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Xavier Landes

THE NORMATIVE FOUNDATIONS OF (SOCIAL) INSURANCE: TECHNOLOGY, SOCIAL PRACTICE AND POLITICAL PHILOSOPHY

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OF (SOCIAL) INSURANCE: TECHNOLOGY, SOCIAL PRACTICE
AND POLITICAL PHILOSOPHY**

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The **Comparative Politics and Public Philosophy Lab (LPF)** at Centro Einaudi is directed by Maurizio Ferrera and funded by Compagnia di San Paolo. It includes the **Welfare Laboratory (We.L)** and the **Bioethics Lab (La.B)**. LPF analyses the transformation of the political sphere in contemporary democracies with a focus on the relationships between policy choices and the value frameworks within which such choices are, or ought to be, carried out. The reference here is to the “reasonable pluralism” singled out by John Rawls as an essential feature of political liberalism.

The underlying idea is that implementing forms of “civilized” politics is desirable as well as feasible. And, as far as the Italian political system is concerned, it is also urgently needed, since the system appears to be poorly prepared to deal with the challenges emerging in many policy areas: from welfare state reform to the governance of immigration, from the selection criteria in education and in public administration to the regulation of ethically sensitive issues.

In order to achieve this end, LPF adopts both a descriptive-explanatory approach and a normative one, aiming at a fruitful and meaningful combination of the two perspectives. Wishing to foster an informed public debate, it promotes theoretical research, empirical case studies, policy analyses and policy proposals.

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KEYWORDS

Efficiency, equality, insurance, redistribution, responsibility

ABSTRACT

**THE NORMATIVE FOUNDATIONS OF (SOCIAL) INSURANCE:
TECHNOLOGY, SOCIAL PRACTICE AND POLITICAL PHILOSOPHY**

Insurance mechanisms are prevalent in industrialized societies, in both public and private sectors. Insurance is offered for various risks ranging from fire to accident. They also constitute the core of the modern welfare state (public health insurance, unemployment benefits and public pensions). The analysis of (public) insurance has however remained marginal in political theory because insurance is often perceived as a simple tool for pursuing equality, i.e. a tool without any moral significance proper. This text proposes an alternative view by drawing a continuum between insurance as a technology, which is the common interpretation in economics, and insurance as a social practice, which characterizes social theory. The goal is to underline how the technology of insurance alters social practices by, for instance, promoting equal standing or transforming the paradigm of individual responsibility. This text initiates a dialogue between disciplines while drawing avenues for future research.

THE NORMATIVE FOUNDATIONS OF (SOCIAL) INSURANCE: TECHNOLOGY, SOCIAL PRACTICE AND POLITICAL PHILOSOPHY¹

Insurance has become pervasive in industrialized societies (Bernstein 1996; Moss 2002). Though it existed before the Industrial Revolution (Lewin 2003), it has reached an unprecedented scale during the last two centuries. Nowadays, it is offered for various “risks” such as illness, work accidents, unemployment, retirement (it is not that much that retirement is a risk in itself, it is more the drop in income due to the reduced ability to work implied by ageing which is a risk), fire, car accidents, travel, etc. Its importance is manifest in the case of the welfare state. Actually, many of the activities undertaken by the welfare state in the name of redistribution go through insurance mechanisms.² In other words, when pursuing collective welfare, institutions often rely on insurance of various sorts. Furthermore, insurance is regularly presented as a policy tool for reducing inequalities of income, resources, wealth or health (Campbell and Ikegami 1998, 87-115; Dworkin 2002, 73-83, 320-350)³ or, more generally, a redistributive mechanism (Stiglitz 1989, 48) in function of needs, for instance (Moultrie and Thomas 1997, 127).

Insurance has nevertheless rarely been subjected to any systematic philosophical enquiry (this lack characterizes most of the social sciences). As noticed by Tom Baker and Jonathan Simon, ‘despite this central role [as a form of regulation], insurance has been almost completely ignored by the traditional humanities and social sciences’ (Baker and Simon 2002, 13). According to the authors, economics,

¹ We are grateful for the useful comments of participants of seminars at CESEM, CRÉUM and University of Jyväskylä (and Arto Laitinen for his invitation), of the PhD course organized by Kasper Lippert-Rasmussen in Vejle (in particular Elisabeth Anderson for her thoughtful comments) and the 2001 MANCEPT workshop in Manchester. We also wish to thank Nicola Riva for his attentive remarks. This research received the support of the Danish Council for Independent Research (10-080448).

² In the United States, for instance, the cumulative amount spent on social security (pensions), benefits for federal retirees and veterans, and health care (Medicare, Medicaid and CHIP) insurance was around 48% of the federal budget in 2010. Another 14%, which concerns safety net programs, included, among other things, “Supplemental Security Income for the elderly or disabled poor and *unemployment insurance*” (emphasis added). Source: Center on Budget and Policy Priorities 2011.

³ For a critical discussion of this assimilation of insurance to an egalitarian, redistributive device from a libertarian perspective, see Daniel Shapiro (Shapiro 2007, 58-66) and, from a strong egalitarian perspective, see John Roemer (Roemer 1994, 119-147).

especially neoclassical economics, monopolizes the discourse on public insurance. With some notable exceptions (Dworkin 2002; Ewald 1986, 1996), the situation is the same for political philosophy.

For social insurance (i.e. unemployment benefits, health, pensions⁴ and, sometimes, work accidents), there is a widespread view of insurance as a means for other, more important, purposes. Insurance can serve equality (Campbell and Ikegami 1998, 87-115) or the conservative and liberal conceptions of the welfare state (Esping-Andersen 1990, 55-70). In all these cases, the source of insurance's moral value is external, flowing from exogenous principles or values. For instance, if insurance aims at promoting equality, and a choice has to be made between two arrangements, the one that maximizes equality of some sort has to be selected. In that sense, the value of insurance comes from its capacity to promote equality. This rationale is common to various justifications of unemployment benefits, pensions or health insurance. Norman Daniels, for instance, defends the view that health insurance has the social function, along with managing risk, of 'protecting equality of opportunity' (Daniels 1990, 514).

