

# CHAPTER I

## INTRODUCTION

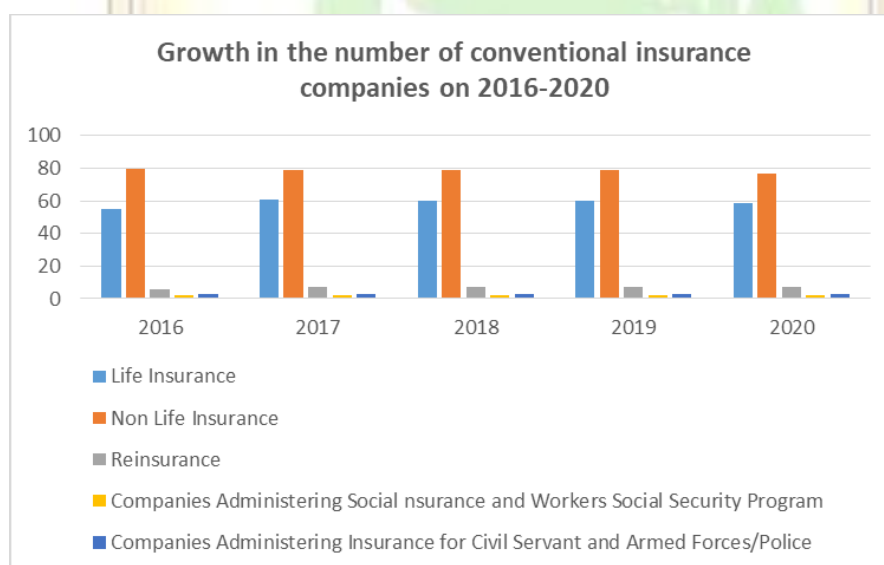
### 1.1 Background

In everyday life, human beings will not be separated from risks, because no one can predict what will happen in the future. Future risks can occur to a person's life, for example; death, illness or the risk of being fired from his job. Every risk faced must be overcome so as to minimize the losses that will occur. To reduce risks that we do not want in the future, such as the risk of loss, risk of fire or other risks, a company is needed that is able to bear these risks. One of the efforts to anticipate risks is to find other parties who are willing to overcome these risks, including insurance companies (Directorate General of State Treasury:2020).

According to the Big Indonesian Dictionary, insurance is coverage, an agreement between two parties. The definition of insurance according to the Monetary Services Authority, which is an agreement between the insurance company and the policyholder, which is the basis for receiving premiums by the insurance company in exchange for or reducing losses. While, according Undang-Undang (Indonesia Law) Number 2 of 1992 Insurance or coverage is an agreement between two or more parties by which the insured party binds itself to the insured by receiving insurance premiums to provide reimbursement to the insured for loss, damage, or loss of expected profits, or legal liability to a third party that the insured may suffer, arising from an uncertain event, or to provide a payment based on the death or life of an insured person.

Life insurance is an insurance product that provides guarantees in the form of compensation or sum insured to the family of the customer who died, had an accident, permanent disability, or other accidental risks. Because of its role, this insurance product is important to have, especially for those who act as the only backbone in the family. The purpose of conventional life insurance is to cover potential loss of income. If a person who played the role of the backbone of the family dies, then the family left behind will not lose the source of income. The types of conventional life insurance are term life insurance, whole life insurance, unit-linked life insurance, and dual-purpose life insurance ([www.manulife.co.id](http://www.manulife.co.id)).

Figure 1.1 Growth in the number of conventional insurance companies in 2016-2020



Data sources: Statistics of Indonesia Insurance 2020

The following figure 1.1 showed the growth in the number of insurance companies. In the end of 2021, there were 59 conventional life insurance companies, 77 general insurance companies, seven reinsurance companies which provide financial protection to insurance companies, two social security programs,

and three insurance providers for government employee (Pegawai Negeri Sipil, PNS) and the Indonesian National Police (Kepolisian Negara Republik Indonesia, POLRI) licensed and regulated by the The Monetary Services Authority (The Monetary Services Authority, 2021).

Figure 1. 2 Growth of Capital, Employee Expense, and Premium Income in 2016-2020 (Triliun)

	Capital	Employee Expense	Premium Income
2016	18.919.883	-	157.728.271
2017	23.977.418	6.484.381	183.332.684
2018	26.392.212	7.158.462	184.264.106
2019	27.844.480	7.717.012	186.263.271
2020	33.769.260	7.671.022	170.833.122

Source: The Monetary Authority, 2020

Indonesia's conventional life insurance industry experienced an increase in insurance capital in 2020 of 21.27% compared to the previous year of 5.50%. The COVID-19 pandemic has had a real impact where conventional life insurance companies have to add a large capital of Rp. 27,844,480 trillion (2019) to Rp. 33,769,260 trillion (2020).

