Plenum
Insurance Linked Capital

Sustainable Development Goals (SDG)

SDG Contribution of the CAT Bond Market

To What Extent do CAT Bonds Meet the Requirements of the 2030 UN Agenda for Sustainable Development?

In its Agenda 2030, the member states of the United Nations have developed a roadmap for transforming the world towards sustainability in society, economy and environment by the year 2030. The Agenda 2030 includes 17 goals and 169 targets. Since companies can hardly be successful in an unstable society, the SDG are an appeal to the corporate world to contribute to sustainable development through their investments, customized solutions and business practices.

1. Impact

There is a variety of negative influences that can destabilize a society. To counter these influences, it is necessary to take action which produces a positive result or a desired effect. In this process, cause-and-effect relationships can unfold their potential directly or indirectly. For achieving goals, financing is critical. However, the term insurance does not exist in the SDG language.

The example of climate change clearly shows that in addition to direct action to reduce climate-damaging behaviour, it is imperative to protect those regions or civil societies which are particularly exposed to climate-related risks.

SDG Contribution of the Direct and Reinsurance Businesses

The extent of the contribution of direct insurers to implementing the UN action plan is outlined in the latest study of the German Agency for International Cooperation (GIZ) titled "How Insurance Contributes to the 2030 Agenda for Sustainable Development" from the year 2017 conducted for the German Federal Ministry for Economic Cooperation and Development.

According to the study, the insurance industry plays a specific role in achieving the UN goals for sustainable development. Since direct insurers do not handle all risks on their own, the reinsurance industry as the downstream entity fulfils an important function. Without it, a broader risk coverage would not be possible. In this light, the contribution of the reinsurance industry is closely linked to that of direct insurers.

1.1. Different Effects of Preventive Measures

There are different types of prevention. Prevention can refer to a range of suitable measures to influence the occurrence of an event. This is where financing in the traditional sense kicks in. Another type of prevention is intervention after the occurrence of an event to counteract a worsening of an existing situation. Independent of the time dimension, selective prevention is aimed at particularly vulnerable people, i. e. "indicated prevention" for already affected people. Precisely at this point, when it comes to repairing severe damage from a natural disaster, the CAT bond market comes in. Particularly in a phase of transformation, like the one we are in right now because of climate change, this type of prevention makes a valuable contribution. In such a phase, preventive measures do not yet have the desired effect and the impact of natural disasters is still very significant. For this reason, it is not uncommon that all preventive measures are taken at the same time to maximize the effect.

1.2. Financing versus Insurance

Companies that finance immediately effective measures earn their "return" indirectly through the creation of long-term stability in economy, ecology, politics and society. They place the emphasis on the investment character, hoping that the investment will be profitable. If investments fail to materialize, the return decreases over time.

In the insurance business it is vice versa. Under certain conditions, the increase in risk may lead to an expansion of the business sector, with the effect that insurers immediately profit by this circumstance through premium income. From this, one could conclude that the insurance industry benefits from the misery of others. It is undisputed that the insurance industry has to pay out huge claims when a natural disaster occurs. In the case of an event, it is the insured who benefits from the insurance pay-out which is financed by the insurance company. So, the insurance business does not profit by the misery of others, but by their need for protection. It plays a key role in promoting rapid reconstruction through private sector financing instead of tax money.

In the SDG world, the term "financing" is not defined. So, it can also mean providing capital for an insured event. Capital set aside to cover the eventuality of the risk is tied up and not available for other investments. In this light, contrary to traditional reinsurance, the capital market-based risk transfer with its 1:1 coverage is a special financing model which underwrites risks worth a multiple of the equity base.

As with progressing climate change, the equity capital of the traditional reinsurance industry may run short, the capital market has a significant and responsible role to play. We have gone full circle when it comes to implementing the polluter-pays principle on a global social scale. We are suffering the consequences of climate change that we have caused or contributed to.

