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# Investment viewpoint

# The next input for insurance asset liability management

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September 2018

**Ritesh Bamania**
Head of Insurance and Pension Solutions

**Shadrack Kwasa**
Analyst
Insurance and Pensions Solutions

### Executive summary

The asbestos crisis, which emerged over a 100-year period, showed the material impact hidden risks can have on an insurance company. These were risks that nobody foresaw, but the crisis ultimately led to the insolvency of numerous insurers.

As the crisis unfolded, many insurers initially saw the threat to their businesses purely as a liability risk, but over time, it was clear that there were implications flowing through on both sides of their balance sheet.

The concept of incorporating ESG metrics into asset liability management is relatively new in some parts of the insurance industry, but we firmly believe it can help mitigate risk, diversify investment portfolios and improve solvency.

### Investment implications

Certain risks can impact both the liabilities side of the business but also have a negative impact on elements of company's investment portfolio. Some of these risks may not be fully reflected in asset liability models because the vulnerabilities may have not been screened through a sustainability lens. Such risk duplication may compound the negative effects of adverse events leading to financial, legal and reputational damage to an insurer.

Risk management that embeds ESG analysis could provide a robust framework for insurers to improve profitability and solvency in the long-run while also mitigating hidden risks.

ESG related strategies if implemented correctly could then either:

a. Seek to minimize return disruption if the risks do not materialize on either the asset or liability side
b. Improve the return experience on the asset side (both potential volatility and returns) if asset prices reflect ESG concerns in the future and the insurer has managed to avoid such risks on the liability side
c. Improve return potential on the asset side and act as a hedge for the liability side if ESG aspects impact both the asset and liability experience of the insurer.

We believe insurers have the potential to benefit from mitigating risk by diversifying and investing in assets that can better endure negative ESG-related risks. There may also be regulatory capital benefits for European insurers.

## The next input for insurance asset liability management

The asbestos crisis, which emerged over a 100-year period, showed the material impact hidden risks can have on an insurance company.

These were risks that nobody foresaw, but the crisis ultimately led to the insolvency of numerous insurers. So how can something with such a massive impact be completely unseen, and is it possible that insurers hold similar risks today?

In 1924 the Journal of the American Medical Association first identified[1] pulmonary asbestosis as a killer, but insurers were exposed to claims arising from hundreds of resulting deaths many years afterwards. As the claims started to materialise, the insurance market was shaken, leaving a question mark over the future viability of the Lloyds of London market. While claims levels relating to asbestos exposure today are lower than they were, they continue to materialise. In 2018, reinsurance group Swiss Re released a report[2] showing one third of European residents are still "potentially exposed" to asbestos at work or in the environment, suggesting future claims are still possible.

As the asbestos crisis unfolded, many insurers initially saw the threat to their businesses purely as a liability risk, but over time, it was clear that there were implications flowing through on both sides of their balance sheet. Many insurers faced duplication of risks on the liabilities side through their everyday business activities, and on the asset side through their investment portfolios.

This risk duplication can compound the negative effects of accidents, failures, scandals and disasters, leading to financial, legal and reputational damage to the insurer. Certain risks may not yet be fully reflected in asset liability models because the vulnerabilities have not been screened through a sustainability lens.

## Environmental, Social and Governance: a hidden asset-liability risk

The asbestos crisis laid bare the potential hidden risks in an insurer's balance sheet. Insurers are particularly sensitive to these types of risks because of the nature of business they conduct; providing financial protection against unknown future events. And such risk exposure could arise from a variety of sources.

One example would be the 2015 "Diesel-gate" car emissions scandal. This had a significant impact on the solvency of exposed insurers, with clear "primary," "secondary" and "tertiary" risk consequences.

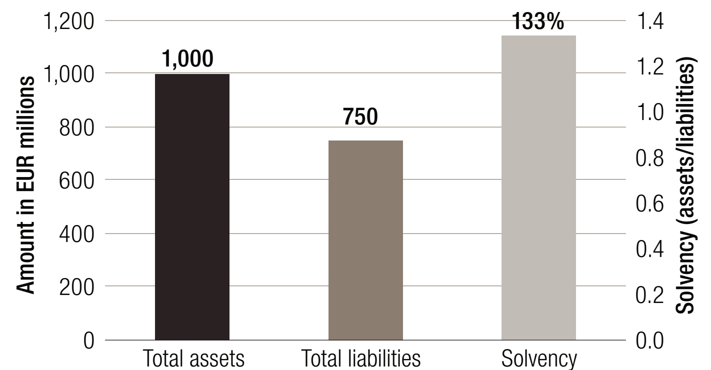
*Primary risk*

The financial impact from primary risks started to crystallise in September 2015 when carmaker VW admitted cheating environmental emissions tests. In the following months 600,000 cars across the group's brands were also found to be affected. Slowly, other manufacturers began to admit they had been doing the same. Affected manufacturers and related industry providers saw their share prices plummet over that period.

