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# Editorial: Insurance and the Economization of Uncertainty


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## Editorial: Insurance and the Economization of Uncertainty

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When one reads newspapers or watches TV nowadays, one is struck by the amount of news on the economy and, especially, the portrayal of the state of economy as increasingly fragile and uncertain. At least since the beginning of the 2007 and 2008 financial crisis, the media has constantly bombarded its audience with stories about how bleak and, perhaps more importantly, unpredictable the economic future seems. Economic news has become ever more central to the way in which we understand our world. In combination with its somber tone, this also creates certain myopia for the observer. It is easy to forget that uncertainty has been characteristic of economic life as long as there has been something called 'economic life'. What is new, however, is the pervasive *economization* of uncertainty. More precisely, it is only recently that uncertainty *in itself* has become a fundamental component of economic life. A crucial role in this is played by the technical means with which uncertainties are managed. When uncertainty is standardized, homogenized and made calculable, it can be given a price and it can be bought and sold. Not only has it been economized, it has been made into an essential commodity of current capitalism.

In the context of this special issue[1], the word 'economization' is important in both of its two meanings. First, in everyday usage the term refers to the efficient use of resources. This points to the importance of studying the ways in which life's complexity is trimmed down with equipment designed to reduce uncertainty, including insurance policies, health care arrangements, pensions, and saving plans. The second meaning of the term 'economization' is more specific. It derives from Çalişkan and Callon's (2009; 2010) recent reframing of the project of studying 'performativity' in the creation of markets. Here, 'economization' refers to the way in which diverse practices are rendered as 'economic'. In this usage 'economization' does not refer only to orthodox economics and its applications; in addition, practices such as accounting, actuarial calculations, marketing, logistics and the design of commercial spaces may all contribute to the emergence of the 'economic' (see also Callon 1998; Callon et al. 2007; MacKenzie 2006; 2009; MacKenzie et al. 2007).

On a general level, it is easy to detect three main forms in which uncertainty is 'economized'. To begin with, multiple risk technologies have been developed to 'tame' uncertainty by attempting to predict and manage the extent of (economic) harm. These have been used in various fields of practice, not only in finance, engineering and infrastructure maintenance but also in health care, for example. Insurance is pre-eminent among risk technologies. Insurance practices operate through standardizing harmful events, giving them monetary value, and spreading and mitigating their effects. During the $20^{th}$ century, a range of insurance tools were used by states, private businesses and households in order to gain a degree of control over uncertainty. Consequently, insurance has received the attention of scholars interested in the ways in which the contemporary way of life is governed (e.g., Castel 1995; Donzelot 1994; Ewald 1986; Erikson et al. 2003; Evers & Nowotny 1987; Rothstein 2008).



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At the same time, however, there is a reverse side to risk technologies as means for reducing the amount of uncertainty. This second general form of economizing uncertainty concerns the positive side, the practices of 'embracing risk' (Baker & Simon 2002). In other words, especially in the financial sector, the use of probability statistics has provided opportunities for not only managing the harms encountered in the uncertain future, but also for *taking chances* in a manner that is, to a degree, controlled. O'Malley (2004), for example, analyses how, in the liberal tradition, uncertainty – especially in contrast to risk defined as something that can be measured – is not only something that people and organisations want to minimize, but it has been seen as providing opportunities for profitable future action for the entrepreneur. The supporters of this view argue that 'uncertainty may be creative, generating profit and wealth' (2004, p. 19). So where the first general form of economizing uncertainty is about the management of insecurity, the second one is about the opportunities that uncertainty presents. Until recently, this side has received considerably less attention in social sciences than those risk discourses and practices that emphasize harm reduction.

