

## **“Financial Impact of Natural Calamities on Life Insurance Companies”**

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**ABSTRACT:** *People, individuals and organizations, are risk-prone. There are three main ways to tackle risks. The 3 ways of dealing with risks are: Eliminate, Transfer, Exploit. Purchase of an insurance is an example of Transfer of risk. In this research paper researcher is mainly concentrating on the financial impact of natural calamity on Life Insurance Company. Quarter on quarter analysis has been used to compare and analyse the selected data. The company selected is listed under NSE. The assumption in this research paper is that the victims have held life insurance policies and claims have been raised by the heirs or nominees of those who lost their lives in natural disasters.*

**KEY WORDS:** *Quarter on quarter analysis, Financial Impact, Natural Disaster, Life Insurance, HDFC life.*

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### **I. INTRODUCTION:**

Natural disasters in India, many of which are linked to India's climate, cause enormous loss of life and property. Earthquakes, floods, eruptions, loss of land and hurricanes can cause a natural disaster. Floods are India's most common natural disaster. Disasters are measured by the extent to which natural or human dangers affect human society and the environment. The scale of disasters in human societies is measured by the cumulative effects of death, injury, financial loss and normal life disruption. Insurance can play a part in reducing each one's impact. August 2018 was the years where Southern of part faced huge losses due to flood. Insurance is an effective supplementary measure for unexpected natural hazard losses. Insurance cannot reduce death, injury and financial losses, but it provides readily available cash to cope with them at a time of extreme stress, thereby significantly improving the recovery phase of disasters and thus reducing normal life disruption India's insurance industry is made up of 57 insurance companies, 24 in life. Insurance and 33 in non-life insurance. Life insurance is a contract between an insurance policy holder and an insurer if the insurer promises to pay a designated beneficiary a sum of money (benefit) in exchange for a premium on the death of an insured person (often the policy holder). Other events such as terminal disease or critical illness can also trigger payment, depending on the contract. The data were analysed using quarter on quarter analysis and data is has been presented using graphs and tables. This paper deals with natural disasters such as floods affecting life insurance companies. In this research paper Life insurance is viewed in the overall context of risk transfer and prevention of losses.

The companies selected are HDFC SBI and ICICI. The only reason for choosing these companies is that only three life insurance companies are listed under NSE.

### **II. REVIEW OF LITERATURE:**

- Insurance and risk selection in natural disaster; with special reference to Sri Lanka insurance industry by Bimali Wijesundara and Sanjaya Thilakarathne. This conference Researchers have identified several factors affecting natural disaster insurance in Sri Lanka and it has clearly been shown that in recent years the amount of funds allocated by insurance institutions has gradually increased. (Potenza & Zotta, 2016)
- The Insurance Market of Natural Hazards for Residential Properties in Italy by Fabrizio Terenzio Gizzi, Maria Rosaria Potenza, Cinzia Zotta. This research paper focuses on Italy and insurance sector in Italy. This study covered the main aspects and limits of the insurance market of natural hazards for residential properties in Italy. It analysis the cause for the low insurance penetration rate in Italy. Further the study aims to investigate the insurance market in Italy and the examination of the features and possible disadvantages of the insurance coverage available. (Potenza & Zotta, 2016)
- Impact of Natural Disasters on Financial Development by Subhani Keerthiratne Richard S. J. Tol. This research paper suggests that natural disasters have a significant positive effect on contemporaneous private

per capita credit. The positive impact on private credit of natural disasters is further mitigated by higher economic dependence on agriculture.(Keerthiratne & Tol, n.d.)

- Insurance against Losses from Natural Disasters in Developing Countries. Evidence, gaps and the way forward by Joanne Linnerooth-Bayer, Reinhard Mechler. This paper examines the recent experience in developing countries with insurance and other risk financing instruments, informed by experience in developed countries, to provide insights into the effectiveness to reduce economic insecurity. This study focuses on the post-Katrina experience in US.(小野 et al., 2017)

### III. RESEARCH DESIGN

**Statement of Problem:** Natural calamity is always an uncertainty. Analysing the loss caused by natural calamity is difficult work. Thus in this research paper we are trying to analyse and compare the financial impacts of natural calamity on life insurance company.

