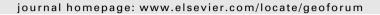


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Natural disasters as the end of the insurance industry? Scalar competitive strategies, Alternative Risk Transfers, and the economic crisis

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ABSTRACT

The aftermath of Hurricane Katrina has piqued interest in the insurance industry, and this scrutiny has led to assumptions that the industry has become unstable and unprofitable with the increased incidence of disasters in highly-insured regions of the world. This paper challenges that assumption by arguing that the insurance industry has responded by spreading risk through scaled and networked recovery schemes. We found that because of competitive strategies of risk-spreading and displacement arrangements, the industry has actually profited as a whole. Regional insurance companies have always relied on the higher financial scales of the reinsurance industry in Munich, Zurich, and London. But with claims reaching into the billions of dollars, the reinsurance industry itself has raised premiums, spread risk farther afield, and jumped scale by spreading risk to futures markets called Alternative Risk Transfers (ARTs). However, the recession beginning in 2008 has called into question the viability of using futures markets as insurance. It is shown through a media analysis of four major business publications (*The Economist, The New York Times, The Financial Times* and *The Wall Street Journal*) how the industry responded to the costs of the 2004, 2005, and 2006 hurricane seasons. Because geography is rather new to this literature, this paper also offers a broad review of the insurance industry.

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1. Introduction

Hurricanes Katrina and Andrew, the Indian Ocean tsunami, Ike, and Gustav, among other extreme weather-related events, have captured the world's attention. The sheer force of these hazards and the threats to lives and possessions becomes a frightening possibility for many in coastal communities. Following Hurricane Katrina, it became clear that (the United) States were not well-equipped to respond to the security demands of these communities after major natural disasters. This is clearly due in part because of the varying scales of natural hazards matched up with the rigid geographical solutions that are stuck at the scale of federal politics (Bakker, 2005; Braun, 2005; Waugh, 2006). Less clear are the strategies and scales employed by private industry (Auerswald et al., 2006), in this case, the role insurance companies have played in bridging the scales of disaster recovery (or response) and how they have geographically restructured their financial strategies after a string of high-cost years.

Following Hurricane Andrew in 1992, which cost insurers over 6 billion dollars in claims, Leggett (1993, p. 30) suggested that "a complete collapse of the reinsurance industry" was very possible as a result (see also, Cummins et al., 2002). Similarly Mills (2005, p. 1043)

predicts a forked path for the future of the industry considering the increased intensity of natural disasters: "[they] may rise to the occasion and become more proactive players in improving the science and crafting responses. Or, they may retreat from oncoming risks, thereby shifting a greater burden to governments and individuals". In this paper we seek to give an early answer to Mills' predicament by illustrating how the competitive strategies of the insurance industry have changed since 2004. To do this we assess, through a discourse analysis of over 60 pieces from four major business publications (*The Economist, The New York Times, The Financial Times* and *The Wall Street Journal*), how the industry responded to the record high costs of the 2004 and 2005 Atlantic hurricane seasons compared to the record low costs of 2006. This media analysis reveals that it altered its competitive strategy through geographic withdrawal, increase in premia, and the entrance of new providers.

What becomes clear in section three and four is that the competitive strategy of other (re)insurers was to reorganize and securitize their investments by opting to spread risk across varying geographic scales. Insurance has the ability to link the local with the global through a network of risk-sharing arrangements and therefore has the capacity to overcome the state-related problems of scale that are associated with natural hazards.² It is concluded

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¹ It could be argued that Ulrich Beck predicted this failure (see Beck, 1992).

² There has been a significant amount of literature on spatial risk-assessment modeling, but is based on cost-benefit equations for the use of the insurance industry (see,Amendola et al., 2000).

that the industry potentially possesses a built-in resilience through its risk-spreading arrangements (in part Alternative Risk Transfers or ARTs) and a large capital base (often provided through the reinsurance industry) that allows it to effectively approach and respond to catastrophic loss events like Hurricane Katrina. We conclude that the socio-political repercussions of this restructuring disproportionately affect poorer demographics.

Despite some clear geographical questions relating to the entwining of social, scalar, and environmental matters, the relation between disasters and insurance has received little sustained attention from social and economic geographers (some exceptions include, Doornkamp, 1995; Palm, 1995; Bennett, 1999, 2000; McLeman and Smit, 2006; Priest et al., 2005), while economists and policy analysts have conducted more sustained disaster-insurance studies (Bougen 2003; Kunreuther and Pauly, 2006). Even scholars of security and international relations have been keen to offer their perspectives (Paterson, 2001: Ericson et al., 2003: Jagers et al., 2004; Lövbrand and Stripple, 2006). There has been some work by geographers in relation to "the New International Financial System," but it only references insurance as a major player in the control of financial capital (Leyshon and Thrift, 1997, pp. 115-160). While some questions have been asked in relation to how global climate change will affect the study of (environmental) economic geography (e.g., Yohe and Schlesinger, 2002; Bridge, 2008), and others ask how human and physical geographers can work together on the issue (Pollard et al., 2008), geographers have not asked, to our knowledge: "how have insurance companies dealt geographically with global environmental change and the resulting natural disasters?3" Answering such a question can open doors for further, more critical, research on how the insurance industry has altered its competitive strategy and wrestled power away from states. It is also for this reason that this paper on "geographies of insurance" also offers a broad review of the insurance industry.⁴

Our focus is primarily an empirical examination of the insurance industry's competitive strategies of scale, from pulling out of regions to employment of the derivatives industry. Concerning the latter, this paper remains largely empirical because theorizing is only conjecture at this point with relation to ARTs, particularly in the present economic climate. As Bougen (2003, p. 255) writes, "even for active participants in the field, the immaturity of the market for securitized catastrophic risk suggests that its viability remains massively underdetermined and as such an empirical issue".

