viewpoints. Notably, research from the early 2000s' indicate that a complete withdrawal from the international whaling commission would not immediately allow for profitable commercial whaling in Japan. Several obstacles prevent commercial whaling beyond just the 1986 moratorium, including several other international conventions, large subsidies being provided to the whaling industry currently, and a seeming decrease in demand for whaling products over the last several decades. Despite this, pro-whaling policies and sentiments remain relatively strong in Japan, which may be instigated by a Japanese pro-whaling identity created by a political countermovement throughout Japan. Through this, anti-whaling sentiments are made out of be emotional, irrational, and an attack on the historical legacies and integrity of Japanese whaling communities.

This research analyzes data collected from the International Whaling Commission, the Ministry of Agriculture, Forestry, and Fisheries in Japan, and the Statistics Bureau of Japan. The data consists of the quantity of whales harvested, average price per whale, population, GDP, the population born before 1940, and the whaling ban in a time-series from 1960—2012.

The quantity of whales harvested was measured in the number of whales caught annually. Average price was determined by dividing the total value of the harvest by the number of whales caught. The population is a just a measure of the total population of Japan in any given year. Population born before 1940 is a measure of consumer preference. Since consumption of whale meat increased after world war 2, the population of Japan who were children during that time tend to have more pro-whaling sentiments than younger generations and consume more whale meat because it is a nostalgia food for them. The whaling ban is a dummy variable which indicates years when the moratorium banning commercial whaling was in place.

I began by conducting a standard OLS regression model with the indicated variables. Here, you can see the results of my regression, with the asterisk indicating significance at the 95% confidence level. Overall, the results were not unexpected. I found that the Average price per whale and the population were both significant factors in determining the expected quantity of whales harvested. Interestingly, the coefficients for these variables did not have the expected signs. The coefficient for price was positive instead of the expected negative sign, and the population variable also had a negative coefficient. This could be a sign of possible omitted variables skewing the results. Additionally, the explanatory variable of interest, the whaling ban, was not determined to be statistically significant.

Next, I moved on to a dynamic model, where I used a 1 year lag of the whaling quantity. Here, the lag of the whaling quantity was statistically significant, indicating that the harvest of the previous year is important in determining the quantity harvested in the current year. An LM test was performed to test for serial correlation, but no serial correlation was found. Here, the whaling ban was also not determined to be significant, however.

The purpose of this research was to determine the effect of the commercial whaling ban on the harvest of whales in Japan. According to my models, the whaling ban was not found to be statistically significant in determining the quantity of whales harvested, which was unexpected. This could be due to a variety of reasons. To begin with, it has been suggested that political influences and bureaucratic red-tape within the International whaling commission lead to little effective oversight into the “scientific” endeavors conducted by Japan, until 2013 when Australia challenged Japan directly. Additionally, there were a number of limitations to my research which should be noted. Due to the nature of time-series studies, my sample size was relatively low. It is also likely that some of my data is inconsistent since survey-taking and reporting procedures for whaling outcomes have changed over the last half century. Additionally, a number of likely significant variables could not be included; the price of substitutes for whale meat and a strong measure of societal sentiments toward whaling and whale-meat could not be found. To further complicate this, the value of the whales may have been over-reported due to government subsidies and programs, which are likely to have paid more for whale meat than it would receive on the open market. Another significant factor that was not included is a prediction of the difficulty level of harvesting whales. A whale population bio-economic model would be important here, as a decrease in quantity could be due to simply being unable to find whales to harvest, as whale stocks decrease. I would recommend future research to consider all of these factors in future studies.

Thank you for listening.