**Source of data:** For the purpose of this research paper, secondary data were collected. Data were collected from published articles, annual reports of companies, other published data and regulatory bodies. The historical data has been collected from the online websites like money control, HDFC life co, Better India, Financial Express.

**Objectives:** To understand the impact of natural disaster on life insurance companies’ financial performance with detailed analysis of quarter on quarter results.

**Limitations:**

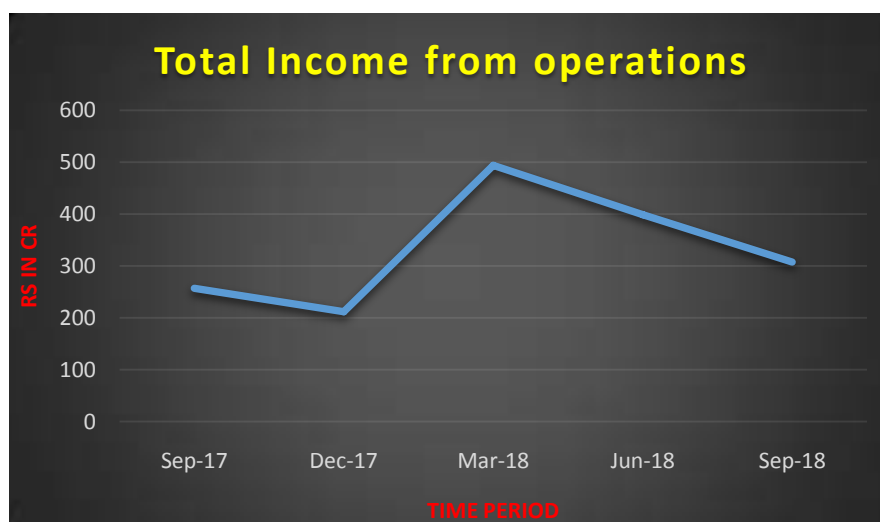
- 1 The selected life insurance company is listed under NSE.
- 2 The specific region is not taken into consideration.
- 3 The selected time frame is restricted to 2017-2018.
- 4 The study studies only 1 life insurance Company.
- 5 The research is in only one sector.