But this view may be misleading, as unemployment benefits illustrate. They are perceived as part of a more general institutional framework to promote redistributive equality. Hence, unemployment benefits cover against the loss of revenues induced by becoming unemployed, not against income inequalities, although by lessening the negative effects of luck, they may be seen as reducing the inequalities between employed (lucky) and unemployed (unlucky) individuals. At the end, strict actuarial insurance schemes do not however modify pre-existing inequalities. They only address the variation in individuals' fate that is due to uncertainty (Landes 2013a). As put by Robert Goodin, 'insurance is not fundamentally redistributive at all' (Goodin 1988, 159).⁵ Of course, appeals to equality may be used to reform unemployment insurance, but they are independent of what insurance is, how it operates and which kind of normative framework it creates. This is not to deny that some egalitarian related positions, such as prioritarianism or sufficientarianism, could legitimate unemployment benefits and turn them into an object of concern for a theory of social justice. However, unemployment insurance in particular and social insurance in general are not necessarily egalitarian, in the redistributive sense, tools. As expressed by Kenneth Arrow:

It may be useful to remark here that a good part of the preference for redistribution expressed in government taxation and expenditure policies and private charity

⁴ In 1945, the Canadian Minister of Justice identified the three forms of insurance—health, old age and unemployment—as constituting the basis of public insurance (Taylor 2009, 3). This view was shared by other Canadian politicians of the time (Taylor 2009, 8).

⁵ The confusion between insurance and a redistributive tool is blatant when Norman Daniels renders the view defended by Gerald Cohen, Ronald Dworkin and John Rawls as follows: 'redistributive schemes are a morally obligatory form of social insurance, which protects us against turning out to be among those whose lack of marketable talents and skills place them in the group that is worst off' (Daniels 1990, 507).

can be reinterpreted as desire for insurance. It is noteworthy that virtually nowhere is there a system of subsidies. (Arrow 1963, 957)

The normative foundations of insurance constitute the scope of this paper. The question of why insurance is morally valuable is responded to by situating insurance in the context of the pluralistic sources of its normative value. In other words, it engages the issue of what makes insurance worthwhile as a *mechanism of cooperation* (because it is a *technology* based on cooperation) and as a *social practice* (because, beyond its technological aspect, it designs a specific context of social interaction). By responding to such interrogations, the paper intends to instil more complexity into the traditional view on the role of government and the instrumental use of insurance. More precisely, it reverses this perspective by arguing that institutions could convey more of the normativity of a given underlying mechanism of cooperation than is usually assumed. In this sense, insurance may be interpreted as having “contaminated” the functions of the welfare state since the welfare state was built in most industrialized on the basis of pre-existing, usually private, insurance mechanisms. The “contamination” of the welfare state happens, for instance, through the promotion of solidarity, mutual responsibility or equal standing embodied in early, non public, forms of insurance that were repatriated within the state apparatus during the twentieth century (Beito 2000; Cordery 2003; Ewald 1986). If such a view (namely, that insurance mechanism conveys some morality of its own) should have some relevance for normative thinking, it is then important to figure out which kind of morality is passed onto institutions, especially public ones, when they take in charge insurance.

In that respect, since providing an insurance mechanism is regularly mentioned as one of the main functions of the state, along with the correction of market failures (principally externalities) (Heath 2011; Moss 2002), a clearer view on the moral value of insurance should help to redefine the proper role of the modern state. Again, because of the widespread idea that government action is justified mostly by an egalitarian rationale and such a rationale is carried on (or incarnated) by social insurance, a refined view on the normative foundations of insurance in general, and social insurance in particular, constitutes an important contribution to various existing debates.

In doing so, this paper builds a bridge between two traditions. One presents insurance as a risk-management technology and situates its worth in its ability to efficiently manage risks. The other sees in insurance a social practice that produces a specific normative order that impacts political principles such as equality and responsibility. This double-pronged foundation reflects the tension between two competitive views, which this paper proposes to combine in a common normative analysis. In short, the first view is dominated by economics, while the second is historical (one might say “genealogical”).

In spelling out these foundations, the paper describes, in the first section, the view that insurance is a technology and, consequently, that its normative value stems

from efficiency.⁶ Through risk hedging, insurance reduces uncertainty and favours the development of socially beneficial activities. The second section presents the view that, beyond this technological dimension, insurance also frames a social context in which individuals nurture specific relationships that carry specific understandings of equality and responsibility that contribute to the normative foundations of insurance.

1. INSURANCE AS A TECHNOLOGY

The first dimension is technological. Though early forms of insurance were offered in Babylon or during the Roman Empire without deep actuarial knowledge, the spread of insurance was rendered possible by the progress of descriptive statistics (e.g. life tables) and probabilities (Bernstein 1996; Lewin 2003, 277-310). Insurance then became more efficient at spreading the costs of adverse events and, consequently, at generating derivative benefits.

1.1. *Efficiency and moral hazard*

In order to grasp how insurance works and where efficiency resides, imagine a situation where 10 merchants trading overseas face a 10% odds of losing their vessel and its \$1,000 shipment. In that case, each time their boat is sent abroad is comparable to a lottery where the payoffs are either 0 or 1,000 with a probability of 0.1 or 0.9. This risk may be faced individually, which means that to remain solvent, merchants should save at least a sum equivalent to the value of their shipment. Indeed, nothing guarantees that any of them will not record several consecutive losses (since the draws are independent), which will dry out their savings. Thus, the merchants face uncertainty at the individual level because of pure luck (assimilated to a lottery) concerning their capacity to stay in business.

The other option is to pool risks, which removes most of the uncertainty. For instance, a 10% premium (\$100) might be levied on all merchants, which will be used to compensate the unfortunate one. In the new situation, everyone faces the same probability (1) of receiving a payoff of \$900. Nothing has changed in the world; the overall level of resources *ex post* has been left untouched (\$9,000). Nothing has been added or suppressed (Heath 2006). The individual set of probabilities remains the same; only the distribution of the gains has changed.