1.3. Discussion

The current wording of the 17 SDGs and their 169 targets implies that the insurance industry, i. e. the assumption of (re)insurance risks, contributes very little or not at all to achieving the goals. However, it is hardly conceivable that the initiators, authors and supporters of the UN sustainability goals take the view that the business model of the insurance industry fails to make a contribution.

According to certain views, the form-over-substance principle should be applied to the global UN action plan. This would mean that from an insurance perspective, there was no right or starting point to act on the action plan. One example of this are CAT bonds whose aim is to combat Ebola. SDG 3 "Good Health and Well-Being" is phrased in such a way that it needs a lot of imagination to discern from the wording that this type of prevention is covered under the SGD.

One could also argue that the insurance contract is only a contingent liability for the insurance company or a financing commitment. In other words, capital will only flow once an insured event has occurred. If no event occurs, no direct financing is provided. Hence, this is not a measure for goal achievement. This way of thinking disregards the fact that insurance coverage is required to create a stable investment environment that attracts investment capital. More often than not, being insured is a prerequisite to minimize the risk for investors or to comply with regulatory requirements. It also helps to build basic trust among the population to prevent migration.

It is undisputed that the loss of an uninsured home can lead to significant distortions and perhaps even poverty. Seen in this way, insurance is a major driver and a preventive measure to fight poverty. This is all the more important as property losses are increasingly caused by the effects of climate change.

The argument that insurance is not a direct benefit which, moreover, does not necessarily involve a cash flow, can be disproved by the following example. Filling a granary creates food security for a society threatened by famine. The provision of capital for protection against harvest failure has the same effect. Also, it promotes a sense of security and functions as a confidence-building measure which is essential for further engagement in the region. Creating confidence is based on the principle of development and protection of the achievements.

The amount of the insurance premium is an indicator of the probability of occurrence in relation to the expected loss. It is determined with the help of risk models and provides valuable information on the degree of exposure of a region or society. This information is vital when it comes to taking action to improve the situation. Seen in this way, the insurance industry thus makes a further contribution to protecting the world against the effects of natural disasters.

From all this it follows that distinguishing between actual cash flow (financing) and the provision of capital for a contingency (insurance) is not useful.

Critics who deny the efficacy of insurance in the sense of SDG argue that the insureds ultimately pay their future losses themselves through the premium payments. This view can be countered by the fact that it needs a facilitator to enable a large number of policyholders to implement the principle of solidarity which makes insurance premiums affordable. The argument that the policyholders pay their losses themselves is only true when the loss occurs after a certain period of time, so that the sum of the accumulated premium payments equals or exceeds the full insurance coverage. If, however, the loss occurs earlier than on average expected, the insurer has to cover the loss from its own resources. This is always the case when a new risk type is introduced and a market has to be established. So, the insurance industry takes on the role of an instigator until the principle of solidarity kicks in.

A closer look at the rationale, motivation and intention behind the UN action plan reveals that through its work, the insurance industry also practices purposeful SDG engagement. In essence, its efforts meet the requirements of the UN action plan. The question how significant the contribution is will be discussed in the following.

2. Priority Goals (Scope)

In our view, five of the SDG goals are currently covered by the CAT bond market, to varying degrees:

Goal 1: End poverty in all its Forms and Everywhere

Goal 1 aims to fully eradicate extreme poverty by 2030 and to reduce at least half the proportion of people who live in poverty in all its dimensions according to national definitions. Poor people are particularly vulnerable to economic and political crises, loss of biodiversity and ecosystem services, natural disasters and violence.

Goal 3: Good Health and Well-Being

Goal 3 seeks to achieve universal health coverage and access to affordable essential medication and vaccines by 2030. This includes the building of quality healthcare systems particularly in less developed countries, professional education in healthcare and controlling diseases.

Goal 9: Industry, Innovation and Infrastructure

The targets of Goal 9 include the development of resilient infrastructure, the promotion of sustainable industrialization and the support of innovation. Investments in a sustainable infrastructure and scientific and technological research boost economic growth, create jobs and promote prosperity.

