12 Speech

Your Name (First M. Last)

School or Institution Name (University at Place or Town, State)

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 **Main Points**

 The study deliberates the economic impact of climate change by utilizing a vote counting procedure to evaluate the density function of the overall economic impact as the parabolic function related to global warming. A significant amount of uncertainty exists pertinent to the implications of climate change up to 3◦C. Exceeding 3◦C will manifest adverse impacts while warmer temperature than 7◦C is likely to cause a welfare loss. The consequences of climate change are not strategically or critically comprehended in contemporary times. The enumerative method stipulates the physical impacts of climate change acquired through the papers of natural science. For instance, the cost of land lost and coastal protection is constituted by the rise in sea level which is postulated in the engineering literature. In this case, the economic ramifications highlight the value of land and cost of dike building. The alternative approach is statistical. It advances to specify the direct approximations of the welfare impacts by utilizing the observed variations in expenditures to discern the impact of climate. However, the enumerative approach harnesses the advantage it relies on the essential natural science experiments, data and models which persistently yield physically realistic results. The first figure demonstrates the chosen traits of the published estimates. The first aspect of agreement in the study is the welfare impact of the doubling of atmospheric concentration of the greenhouse emissions is relatively small on the economy these days. For instance, it is approximately equivalent to the year’s growth of the global economy. Besides, several studies have illustrated the initial advantages of the increase in temperature which are followed by disadvantages as the temperature rises further. The studies published after 1995 indicate the regions equipped with net gains and losses because of global warming but the earlier researches focused on net losses only(Tol, 2011). In addition, the uncertainty as per the studies is immense. Studies comprising the benchmark warming as 2.5◦C reflect an average approximation impact of the climate change on the standard deviation of 1.2% of GDP and output of -0.7% of GDP.

 In all of the studies mentioned above, the economic losses are associated with direct costs after ignoring the partial equilibrium and general equilibrium effects. The instances of extreme climate scenarios comprise the disintegration of crucial ice sheets and the alteration of patterns of ocean circulation. The primary manifestations of the factors causing these changes or estimating the consequences of these changes are unknown. Besides, the impact of climate change in the long run is a grave concern yet unknown. A wide range of studies suggests the adverse implications of climate change are likely to accelerate until 2100. It can not only impact the biodiversity through the variations in precipitation and temperature but can also affect nutrient cycles, land use, the likelihood of incursion of habitats by alien species and ocean acidification. The growth ratio of the mean social cost of Caron throughout the 21st century is 1.99% each year as per the integrated assessment model of DICE99 (Tol, 2011).

**Reflection on the Reading**

The research study critically addresses the uncertainties pertaining to the net cost of climate change. It utilizes both the previous studies and the integrated assessment models to conclude and estimate the uncertainties. It is evident from the study that the incremental consequences for any warming are negative but can be avoided. However, climate change is highlighted as positive initially. It is essential to deliberate the significance of the published estimates for the study. They added to the study by postulating that climate change is not primarily a major problem. Meanwhile, these published studies predicted the approximations of 3.0◦C where actual value can be much larger. The key aspect in the study is the accumulation of primary estimates to establish the probability density functions on the impact of warming as 1.0, 2.5 and 3.0◦C. The utilization of vote-counting was also critical instead of Bayesian updating as the fundamental purpose was the preservation of widespread uncertainty. The ambiguity related to carbon is an explicit illustration of uncertainty which is growing over time. The subsidization of the greenhouse gases cannot be excluded yet the estimated value of the social cost of carbon refers to a carbon text. As per the research studies conducted in the readings, the carbon tax begins at $30/tC and advances at 2% each year.

 Furthermore, it is imperative to highlight the limitations of the study. There existed several limitations which highlight the areas to be assessed in the future researches. First, only the uncertainty related to the economic impact of climate change was assessed. A critical appraisal of the study reflects that the uncertainty about the future concentrations and emission is completely disregarded. Likewise, the variations in the vulnerability to climate change were also overlooked which is often deemed a modulated of climate change. Since the fourteen studies in the readings did not mention this factor, it is not discussed or estimated. One of the major aspects is the lack of policy implications. In addition to the social cost of carbon, the carbon tax should have been levied. These limitations pave the path for future research which ought to focus on these aspects to comprehend the intricate implications of the climate change on the welfare loss by reaching global warming. Likewise, it is critical to shedding light on the models and methods used by the researcher. The vote-counting method is used as it does not narrow the uncertainties rapidly.

**Contemporary Instances Pertinent to the Issue**

A special study published by the United Nations highlighted the economic implications of climate change. In 2017, California promulgated legislation stating utilities to have 100% renewable energy power until 205. The emissions by Britain declined back to 1894 levels in 2016. After the surge of technologies as the electric cars and offshore wind in the market, the potential of drastic shifts in the economy is also accelerating. These instances are likely to make climate politics further existential and less distributed. It is essential to differentiate between the distributed and existential paradigm. The distribution politics can be related with the reading as it underpins the climate politics comprising the confrontation over cap emissions or tax carbons, subsidies on several types of energy and the estimated worth required to be transferred by developed states to the prone states. This political aspect is primarily a confrontation between the most vulnerable entities and environmentalists. The energy-intensive sectors and fossil fuel producers are also critical to change the economic implications and further accelerate the uncertainties. In the contemporary era, the insurance corporations, military bases, agriculture and property holders are already getting affected by the adverse economic impacts. With the passage of time, the damage is likely to enhance which is directly proportional to the economic distortion. The formulation of long-term strategies is essential as it will protect the most vulnerable sectors like real estate, agriculture and insurance. Since the events are uncertain in the future, it is imperative to expect the worst and prepare for it in true letter and spirits. The delay will not only affect the economy but also create a further burden on the taxpayers for reactive and expensive measures.

 The other issue is the contemporary approach and progress of the United States of America (USA) on the issue of climate change and its implications on the economy. The policymakers have advanced to avoid the worst-case scenarios through mitigation to reduce the economic losses across the state. The extent of the economic harm is uncertain which can perhaps affect the economy till the very end of the century. However, the expert has revealed that behavioral and policy changes to curb the emissions can reduce the damage by half. As per the estimates, the control on emissions can reduce the losses by 48 % in 2090. A new venture of the National Climate Assessment that addresses the interest of the state highlight the critical implications for the agriculture sector. It contributes $136.7 billion directly in addition to 2.7 million jobs in the United States. In the case of economic adversities inflicted by climate change, the sector will receive detrimental impacts which are tied to both home and abroad. The reports published by NCA are entirely different from those published by the Intergovernmental Panel on Climate Change of the United Nations. The recent studies discuss the difference between the environment that warms 2 degrees and 1.5 degree Celsius. However, a few researchers have conducted studies to quantify the consequence of climate change on the corporations of the United States and the effectiveness to confront the impacts.

**Two Questions**

* What are the prominent steps taken by developed states to curb the emissions? Assess the significance of those steps pertinent to the long-term impacts of climate change on the economy.
* The International treaties and organizations are substantiating the economic advancement of the developed states in comparison to the non-developed states. Discuss the validity of this statement by evaluating the previous and contemporary economic impacts of those treaties and developments.

References

Tol, R. S. J. (2011). *The Uncertainty about the Total Economic Impact of Climate Change* (No. WP382). Retrieved from the Economic and Social Research Institute (ESRI) website: https://ideas.repec.org/p/esr/wpaper/wp382.html