⁶ The concept of efficiency used throughout the article may be interpreted as very close to the Kaldor-Hicks one: insurance is efficient insofar as it improves the collective situation of at least one agent while leaving open the possibility to compensate any potential loss recorded by another agent. This criterion is less stringent than the Paretian one where an action is efficient only insofar as it improves the situation of an agent *without* worsening the situation of anyone else. In addition, risky activities covered by insurance are often activities that *may be* harmful for the involved parties or a third one. Then the Pareto criterion is mostly ineffective since it will forbid acts that are still globally beneficial, i.e. after compensation. By the way, insurance payments could represent such compensation.

Needless to say, the example is simplistic. In the real world, individuals differ from each other regarding their risk aversion or exposure. Consequently, any “real” sample covered by insurance will be far more diverse in terms of risk profiles than our 10 merchants. But, by its simplicity, the example helps to illustrate the mechanism (risk pooling) and the result (reduction or removal of uncertainty) of insurance.

Two traits are to be noted. First, the reduction or elimination of uncertainty offered by insurance actually stems from the *Law of Large Numbers*.⁷ Then, when the size of the insured population tends toward infinity (i.e. when it increases), the calculation of risk probabilities and expected losses becomes more reliable. Consequently, adequate premiums may be charged to policyholders. In sum, pooling risks together increases predictability.

Second, efficiency lies in the distribution of losses. Based on this, a common view is to make insurance’s efficiency conditional on the invariability of the probabilities attached to a set of events. When such invariance is assumed, the efficiency is just about redistributing losses. There are two dimensions then. The first one is purely statistical: insurance renders the future less uncertain and allows prediction. The second has to do with the redistribution of costs: insurance reduces individual exposure to risk (or it increases individual resilience in front of it).

It is important to note, however, that these two dimensions are *presumed* to be valid only if the behaviour of agents does not change once they get covered. Any change of behaviour (i.e., of probabilities) would undermine insurance’s efficiency. *Moral hazard* refers to this kind of situation: the fact that individuals tend to become either immoral or less risk averse once becoming insured, which alters the set of probabilities. ‘Moral hazard in insurance occurs when the expected loss from an adverse event increases as insurance coverage increases’ (Pauly 2007, 7). The moral hazard argument stipulates that insurance sets up a context of choice where individuals have an incentive to adopt riskier or immoral attitudes since they will not have to support the full cost of their choice.⁸

The alteration of probabilities is assumed to handicap insurance efficiency. Moral hazard serves to justify practices such as the exclusion of ‘bad risks’, refusal to bail out banks and financial institutions (Stern and Feldman 2004), or opposition to

⁷ The Law of Large Numbers is the ‘mathematical premise stating that the greater the number of exposures, (1) the more accurate the prediction; (2) the less the deviation of the actual losses from the expected losses [...]; and (3) the greater the credibility of the prediction [...]. This law forms the basis for the statistical expectation of loss upon which premium rates for insurance are calculated. Out of a large group of policyholders the insurance company can fairly accurately predict not by name but by number, the number of policyholders who will suffer the loss’ (Rubin 2008, 272-273).

⁸ Benjamin Hale gives the following characterization of the moral hazard argument: (1) ‘because citizens know that they will be bailed out in the event of a disaster, they have incentives to be less cautious (or do not have incentives to be more cautious) about disaster’; (2) ‘they act on these incentives and change their behavior, which is wrong’. The normative implication is that (3) ‘we ought not to bail citizens out in the event of a disaster (or we ought not to bail them out as much)’ (Hale 2009, 8).

universal health insurance (Gladwell 2005). The rationale is powerful in debates that surround governmental involvement in the regulation of social risks.⁹ It extracts part of its intuitive appeal from the following line: if insurance as a technology is justified by the coverage against risks it provides, and if, at the same time, it increases risk probability or loss magnitude, it becomes inefficient at managing risks. The implicit judgment is that it is bad to alter risk probabilities in a situation where resources for risk coverage are pooled.¹⁰ From an efficiency perspective, moral hazard is used to oppose or limit diverse sorts of insurance that cover risks related to fire, health, unemployment, etc.

Indeed, the mere alteration of probabilities is not *per se* a sign of defect. Insurance efficiency is, *to a certain extent*, independent of moral hazard. Furthermore, insurance may be efficient even in the presence of moral hazard for two reasons.

On the one hand, insurance can generate benefits that exceed the costs, including the costs of moral hazard (Marshall 1976). For instance, a public health insurance may generate costs in terms of consumption of non-necessary medical acts or drugs, but it also contributes to the detection of diseases at an early stage (and then reduces future costs of treatment) and to maintaining a population in better health (so more productive).¹¹ In short, *it is not because insurance could generate inefficiencies of variable magnitude that insurance is inefficient on the whole*.

On the other hand, insurance is often explicitly offered to incentivize people to adopt riskier behaviours and carry out socially (but risky) beneficial activities. In other words, *insurance is about redistributing collective wealth generated by risky activities through collective coverage of the losses induced by such activities*. Under certain conditions, the increasing costs of insurance may signal that a worthwhile social activity is expanding thanks to insurance. Motor insurance provides a good example. To be sure, it allows people to drive faster, increasing the risk of accidents and, then, the damages suffered by policyholders as a group. But would a world without vehicle insurance be preferable? Would a world without risk pooling, where everyone is personally liable for the damages she causes, represent a social improvement?

⁹ By “social risks” we mean risks with strong social components, i.e. risks that stem from or are strongly amplified by living in society. Industrialization is an example.

¹⁰ The moral hazard objection actually contains two criticisms. The first points at the rise of the costs implied by the modification of insurees’ behaviour. Due to their riskier attitudes, the amount of compensation increases, which undermines the resilience of insurance. The second is properly moral. Moral hazard is bad because it shifts costs, i.e. makes non-causally responsible individuals bear the costs of someone else’s imprudence or immorality. Both criticisms are misleading. The first one because the increase in the losses induced by insurance coverage is not in itself an argument against insurance. At the limit, it is an argument for maximizing the net benefits of insurance (once the costs are subtracted), i.e. to regulate and monitor moral hazard. The second because apprehending insurance as a cost-shifting device is a miscomprehension of how insurance works. These two criticisms are dealt with in the rest of the article.

