# Sam Woods: Embarking on a new voyage? Solvency II in context

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Good afternoon.

The good ship Solvency II is now afloat. It has taken a long time to make it seaworthy. Some might question whether we need this newly improved vessel. Indeed, some might challenge whether we should have a ship at all. But that is largely academic, given we are now under way and in light of the gargantuan efforts insurance firms and regulators have put into getting us to this point.

In my speech today, I would like to look at this development in the wider context of insurance history. First, I would like to offer a brief view on why, looked at through the lens of today, we regulate insurance companies at all.

Second, we will take a very whirlwind tour of 5,000 years of insurance activity, for the single purpose of pointing out that for at least four-and-a-half of those five millennia there was very little regulation of insurance, if any.

Third, I will examine how the British state has involved itself in the affairs of insurance companies over the past 500 years.

Finally, I will ask what – if anything – we can learn from this as we enter the Solvency II era. My main conclusion, which may make me unpopular with many colleagues and members of the insurance industry, is a simple one: Solvency II is a big and important change, but – when viewed in the context of history – we are still sailing the same ship, in broadly the same direction.

### Why do we regulate insurers?

Individuals and institutions give money to insurance companies to transfer the cost of risks they could not otherwise bear. In doing so, they trust that the insurer will make good on its promise in the event that the insured risk crystallises. Indeed, the word policy comes from the Italian "polizza", which meant a promise or an undertaking. Like banks, insurers invest policyholder funds directly onto their balance sheet thereby exposing customers directly to the risk inherent in those balance sheets. Our job at the PRA is to make sure that insurance companies keep their promises to pay policyholders and do not let them down, often when they need that money the most.

Insurance companies undertake an activity that matters, often critically – for the corporates that rely on protection of insurance for the day-to-day running of their businesses, and for individuals who invest a significant portion of their wealth in insurers over their lifetime, or who rely on insurers to protect them against financial disasters. It is for these very basic reasons that we are interested in insurance as a matter of public policy.

However, we cannot justify regulation of an industry just because its activity is important. The aim of regulation is always to correct some sort of market failure. The insurance industry has many characteristics that could lead to the market producing a sub-optimal outcome, if left alone. First, the insurance business model is unusual in that it has an inverse production cycle – insurers typically receive premia upfront for a service that may or may not have to be rendered in future (claims), the cost of which is difficult to calculate. Policyholders rely on the insurance company to set aside appropriate provisions to satisfy future claims, but the market may not always be a reliable mechanism for ensuring that insurance companies do not grow excessively by taking on too much risk.

Insurance obligations are often long-term and so policyholders trust insurance companies with their money for considerable periods of time. It is possible that the behaviour and incentives of an insurance company evolve in a way that does not take account of the interests of policyholders, not least because the best interests of the shareholder and the policyholder are not perfectly aligned.

The receipt of premia before claims have to be paid can introduce perverse incentives for struggling insurers in particular. For instance, faced with the prospect of failure, there is a risk that insurers begin to invest in high-return but riskier assets, or rely on unsustainably priced new business to ride the tide, without being called to account by the market[1]. This looks dangerously like a "gamble for resurrection", which might in some circumstances be a rational strategy for shareholders but is unlikely to serve policyholders well.

Moreover, the inability of policyholders to transfer their policy or amend the terms of what is essentially an infungibile contract limits the extent to which they can maintain the best deal. Furthermore, it is difficult for policyholders to assess the true soundness of any one firm. The absence of a tough claimholder therefore necessitates the existence of some objective standard by which insurers can be assessed – in today's environment, this most often takes the form of being authorised by a supervisory authority that subjects firms to legal regulatory standards. Of course, this standard will always be imperfect – but I think it is far better than nothing.

The role of the PRA is to make sure that the risks for which insurance companies provide protection do not revert to the customer when bad outcomes happen. It would be grossly unfair if you had paid somebody to take your risks away, only to find that you had unwittingly acquired a huge credit risk by giving your money to a financially unsound company. Our main job at the PRA is to ensure that firms are safe and sound, and contribute to policyholder protection. That way, the shareholder can reap the rewards if the risks pay off, but will bear the cost if the firm loses money.

