



In Partial Fulfillment of the Requirements for the Degree of

## Doctor of Philosophy

**Vanessa Lueck**

Will defend her prospectus

### **Insurance for climate change adaptation?**

#### **Abstract**

The international community acknowledges that climate change is occurring with multiple impacts for societies, and, recognizes that individuals, communities and societies should be adapting. However, the international community does not see enough adaptation occurring or quickly enough for the changing circumstances. In an attempt to remedy this 'adaptation gap' the international community is calling for various means to enable and compel adaptation. One of the calls is for insurance.

These calls for insurance assume that insurance will automatically lead to policy holders adapting to the changing climate, and, transfer the risk away from the poor and most climate change vulnerable. Unfortunately, it is not clear in the calls nor in the literature what kind of adaptation insurance leads to, how insurance is functioning as an adaptation mechanism, or who is carrying the risk. My dissertation delves into this space.

Simultaneously, there is a growing body of literature on insurance as governance, but this has not been widely applied to discussions of insurance in the adaptation context. In the first part of this dissertation I integrate these discussions. By synthesizing literature on insurance, insurance as governance, governance, and adaptation I will be able to conceptually explore questions such as: what kind of adaptation is insurance leading to; how is insurance functioning as an adaptation mechanism; who is carrying the risk; what are the consequences for legitimacy and accountability within climate change adaptation; and, what potential climate justice issues does insurance as governance in the adaptation context raise?

Agriculture is the only field where insurance as a climate change adaptation mechanism has been implemented and, in a limited number of cases, studied. In

the second part of the dissertation I will examine climate insurance agriculture cases using the insurance as governance approach in order to see how well these cases satisfy climate change adaptation and climate justice. These agricultural cases highlight that it is not clear what kind of adaptation insurance leads to and raise the issue of who is carrying the risk in climate insurance. However, agricultural climate insurance is relatively new, in flux, and most proposed programs have not yet been implemented. Therefore, in the rest of my dissertation, I will explore an area of insurance that has been influencing policy holder's choices for a long time, albeit not under the name of climate change: coastal insurance.

60% of the world population lives within 60 miles of the coast; many of the poorest and most climate vulnerable people live on or near the coast; warming oceans are an existential threat for many coastal areas; insurance has been playing an important role in coastal development for a very long time; and, insurance has already been influencing adaptation to warming seas, although primarily implicitly.

In the third, and primary, section of my dissertation I will use case studies of two coastal communities to explore how insurance has been functioning as an adaptation mechanism. Specifically, I will examine how it has shaped adaptation choices and the distribution of risks and benefits, and the potential implications these have had for justice, legitimacy and accountability.

Using academic and grey literature, public documents on and for coastal flood insurance and public private insurance requirements I will discover what adaptations insurance is enabling and requiring, and then evaluate whether these adaptations improve individual and community capacities to deal with a changing climate now and into the future. Using the same documents, I will discover and map the distribution of risks and benefits flowing from the insurance and insurance adaptations; then assess how and why the flows (do not) match with the international calls for insurance for climate change adaptation; and, logically deduce what the climate justice issues may be. In addition, I will conduct interviews at the community level to discover: how the community views the legitimacy of these insurance driven adaptations; how the community perceives the risk and benefit flows; and who the people in the community think are and should be held accountable for adapting to coastal hazards. These interviews will provide insights into how insurance as governance may be impacting the legitimacy of climate change adaptations and challenges of accountability within this.

I will be comparing one community with a well-developed, high-density, mixed public and private insurance system combined with high catastrophic risk and existential risk from climate change with a second community that has similar high catastrophic risk and existential risk from climate change, but has poorly-developed, low insurance density, primarily or exclusively provided through a private insurance system. The first type of community is often used as an example of why everyone on the planet should have insurance and the second represents a target community for these international calls for insurance.

With this comparison I will begin to illuminate the structural consequences of telecoupling and decoupling of risk and financial flows from ecological and social circumstances, and legitimacy and accountability issues in public-private governance in insurance for climate change adaptation. In addition, my research will provide the necessary information to use in the development of a proto-type insurance product that will enable relocation away from the coast.

Monday, September 10, 2018

12:00 pm

Wrigley Hall, Room 481

Faculty, students, and the public are invited.

Supervisory Committee:

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