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## RISK PRICING AND PROFITABILITY OF NON-LIFE INSURANCE COMPANIES IN NIGERIA

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### ABSTRACT

Insurance companies continue to face intense pressure to improve performance, increase profitability, deliver superior customer service and increase shareholder returns. This is primarily due to the fact that operating efficiency is of particular interest for managers whose aim is to improve the performance of their firm and, therefore safeguard the stability of the financial system by generating enough profit. The Nigeria Insurance Industry is facing a myriad of problems ranging from underwriting losses, high operating expenses and reduced income. It is the believe of the market that the emerging trend bothers on pricing of risk. The research investigates the impact of pricing of risk on the profitability of Nigeria Insurance market and also to find out the relationship between operation expenses and profitability of the non-life insurance market in Nigeria. Our results show that economy, competition and government regulation have effect on pricing of risk. These findings will have special significance for both the insurance industry policy makers and market competitors. Policy holders can use these findings to develop long term policy strategies for market development. Also, it was observed that operation expenses is strongly correlated to profitability and should be properly managed.

**Keywords:** *Pricing, Risk, Profitability, Operating expenses .Nonlife insurance*

### INTRODUCTION

Calculating the price of insurance has been one of the central concerns of actuarial science. Traditionally the fair premium in insurance pricing is equated with the expected loss resulting from the underwritten risk. However, as the expected loss (*or net premium*) does not account for the variability of risks or for the aversion of economic agents, it is apparent that more sophisticated mechanisms for the calculation of insurance premium are called for. Systematic approach to premium calculation were first proposed by Markowiyz , who introduced the concept of premium calculation principles. A premium calculation principles is a function that takes as an argument (the probability distribution of) a risk and returns the premium that should be charged for it. The interpretation of premium as capital used to offset potential insurance losses invites an interpretation of premium calculation principles as risk measures. Risk measures are defined as functions giving the amount of capital that the holder of a risky position should prudently invest so that he is allowed (e.g. by a regulator) to proceed with his investment plans. Insofar, the parallel between premium principles and risk measures reflects the relationship between pricing and capital allocation by an insurance company. Insurance pricing,, involves the calculation of each policy owner's fair share of losses and expenses. The price paid for insurance, called the premium, is the rate per unit or coverage multiplied by the number of unit purchased. Unit of insurance are measured differently according to the type of coverage. The rates are established before the exposure period to which they apply so that a forecast of the future must be made. The probable number and value of claims are forecast from historical loss experience with consideration given to trends and new

developments. Insurers cannot set rates arbitrarily; rates are subject to state control.(Andersen,2008). Many companies in Nigeria, after the recapitalization of the insurance companies in 2007 have embarked on undercutting the specified rate for the insurance risks they are assuming leading to the diminution of or diminishing returns in their annual cash flows and subsequently reducing their technical profit. The underwriters are now agitating that reviewing rates of these risks especially the nonlife should be revisited by the regulatory authority, while the intermediaries in the industry believe that this might not be necessary as most of the problems faced by the insurers are self inflicted. The objective of this research is to look at the various factors affecting pricing of risk and the effect on the profitability of the industry. Also to find out the effect of operational expenses on the profitability of insurance companies in Nigeria.

## **LITERATURE REVIEW**

A fundamental principle of insurance pricing is that insurers are to sell coverage willingly, they must receive premiums that are sufficient to cover their expected claim costs and administrative costs and provide an expected profit to compensate for the cost of obtaining the capital necessary to support the sale coverage (Niehaus 2003). Arguably, the premium level that is just sufficient to cover the insurers expected costs and provide insurance company owners with a fair return on their invested capital is known as a fair premium. Niehaus et al, (2003) describes a fair premium as the premium that would be charged in a perfectly competitive insurance market, and the major determinants are expected claim costs, investment income, administrative costs and fair profit loading. The earliest efforts to identify the relationship between pricing of risk and the profitability of insurance companies can be attributed to Bain (1951) who developed the concentration profit hypothesis. Drawing on conventional price theory, Bain hypothesizes that a concentrated market structure encouraged oligopolistic behavior by competitors. A later variant of the hypothesis submitted by Stigler (1964) came to be known as the collusion theory. It is now commonly known as the structure conduct performance. This may not be feasible in the Insurance Industry because of the elastic nature of insurance .The insurance industry no doubt is a highly competitive market, any increase of price above the market price will reduce sales and invariably the profit. The structure conduct performance hypothesis expects dominant firms in more competitive insurance market to set prices that are favourable to consumer because of competition even though is below the standard rate. Subsequently, smaller competitors in the market are able to adopt similar pricing strategy resulting in an overall increase in industry profitability. The opposite is always the case, as the rate adopted is always too low so as to undercut the smaller competitors. Joskow (1973) examined the competitive market structure of the non-life insurance market place and concluded that the combination of state regulation pervasive pricing and other market peculiarities resulted in significant effect on profitability. Baytelsmit and Bouzouita (1998) examined the market, market structure and industry profitability relationship within the non life insurance market and found a significant relationship, concluding that the structure and characteristics of the market place contribute to a reduced level of competition among insurers.