This public policy case is well established in many countries, such that the approach of different regulators is often founded in commonly agreed principles. For instance, in the 1970s, the introduction of Solvency I codified these principles into a set of requirements across the EU.

## The birthplace of insurance

However, looked at across the sweep of insurance history, this public policy case is a new-fangled set of ideas. I have tried to find out what, if anything, public authorities have thought about insurance through time. In my quest to find the answer to this question, I ended up going back further than anticipated – to around 3000 B.C. – and came across the curiously-named practice of "bottomry" in the era of Babylon. Bottomry, it turns out, was a type of contract whereby a lender would, for a fee, put up money (either in the form of a loan or sometimes a joint stake in the stock) for the purpose of advancing trade. This was on the understanding that "the borrower should, in consideration of a high rate of interest, be freed from liability in the event of certain accidents happening, e.g. failure of goods to arrive at their intended destination"[2]. This looks to me rather like a Babylonian version of today's catastrophe bond.

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1 Plantin and Rochet (2007). See also Thoyts (2010).

2 Clayton (1971). See also, Bernstein (1996).

The practice of bottomry flourished due to the proximity of another group of great traders – the Phoenicians, who adapted the basic concept to support trade expansion on the Greek coastline during the 10th and 9th centuries B.C., and to the increasing domination in the Aegean Sea after 800 B.C. of Greek traders who needed indemnity against their cargo.

Hop westward across the Mediterranean Sea to ancient Rome, and citizens were paying subscriptions to so-called "burial societies" to cover the cost of expenses associated with their death – a kind of latter-day funeral insurance. This activity evolved such that by the second century A.D. it became common practice instead to pay the relatives of the deceased person a lump sum (the *funeraticium),* provided their subscription was not in arrears and the deceased had not committed suicide[3]. Despite not being labelled as such, this arrangement seems in some way similar to a modern-day life insurance policy. And yet back then, perhaps unsurprisingly, the subscriptions paid by members were not subject to any protections or oversight – indeed, when a burial society did run out of money, it was commonplace simply to issue a notice to convey the demise of the society and the fact that funeral expenses would no longer be met. There is also evidence that soldiers in the Roman army were paid a lump sum at retirement, despite the fact that contributions were not made throughout the soldier's lifetime.

By medieval times, the Church had become one of the largest employers and had started occasionally to issue pensions to clergymen. One such example involved Nicholas Thorne, a former abbot of St Augustine's monastery, who was living in difficult circumstances. Thorne had voluntarily retired, apparently stricken by a guilty conscience after he acquired some documentation on behalf of the abbey through bribery at the Court of Rome. The scandal led him to retire to an ordinary monastery in Yorkshire, but when his old comrades heard of his infirmity and weakness, they awarded him an *ex gratia* pension of 10 marks a year[4]. It seems unlikely that the Church extended such gestures on a regular basis, but from this point onwards we can see evidence of pension provision via employers (the Church and King), particularly for notable individuals in society where reliance on charity alone would not suffice.

Such examples are not representative of the modern day insurance companies established since the 19th century. But I include them to illustrate that the principles of insurance were very much alive as far back as our earliest civilisations – and mostly without any controls or regulation around them. So what changed?

### Enter the state

This brings us to my main theme today: the interest of the British state in the affairs of insurance companies. My aim is not to do full justice to this field of history given the rich body of academic literature available, but – in order to see Solvency II in context – to give a flavour of the sorts of philosophies and motivations that seem to me to have guided the British state's involvement through time.

Most textbooks will reference marine risk as one of the earliest forms of insurance in the UK. But evidence of one of the first genuine insurance policies suggests that whilst the first marine contract may well have been written in nearby Lombard Street, the risk was not taken on by British underwriters – instead, it was underwritten by Italian counterparts temporarily resident in London[5]. Indeed, throughout this period, there are several mentions of insurance interactions between London and the Italian regions of Lombardy and Tuscany[6] – hence the

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3 Lewin (2003).

4 Ibid.

5 Ibid.

6 Ibid.

development of policy wordings according to the customs of what would become known as Lombard Street.

The contracts written around this time – which de-coupled the insurance risk from the financing of voyages such that there was a genuine insurance element – related to popular, often expensive, commodities like woollens, iron and grain. So it is little surprise that disputes arose when adverse events took hold, particularly when risks were written across borders. In addition, it became easy to enter into dishonest practices, for example by finding multiple brokers to write the same risk and then cashing in several policies for the same insured event.

