

Eduardo Porter offers a “teachable moment” thanks to his NY Times Business piece on [insurance today](#). He writes a piece arguing that for profit “conservative” firms have a stake in fighting climate change. While I want this logic to be correct, an academic might ask whether it is correct. The insurance industry makes profit if it collects more in premiums than it pays out during disasters. So, if it sells \$20 million dollars worth of insurance but only 3 guys file claims and collect \$2 million in total then the insurance industry has had a great year. Porter’s logic is simple. If climate change raises the probability of horrible outcomes where the insurance companies must payout a fortune, then doesn’t this industry have an incentive to root for carbon mitigation? The correct answer hinges on risk pricing and the extensive margin. If insurance companies can raise their premiums because of climate change then their expected revenue and expected costs rise from climate change. If they can use bankruptcy to avoid catastrophic claims, then an option value model of bankruptcy would say that the insurance industry will root for climate change because this allows them to flip “one sided coins”. It is also possible that the demand for insurance will rise because of climate change. If more people now buy policies (the extensive margin) because of the perceived risk, the insurers may be even happier.

Insurance exists because demanders are [risk averse](#) but are the insurance companies risk averse? If they can spatially pool risk, then they will be risk neutral due to standard diversification arguments and if the insurer has the default option, then they have an incentive to be risk loving and to root for climate change.

UPDATE:

Let’s go through the insurance cases with a focus on the economic incidence issues brought about by climate change; In case #1 and #3 the insurance industry doesn’t lose because of climate change.

1. Case #1; The insurance market is a perfectly competitive industry with free entry and free exit. In this case, expected profits are always zero and the insurers are indifferent between whether there is climate change or not. Insurance rates rise to cover the expected costs of the claims; in expected expected revenue = expected costs and expected profit = 0.

In such a market, the insurance demanders bear the full incidence of climate change.

2. Case #2; The industry is highly regulated so that insurers face a maximum premium they can charge and they are prohibited from exiting the market. In this case, Porter’s logic is correct and the insurance firms will lobby for carbon mitigation because they foresee that they bear the incidence of climate change risk.

3. Case #3; The insurer is a monopolist and this single firm has the option to exit the industry after a catastrophic shock and force the government to pay disaster relief. In this case, the insurer is likely to be a fan of climate change because it can charge a larger price

premium and if the disaster occurs it can default. Shouldn't insurance buyers anticipate this? While a Chicago economist would say "yes", the large number of fans of behavioral economics would say that the Homer Simpson public won't anticipate this and the insurance company will exploit his ignorance for its own profit gain.