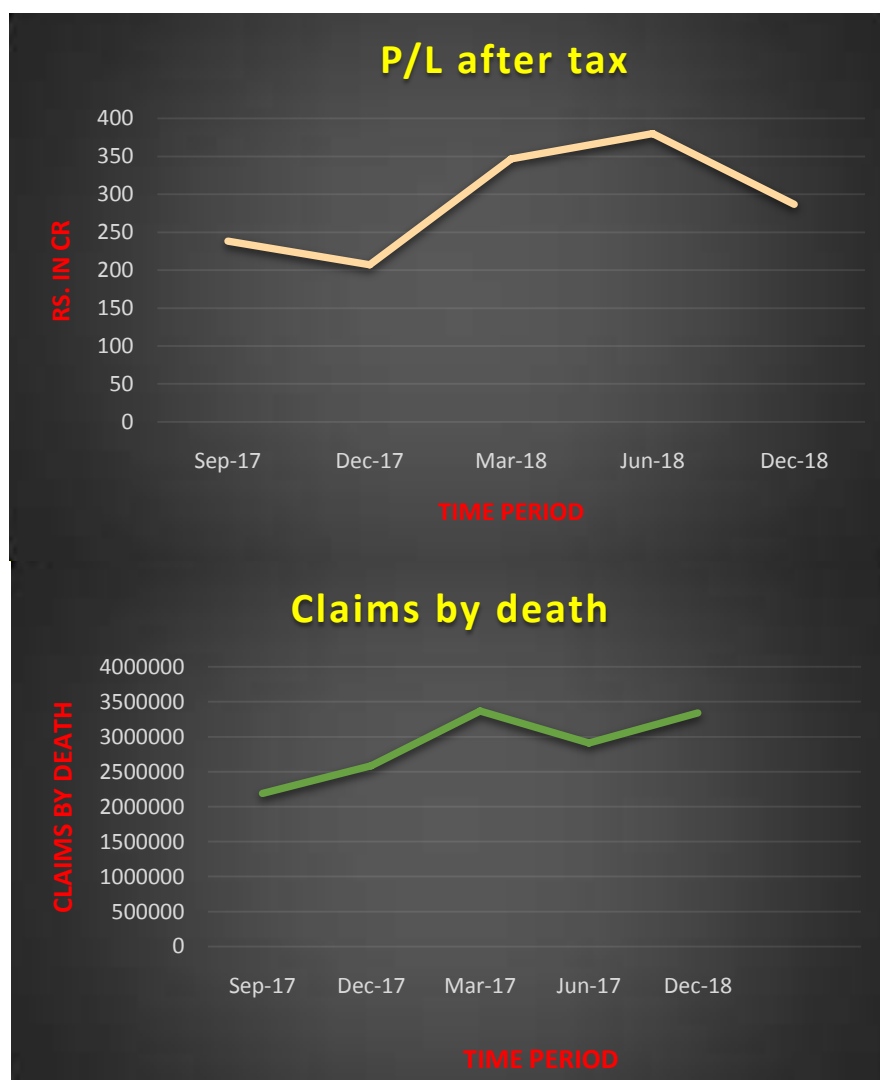
### IV. DATA ANALYSIS TOOLS: HDFC LIFE INSURANCE

The following data was used to analyse the financial impact of natural disaster

**Table 1**

Time Period	Total Income from Operations (in Rs.Cr)	P/L after tax from ordinary activities (in Rs. Cr)	Equity Share Capital (in Rs. Cr)	Claims by death
September 2017	256.86	238.49	2005.55	2,190,231
December 2017	211.65	207.32	2008.97	2,588,630
March 2018	493.86	346.84	2011.74	3,368,195
June 2018	398.78	380.18	2012.52	2,914,048
September 2018	307.38	286.98	2013.91	3,341,145





## V. DATA ANALYSES :

### Quarter on quarter analysis:

Quarter-over-Quarter figures calculate change compared to the previous financial quarter, such as comparing Q2 with Q1 of this year.