The third general form of economizing uncertainty partly overlaps with the two previous ones, yet is a kind of meta level and thus merits consideration of its own. Much of contemporary financial life centres on the capacity to master the *ratio* between risk and profit. It is the *management of this ratio* – not simply doing away with uncertainty or making use of the possibilities it offers – that becomes the most important source of profit-making for the service provider. The distinction is one of perspective: whereas economizing uncertainty by reducing it, or by engaging positively with it, has to do with the *consumption* or use of risk technologies to domesticate uncertainty, offering services and instruments which promise to help to manage the ratio between these two is more about the *production* side of the same technologies. Uncertainty here is organized not for the sake of one's own need but for others' use. The management of uncertainty becomes a service commodity that is produced for the market. Obviously, most players in the financial sector, among them various rating agencies, consulting firms and insurance companies, make big business out of providing the means to organize uncertainty. If you go to a bank to discuss your economic situation, the first thing you will be asked to do is to assess the levels of risk you think you can support, and relate this to what you can save, how much money you want to borrow or expect to earn. The primary thing many banks try to sell nowadays is this presumed knowledge of how to control the ratio between risk and profit. Consequently, the client of an investment provider or money lender does not so much have to decide how big a gain she is after, or how much money she wants to borrow, but what her risk level and its ratio to expected gains is.

All in all, uncertainty has become at once not only a source of concern but also the premise for commercial action and the basis for financial profit making. Hence the proliferation of contrasting marketing arguments: 'Beware of the risks you might face!' 'Profit from the opportunities that the uncertain future provides!' In a double move, the actors in the financial sector sell a world view which emphasizes the uncertainty of the future while, simultaneously, they claim that they are the ones who



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provide tools for managing this uncertainty. Simply put, they highlight and produce the need for the services that they themselves are in a position to offer. At the same time, the insured subject is formatted around the moral call to act responsibly, with foresight and prudence, as regards the future – a classical topos of liberal thought (Ewald 1986; Langley 2008; O'Malley 2004). No wonder the news is full of stories about the unpredictability of economic life. Yet as the papers in this special issue make clear, while all of the above is pertinent, to remain on this general level of analysis would be insufficient. That is, there is a need for a more detailed examination of, first, what exactly is the conceptual and practical relationship between 'uncertainty' and 'risk'; second, *how* is uncertainty being economized; and finally, what kind of social scientific research traditions are useful for approaching these topics. The papers collected here tackle these questions by exploring the challenges raised by insurance in a variety of very different empirical settings.

**Risk and uncertainty as close relatives**

An influential text for the analyses of uncertainty and risk is Frank H. Knight's *Risk, Uncertainty and Profit*, originally published in 1921 (2006). Reviewing the basic orthodox economics of his time he examined the ways in which profit arises in the context of free competition. His main claim was that economic theory had failed to make a strict conceptual distinction between two kinds of risk, the first of which concerns statistical probability calculations, and the second, unique instances and events, the likelihood and success of which can only be estimated, not calculated. The first one he calls 'risk' proper, and the latter 'true uncertainty' (Knight 2006, pp. 46; 232–233). According to Knight, profit only arises from the latter, the chance occurrences. This is because if the probability of events is more or less known, as it always is when risk calculations can be applied, competitive markets make sure that no one can gain in the long run. Profit is 'the one true residual in distribution' (Knight 2006, p. lxii). Knight insists that it is the role of the entrepreneur to bear the results of true uncertainty, both the positive and negative profits which it gives birth to. Therefore, uncertainty is not a negative thing but a positive precondition for profit making. When a business decision on a large commitment is made, to take Knight's own example (pp. 226–227), there is no way to calculate the likelihood of the business succeeding. This cannot be done *a priori*. Nor are there large numbers available. Yet there is information available on somewhat similar cases, and thus the decision can be made based on judged opinions, educated guesses. For someone who is constantly able to make such estimations successfully, true uncertainty is a friend, according to Knight.

When summarizing his position, Knight comes to define 'risk' in a fashion which amounts to a determinism of large numbers – although it must be said that elsewhere in the book his discourse is more nuanced. From this idea follows the role he gives to insurance. For him, insurance is the prime example of 'the principle of eliminating uncertainty by dealing with groups of cases instead of individual cases' (Knight, 2006, p. 245).