¹¹ It has been a recurrent argument for the development of public insurance. Niall Ferguson offers such an example for Japan (Ferguson 2008, 207-208).

In numerous cases, the obvious answer is “no”. For instance, motor insurance remains efficient at producing various *social benefits*¹² in spite of the increase in risks it produces. First, it still decreases the uncertainty that individuals face even if it may increase the probabilities and expected losses. It does so by improving individuals’ financial resilience in front of risks (insofar as the insurance remains actuarially sound). Second, social activities relying on driving, which include personal transportation, delivery of goods and provision of services, can blossom. Third, insurance lowers transaction costs regarding the settlement of liability and compensation by internalizing them in a contract. Thus, insurance reduces the costs of litigation by clarifying the process of resolving accident claims.

Indeed, it is not because probabilistic invariance does not grasp the core of insurance’s morality that it is not important at all. In fact, moral hazard raises a major practical issue. In some contexts, insurance efficiency is impaired by the increase in risk resulting from the alteration of the insured’s behaviour, while, in other cases, either moral hazard is not noticeable or its impact is overridden by positive outcomes. Moreover, action is usually possible in order to curb the most detrimental forms of moral hazard (e.g., by imposing some care requirements on policyholders, monitoring their behaviour, etc.). Thus, moral hazard is neither a lethal argument, nor unimportant, but there are ways to keep it under control (Moss 2002).

Nevertheless, the point here is that *ex post* probabilistic invariance does not constitute the core of insurance efficiency, so it is difficult to consider *ex post* variance as a defect. It is consequently misleading to consider that moral hazard by itself is an argument against insurance. Of course, it constrains efficiency, but it should be weighed against broader social benefits that flow from insurance (e.g. gains for allowing vehicles to drive at a speed above 5 km/h). In that sense, the question is not to judge efficiency based on the existence of moral hazard, but to determine how much moral hazard a society is eager to accept once balanced with the social benefits, or/and how much moral hazard can be handled by mechanisms such as care requirements, adequate monitoring or regulation.

1.2. *Reduction of uncertainty and derivative benefits*

To recap the beginning of this section about normative foundations of insurance as a technology, efficiency comes into play at two levels.

❶ One is the *pooling mechanism* proper. Two common mischaracterizations should be corrected before proceeding. First, insurance is often conflated with risk shifting (Arrow 1963, 945).¹³ However, risk shifting takes place when an agent, who

¹² The notion of social benefits might appear fuzzy. For our purpose, it is, however, sufficient to say that an activity is socially beneficial if it respects the Kaldor-Hicks criterion described above.

¹³ Barron’s *Dictionary of Insurance Terms* provides an illustration of the confusion. Under the entry ‘insurance’, we can read: ‘mechanism for contractually *shifting* burdens of a number of pure risks by *pooling* them’ (Rubin 2008, 246, emphasis added).

is less risk averse and/or has more resources for facing risk, takes in charge, in exchange for a payment, the risk of another agent, who is more risk averse and/or has less resources for facing risk (e.g. mortgage-backed securities or swap products in finance). In the case of insurance, risks are pooled, not shifted. Policyholders do not transfer anything to anyone from the perspective of the insurance. They gather their resources to confront risks and losses collectively.

In the case of social risks, which constitute the core of this article, the exposure of a given individual depends as much on her own behaviour as on others'. Unemployment is mainly structural and cyclical, even if voluntary unemployment exists. Each individual is significantly impacted by others' behaviour (the structure of the economy, i.e. the state of the technology, the nature of production, the level of the aggregated demand). For health, a majority of diseases are social in regard to their origins and/or their diffusion (e.g. the impact of poor food quality on obesity and ischemic diseases, influence of publicity, contamination by chemical products, and so forth). Status itself might be a source of pathologies (Marmot 2004). Finally, not being able to work or becoming a less productive worker due to ageing is not the consequence of others' decisions *per se*. But being left alone without any kind of support, by comparison with traditional societies (where ageing individuals are usually taken in charge within extended families), is the result of aggregated decisions (which reinforces the argument that insurance is not about risk trading but risk pooling).

In fact, the term of risk pooling is somewhat misleading since, more than risks, it is their burden, i.e. their material consequences, that is pooled. Individuals still face the risk of suffering a car accident, being sick, being fired or ageing. Insurance does not relieve policyholders from these risks. Nevertheless, its efficiency lies in the *reduction of uncertainty* concerning losses provided by mutual protection, not in the transfer of risk to someone else.

Another miscomprehension is to consider that the core of insurance efficiency has to do with risk diversification (Moss 2002, 29-31). It is difficult to deny that diversification improves efficiency by lowering insurance's vulnerability to systemic risks. Refining the precedent example, imagine that all merchants are taking the same sea route or are using boats produced by the same manufacturer. They then have a similar risk profile, which exposes the insurance to adverse events directly caused by some feature of this shared profile (a storm that will strike the route or a defect in the design of the vessel). Although diversification reduces exposure to systemic risks, it does not constitute the core of insurance efficiency since insurance can be theoretically efficient even in the absence of diversification.¹⁴

¹⁴ Confirming this point, Barron's dictionary specifies that one of the characteristics of an insurable risk lies in 'homogenous exposures' (to risk) of the given population (Rubin 2008, 246). In addition, '[h]omogeneity of exposure units is extremely important to the accuracy of the prediction of future losses based on historical loss experience' (Rubin 2008, 225).

Once these clarifications are made, it is worth noticing that the normative value of the *reduction of uncertainty regarding the material consequences of risk exposure* can be broken down into three dimensions: *subjective*, *distributive* and *motivational*.