This brings us to the first, to my knowledge, serious participation of the British state in the affairs of insurers: disputes. These disputes led to the involvement of the judicial system, with high volumes of cases referred to the Privy Council. When this situation became untenable, the Privy Council established a tribunal (later known as the Court of Assurances) to which seven merchants (along with a Judge of the Admiralty and one civil and one common lawyer) would report twice a week (Monday and Thursday) to resolve disputes. This group had authority from Parliament to commit underwriters to prison if they failed to meet their obligations[7]. In 1575, the Privy Council ordered the Lord Mayor to compile some rules since no body of law existed to determine the resolution of insurance disputes. Around the same time, Queen Elizabeth granted a monopoly on the writing of assurance policies to Richard Candeler, who led the newly-created Office of Assurances. The Office introduced a system of fees – with the Office receiving a fixed percentage per £100 insured[8] – for the production of physical written policies.

Both through the creation of the Office and Court of Assurances, and the receipt of customs duties from insurers, the Privy Council in the 16th century – as approved by the monarch – cemented the role of the state in exercising a judicial function and creating an environment of policy registration and anti-fraud conducive to commerce. So, as I see it, this first phase of engagement between the British state and the insurance sector was effectively a trade: dispute resolution services were provided by the state, and insurers contributed some revenue to it in return. Indeed, in the early stages this revenue went directly to Candeler himself.

Despite the tight state controls around *who* could write insurance, the nature of risks being underwritten was granted little oversight – so much so that, for many, the practice of insurance became synonymous with gambling in the 18th century. Perhaps – and I say this with some trepidation here at Lloyd's – some of the most egregious examples of such behaviour were evident in the marine market. By this point, London had emerged as a centre of excellence in marine risks, due partly to its strategic location on famous shipping routes.

Marine insurance had become a necessity for trade – without protection, a bad storm could overturn the entire fortunes of merchants. But a lack of safeguards paved the way for abuse. One particularly spectacular example involved John McDougall, a Glaswegian merchant, who arranged to have a ship called *Friends* (whose cargo was valued at £1000) deliberately shipwrecked off the coast of Denmark – but not before insuring his own stake in the voyage in five separate policies for £3,475 and insuring the ship and other goods for £1,660 in a further three policies. In total, he obtained eight policies on the same risk – spreading the deceit between unsuspecting underwriters across Glasgow, Dundee, Hull and London. In doing so, McDougall (and others like him), introduced a speculative spirit that threatened the more sober motives crucial to indemnification contracts[9].

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7 *4 Statutes of the Realm 978* (1547-1624).

8 Lewin (2003).

9 Clark (2004).

Practices such as those described above ultimately led Parliament to take action. This first took the form of the Marine Insurance Act 1745, which rendered void marine policies made without an insurable interest. A similar provision was subsequently applied in relation to life insurance under the Life Assurance Act 1774. These Acts did leave a gap – namely, non-marine indemnity policies. However this was filled when gambling contracts were rendered void by the Gambling Act 1845, as the existence of an insurable interest served to distinguish insurance contracts from gambling contracts.

This was not the first time that Parliament had concerned itself with the affairs of insurance companies, however. In 1739, Britain entered into a war with Spain. As a consequence, trade with Spain ceased but – perhaps surprisingly – the underwriting of Spanish ships by British underwriters continued unabated. This led to a somewhat perverse situation in which British insurers compensated enemy merchants for shipping losses suffered at the hands of British privateers and squadrons of the Royal Navy. The value of insurance trade was, it seems, considered by many to be too valuable to forfeit voluntarily[10] as Britain entered a period of sustained warfare with Spain and then France.

By 1748, attitudes had changed and Parliament passed an Act which banned the insurance of enemy ships by British insurers. Yet the Act was expired just a few months later (after the Seven Years War ended) such that insurers did, in fact, enjoy considerable discretion over which risks to underwrite, including foreign enemy ships. I think that what this example ultimately demonstrates is the importance of trade and competitiveness in shaping the British state's involvement in the affairs of insurers. The protection of enemy ships was at direct odds with Britain's foreign policy – but trade was ultimately considered strategically more important. In common with the environment in which our eighteenth-century forebears worked, trade and competitiveness remain important contextual factors in the debate about how we should regulate insurers today. Indeed, it is useful to remind ourselves that these debates about competitiveness have been a feature of the state-business nexus around insurance for several hundred years.