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> 'The fact is that while a single situation involving a known risk may be regarded as "uncertain", this uncertainty is easily converted into effective certainty; for in a considerable number of such cases the results become predictable in accordance with the laws of chance, and the error in such prediction approaches zero as the number of cases is increased. Hence it is simply a matter of an elementary development of business organization to combine a sufficient number of cases to reduce the uncertainty to any desired limits. This is, of course, what is accomplished by the institution of insurance.' (Knight 2006, p. 46)

It is striking how easy the management of risk is in Knight's opinion. Yet it could be claimed that this is just his manner of emphasizing how rarely it is the case that exact numbers are available, and how important but underappreciated the phenomenon of unmeasurable uncertainty is.

Because of its apparent clarity Knight's conceptual distinction is often followed, more or less consciously, at least on the level of social theory. Insurance, then, is understood as the realm of risk proper. Hence when Ulrich Beck originally made his 'risk society' thesis, he started from the premise that insurance practice strictly follows the actuarial logic, and is sterile when exact calculations on probability are absent (Beck 1986). Similarly, in his magnum opus *L'État providence,* published in the same year, François Ewald discusses the concept of risk in the context of insurance solely in relation to the ability to calculate the frequency and cost of a harmful event (Ewald 1986, pp. 175–181). More recent social scientific scholarship on risk and uncertainty has, however, started to call into question the rigidity of this distinction, as we discuss below. Still, Knight's ideas can be useful, in at least two respects. First, highlighting the positive and creative role of uncertainty, in contrast to calculable risk, has a sensitizing and even sobering effect on social scientists immersed in various discourses on 'risk society' or 'cultures of risk', where both risk and uncertainty are often – and way too simply – equated with threat.[2] In addition, in its dogmatic clarity Knight's distinction between risk and uncertainty gives a good background against which it is possible to draw attention to the focus of this theme issue: the *plurality* of the ways in which uncertainty is being tamed, standardized and calculated in insurance.

To begin with, empirical work has shown that in practice insurance underwriting is not always dependent on the availability of exact calculation; this is most evident in the case of catastrophe risk (Bougen 2003; Collier 2008). Perhaps more importantly, as Ericsson & Doyle (2004) and, more recently, others (Baker 2011; McFall 2011; McFall 2014; Van Hoyweghen 2007) have shown, even the part of the business that manages the oldest and best-understood insurance risk – mortality – operates just beyond the limits of knowledge. Where calculations are supposed to dominate, they often do not. It is telling that practitioners themselves do not systematically rely on a clear Knightian distinction between risk and uncertainty, neither in finance nor in engineering. Rather, professionals' discourse in business journals, for example, is closer to everyday parlance where 'risk' denotes all kinds of potentially harmful future events, not only those the probability of which can be



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more or less exactly calculated. Moreover, instead of talking about the uncertainty/profit relationship, financial institutions often structure their activities around a very different notion of risk/profit ratio. In the latter case, the point is that although the level of risk cannot always be calculated in exact numbers, it can nevertheless be estimated in a numerical fashion to a sufficient degree. Thus it can be compared to the quantified estimation of gains.

Obviously, in practice the distinction between risk and uncertainty is not as clear as Knight made it out to be (see also Nowotny et al 2001; Renn 2008). For example, in his *Organized Uncertainty*¸ Michael Power examines how things move from the sphere of unmeasurable uncertainty to that of measurable risk. Power emphasizes the historical nature of the distinction: more and more techniques are developed for turning uncertainties into objects of risk management. And he concludes: 'Much of what we today call risk management is "uncertainty management" in Knightian terms, i.e. efforts to manage "risk objects" for which probability and outcome data are, at a point in time, unavailable or defective' (Power 2007, p. 26). Power's stress on the dynamics between uncertainty and risk is valuable, especially as his book shows there are myriad ways in which uncertainty can be practically organized, and how risk objects are constantly being constituted. Yet in the end his argument leaves intact the notion that the distinction between risk and uncertainty itself is pertinent in Knightian terms, as regards the fundamental continuum between them.

