Assessing Costs of Anthropomorphic Climate Change--Regulatory Intervention

by Sophia Tutorial

WHAT'S COVERED

This tutorial will discuss assessing costs of anthropomorphic climate change, focusing on regulatory intervention. We will define and explain what anthropomorphic climate change involves and its effects. We will also discuss the impact of these weather volatility effects on the market for insurance, and explain ways that governments and economists view this issue and attempt to address it for the future.

Our discussion breaks down as follows:

1. Anthropomorphic Climate Change
2. Weather Volatility
3. Impact on Insurance Availability
4. Government Response
5. Economists' View of the Future
6. Intergenerational Decisions

1. Anthropomorphic Climate Change

Let's begin with the definition of **anthropomorphic climate change**, which is climate change resulting from human causes.

These are climate change events that are specific to man-made activities, involving activities such as:

- Emission of greenhouse gases
- Treatment of wastewater and solid waste
- Overuse and grazing of lands
- Deforestation and use of pesticides
- Many other changes to the natural ecosystem

There is much public debate over this and there are multiple perspectives on climate change.

THINK ABOUT IT

An online article from The New York Times discussed how our levels of carbon dioxide have passed a frightening milestone, and while scientists certainly had something to say about it, readers also posted over 700 comments about the article. There were people on both sides of the debate who felt very passionately about their opinion, so clearly this is a topic that creates much public debate. Where do you fall on the topic of climate change?

Currently, there are economists who believe that climate change is a major concern and they are studying ways to address the issue, which is the focus of today's tutorial.

TERM TO KNOW

Anthropomorphic Climate Change
Climate change resulting from human causes

2. Weather Volatility

Anthropomorphic activities have resulted in heightened weather related volatility, as measured by the number of insurance claims.

Insurance companies have reported a significant increase in the number of claims due to natural disasters.

There have been an increase in premiums because many of these companies cannot afford to keep the premiums at their original levels.

Unfortunately, some people have been unable to get private insurance in some areas because insurance companies were reporting negative returns.

3. Impact on Insurance Availability

One question that economists are starting to ask is if limited insurance could slow our economic growth.

Developing new products or entering new markets involves a lot of risk, and risk sharing with insurance companies has at least helped with this.

So, will people become too risk-adverse to continue innovating?

We need people innovating and developing new things, and if it becomes too risky for them to do so, it could certainly slow economic growth.

It could also have a major impact on people's ability to get health insurance or on the health insurance business in general.

We know that climate change could affect human health, in terms of:

- Sanitation

- Increase in vector-born diseases
- Food and water shortages

Therefore, climate change could have an impact on health insurance.

4. Government Response

Now, what is the government response to climate change?

Well, it is being addressed on a global scale, in some countries more than in others.

It was a national priority for President Obama and his administration and there are many organizations worldwide involved in encouraging firms and consumers to change behaviors to improve the environment.

5. Economists' View of the Future

Economists' view of the future is fairly simple.

Number one, we know we cannot change the past. What we do know for certain is that there will be some long-term impact, whether or not it is as extreme as some people believe.

We also know that the outcomes remain unknown.

Presently, though, we need to take action in terms of mitigation and adaptation:

- Mitigation involves modifying our activities to reduce further emissions and climate changing behaviors.
- Adaptation involves developing infrastructure to keep people safe from our more volatile climate.

Both of these will require intergenerational value, which we will discuss next.

6. Intergenerational Decisions

Intergenerational decisions is decision making in the present that considers the future cost and benefit as well as the current cost and benefit.

This can present a problem regarding politicians, because what incentive do they have to consider future costs and benefits, or the impact on future generations? Their entire job revolves around current costs and benefits--pleasing constituents today so that they get re-elected in the short term.

Most people, unfortunately, are not as forward-looking as they need to be in order to fix our climate change behaviors.

Therefore, intergenerational decisions need to come into play if anything constructive is going to be done about this issue.

TERM TO KNOW

Intergenerational Decisions
Decision making in the present that considers the future cost and benefit as well as the current cost and benefit

SUMMARY

Today we learned that **anthropomorphic climate change** refers to human impact on climate change and how it has caused increased **weather volatility**. We examined the **impact on insurance availability**, which is expected to hamper economic growth. We discussed **government response** and **economists' view of the future**, and how they are working to address the issue, though it will require **intergenerational decisions** that consider the future as well as the present.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Anthropomorphic Climate Change
Climate change resulting from human causes.

Intergenerational Decisions
Decision making in the present that considers the future cost and benefit as well as the current cost and benefit.