So, I think that we can see in this phase the emergence of a more complex set of interests and motivations for the British state in dealing with the insurance sector – heightened concern about reckless or dishonest practices by policyholders, and debates about competitiveness and the importance of the industry to London and the Exchequer. But back in the 18th century, the aversion of Governments to getting involved in the affairs of insurers led to the development of a "freedom with publicity" approach. In practice, this meant self-regulation with some element of disclosure in order to encourage market discipline. A burgeoning insurance press emerged in the 1840s; initially funded by the revenue from insurance advertisements, these newspapers quickly emerged as guides to help the consumer and, indeed, many became increasingly critical as new companies began to go bust[11].

It wasn't until the Bubble Act was repealed in 1825 that insurers were able to organise freely as regular joint stock companies, outside the auspices of the Office of Assurances. As a consequence, the number of insurance companies skyrocketed; following a flurry of formations in the 1820s, more than four hundred insurers were established over the next four decades[12], ranging from small (often fraudulent) companies to some names still around today. Somewhat startlingly, of the 219 insurers established between 1843-1870, 170 were discontinued by 1870[13] – so over three out of every four new companies failed.

[10] Ibid.

[11] Alborn (2009).

[12] Ibid.

[13] Borscheid and Hauter (2012).

In 1869, the Albert Life Assurance Company failed, in part due to an over-ambitious takeover strategy[14] but also to having racked up excessive expenses, inadequate premia and an unexpectedly high surrender rate. Despite a suspicion that the Albert had been insolvent for several years, the company only failed when it ran out of liquid assets to pay current claims – thus revealing the limited oversight of insurers more generally and, in this case, the lack of legal means available to prevent the company from trading any earlier.

The Albert is therefore often cited as the catalyst[15] for a piece of legislation passed the following year – the Life Assurance Companies Act 1870 – which attempted to address such problems and establish a scheme of regulation specifically tailored to insurers. This in part reflected the view of the insurance industry by Parliament – described by the Select Committee of 1853 as “those useful institutions” – as playing an important role in the economy. It is noteworthy that even back in the 19th century, many were outraged by the introduction of the Act which to them represented ‘the mephitic influence of red-tape regulations’[16] – a sentiment that has surely been uttered in more recent times too. But ultimately, it was considered too costly for the state to rely on the effectiveness of market discipline at a time when the reputation of the industry was so sour it was being satirised in novels by Dickens. Indeed, for these reasons the 1870 Act was widely welcomed by professional bodies like the Institute and Faculty of Actuaries[17].

The 1870 Act introduced a number of elements aimed at regaining the confidence of policyholders in the insurance sector. First, insurers now had to stump up £20,000 (roughly £2m in today’s money) as security before they reached a certain size, which curbed the influx of new companies that, up to this point, had been entering the market at very rapid rates. In addition, accounts and balance sheets had to be published in a prescribed form, thereby introducing a degree of consistency and comparability between different firms. Importantly, firms now had to publish an actuarial report on their financial condition every five years and insurers had to take into account prospective liabilities under existing policies; in other words, they had to look forward.

The 1870 Act was clearly a major evolution of the state’s approach to insurance and established many of the building blocks that still underpin the regulation of insurers today – the importance of solvency, the role of the actuary, the interests of current and future policyholders, and a role for financial disclosure. Despite contemporary opinion at the time suggesting that a delicate balance needed to be struck between the role of the state and the activity of the market, the willingness of the state to legislate on these matters was a significant step in that it acknowledged more explicitly than before a legitimate public interest in insurance[18]. Despite this, many thought that the Act was not robustly implemented, nor did it deliver results overnight. Indeed, the 1870 Act was relatively non-interventionist compared to how insurance regulation would evolve throughout the 20th century.

But before we come to developments in the nearer term, it is worth noting that it wasn’t just the private sector that was mobilising itself in the insurance industry at this time. In 1865, Parliament passed the Government Annuities Act, which empowered the Postmaster-General to conduct life assurance business on behalf of the state. A year earlier, Gladstone (then Chancellor) delivered a speech to the House of Commons in which he was particularly scathing of the high lapse rates and expense ratios which it was felt were giving

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14 Clayton (1971). See also, Alborn (2009).