In contrast, Pat O'Malley's book *Risk, Uncertainty and Government* complicates the picture, in at least two ways. First, O'Malley claims that 'making the distinction between risk and uncertainty cannot be regarded as setting up a rigid binary. It may be better to regard them as related along multiple axes, with the effect that no single continuum (such as one running from statistical probability to vague hunches) will adequately represent the relationship between them.' (O'Malley 2004, p. 21) O'Malley's argument is in line with the symptomatic issue that practitioners themselves rarely have such a clear understanding of what really constitutes a 'risk'. Second, reflecting on liberal forms of governance and conceptions of political organizations, from Jeremy Bentham to Knight and then onwards to more recent management consultants such as Tom Peters, O'Malley recognizes that sometimes the economization of uncertainty does not mean that uncertainty is (trans)formed into a 'risk'; rather, management utilizes uncertainty and governs through it, in a manner that does not do away with it. His claim is that as there are technologies of risk, there are also technologies of uncertainty; 'organisation' is not only on the risk side. Furthermore, he emphasizes that risk and uncertainty are often 'in unstable and multiple relationships with each other' (O'Malley 2004, p. 26). In other words, practices of calculation and other forms of understanding and organizing uncertainty constantly flow into each other.

The question is not whether insurance or other forms of economizing uncertainty are 'thoroughly' rational or able to calculate risks 'correctly'. Rather, the interesting thing is the overflowing between the attempts to calculate and what *shadows* these attempts. The papers of the special issue highlight how it is not always easy to say whether what the actors encounter, mitigate or



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create is uncertainty or risk. The contingency of the world is tamed to a degree, but the knowledge of the exact degree is not assumed.

**Insurance as uncertain business**

Insurance institutions have had immense success during the past one hundred years, both in their social and private forms. As the papers in this special issue point out, insurance should not be studied as something inherently coherent and homogeneous. Rather, it operates through a number of rationalities and technologies at work in the contemporary world. Therefore, a special issue which addresses insurance has to take into account the dynamic ways in which events and practices have both become subject to and have evaded processes of economization through working upon risk and uncertainty. While most scholars in the social studies of insurance have focused on the 'technical risk' aspect of insurance and its central role in performing liberal forms of governance, this collection stresses that insurance is also and always about proliferating and taming uncertainty. Insurance is an 'uncertain business' (Ericson & Doyle 2004), characterized by competition for premiums that pushes insurers into the unknown. Insurance practices are revealed as a never-ending balancing act between the boundaries of knowledge-based risk protocols and the more speculative dynamics of uncertainty.

In approaching insurance as a complex configuration with diverse risk and uncertainty technologies, the issue responds to the following programmatic call by O'Malley. According to him it is important to develop

> 'a genealogical approach to risk and uncertainty, attending to their natures as the products of contingency and invention rather than the effects of an inescapable "logic" of modernity, capitalism or whatever. We should also develop some ways of analysing the governmental or political implications of the various forms and combinations of uncertainty and risk. These analyses would include examining the diverse ways in which risk and uncertainty might shape the kinds of subjects we are to be made into; the practices through which we will be expected to govern ourselves; and the ways we will be expected to imagine the world and prepare for the future.' (O'Malley 2004: 7)

We consider O'Malley's programme to be instructive for the collected papers here. It matches well with the issues addressed in the articles, and helps to detect relationships between them. Hence we want to highlight the three theme areas identified by O'Malley: first, a genealogical approach to the taming of uncertainty and risk, second, the political implications of these configurations of uncertainty and risk, and finally, the collective forms of imagining the future and the enactment of subjectivities that follow from the previous two themes.

*Genealogical approach.* While most of the articles collected here employ some historical materials, more important than the historicality of the sources per se is that all papers help elaborate



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the contingent and multifaceted character of the process through which uncertainty is economized. These contingencies of economization are often most easily discernible in studies based on historical data. O'Malley's own paper in this collection, for example, scrutinizes the political conditions for actuarial calculations becoming effective for the fire insurance in Australia in the early 20th century. He shows that the specific forms of private and public government needed to be in place for actuarial calculations to begin. Stephen J. Collier's paper emphasizes the other side of the coin: insurance technologies are deployed as political technologies. Collier's contribution takes up the genealogy of a public application of insurantial rationality in the US of 1960s. Here, insurantial rationality was used to both control the harm done by catastrophes and to render private citizens more responsible than before for the consequences of their own actions. In his story, environmental concerns, governmental planning, and conceptions of moral and political philosophy come together to shape a specific case of economizing catastrophe mitigation. As a political technology, insurance 'forged a new articulation and accommodation between political government and processes of rationalization' (Collier).