Firstly, by lowering the threat of not being able to cope with future losses, insurance actually *improves subjective well-being* since uncertainty, especially of this sort, is a major life stressor. It also helps to increase the sense of control that individuals have over their lives. More generally, by reducing uncertainty, it provides a more reliable social context and more stable social interactions, which are valuable in themselves.¹⁵

Secondly, it *narrows disparities in material outcomes due to luck or suboptimal decisions*. One may identify in this second benefit the reason why insurance is often assimilated to an egalitarian tool. But, as already mentioned, the less unequal outcomes constitute an unintended consequence precisely because insurance alleviates one of the main causes of inequality: randomness and unlucky decision making. Insurance partly re-establishes unlucky individuals in the situation that prevailed before the adverse event. From a pure theoretical perspective, it may be argued that the main role of insurance is indeed to cancel out the effects of uncertainty (through risk pooling), not to contribute to a fairer society or to redistribute resources according to egalitarian reasons. It does not induce that insurance mechanisms do not actually reduce *ex post* inequalities (i.e. inequalities that arise from adverse events); it simply suggests that the theoretical justification of insurance is not egalitarian. A manner of looking at it is to realize that insurance does not aim at altering the *expected utility* of the policyholders.¹⁶ In any case, this reduction of *ex post* disparities could diminish even further the stress related to the future.

The third aspect is that *individuals, by the mere fact of facing lower uncertainty related to losses, are prone, as already mentioned, to take more risks than they would have done otherwise*, which could be socially beneficial. This motivational dimension leads to the second source of normativity of insurance as a technology.

¹⁵ We would like to thank David Estlund for suggesting this idea to us.

¹⁶ The expected utility is the sum of the expected outcomes of a set of events. The expected outcomes consist in the product of the probability of each event and their material outcomes. In case of an actuarially fair insurance, enrolling in the insurance does not change the expected utility. It reduces the uncertainty that individuals face. Imagine that 10 merchants who trade overseas face a 10% risk of losing the totality of their shipment, which is worth €1,000. Each merchant's expected utility is €900. The 10 merchants have then two options. They can face risk alone, i.e. by individually assuming the expected losses; or they can *pool* their resources by paying a premium of €100 each, which will cover for the future loss of the unlucky policyholder. In this paradigmatic case insurance has had no redistributive effect in terms of expected utility since every merchant has the same expected utility before and after the creation of the insurance. However, insurance reduces the standard deviation of the population of merchants. Instead of facing a 10% risk of getting nothing and a 90% chance of earning €1,000, every merchant now faces a certain outcome of earning €900. The only effect of the insurance has been to transform uncertain outcomes into certain ones, but without altering individuals' expected utility (Landes 2013b).

② The second source is derivative from the *activities that insurance favours or renders possible through the reduction of uncertainty*. The hedging of risks has probably facilitated industrialization (factory work, transportation of people and goods, driving, urban development, etc.). Insurance was, for instance, the solution retained in France in order to remove the uncertainty regarding material responsibility for work accidents (as the next section shows) (Ewald 1986). Insurance technology has contributed to render our societies more affluent by maximizing the benefits of industrial development.¹⁷ Arguably, without insurance and other risk-management devices, especially those handled by states, industrialization would have been compromised (Moss 2002).

Despite the fact that this dimension is a by-product of the first one—hedging of risks—, its normative implications go beyond the pure technological aspect. Actually, to judge the efficiency of a specific kind of insurance is to judge in which sense insurance facilitates *some socially beneficial activities* (which depends on a social conception of what is collectively beneficial or not). For instance, Tom Baker and David Moss (Baker and Moss 2009, 105) explain that offering a state insurance for student loans in the United States would reduce the anxiety of young people who are unsure about undertaking higher education due to the risk of not being able to reimburse their loans. An important side effect is that more Americans would then get a specialized education. The collective benefits would be, for instance, to render individuals more productive and more active as citizens or to enhance their capacity to lead a good life (if one thinks that education has anything to do with that).

Another example is Shiller's proposition to develop livelihood insurance (Shiller 2003, 107-120). This type of insurance could be offered in case one's choice of education turns out to be unproductive. In fact, with the increased specialization of knowledge, the person who decides to get a PhD takes the chance, if she does not obtain a position within her domain at the end of her education, to suffer from a shortage of resources. Moreover, she could have to change her career because of a lack of labour demand in her branch, for instance. It is one of the risks of overspecialization, a characteristic of modern societies. If we put the argument into context, it is obvious that society as a whole benefits from having a specialized workforce. The downside is that overspecialized individuals are more vulnerable (than those with broader competences) in case of a bad economic situation or a structural shift in labour demand. However, through their choice to specialize, they generate gains for the whole economy (by optimizing labour division). This social benefit comes with a risk that should be partly assumed at the collective level because specialization creates a gain for everyone.

The precedent developments confirm that the value of insurance as a technology is derivative from activities it favours, which implies that the normative worth of

¹⁷ This role will continue to increase due to, for instance, the costs of natural catastrophes linked to climatic change.

efficiency depends on other goods, regarded as socially important (e.g. having a population that is highly educated and specialized). It is, though, legitimate to ask whether we still talk about an inner morality. If the value of insurance flows from what it permits, namely the kind of conditions it sets up for pursuing other ends, is it still accurate to mention the “normative foundations” of insurance, or, at least, to consider that such foundations would be inherent to the mechanism itself?

It may be replied that, except considering that the normative value of a cooperative mechanism is only intrinsic, considerations of what such a mechanism is good for are central to any moral evaluation. Moreover, human life knows few purely intrinsic goods, that is to say goods that are worth what they are without any consideration of what they produce. From a philosophical perspective, even equality is not an intrinsic good. Equality may be good because it allows individuals to pursue their conception of the good without being impaired or because it grounds political stability (Wilkinson and Pickett 2010). Insurance is not an exception. In that sense, the reduction of outcomes disparities or uncertainty can be counted as traits of an insurance mechanism and, as such, included among its normative foundations, i.e. these normative traits that justify a cooperative arrangement.

This leads to a second source of normativity, which goes beyond insurance as technology because it is derived from the social use (one may say “function”) of insurance. The next section expands the scope of this article to social insurance, which encompasses the kind of risks that are the most intimately tied with modernity. It shows that the normativity of insurance exceeds its sole technological dimension and includes elements about the way individuals relate to each other. The normative value of insurance then stems from the fact that it shapes human relationships in a certain way.

