



## The Invisible Hand of Insurance

by Dr Hans Peter Würmli

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*The social responsibility of business is to increase its profit.*  
Milton Friedman<sup>1</sup>

The recent disaster in Japan was exceptional. The extremely high magnitude Tohoku earthquake triggered a devastating tsunami, which not only wiped out the existence of thousands, but also caused the worst nuclear accident since Chernobyl at the Fukushima Daiichi nuclear power plants. We must ask ourselves if this was a case of risk management gone wrong, or if this was one of these rare but possible low probability events remaining.

Let me ask the question differently: what have off-shore oil drilling in the Gulf of Mexico, the operation of nuclear power plants in Japan and occupational pension plans in Switzerland in common?<sup>2</sup> First I shall give the short answer. Those without the fortitude can then forego the more detailed explanations that follow!

All three are representative of huge societal problems and all three either lack appropriate insurance or violate important insurance principles in their chosen solution. In all three cases, the insurance community has failed, in my opinion, to convince the public of the benefits of insurance to society and, equally, legislators have failed to regulate appropriately. The insurers' skills, knowledge and expertise to design, place and maintain appropriate insurance covers are not recognised adequately by society. Not only are their risk management skills not appreciated, but worse, insurers and pension schemes are burdened with a large part of the huge cost of regularly occurring monetary easing, jeopardising part of their business model and risking their long-term survival.

Let me highlight just three decisive strengths of the insurance community: the ability and independence to assess risk, including judgements as to the limits of insurability; the capacity to create insurance products to internalise external cost, e.g. of dreaded events; and, most important of all, having the right incentive to impose provisions and measures to manage risk exposures that can render dreaded events more unlikely. Where society uses the insurers' services, the public's trust does not need to rest on some blurry hope for better and more competent experts, but it can rely on their profit incentive and loss disincentive that risk is assessed and dealt with objectively. The invisible hand of insurance operates to a great part with the transparency that is created by its activity. That's the short answer.

If insurers and banks were to compete for popularity, insurers would lose with the public, even in the light of the recent financial crisis. We are faced with a peculiar situation: the insurers' business model has proven sustainable, largely because insurers know how to quantify risk and how to set up appropriate technical provisions. On the other hand the banks' business model of transforming terms and the reserve system of fiat money regularly crash, prompting governments and central banks to loot taxpayers and

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<sup>1</sup> *New York Times Magazine*, 1970.

<sup>2</sup> All three examples are representative for similar situations in other regions of the world and, of course, there is an abundance of further examples sharing the same trait.

the insurers' and pension schemes' funds to "save" the banking system and the "economy". There are of course politically correct terms to describe this: "rescue of the payment system", "active fiscal policy", "quantitative easing" among many others. This type of monetary policy takes place by large scale manipulation of bond and other investment instruments' prices by central banks, made possible by the availability of sheer unlimited resources of money. The interventions since the 2007 credit crisis deprive insurers of instruments with the appropriate risk-return levels. By ignorance or ill intentions, the insurers' business model, if not their existence in the long run, is destroyed. To make matters worse, this does not appear to trigger discussions or outcries from the insurance industry. This might be because it perceives itself as frail in the arena of public opinion. A notable exception to this was the ZFS Chief Economist's and CRO's opinion published in the *Wall Street Journal*.<sup>3</sup>

What makes insurance so valuable in a modern division of labour based economy? Insurance can address the agency dilemma or, as it is also called, the principal-agent problem better and more effectively than any other institutional set-up. Risk managers know the principal-agent issue and its risk management mostly in the form of the risk owner—risk taker—risk controller relationship. The visible role of the risk controller lies in providing second opinions and independent views. The less visible role of the controlling activity is the beneficial disciplining effect it has on risk-taking resulting mostly from the gain in transparency.

In our democracies we split political power into the executive, legislative, and judiciary power to address principal-agent problems. Where governments see their role as principal, the institutional set-up of choice is often a government agency, be it an "energy agency" or an "insurance supervisory authority". But in many situations other ways exist to monitor principal-agent relationships. Let us look at a concrete example. Our post-industrial service economies are still run on a lot of primary non-renewable energy. Society, or governments at its place, acts as a principal when it tasks energy firms, the agents, to produce the energy we need. This of course runs costs and the lower the costs, the lower the price of energy for society, at least when there is sufficient competition. But as is foreseeable, in this simple set-up only costs internal to the system are priced. How could we take account of all the cost that can arise to society or the environment, say, of possible oil spills, nuclear accidents, breaking dams or air and water pollution? We require that all possible threats should be considered, their full cost taken into account, liabilities clarified and the contingent finance assured. My claim is that private insurance would do all this better than any other institutional set-up. The profit incentive will drive insurers, but the loss disincentive will be an even stronger guiding hand.

Modern insurance is the brainchild of Enlightenment, even if most are unaware of it. The Lisbon Earthquake of 1755 was the key event for the new way to think about catastrophes. It brought the insight that we humans cannot influence earthquakes and tsunamis, but that we can manage our exposure to them by, say, building differently or at different places. Enlightenment thus brought us a rational approach to dealing with the vagaries of nature and humans alike. Another breakthrough of the time was the invention of an adequate institutional setting, letting corporations and citizens alike enjoy legal certainty. Adam Smith's "invisible hand" and a merchant's "*laissez-nous faire*" plea to mercantilist Colbert exemplify well how enlightened citizens of the time saw the economic needs best served. In a modern ordoliberal understanding, the invisible hand would lead the self-interested agents best by being guided by adequate regulation.