**Formula= [(Quarter X - Quarter Y)/Quarter X]\*100**

### Income from Operations Total

Comparison of June 2018 with September 2018

=[(307.38-398.38)/307.38]\*100

**=(29.61%)**

### P/L after tax from ordinary activities.

Comparison of June 2018 with September 2018

=[(286.98-380.18)/286.98]\*100

**=(24.51%)**

### Equity share capital

Comparison of June 2018 with September 2018

=[(2013.91-2012.52)/2013.91]\*100

**=0.07%**

### Claims by death

Comparison of June 2018 with September 2018

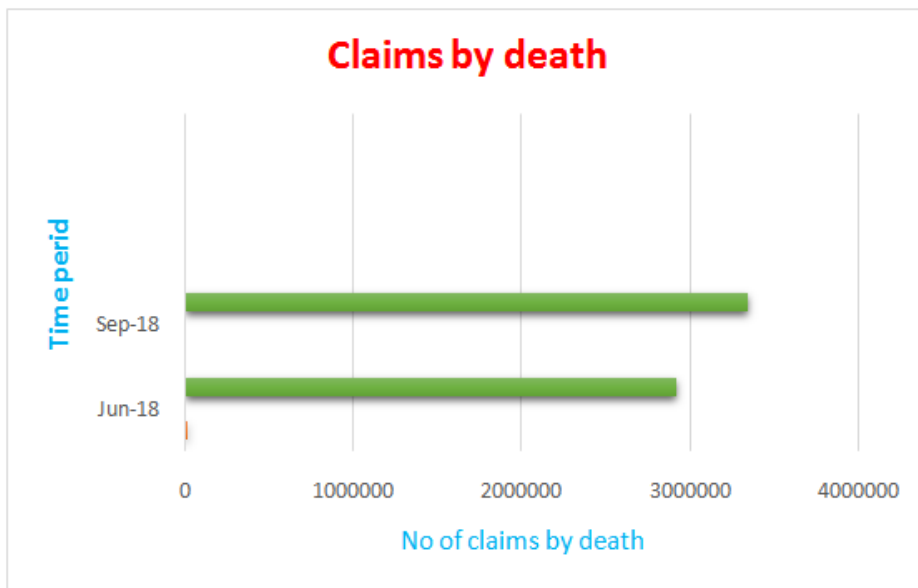
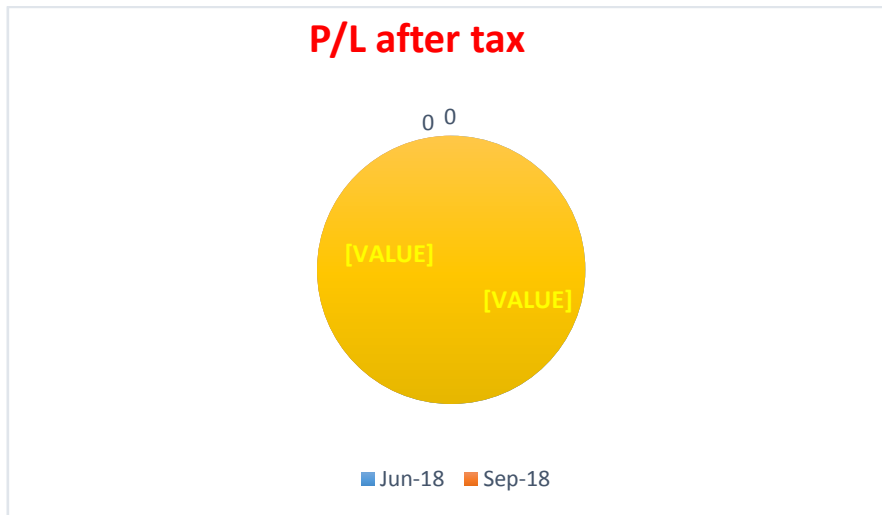
=[(3,341,145-2,914,048)/ 3,341,145]\*100

**=15%**

**VI. DATA ANALYSIS AND INTERPRETATION:**

**Table 2**

Pre/Post	P/L after tax from ordinary activities	Total income from operations	Claims by death
Pre natural calamity (June 2018)	398.78	2012.52	2914048
Post natural calamity (September 2018)	307.38	2013.91	3341145



**Analysis**

The flood occurred in the month of August 2018. Thus June 2018 and September 2018 has been considered for the analysis. The company had lesser death claims pre occurrence of natural calamity the post. The insured has claimed the insurance from company. There is 15% increase in the claims by death post occurrence of the natural calamity. The company did face fall in its profit/loss of 24.14% post the occurrence of the natural disaster.

**Profit/loss after tax**

As per the analysis the company is incurring losses after the natural disaster. Pre natural disaster company’s profit raised at the rate of 8.76%. However company’s profit dipped by 24.51% from the previous quarter (pre natural calamity).The increase in claims paid out by the company implies that the survivors have raised claims with the insurance company post the calamity

**Claims by death:**

The detailed analysis shows that claims by death has risen by 15% on September 2018 (post natural calamity). Policy holder claimed insurance after the death of the insured.

**VII. FINDINGS AND SUGGESTIONS:**

August was the month India faced one of the most tragic floods in Southern Parts. It hit the Kerala on 9<sup>th</sup> August 2018= and 19<sup>th</sup> August Coorg (part of Karnataka). Though company faced downfall in its profit by 24% post occurrence of the natural disaster however the company’s equity share capital didn’t get affected. The natural calamity effects the life insurance company in both sides. When company is paying out the insured for loss of the life during natural disaster, it is creating attracting the new customers however it might not always holds true. The company can extend its coverage to other regions to diversify the risk. The study is likely to identify many areas outside its scope but worthy of the future.

**VIII. CONCLUSION**

In terms of result of our quarter on quarter analysis natural disasters clearly demonstrate a significant financial impact on Life Insurance Company. With this research paper we can rely on saying that natural calamity do effect the financial performance of the life insurance company. It significantly holds true that policy holder will claim the life insurance after the death of the insured. As with motor insurance, where third-party insurance is required, hazard insurance–droughts, floods or fires –must also be made compulsory.

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