2. INSURANCE AS SOCIAL PRACTICE

In an insurance scheme, individuals do not only pool their resources, they also tie their fates together. They build up relations of interdependence and a specific social context. Since its origins, commentators have emphasized the objective solidarity nurtured by insurance. Still, there is more than mutual material support among policyholders. With insurance also comes a manner of addressing social questions, which, according to Deborah Stone, ‘helps define norms and values in political culture, and ultimately, shapes how citizens think about issues of membership, community, responsibility, and moral obligations’ (Stone 1999-2000, 45).

Two of these “norms and values” are important: *equality* and *responsibility*. Central to political philosophy, they have been at the core of numerous debates about the proper understanding of equality or the sensitivity of redistribution to individual responsibility as expressed in the luck egalitarian literature, for instance. The

influence that insurance, especially social insurance, has exerted on these two principles is particularly evident in the origins of social insurance. On that respect, the role of friendly societies and *sociétés de secours mutuel* is instructive (Beito 2000; Cordery 2003; Ewald 1986, 1996; Heath 2006, 334; Lewin 2003, 405; Moss 2002).

2.1. *Equality of status*

A look into the fraternal or mutual movement is particularly instructive because friendly societies were the first institutions to offer social insurance on a large scale.¹⁸ This activity was a decentralized response to industrialization in two respects. Firstly, workers faced increasing risks of being injured by mechanization and the concentration of labour and capital in small spaces. Secondly, and more importantly, traditional mechanisms of risk management had been undermined. Prior to industrialization, extended rural families endorsed risk pooling and redistributive purposes. When one felt sick or became too old to work, she was likely to be supported by relatives. But gains in agricultural productivity, land reorganization (e.g. the enclosure movement) and the industrial boom provoked a large exodus toward cities. Extended families broke down, and the mutual support they provided disappeared. At the same time, pauperism increased: millions of people lived in terrible conditions, underpaid and without the support of their families. Poverty became a ‘national social problem’ (Cordery 2003, 22).

Social insurance was the response from the fraternal movement to this aspect of industrialization. As the traditional family was a risk-pooling device, likewise, fraternal societies purveyed this sort of service for strangers. Fraternal insurances were a reply to pauperism that diverged from charity (mainly offered by churches) and poor relief (offered by local authorities). If insurance was available before industrialization (churches and guilds), it reached a new scale with fraternities.

Insurance was perceived to be radically different from charity because of the promise made to workers that they could become autonomous by relying on their own (pooled) resources in face of adverse life events. Insurance was conceived as promoting self-reliance and enhancing the self-esteem of the working class. While traditional poverty management through charity (Lindert 2004) implied a neat distinction between donors and receivers, insurance greyed this distinction.

Hierarchical relief was characterized by large, bureaucratic, and formalized institutions. The donors actually came from geographical, ethnic, and income backgrounds significantly different from those of the recipients. Reciprocal relief tended to be decentralized, spontaneous, and informal. The donors and recipients were likely to be from the same or nearly the same walks of life. Today’s recipient could be tomorrow’s donor. (Beito 2000, 18)

¹⁸ They usually charged their members a flat rate in exchange for a fixed payment or coverage in case of various social risks or life events (death, burial, work accident, illness, etc.).

If the distinction drawn by David Beito captures an essential point, a precision is necessary. Reciprocal relief is usually presented as an explanation for the fraternal movement's strong resistance to state regulation of their activities (Beito 2000; Cordery 2003). As an empirical claim, this might be true or false. It might then be tempting to interpret this opposition as a stark dichotomy between two sorts of organization: the state vs. a decentralized, privately run alternative (Schmidtz 1998, 69-70). The idea has thus flourished that the fraternal movement, because of its reliance on insurance, was an alternative to the state, which promoted hierarchical relations.

Such a view suffers from a double confusion. First, it conflates a given mechanism of cooperation (insurance) with the institution in charge (fraternal society). For instance, Beito does not distinguish between the insurance mechanism (two last sentences) and the specific institutions in charge of it (two first sentences). The second confusion is between what is called in philosophy of sciences the "context of discovery" and the "context of validity". It is not because insurance emerges locally, assumed by friendly societies, that it could not be managed at a larger scale by another kind of institution (the state).

The relevant distinction is not between institutions in regard to their nature, but between different kinds of ethical relationships supported by specific cooperative mechanisms: the *charity model* (or hierarchical relief), based on adversarial relationships¹⁹ that confront a donor and a recipient who belong to two distinct categories (e.g. the wealthy and the needy), and the *mutual model* (or reciprocal relief), based on cooperative relationships among people of equal status (Beito 2000, 57). If we are to understand Beito in this way, his distinction becomes fruitful.

In that respect, insurance highlights a division between two manners of thinking about material transfers. On the one hand, redistribution in the case of social risks refers to one-way transfers from the better offs to the worse offs. This leads to the idea that redistribution potentially carries a conflict between a discourse of entitlements and the positive duty to redistribute some of the economic surplus. On the other hand, *ex post* redistribution in the case of social risks has a form of self-referential transfer where there is no distinction between contributors and beneficiaries, all being parts of a common pooling device (which renders even more salient the distinction between cost pooling and cost shifting). In that case, any moral distinction among individuals based upon their place in the flux of resources at a given moment becomes partly irrelevant.²⁰

¹⁹ The relation between the donor and the recipient is potentially adversarial since it contains a conflict in germ between the individual right to enjoy the result of her work and the moral obligation to help the needy. 'From the perspective of an entitlement theory, redistribution is a serious matter indeed, involving, as it does, the violation of people's rights' (Nozick 1974, 168).

²⁰ If it is clear that: (1) There are two conceptions of resources' transfers: hierarchical and reciprocal, (2) Insurance belongs to the second type. It does not follow that: (1) The welfare state has only to implement reciprocal relief measures, (2) The two conceptions refer to two modes of transfer that are incompatible within a given institution (the welfare state).

Obviously, insurance promotes moral equality by breaking the univocity of transfers. Theoretically, no distinction of status is made among individuals. What insurance offers is a framework where individuals enjoy equal standing (by comparison to mean-tested transfers) no matter their net position in the fluxes (net contributors or benefiteres). A material dimension completes this equal standing. In front of adverse life events, they support each other. Then, the actions and fate of a given individual affect other policyholders. This principle of concrete solidarity completes the equal standing. While it is commonly assumed that insurance, especially applied to social risks, is about distributive justice, it is obvious that the context for transfers set up by insurance promotes, first, a statutory conception of equality and, secondly, a mutual support that is distinct from redistributive equality.