15 Rawlings (2015).

16 Alborn (2009).

17 Council of The Institute of Actuaries, Minute Book II: January 1854 – May 1866, see minutes of 9 March 1854 and 1 August 1857.

18 Rawlings (2015).

policyholders a raw deal. His remedy was for the state to compete directly with these companies in the mass market in a bid to raise standards or drive them out of business[19]. The insurance sector today is no doubt relieved that such a strategy is not being adopted by the PRA. And, in fact, the scheme was not very successful in the end, largely because it abandoned the collection of weekly premia by doorstop agents which ultimately increased lapse risk.

The state would later dabble in annuities once more but motivated by a different set of reasons this time – the funding of war. During the early part of the 20th century, I am told the Government extended annuity provision as a way to access funding for World War. Indeed, there is evidence that states have used the provision of insurance as a way to self-fund going as far back as the 15th Century; in 1425, the city-state of Florence introduced a specialised social insurance system, the so-called 'Dowry Fund', which enabled fathers to make regular deposits on behalf of their daughters to accumulate a dowry that would be payable upon their marriage[20] – all for the purpose of financing the state purse.

Over the course of the 20th century, regulation evolved further but the concept of supervision had not yet surfaced, at least not in the UK; the UK Board of Investment appointed its first actuary in 1917, but by this point the New York State Insurance Department was already employing 179 (supervision) staff. By the 1970s, an era of supervision – as distinct from regulation – had begun in the UK. The more recent history of insurance regulation over the last century is a major topic in its own right, so I only propose to outline a few points.

In 1923, the Industrial Assurance Act introduced a Commissioner to discharge statutory powers on behalf of the Board of Trade, with the idea of specific regulatory bodies introduced[21]. By 1946, the regulatory framework had expanded to include motor, aviation and transit insurance and, significantly, the deposit system was replaced by a more sophisticated solvency margin which specified that a particular margin of assets over liabilities should be maintained.[22].

A string of high-profile failures in the 1960s and 1970s – including the failure of Fire, Auto and Marine which left 400,000 (mostly motor) policyholders uninsured, and an even bigger failure in 1971 when Vehicle & General, with 1.2 million policyholders, collapsed – led to demands for further reform[23] at a time when a wave of consumer protection laws beyond the insurance sector had put regulation firmly on the agenda in any event.

Relatively speaking, up until the 1970s, individuals running insurance companies attracted scarce regulatory attention. This all changed in the 1970s when conditions around the fitness and propriety of senior individuals were introduced. In practice, however, the professional conduct of individuals – as well as the organisation and culture of insurance firms – has always mattered, particularly in earlier periods when reputation was the only means by which policyholders could assess the safety and soundness of insurers.

The failure of Equitable Life in 2000 – driven by an over-extension on the part of the company in offering guaranteed annuity rates on their products with insufficient reserves to pay out – reinforced the importance of a sound regulatory and supervisory framework and, once again, the case was reform was alive.

But perhaps the single largest factor in determining the nature of state involvement in the insurance sector towards the end of the 20th century was the UK's membership of the

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[19] Clayton (1971).

[20] Fratianni, and Spinelli (2006).

[21] Thoyts (2010).

[22] Ibid.

[23] Ibid.

European Economic Community. Not only did it require the UK to enact a package of European directives (colloquially known as Solvency I), but it has had a significant impact on the British state's involvement in the affairs of insurance companies ever since. Whilst Solvency I allowed the state to introduce further UK-specific initiatives for the insurance sector – such as the Individual Capital Adequacy Standards (ICAS) regime – insurers and regulators alike are now bound by European-wide maximum-harmonising requirements, most notably of course through the recent implementation of Solvency II.