Insurers providing liability cover to these companies may have been on the hook for liability insurance claims from manufacturers resulting from the scandal. Some may also have been invested in securities issued by these companies, their competitors or related industries and suffered large losses on these investments.

## Case study: "Diesel-gate" insurance balance sheet impact

**FIG. 1 EUROPEAN INSURER A BEFORE SEPT 2015**

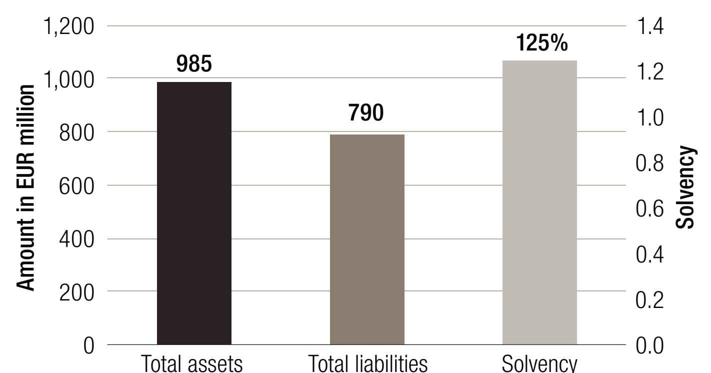



Source: LOIM. For illustrative purposes only.

| ASSUMPTIONS | RESULT |
|---|---|
| • Insurer A invests 75% of assets in short to medium dated investment grade corporate bonds.<br>• A EUR corporate bond index is a reasonable proxy for this proportion of the investment portfolio. | • The Markit Iboxx 1 – 5-year corporate bond index fell by 2% over the period of the scandal.<br>• Insurer A would have lost at least EUR 1000 million x 2% x 75% = 15 million over the period. Plus there could have been negative effects from some equity holdings (not quantified above). |
| • A typical European car manufacturer would have Directors & Officers (D&O) liability cover of c. EUR 600 million.<br>• A car manufacturer spreads this cover across 12 different insurers.<br>• Insurer A estimates the cost of expected D&O claims to be EUR 10 million p.a.<br>• The insurer purchases reinsurance cover for the total expected claims i.e. EUR 10 million. | • Emissions scandal cost to a car manufacturer was upward of EUR 30 billion.<br>• The share of the insurers liability is 600 million/12 = EUR 50 million.<br>• Reinsurers provide cover of EUR 10 million.<br>• Insurer is left holding a EUR 40 million claims cost. |

Source: LOIM. For illustrative purposes only. Past performance is not a guarantee of future results. results. Although certain information has been obtained from public sources believed to be reliable, without independent verification, we cannot guarantee its accuracy or the completeness of all information available from public sources.

**FIG. 2 EUROPEAN INSURER A AFTER SEPT 2015**




Source: LOIM. For illustrative purposes only. Past performance is not a guarantee of future results.

[1] Source: https://jamanetwork.com/journals/jama/article-abstract/253232.
[2] Source: http://www.swissre.com/media/news_releases/nr20180531_sonar.html.

*Secondary risk*
Two years after the initial financial hit, secondary risks started to play out. A recall of thousands of cars affected by the scandal left motorists without their vehicles. With no cars, they may no longer have had a requirement for an insurance policy, potentially leaving insurers to refund unexpired premiums and shoulder the associated administration costs. If some of these policies were not renewed or replaced, then an insurer may have had a less diversified underwriting book. This in turn may have negatively impacted the insurer's economic and regulatory capital position. The severity of this impact would depend on the extent of diversification of the insurers' assets and liabilities.

*Tertiary risk*
While the secondary risks from this scandal continue to play out, there are also tertiary risks which may not materialise until years or even decades later. Insurers that underwrite risks that are sensitive to catastrophes may yet feel further financial consequences from the environmental damage resulting from carbon emissions. There is evidence[3] of a correlation between detrimental environmental activity and global weather pattern changes. These effects may be a contributing factor to higher frequency and increased severity of natural disasters that may have an adverse impact on cost of cover for these providers.