2.2. Responsibility

Insurance also influences the conception of responsibility in ways that have rarely been acknowledged as such in political philosophy. As noted by François Ewald (Ewald 1986, 1996), insurance marks a flip for contemporary societies. The liberal discourse of the eighteenth and nineteenth centuries made individuals responsible for their fate. What happened to them in life was the result of their actions (*their fault* if it was bad) and, ultimately, of their moral character. To some extent, inequalities were naturalized as the just retribution for individual responsibility.

In that context, pauperism raised the question of the responsibility of those who, hit by extreme destitution, relied on charity or poor relief to survive. They were either responsible for their condition, in which case they might be left without support, or they were not responsible, in which case something was wrong with holding them responsible for their condition. It was the incompatibility of the liberal position with both situations or, more precisely, the inconsistency of the 'liberal diagram' (Ewald 1996, 17) that led public institutions to promote or endorse insurance mechanisms.

If people were responsible for their disastrous situation, then it could mean that Enlightenment's emancipatory project had failed. To be drowned in extreme poverty, crippled with debts, unable to find a decent job, sick, relying on charity, showed the widespread incapacity of human beings to emancipate from necessity. How then to reconcile the pervasiveness of poverty and individual failures with the belief in individual freedom and human abilities without adding insult to injury? On the opposite, if people trapped in extreme poverty were not responsible for their condition, then it became a problem within the liberal rationality since it conflicted with the postulate of individual freedom.

Hence, insurance was used to resolve this contradiction in societies marked by the expansion of social risks and pauperism. Work accidents are illustrative of this dynamic (Baker and Moss 2009; Ewald 1986, 1996; Moss 2002). With the development of industry, work accidents increased, which posed the question of the responsibility for their costs. In that context, insurance provided the opportunity

to transform the conception of responsibility and, as such, to find a way out of the liberal dilemma formalized below.

Table 1 – **Arguments for responsibility attribution**

Responsibility/ Arguments	Worker	Employer
Pros	Freedom to contract ①	Ownership, guardianship ③
Cons	Lack of control ②	Industrialization ④

The position endorsed by classical liberalism is to consider that workers are responsible for their safety. At least if they are not responsible for the accidents themselves, they are responsible for the lack of care that renders accidents possible (Arnoldi 2009, 32). The contract is supposed to manifest their free will, i.e. their acceptance, in exchange for a salary, of the duties and risks implied by the tasks they promise to accomplish. An obvious problem with this rationale is that employees can hardly be held responsible for most of their working conditions. They depend on other workers, management staff, machines, etc. In addition to this lack of control, they are not the owners of the capital (machines, factories), and as an old principle of law states: the owner of a “thing” is responsible for its use, including the potential damages.²¹ In consequence, there is a material and a legal basis to hold entrepreneurs responsible for work accidents and the related costs.

This position has been repeatedly expressed by various court decisions in France (Ewald 1986). However, this position is vulnerable to two limitations. First, *prima facie* entrepreneur’s responsibility is fundamentally incompatible with industrialization. As shown by Ewald (Ewald 1986, 1996), it was thought that the costs borne by entrepreneurs would jeopardize the pursuit of their activities by rendering them more risk averse.²² This threat was perceived even more intensely in a context of harsh economic competition among nations. As a painful confirmation, French courts started to interpret the Civil Code liberally by making employers increasingly responsible for the accidents in their factories.

The second limitation is the epistemological difficulty in assessing the existence of fault, in addition to causation, for ascribing responsibility. ‘Closely associated with these industrial developments were changing ideas about *fault*. Particularly in the case of industrial accidents, fault seemed increasingly difficult to identify and assign with accuracy’ (Moss 2002, 157, emphasis added). The intractable causation reinforced the necessity of reformulating the theoretical framework in which one apprehended work accidents and their consequences.

²¹ The French Civil Code (articles 1384, 1385, 1386) enunciates such a view.

²² In addition, this was presumed to nurture social dissensions since the worker had to sue his employer, i.e. to directly attack the source of work authority (Ewald 2002, 211-212).

The regime of fault was judged as an inadequate framework for dealing with the consequences of certain risks, which led to dropping the absence of fault as a criterion for compensation in favour of an insurance system. So, insurance mechanisms were adopted and promoted by institutions for dealing with social risk. At the same time, they modified the frame of reference for responsibility. They did not only respond to the impossibility of situating individual responsibility, they also institutionalized a relaxed conception of responsibility within several domains.

Insurance transforms responsibility in the sense that being compensated does not depend on one's actual responsibility, but on being insured. In other words, while the policyholder may still be causally responsible for her condition, she is usually no longer financially responsible for part or all of it. She does not have to bear the full costs of the situation her action created or contributed to creating. It does not mean that the whole concept of responsibility has been wiped out. Responsibility is transformed and compensation is collectivized.

Tom Baker and Jonathan Simon present this transformation as a three-stage process. Firstly, consequential responsibility is disentangled from its moral counterpart. Secondly, the consequential responsibility of those who suffer from the loss is reduced. Consequently, it increases the consequential responsibility of those who do not suffer from the risk and have taken no part in the production of losses (Baker and Simon 2002, 39).

Baker and Simon's point is useful since it underscores a distinction within the notion of responsibility between a moral side and a consequential side. But the conclusion of their argument suggests that insurance is about shifting consequential (or financial) responsibility. In addition, a moral distinction is introduced between causally responsible people, who do not bear the costs of their behaviour, and non-responsible people, who have to bear these costs. By doing so, it disregards the very nature of the pooling mechanism that applies to costs. Or, at least, it insinuates that something might be wrong with, first, the separation between the two sides of responsibility, and, second, the shift of material responsibility.

Baker and Simon's account may be challenged on the ground that their description of the pooling mechanism of insurance leaves room for the moral relevance of causal responsibility and the distinction between agents based on their place in the redistribution. Nevertheless, their account remains useful because it pinpoints the fact that responsibility is a multidimensional concept within which insurance introduces a tension. A possible refinement consists in distinguishing three kinds of responsibility: *causal*, *moral* and *material*.