Insurance activity by no means only amounts to collecting premiums and paying claims, but an essential part of the activity is the assessment of risk, designing the proper products, defining the constraining clauses and requiring the necessary precautionary measures. Private insurance is entrusted with the insurance of many of our personal and business risks. "Private" indicates that the prices and products result from either free negotiation or from free choice among competing suppliers. Insurance activity has created legions of underwriters, actuaries, marketers and sales persons, investment and claims specialists, as well as the insurance firms' managers that all have learnt to manage risk in its diverse facets. When insurers quantify risk they use models, but at best, these models can be appropriate for their chosen purpose. Good theories can only be falsified, never proven true and so models can never be "validated", but only deemed appropriate. However, our judgement does not need to be based on blind trust in insurers' expertise. If regulation sets up the institutional framework properly, insurers have

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<sup>3</sup> D. Hofmann and A. Lehmann: "The Sweet Poison of Low Interest Rates, Fiscal pump priming and quantitative easing also impose costs", *The Wall Street Journal*, 18 January 2011.

to “put their money where their mouth is”, i.e. the incentive for more profit is restrained by the disincentive to suffer unexpectedly high losses if their models are inadequate for the risk.

Even though insurance is a success story and the industry has a proven track record to adequately assess and manage risk, why then does it not get entrusted with solving our societies' mega problems? Why instead of being praised is the insurance industry confronted with mistrust and are its solutions doubted? One can only speculate on the reasons for this. Maybe the insurers' rational realism destroys dreams by tagging risks with the right prices. One shoots the messenger who debunks the dreams of cheap nuclear power or oil from the deep sea, who exposes the true cost of long life or unmask the consequences of unlimited access to medical services. Where insurance proves successful and sustainable, its successes however are taken for granted. Successful insurance activity benefits society and insurers alike. But increased insurers' profits bring envy instead of gratitude. Milton Friedman's statement quoted above is hardly unanimously accepted.

No doubt, with targeted public campaigns, marketing and also lobbying work, the reputation of insurance can be improved and its mechanisms explained. The industry will have to be open and transparent about its inner workings to gain the public's reluctant trust. This appeal for transparency grows out of risk managers' experience in corporate environments. The most successful solution for many risk management issues is transparency, because the exposed reality often speaks louder than words. Because creating transparency and openness within the firm has a highly beneficial effect, it is promoted in all the emerging solvency regulation, with the aim of engaging market discipline in managing risk. One of the most important transparency measures within companies as well as at the regulatory level was the requirement for market-consistent valuations of assets and liabilities; only values reflecting economic reality allow good judgements and appropriate decisions by employees, clients and competitors alike.

The same applies for insurance. The invisible hand of insurance is not mysterious, but can be explained by our insights into human behaviour and how to bring the best out of it with appropriate incentives and disincentives. Insurance requires and brings transparency into principal-agent relationships, thereby exposing the true cost of risky projects. If insurance had made the potential cost of failed or sloppy risk management more transparent, would failed projects such as the Deepwater Horizon platform or the Fukushima Daiichi nuclear power plants have taken a different course? Would insurance have required more effective and cautious approaches as precondition for insurance? Failures can never be excluded, but where experience exists, as is the case with the well-defined and reasonably tight liability for oil rigs and pipelines in the North Sea, insurers can be confident that they have a beneficial impact on the incidents and the course of catastrophes. Thus, we can see that the invisible hand of insurance can work to the great benefit of society.

Let me close with an awfully topical quote from James Madison: *“A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy; or, perhaps, both.”*<sup>4</sup>

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#### *Note by the Editor*

The “reputation of insurance” quoted by Hans Peter Würmli above may become a key factor in the increased competition for the best brains, as the age pyramid turns into an age apple tree. Insurance is an intangible activity which is invisible to young people. We thus need to actively sell the professional careers within insurance activities before students have made up their mind of what they want to do. One solution could be a variety of temporary jobs as interns to familiarise young people with the jobs within insurance and make insurance more visible and attractive.

Other activities have a similar problem of intangibility, such as space activities. In the U.S., 25 per cent of the space specialists will retire within the next few years. In Russia, 10 per cent of the space specialists are between 70 and 80 years of age. Space activities will therefore soon go into a hiring spree. The lasting economic value of space activities are untold but easy to sell: health, emergency, security, environment, information—people are unaware that Internet (including Google and websites), GPS,

<sup>4</sup> Quoted from the American Constitution Society website: Why Government Transparency is Vital to Democracy. Also the following explanation can be found there: *“In fact, the notion that government should be open to public scrutiny and criticism dates back to the Enlightenment when intellectuals criticized state secrecy. The idea of a free press stems from this view.”*

Google Earth, mobile phones, earth imagery and satellite-based photography on TV, withdrawing money at an ATM on another continent, are impossible without satellites—e.g. space technology.

The lasting economic value of insurance activities may be more difficult to sell. Insurance and space technologies are both enablers of modern life—but we are not selling it to young people and our customers.

In *“Citadel”*, Antoine de Saint-Exupéry’s last book, the poet-author explains that if you want to build ships, do not call people together and buy materials, but give people a longing for the sea—*“créer la pente vers la mer”!* Can we do the same for insurance?

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