2. Financial scale and the geography of the insurance industry in review

Posing arguments reiterated by Wisner et al. (2004), Beck (1992) argues that disasters differ from hazards in that disasters are caused by the social, political and economic environments of a society; there is no 'other' to which blame can be assigned, as disasters are decidedly an inside job. States, for example, are programmed to respond to all security threats in the same manner, that is, through military institutions and massive infrastructure projects. Burton et al. (1978, p. 213) write, "the prevailing public approach [to disasters] has been to offer immediate relief and then to turn to the technological approach". Natural hazards are defined as a security threat precisely because they are synonymous with a lack of control, uncertainty and unpredictability.

As Fortun (2001, p. 19) finds in the case of the 1984 Union Carbide disaster in Bhopal, there is a tendency to "think of disasters as isolated in time and space" when many different scales and networks are affected by the event. In an age of fluid transnational flows of commodities, financial networks, and the rise of capital in global politics, insurance, it seems, has the ability to overcome such problems of scale that render states both cumbersome on the local level and powerless on the international level. Insurance and reinsurance companies have the ability to link the global with the local through risk-sharing agreements that connect bilateral agreements between policyholders and providers to a vast array of corporations, investors and clients.

The insurance industry is an interesting case for geographers of finance and politics because of its "scale bending" or "scale jumping" (Smith, 2004), one that obscures conventional definitions of sovereignty and opens up geographical analysis of a massive field of financial power. The industry has globalized itself through various scales that bend from the regional to the multinational and then down through the scale of the home (Marston, 2004). While research on various scales is more often connected to (neo-Marxist) strategies of resistance against corporate model self-interest or state "re-scaling", we feel that finance corporations themselves should be studied as they adopt these strategies so as to better locate the intricacies of their power and influence (Brenner, 1999; Swyngedouw, 2000).

Using Hardt and Negri (2000), de Goede (2007) points out that the metaphors and analogies that are used in the financial industry or in this paper, such as "scale", can take on powerful roles themselves suggesting a well-structured and well-oiled system. We believe that scale can be a useful analogy for categories of analysis to track and describe the flexibility of insurance as it attempts to adapt to a financial world less centrally bound by states which means a scaled risk society in the sense that events can be felt but also buffered from networks around the world (see Moore, 2008). Following Beck's (1992) thesis of risk society, Bougen (2003, p. 260) argues that there is an acceleration towards non-insurability to the point that today "reinsurers catastrophes can either remain or become reinsurable only if innovative solutions or more imaginatively assembled risk networks for catastrophe

³ It has long been argued in geography and regional studies that there would be an increase in disasters for the most part because of population density and location (see. Burton et al., 1978; Hewitt, 1997; Alexander, 1997; Changnon and Changnon, 1999). Whether or not hazards themselves have increased in recent years is still up for debate, specifically with reference to hurricanes (Klotzbach, 2006). While future climate projections are still somewhat crude, there is increasing evidence to suggest that hazards will increase in both size and frequency in the coming decades. The Intergovernmental Panel on Climate Change (IPCC, 2001) expects "more frequent heat waves, less frequent cold spells (barring so-called singular events), greater intensity of heavy rainfall events, more frequent midcontinental summer drought, greater intensity of tropical cyclones, and more intense El Niño-Southern Oscillation (ENSO) events" and other natural hazards which may lead to disasters. There has been some consensus that there will be an increase in hurricane intensity among climate model scientists (Trenberth, 2005: Emanuel, 2006), Critics of these projections rightly claim that scientific proof that explicitly links climate change to an increase in natural hazards incidents has yet to be presented; however, as Berz (1999, p. 284) writes, "even if scientific proof of this link has still yet to be presented, there is no doubt about the plausibility and gravity of this suspicion".

To give a brief overview of the insurance industry: National insurance industries tend to be dominated by a relatively small group of financially powerful companies. In the United States, ten companies accounted for nearly fifty per cent of the premiums collected by the entire property and casualty insurance industry in 2004; to put this figure into context, there are approximately 3000 insurance companies operating in the United States (Insurance Information Institute, 2006a). Also, most 'local' insurance companies belong to international financial conglomerates; for example, ING Canada is part of the ING Groep NV in the Netherlands which, in addition to selling insurance, offers a full range of financial and investment services for millions of clients worldwide. Although the randomness of hazards allows insurance companies to generate profits and pay for insured claims, it can also undermine their capital reserves. Most large insurance companies are able to cover damages using their own reserves; but, in extreme cases, reinsurers and capital markets help to fund claims payouts, such as following Hurricane Katrina in 2005. Despite being a massive industry that controls literally hundreds of billions of dollars worldwide, reinsurance is relatively specific in terms of its geography and power distribution. Nearly three-quarters of its global business is underwritten by companies in Germany, Switzerland and the United States, with only a handful of companies controlling the industry, notably Swiss Re, Munich Re and Berkshire Hathaway (Insurance Information Institute, 2006b).

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