Causal responsibility is about determining the chain of causation that leads to a certain outcome. *Moral responsibility* is the set of normative judgments about the worth of the different actors who are parts of this chain. *Material responsibility* con-

moral hazard would be involved in both cases: it is presumed to surge because the causal and moral side of responsibility is disconnected from the consequential aspect.

What this line of reasoning gets wrong is, first, the perception of insurance as a cost-shifting tool where it is not in principle.²³ Again, the right to get compensated comes from being part of the insurance, i.e. from paying premiums for the collective coverage against losses.²⁴ Also, as previously mentioned, compensation may not cancel out the losses that follow a risky action. For instance, to be a smoker and to get medical care in case of lung cancer does not remove the psychological and physical suffering. The same goes for a car accident, a work accident, a fire, unemployment (especially in the long term), etc. That does not mean that moral hazard does not pose any normative issue. It just suggests that the wrongness of moral hazard does not lie *first and foremost* in the intent to shift costs.

In any case, moral hazard problematizes the disjunction between causal and material responsibility (both ends of the responsibility chain). More, it raises the concern that any compensation not based on clear individual responsibility may generate inefficiencies that impair insurance's mechanism by changing expected losses. Even if one may consider that viewing the issue in terms of moral hazard is inaccurate, it should be recognized that moral hazard poses the central question of how to conceive of responsibility in an insurance scheme.

The challenge of individual responsibility may be met in different ways. Traditional solutions include the exclusion of the "bad risks" (through underwriting), the re-introduction of consequential responsibility (deductibles, co-insurances and co-payments) and the establishment of built-in mechanisms for monitoring and controlling individuals' behaviour (Moss 2002, 49-52). The exclusion of "bad risks" and re-introduction of consequential responsibility are attempts to re-value individual responsibility by making the agent bear the costs of her condition. In contrast, other solutions (monitoring, care requirement, etc.), especially when applied to social insurance, take seriously insurance as a social practice. More precisely, these ways to deal with moral hazard have to do with social order, i.e. with monitoring and controlling individual behaviour. Because losses are collectivized, every policyholder becomes materially responsible for everyone else. The consequence is that the collectivity, i.e. everyone, has an interest in checking every member's behaviour. Insurance turns out to be the basis of a social order regulated by its own conception of equality and responsibility.

²³ Of course, any insurance may be potentially turned into a redistributive mechanism by veering away from the actuarial rationale. But it has nothing to do with the insurance mechanism itself, but with a particular manner to implement it (which is to alter its inner rationale).

²⁴ Such a condition is highly hypothetical in the case of public insurance (i.e. insurance offered at the state level by some public institution) since every potential taxpayer is presumed to be a part of the insurance scheme even if she or he does not actually contribute.

3. CONCLUSION: THE PARADOX OF RESPONSIBILITY

In sum, insurance is a cooperative arrangement that extracts its normative value from its efficiency at spreading the losses of risky activities, its capacity to generate social benefits and the response it offers to the problem of individual responsibility in the case of social risks. As shown in this paper, insurance is valuable in itself for the efficient outcomes that it produces regarding risk management as well as for the kind of moral relations it nurtures among policyholders.

But, it is striking to notice how a large part of the literature on the topic diverges from these normative foundations. Political philosophy, for instance, hosts positions that make compensation for adverse events conditional on individual causal responsibility, as in most forms of luck egalitarianism. In addition, such compensation is presented as a question of distributive justice. This implies two things: (a) that entitlement to compensation is conditional on not having “gambled” (which implies not having taken a risk of any sort); (b) compensation is the consequence of a resource-shifting system, not a resource-pooling one. This paper is not the proper place to launch a discussion on this redistributive perceptible bias, but it should be remembered that an egalitarian dimension is present in insurance mechanisms. But the equality at work is mainly one of status, as shown by Beito in the above. The distributive aspect is secondary.

In economics literature, a sizeable part of the discussion is monopolized by the issue of moral hazard and the ways of curbing it by rendering individuals more individually responsible for the consequences of their actions. This underscores the central question of the transformation of the concept of responsibility. Insurance seems to moderate the individual responsibility for spreading losses that *might* be linked to individual behaviour. This moderation of individual responsibility is what the critics are referring to when they point at moral hazard as the dynamic that undermines insurance’s financial sustainability. However, when considering insurance as a technology and a social practice, moral hazard’s issue (the point where discussions about insurance end up) reveals a tension.

- ① Insurance has been designed for the purpose of dealing with situations where individual responsibility cannot or has not been clearly identified,
- ② By moderating individual responsibility, insurance allows the development of a large range of socially beneficial activities,
- ③ By moderating individual responsibility, insurance allows the relaxation of too stringent requirements about causation in the process of assessing coverage for losses,
- ④ However, it seems that when moral hazard emerges, i.e. when insurance is producing partly ② and ③ (i.e. altering the set of probabilities), one common assumption is that there is something wrong with moderating individual responsibility and that the solution lies in the re-introduction of some dose of individual responsibility.

However, is responsibility inside and outside insurance the same? One may claim that in a situation without insurance, individuals are responsible for their own actions. In an insurance scheme, individuals may be held responsible for their impact on the insurance mechanism itself, its ability to subsist through time. But, to do so, some additional conditions should probably be introduced, which was not the point of this paper.

A last point needs to be mentioned. What an enquiry into the normative foundations of insurance shows is that insurance is a mechanism that may provide justifications for controlling and ruling individuals. Debates on insurance are often about promoting behaviours that not only share the characteristic of being less risky (e.g., prudent driving, fire prevention equipment, etc.), but also behaviours one may consider conformist or even perfectionist (e.g., quitting smoking, exercising, reducing fat in food intake, etc.). In the end, insurance, when applied to the whole society, which is the case for public insurance, may be less about equality and redistributive justice than regulating individual behaviour and enforcing a social order without being explicit about it. It is so because insurance (1) promotes equality of status among policyholders, (2) enforces mutual support, (3) collectivizes material responsibility, and (4) blurs the very concept of individual responsibility.

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