



*Ken Mungan, FSA MAAA, Chairman
The Insurance Industry: Arthropod or Vertebrate*

The insurance industry is going through structural changes brought on by the zero interest rate environment and regulatory trends to increase transparency. As industry participants, we must decide how to respond to these trends. My view is that the industry should be vocal and active to demonstrate the important role that insurance plays in the effective functioning of the economy. In particular, we must make complementary structural changes to increase the range of investments made by insurers. This will allow the industry to provide solutions to important societal problems, such as climate change and the risks associated with increasing longevity.

Historically, insurance uses two primary mechanisms to help people and organizations manage the risks that they face: pooling and investment. The property and casualty industry emphasizes pooling of risks over the near-term, and without these solutions, people and businesses would not be able to confidently participate in economic life. Life and health insurers rely on pooling and long-term investment of premiums as they are solving long-term risk management problems: providing life insurance, creating protected lifetime income for retirees & providing long-term care solutions. This is evident as the asset base of the life & health industry is approximately four times larger than the P&C industry, including assets held in general and separate accounts.

In response to the pandemic, central banks took immediate and decisive action to protect credit formation in the global economy. They have lowered interest rates to zero and intervened in the capital markets. Following the script used to limit economic damage in the Global Financial Crisis, central banks acted very fast. This action was warranted; without a functioning banking system and the formation of credit, an economy cannot function.

In addition to these decisive actions, the secular trend of aging societies and slowing population growth is also weighing down interest rates. There are other secular trends affecting the insurance industry as well. The watchphrase in financial regulation is increased transparency. With increased transparency on an insurer's risk profile, it is assumed that the system will function more efficiently. This trend is manifested in updated regulations covering solvency, reserving and financial reporting. In addition, there is a trend towards higher frequency, more transparent investments. Today, we have exchange traded funds that trade over a thousand times a second.

The zero interest rate environment and these structural trends are affecting the industry in profound ways. The risk bearing capacity of the insurance industry is shrinking. However, unlike a collapse in credit formation which occurs suddenly, this change is occurring slowly. As a result, it may not trigger any crisis management response.

Insurers are organizations run by and regulated by people. Mid-level and senior executives are overseen by regulators and rating agencies; each organization has its own interpersonal dynamics. My belief is that a byproduct of increased transparency for the risk profile of insurers could be a reduction in risk taking. This would be an emergent property of a complex system with many people included in a chain of decisions that result in taking or not taking a specific risk.

For an insurance executive looking at the market environment today, the simple, safe choice would be to offer insurance using pooling alone. Insurance solutions provided through pooling and investment could be regarded as the product of another time, a time when rates were higher and the regulatory environment was less constrained. In my view, this would gradually lead to an industry that is smaller and societies that are less protected from the risks they face.

As an example, let's look far afield at an example in evolutionary biology. Evolution has produced two distinct solutions to the problem of the skeleton. The skeleton helps an organism support its weight, maintain its shape and protect its internal organs. It provides protection, just as insurance products protect people and organizations in a society. Vertebrates, which include mammals, birds and reptiles, have an internal skeleton. Arthropods, which include insects and crustaceans, have an external skeleton. Both approaches provide the creature with protection. If the insurance industry were to switch from pooling & investment to pooling alone, it would be similar to switching from the vertebrate solution to the arthropod solution to creating a skeleton.

At first glance, this may seem fine. After all, it might be exciting to have external armor plating for a skeleton like a lobster. However, in time, the serious deficiencies of this change would become apparent. Vertebrates have a significant evolutionary advantage. An internal skeleton allows the creature to grow to immense size. It is no coincidence that the largest creature on earth, the blue whale, is a vertebrate. An internal skeleton allows for continuous, gradual growth. Arthropods need to shed their entire skeleton and manufacture a completely new one in order to grow. As a consequence, they are destined to remain small. The coconut crab is the largest living arthropod, and you could easily pick one up.

If the insurance industry switches from pooling and investment to pooling alone, our economic growth will be diminished. The investment component of the insurance industry plays a key role in the ability of our economies to grow over the longer-term.

In addition, the investment component of the insurance industry is needed now, more than ever. One of the greatest problems facing humanity today is climate change. Exciting innovations, driven by science and technology, are being created that offer sustainable solutions to climate change. In areas such as power production, water management, agriculture, waste management and building homes and offices, sustainable systems are being developed. The driving force behind the creation of these systems comes from equity investors. However, the driving force to implement these new solutions at scale comes from debt investors. Insurers and pension plans will be needed to finance the massive investment in infrastructure necessary to create sustainable societies.

In closing, let's go big! The insurance industry must commit itself to using both pooling and investment as the mechanisms to manufacture insurance. In this way, the industry can help people and organizations protect themselves from the full range of risks that they face. Without action, the industry could gradually withdraw from the investment sphere, as each participant responds to low interest rates and regulatory constraints. Increasing the focus on the investment-side of the industry will not happen randomly. Political leaders, at the highest level, recognizing the long-term benefits provided by the insurance industry must encourage the industry's investment role. Regulators must respond with changes to encourage insurers to make long-term, often illiquid, infrastructure investments. Rating agencies would reflect this framework in their ratings process. At the end of this chain, insurance executives would respond by offering investment-intensive products that address long-term risk management problems faced by people and organizations.