Goal 13: Climate Action

Climate change is a key challenge to sustainable development. Warming of the earth's atmosphere causes changes in the global climate which endanger the livelihood of large parts of the population in least developed countries. In developed regions, it is mostly the infrastructure and certain industries which are exposed to the risks of climate change.

Goal 17: Partnership for the Goals

To successfully implement the 17 goals for sustainable development, an extensive funding base beyond official development assistance is required. In addition to public and private funds, politics is asked to make a greater contribution to achieving the goals.

Starting Points for Action (Ambitions)

2.1. Goal 1: End Poverty in all its Forms and Everywhere

For people who have escaped poverty not to fall back into it, it requires measures to strengthen their resilience and the building of social security systems.

Starting Points

To strengthen the resilience of societies against poverty, factors leading to poverty need to be neutralized. So, failure to rebuild a private home is always a key driver of poverty which may go beyond homelessness. It is not uncommon that the home is the most valuable asset and leaving it uninsured can lead to immediate poverty in case of an event. The protection of assets is a basic element of insurance and serves its purpose both in developed and less developed regions.

CAT bonds help to directly improve the resilience of the poor and people in precarious situations and can reduce their exposure and vulnerability after climate-related extreme events.

The rapid provision of funds through CAT bond investors in the event of a claim has a stabilizing effect on the affected society. Quick reconstruction has a multiple effect: A main driver of the rising SDG engagement is the growing realization that major loss events, increasingly caused by climate change, cause great misery and pose major challenges for the affected societies (e. g. epidemics, migration, unemployment, reconstruction, etc.). It is about alleviating suffering and the grave impact of natural disasters through a rapid financing of reconstruction. Time is a crucial factor to build confidence and improve the living conditions.

2.2. Goal 3: Good Health and Well-Being

One target which is relevant to the CAT bond market aims to reinforce the capacity of all countries and the developing countries in particular in the areas of early warning, mitigation and management of national and global health risks.

Starting Points

There are CAT bonds that cover pandemic risks. Their aim is to quickly contain the spread of diseases like Ebola by providing funds for emergency measures.

In 2017, the World Bank launched the first ever pandemic insurance in the form of a CAT bond in the amount of USD 500 million to ensure the financing of emergency measures to prevent the spread of pandemics (Pandemic Emergency Financing Facility – PEF). Scientists believe that an outbreak like the Spanish flu of 1918 today would claim more than 33 million lives in just nine months. The costs are estimated at nearly five percent of the worldwide BIP. According to the head of the World Bank, this would be equivalent to more than USD 3.6 trillion. After the Ebola outbreak in West Africa in 2014, which revealed major shortcomings of the crisis management system, it turned out that the economic losses were USD 10 billion. The CAT bond was structured in such a way that the premiums were financed by various industrialized countries such as Germany and Japan whereas the risk of losses was assumed by the capital market. CAT bonds make a major contribution by quickly and purposefully providing financial resources for fighting pandemics.

2.3. Goal 9: Industry, Innovation and Infrastructure

Focus of this goal are improving the resilience of infrastructure and sustainable industrialization.

Starting Points

CAT Bonds make a sustainable contribution to increasing the resilience of infrastructure. When infrastructure was destroyed by natural disasters, reconstruction is often subject to new and stricter construction and safety standards which improves the resilience of infrastructure against future events.

Sustainable industrialization requires a certain level of stability in economy, politics, ecology and society as well as confidence that destabilizing effects are neutralized quickly. The latter is particularly important when risk-exposed areas take the route of large-scale industrialization.

2.4. Goal 13: Climate Action

Goal 13 calls on countries to include climate protection measures in their national policies and to support each other in meeting the challenges.

Starting Points

The target of increasing the resilience and adaptability against climate-related dangers and natural disasters in all countries is effectively supported through the use of CAT bonds. Goals 13 and 9 are closely linked.