The Indonesian conventional life insurance industry experienced an increase in employee expense in 2018 of 10.39% compared to the previous year. Thus, conventional life insurance companies must add employee expense of Rp. 6,484,381 trillion (2017) to Rp. 7,158,462 trillion (2020).

Indonesia's conventional life insurance industry experienced a decrease in insurance premium income in 2020 by -8.28% compared to the previous year. Before the COVID-19 Pandemic insurance companies grew only 1.08%. However, the COVID-19 Pandemic had a real impact where premium income fell from Rp. 186,263,271 trillion (2019) to Rp. 170,833,122 trillion (2020). Premium income received by conventional life insurance companies decreased -8.28% from the previous year, from IDR 163.50 trillion (2019) to IDR 152.90 trillion (2020).

The conventional life insurance industry experienced a large increase in inputs so that life insurance experienced inefficiencies. Meanwhile, output tends to fall. Supposedly, the greater the premium income received by the company, the more efficient the insurance company is. Meanwhile, the greater the paid-up capital and the greater the employee costs that must be incurred, the more inefficient the insurance company will be.

According to the State Bank of Pakistan (2005), the growth of the insurance sector will contribute to economic growth. One of the measurements of good insurance performance growth is seen in its efficiency. The efficiency of an enterprise means making the best use of the available resources. Efficient companies show better performance with input utilization (Janjua & Akmal, 2015). According to Abidin and Endri (2010), one of the most important aspects for the success of an insurance company is efficiency. Efficiency is indeed one of the performance parameters that are quite popular, but efficiency alone is not enough to be a performance parameter of an insurance. The efficiency of an insurance must at least be followed by good risk management, so that in addition

to being able to get maximum profit, insurance is also required to be able to control existing risks.

The research related to the efficiency of life insurance is a study by Shieh et al. (2020) with the title "Efficiency of Life Insurance Companies: An Empirical Study in Mainland China and Taiwan". This research shows that environmental factors significantly affect the efficiency of all life insurance companies. After the adjustments, the efficiency score of life insurance companies in mainland China and Taiwan drops to 14.01% and 26.64% in the regional frontier, and 38.31% and 12.22% in the metafrontier frontier. Before 2008, the life insurance companies in Taiwan were more efficient than those in mainland China. Different with research from Kader et al. (2010) with the title "The Cost Efficiency of Takaful Insurance Companies." This research shows that larger Sharia insurance companies have a better level of efficiency.

Based on this, the authors want to analyze the efficiency of conventional insurance because output (premium income) tends to decrease in 5 years, while input (capital and employee expense) increases too much. Thus, it is necessary to do research on whether the conventional life insurance industry is able to survive with certain inputs so as to produce maximum output by using data from conventional life insurance financial reports owned by insurance companies on each company's website. Based on the phenomena that occur and also the various backgrounds of the problems mentioned above, it is necessary to conduct research with the title **"Analysis of the technical efficiency of conventional life insurance in Indonesia in 2016-2020 using the Data Envelopment Analysis (DEA) method"**.



## 1.2 Problem Formulation

Based on the background that has been described, the formulation of this research problem is to determine the efficiency of insurance through efficiency scores

## 1.3 Benefits of Research

The results of this study are expected to be useful for:

1. Researcher

This research is useful to add insight and knowledge about how the efficiency of conventional life insurance is using *Data Envelopment Analysis*.

2. For Companies

Provide input on the efficiency assessment of conventional life insurance companies using *Data Envelopment Analysis*.

3. For Government

In economic development, data insurance accelerates the pace of economic growth and seeks to promote general welfare because it raises public funds.

4. Investors

To provide information to investors and users of the company's financial statements regarding the efficiency of conventional life insurance, so it is hoped that this information can be considered and guided by investors in making decisions.

5. Next Researcher

This research is expected to spur better research on the efficiency of conventional life insurance. This research is also expected to add knowledge and

insight to researchers regarding conventional life insurance so that it is expected to be information to conduct further research.

#### **1.4 Scope and Limitations of the Research**

This study only discusses limited to conventional life insurance in 2016-2020, only using technical efficiency and using the *Data Envelopment Analysis* (DEA) method.

#### **1.5 Systematic Writing**

Systematics of writing is made to facilitate the preparation of this thesis; it is necessary to determine a good writing systematically. The writing systematics is as follows:

##### **Chapter 1: Introduction**

The chapter contains the problem identification why this topic was chosen, problem statements, research objectives, research benefit, and systematic writing.

##### **Chapter 2: Literature Review**

The chapter contains the references and literature reviews relating to definition of efficiency, components of efficiency, efficiency measurement, type of efficiency, and research framework.

##### **Chapter 3: Research Methodology**

The chapter contains the operational research objective, research location and time, sampling techniques, data collection technique, and data analysis technique, model in *Data Envelopment Analysis*.

#### **Chapter 4: Result**

The Chapter contains discussion of an overview of the result and discussion

#### **Chapter 5: Conclusion**

The Chapter contains the conclusions of the analysis and recommendations.