## Conclusion

What can we learn from this? As with all history, one can take different views on what happened in the past, why it happened and whether it has any significance for us today. Personally, I take three things from it:

- First, there is a sound public policy case for the regulation of insurance. But looked at in the very long context of insurance history, the state's involvement in the direct regulation of insurance activity is a relatively recent phenomenon.
- Second, coming to the UK, a tidy-minded historian could easily identify some common themes which appear present in different phases of the British state's involvement in insurance, and perhaps weave them into a coherent narrative. I am less convinced. With the exception of a consistent interest in being able to raise revenue from insurance activity, the motivations and philosophies which have guided the British state's involvement in insurance matters seem to me to have varied very widely through time. The earliest phase of dispute resolution, the later phase of freedom with publicity, and our current phase of quite intensive prudential and conduct supervision seem to me to be very different.
- Third, although there are important technical differences between ICAS and Solvency II, the basic philosophy remains similar: market-consistent capital regulation coupled with supervision. I do not wish to underplay the huge efforts made by many people across the insurance sector in bringing in Solvency II, but compared to previous shifts in philosophy, the change appears quite modest. To return to my marine analogy, the good ship Solvency II has more up-to-date and useful features than the old one. But it is an evolution, not a revolution, in ship design. It still has cabins, a bow, and propellers. More importantly, we may have tuned up the engine a bit and altered course by a few degrees, but we have clearly not changed our course or our destination.

Thank you.

## References

***Adams, J.*** *The impact of changing regulation on the insurance regulation on the insurance industry*, speech delivered at the Nicholas Barbon Lecture, London, 2012.

***Alborn, T.*** *Regulated Lives: Life Insurance and British Society 1800-1914*, Toronto, University of Toronto Press, 2009.

***Andromachi, G. and Goldby, M. (eds),*** *Systemic Risk and the Future of Insurance Regulation*, London, Informa Law, 2015.

***Bailey, A.*** *The evolution of insurance regulation: a shifting scope and new frontiers*, speech delivered at the Nicholas Barbon Lecture, London, 2013.

***Bernstein, Peter. L***. *Against the Gods: the remarkable story of risk*, New York, Wiley, 1996.

***Black, M.A.,*** *'Chronological and Statistical Chart of the Life Associations Established in the United Kingdom from 1706 to 1863 Showing Where They Are, When & How They Disappeared,.* Published by Edward Stanford, 1864.

***Borscheid, P. and Haueter, Niels-Viggo.*** *World Insurance: The Evolution of a Global Risk Network*, Oxford, Oxford University Press, 2012.

***Clark, G.*** *'Insurance as an Instrument of War in the 18th Century'*, The Geneva Papers on Risk and Insurance, Vol. 29, No. 2, (April 2004), pp. 247–257.

***Clayton, G.*** *British Insurance*, London, Elek, 1971.

***Debbage, S. and Dickinson, S.*** *'The rationale for the prudential regulation and supervision of insurers'*, Bank of England Quarterly Bulletin, Q3 2013.

***Finsinger, J. and Pauly, M. (eds),*** *The economics of insurance regulation*, London, Macmillan, 1986.

***HeinOnline,*** *Citation: 4 Statutes of the Realm 978*, 1547–1624.

***Leonard, A.*** *'Contingent commitment: The development of English marine insurance in the context of New Insitutional Economic, 1577-1720'*, in Coffman, D'Maris, Leonard, A.B. and Neal, Larry (eds): *Questioning 'credible commitment': perspectives on the rise of financial capitalism*, Cambridge, Cambridge University Press, 2013.

***Lewin, C.G.*** *Pensions and Insurance Before 1800: A Social History*, East Lothian, Tuckwell, 2003.

***Persaud, A.*** *'How Not to Regulate Insurance Markets: The Risks and Dangers of Solvency II'*, Peterson Institute for International Economics, PB15-5, April 2015.

***Pearson, R. and Lonnborg, M.*** *'Regulatory Regimes and Multinational Insurers before 1914'*, The Business History Review, Vol. 82, No. 1, (Spring 2008), pp. 59–86.

***Plantin, G. and Rochet, JC.*** *When insurers go bust*, Princeton, Princeton University Press, 2007.

***Raynes, H.*** *A History of British Insurance*, London, Pitman, 1968.

***Rawlings, P.*** *'What can history tell us about insurance regulation?'* in Andromachi, G. and Goldby, M. (eds), Systemic Risk and the Future of Insurance Regulation, London, Informa Law, 2015.

***Thoyts, R.*** *Insurance Theory and Practice*, Oxford, Routledge, 2010.