2.5. Goal 17: Partnership for the Goals

One target is the mobilization of additional funds for developing countries from various sources.

Starting Points

The World Bank, countries and subsequently the capital market perform important financing functions. Covering earthquake, flood, weather event and pandemic risks is the basic prerequisite to create confidence among investors to bolster the economy of a developing country. What good are investments if they become worthless because of a natural disaster and reconstruction is out of the question?

Guarantees of financing reconstruction by insuring assets are crucial for attracting international capital. Instead of tax money, private funds are provided through the capital market.

CAT bonds make an alternative financial contribution beyond public funds, thus helping to relieve public budgets. This trend is also driven by the increased social engagement of the capital market.

The following examples of task sharing between public sector and capital market show the starting points of the insurance industry to contribute to the SDGs.

As mentioned under item 3.2., the World Bank launched a pandemic insurance. The International Bank for Reconstruction and Development (IBRD), a development bank administered by the World Bank, issued the Mexico MultiCat Bond and subsequently the "Fonden 2017 CAT Bond" with an issue volume of USD 290 million for the insurance of natural disasters in Mexico. The premiums were paid by the government of Mexico. This CAT bond was issued in August 2017 and only a month later, the event occurred.

3. Conclusion

We are currently in a phase of discussion about the interpretation prerogative in which the form-over-substance principle is being supported with substantial arguments, to the point of being regarded as generally accepted.

A closer look at the exact wording of the UN action plan for sustainability reveals that the insurance industry is not mentioned explicitly. While goals to prevent climate change and reduce the impact of natural disasters are outlined, no measures are defined to fight poverty (falling back into poverty) or reconstruct infrastructure after a natural disaster. The initiators of the UN action plan, however, do count on the private sector which is regarded as an indispensable partner in achieving the SDGs and also includes the insurance industry.

It is not conceivable that the intention of the UN action plan for sustainability is to only achieve goals. It is also about protecting the achievements and settling claims incurred. Seen in this light, the contribution of the CAT bond market, whether direct or indirect, is reflected in the UN action plan, particularly when it comes to maintaining social stability.

The study of the German Agency for International Cooperation (GIZ) titled "How Insurance Contributes to the 2030 Agenda for Sustainable Development" from the year 2017 conducted for the German Federal Ministry for Economic Cooperation and Development gives an indication of how to read and understand the UN action plan.

Under SDG 13 (Climate Action), it says "Catastrophe Insurance protects a variety of stakeholders, from companies and infrastructure to the most vulnerable". This suggests that it is generally accepted that NatCat coverage does indeed make a contribution, irrespective of the wording.

The UN action plan primarily consists of taking measures targeted at creating stability. Once stabilization goals have been achieved for the first time, the question arises how to protect the achievement. The need for protection increases with the probability that SDG prosperity once achieved can be destroyed again. The motivation to take immediate measures rises when it is ensured that the desired result can be permanently sustained. If this is not the case, the usefulness of the measures will be questioned, as the principle of sustainability is based in particular on the aspect of longevity, i. e. the ability to preserve achievements for the future.

For all these reasons, the CAT bond market as a carrier of natural disaster risks makes a valuable contribution when it comes to shaping the phase of transformation in the sense of SDG.

Final Remark to Put Things into Perspective

Those who perceive catastrophe bonds only as an investment instrument fail to see the special features of this form of investment, i. e. their function as a facilitator for taking social responsibility and their stabilizing effect on the existing reinsurance system.

The question is not whether it is the role of investors to take on reinsurance risks, but how we collectively confront the increasing losses, which are more and more often caused by natural disaster events, and the resulting challenges.

Anyone willing to take social responsibility places emphasis either on the impact an investment in catastrophe bonds makes or on the challenge involved. Taken from this perspective, capital optimization in the insurance industry by transferring risks to the capital market is just a means to a good end.