*Governmental and political implications.* The articles by O'Malley and Collier clearly examine cases of governing through and with insurance. When these are juxtaposed with the other articles in the collection, an appreciation for the variety of scales on which insurance is a political question begins to emerge. In her micro-study of medical risk selection, Ine Van Hoyweghen examines how the calculative devices applied in underwriting 'generate, intervene and re-arrange the worlds in which they are deployed.' Insurability is not given, it is made. This insight opens the way for an active politicization of insurance markets. 'If', as she puts it, 'markets are the result of collective calculative devices, there are multiple market configurations possible'. José Ossandon's work also deals with an overtly political issue, the parliamentary discussions and decisions concerning the Chilean health insurance scheme and its reform. Different uses of the insurance technology seek conflicting political purposes; the aims of creating social 'solidarity' clash with those where the fundamental value is life understood as – and economized as – 'private property.' It is a conflict between what the insurance institution is seen to be good for that separates the parties involved in the dispute.

*Imagining the future, shaping subjectivities.* The economization of uncertainty further implies that the future must be imagined, pictured, and staged in a form that allows for its discounted value to be estimated at the present moment. Also this activity can take many shapes. Lobo-Guerrero's contribution discusses the practices of modelling catastrophes. This is a way of making the future potentially present as something which can be used for creating capital; in the case of new instruments of securitisation, the use of simulation implies a multi-layered manipulation of the ways in which time is conceived, for the 'insurance event' to become insurable. If Lobo-Guerrero engages with the 'high tech' of imagining the future, Lehtonen's paper takes on a much more mundane aspect of selling the future, namely the marketing materials for private life insurance. Moreover, while these materials stabilize the understanding of what an insurance policy is, and what it can do, they simultaneously try





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to mobilize the subjects of insurance. Technologies of economization are intimately linked with technologies of the self. Lehtonen states that in the subjectification through private life insurance, 'the two sides of life insurance, rational calculation and affectivity, do not contradict each other. Instead, the intensification of rational economic planning implies, simultaneously, the intensification of family values and moral sentiments.' Van Hoyweghen's findings present a different angle on the interface between insurance companies and their customers. Where Lehtonen concentrates on the materials used for recruiting and mobilizing the potential customers, Van Hoyweghen shows how in the process of underwriting, the same subjects' scope of activity is very much reduced. This is done by the calculative devices which are used for (pre)formatting customers and thus economizing uncertainty. She claims that 'during the underwriting process, the devices are exactly performed to keep applicants at bay, so that their calculations do not disturb the insurance framing.' What both Lehtonen and Van Hoyweghen underline is another aspect of uncertainty: insurance companies work to shape their relations with current or potential customers, yet, in the end, they remain indeterminate whether they *can* stabilize these relationships. That is to say, insurance companies' knowledge of their own customers remains uncertain.

In their very different ways the contributions to this issue can be understood as attempts to better situate the role of insurance in economizing the vagaries of life. Insurance, as these articles tend to agree, occupies a place at the turning point, where the distinction between risk and uncertainty is being performed, not only as a means of taming uncertainty, but also at the same time of performing new uncertainties. Practices of taming and untaming uncertainty come in many interdependent forms. Insurance would not work unless it was attached to other ways in which concern for the future is expressed both conceptually and practically. With the pensions crisis, the increase of environmental risks, genomic diagnostics, and the proliferation of anti-discrimination regulations in insurance, the need to address the ways in which uncertainty defies, exceeds and escapes the various practices of insurance risk management, as these papers indicate, is becoming ever more urgent.

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**Notes**

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[2] While for Knight true uncertainty is a friend of risk, it may thus also be a ‘false friend’, as Callon et al convincingly argue in their book *Acting in an Uncertain World* (2009: 21; see also Latour & Ewald, 2003).

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