### Emerging risks in the wider insurance industry

The impact of Environmental, Social and Governance (ESG) asset-liability risks can be significantly broader than those discussed above. For example, commercial property providers covering structures linked to the coal industry are increasingly experiencing asset stranding – where assets are prematurely written down or devalued. This is a direct consequence of significant progress in renewable energy, deteriorating air pollution and social pressures to reduce demand for thermal coal.[4]

The adverse impact on the balance sheet would likely be compounded where these insurers have an investment exposure to companies linked to the coal industry.

Certain public liability providers are also exposed to emerging delayed-onset ESG risks. These are legal or regulatory consequences that don't materialise financially until long after the initial event. For example, providers who have held policies with tobacco companies may be exposed to future public liability claims as a result of the now medically-established link between smoking and lung cancer. Lawsuits currently playing out in courts around the world may result in tobacco companies becoming liable for related healthcare costs.[5] This may trigger a claim event in related insurance policies. Investments in tobacco companies may also suffer losses should judgements go against them and insurers invested in tobacco companies and related industries may experience a significant balance sheet shock. This is an asset-liability risk some providers may not be fully prepared for.

### Example consideration for insurers

Insurers can take some practical steps to reduce their exposure to ESG risks. Below we set out a few examples (in no particular order):

| STAGE | EXAMPLE ACTIONS | POTENTIAL BENEFITS TO INSURER |
|---|---|---|
| a. Engagement | • Ensure appointed asset manager carried out appropriate engagement with corporate boards for relevant strategies. | • Provides an ESG "hedge" especially if liability exposure has correlation with such risks. |
| b. Exclusions | • Gather internal views and assess whether there could be any investment that is significantly correlated with liability risk. Seek to reduce exposure to such correlation risk by instruction asset manager to exclude such companies although appropriate risk and return consequences should be explored beforehand. | • Could lead to first mover advantage and gain from further positive asset returns if demand for such investments continues to increase.<br>• Reduction in adverse asset impact from future ESG-related downside events<br>• Reduced impact of secondary risks linked to ESG factors (eg. reputational and legal risks).<br>• Alignment of insurers with societal and regulatory trends |
| c. Carbon and water targets | • In the case of carbon emissions, many insurers are already starting to divest from fossil fuel intensive companies.<br>• The implications of all insurers seeking to improve exposures linked to topics such as carbon and water are significant as it could push these companies to transition to improved operating models to protect their future funding.<br>• For insurers, therefore, this is a long-term and sustainable investment approach. | |
| d. Sustainable business practices | • Explicitly incorporate other signals such as controversy level and ESG scores as part of assessing attractiveness of shares and bonds. | |
| e. Direct investing | • For example, investing in climate bonds – bonds that are connected to projects seeking to have a direct impact on climate related aspects. | |

Source: LOIM. For illustrative purposes only.

### Making improvements

While the concept of incorporating ESG metrics into the investment strategy is relatively new in some parts of the insurance industry, we firmly believe it will likely improve return potential and risk management on the asset side combined with providing a potential diversification (and in some cases, perhaps, direct mitigation) against some of the risks on the liability side. Risk management that embeds ESG analysis could therefore provide a robust framework for insurers to improve profitability and solvency in the long-run while also mitigating hidden risks.

[3] Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or securities. It should not be assumed that the recommendations made in the future will be profitable or will equal the performance of the securities discussed in this document.

[4] Intergovernmental Panel on Climate Change (IPCC) Special report on Climate Extremes 2007 and 2012.

[5] https://www.lloyds.com/news-and-risk-insight/news/lloyds-news/2017/11/lloyds-corporation-announces-coal-divestment-plan.

Whilst insurers may be able to enhance their asset liability models for some of the risks mentioned above, we appreciate that the quantification of some of the known and unknown risks can be extremely difficult. ESG related strategies if implemented correctly could then either:

a. Seek to minimize return disruption if the risks do not materialize on either the asset or liability side
b. Improve the return experience on the asset side (both potential volatility and returns) if asset prices reflect ESG concerns in the future and the insurer has managed to avoid such risks on the liability side
c. Improve return potential on the asset side and act as a hedge for the liability side if ESG aspects impact both the asset and liability experience of the insurer.

We believe insurers have the potential to benefit from mitigating risk by diversifying and investing in assets that can better endure negative ESG-related risks. There may also be regulatory capital benefits for European insurers. Ultimately, we believe risk management that embeds ESG analysis provides a robust framework for insurers to improve profitability in the long-run while also mitigating hidden risks.

The future occurrence and impact of ESG related negative risks may be difficult to quantify today, and there are various debates around whether such risks truly exist. However, the uncertainty around this topic cannot be refuted and this in itself is a good reason to consider such a framework.

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