## **CONCEPTUAL FRAMEWORK**

The Harvard paradigm which has to do with the body of research generated by the Harvard Business School in 1950 to 1970 provides a conceptual framework from which the

market structure performance relationship can be assessed and has proven to be readily adaptable as a conceptual model of insurance market operations (Swiss Re 1996). In his presentation of the paradigm, Porter (1980) identified five forces (characteristic of market structure) that influence a marker’s conduct which in turn determines the market performance. Four of the forces can be considered external to the industry, the threat of entry, the threat of substitution, the bargaining power of consumers and bargaining power of suppliers. The fifth force, the level of market competition is conceived of as an internal force and is generically described as the intensity of rivalry among current market competitors. Porter (1991) came up with the idea that these dynamics are subject to the influence of regulatory supervision which many serve as a catalyst (or inhibitor) of innovation in the market place. Conceptually the premiums paid by insureds are pooled to create a fund from which qualified claims are paid. Therefore, within the insurance context, the insured’s may be conceived of as being both the buyers for the products as well as the suppliers of the necessary capital to create a functioning insurance market. The structural forces that remain to be considered and the level of market competition the threat of entry factors affecting the pricing of risk comprise the key elements of our empirical investigation discussed below.

Although the Paradigm may provide a conceptual framework, Cowling and Waterson (1976) provided formal theoretical support for the key relationships under investigation in this article. They identify a positive relationship between the profit-margin ratio (a measure of market performance) and market prices of risk. The profit function of firm  $i$  can be as

$$\Pi_i = p(Q) q_i - c_i(q_i), \tag{1}$$

Where  $\Pi_i$  is profit for firm  $i$ ;  $p$  is the market price;  $q_i$  is output of firm  $i$ ;  $p(Q)$  is the inverse demand function, where  $Q = \sum_{i=1}^n q_i$ ; and  $c_i$  is the cost for insurer  $i$ . Profit maximization is defined by the first order condition:

$$\frac{d\Pi_i}{dq_i} = p(Q) + p'(Q)(1 + \lambda_i) q_i - c'_i(q_i) = 0, \tag{2}$$

Where  $\lambda_i$  is the conjectural variation term defined as

$$\lambda_i = d \sum_{j \neq i} q_j / dq_i. \tag{3}$$

If we multiply Equation (2) by  $q_i$  and sum over the  $N$  firms, we have

$$\sum p(Q)q_i + \sum p'(Q)(1 + \lambda_i) q_i^2 - \sum c'_i(q_i)q_i = 0. \tag{4}$$

Conjectural variation terms represent a firm’s speculation of other competition reaction to changes to its output. Thus, subscript  $j$  in equation (3) represents any firm that is different from firm  $i$ .

We can rewrite Equation (4) as

$$\frac{\pi}{R} = \frac{H}{n} (1 + \mu). \tag{5}$$

Where market profit ( $\pi$ ) is related to revenue ( $R$ ) as the industry average profit-cost margin ( $\pi/R$ ),  $H$  represents Herfindahl Index of market concentration,  $n$  represents the

industry price elasticity of demand, and  $\mu$  represents the weighted sum of conjectural variations. Thus, Cowling and Waterson established a theorized positive relationship between market concentration (H) and profitability ( $\pi/R$ ) in Equation (5). Additionally, they identify a theorized negative relationship between market profitability and the price elasticity of demand ( $n$ ).

**VARIABLE DEVELOPMENT**

Carroll (1993) adapted Cowling and Waterson’s (1976) theoretical estimation for the insurance mechanism and insurer’s profit margin (PM) as follows:

$$\frac{\pi}{R} = \frac{\text{Profit}}{\text{Revenue}} = \frac{\text{Premiums} - \text{Losses} - \text{Expenses} + \text{Investments}}{\text{Premiums}} = 1 - LR - ER + ROI, \tag{6}$$

Where LR is the loss ratio, ER is the expense ratio, and ROI is the return on investment. We adopt Carroll’s measure of PM as our measure for market profitability. However, the general lack of insurance-specific data related to insurer expenses and return on investment across national markets prevents us from including such information in the construction of the variable. Therefore, our measure of market profitability which is Profit is proxied by one minus the loss ratio and the variables that control for expenses and investments are included in the model as independent variables a solution similarly employed by Carroll. To control for the variation of market expense levels, we note the significantly differing role that loss-adjustment expenses play in various lines of insurance. Liability coverages traditionally include payment of defense costs, thereby significantly increasing expenses associated with that line of business as compared to other lines. Thus we expect higher expenses structures in industry where liabilities coverage accounts for a significantly greater proportion of the nonlife insurance market. Therefore, the ratio of general liability premiums to aggregate nonlife insurance premiums (ER) to control for variation in underwriting expenses in each market. There are so many factors affecting the adequate pricing of Insurance risk as enumerated by Bedard (2004) these factors include competition, operational expenses and Government regulation. He further concluded that there is a strong relationship between price decisions and competition.

**Level of Competition**

A basic promise of the paradigm is that the character and composition of competition in a given market influences its conduct. Ippolito (1979) summarizes the fact that the number of competitors in the market place also affects the level of markets competitive risks. Everything equal, higher numbers of insurers increased competition and consequently, lower market profitability. The paradigm identifies the threat of entry by new competitors as one of the major factors affecting market conduct. This was upheld in insurance literature as been significant.(Bain, 1956,). New competitors to the marketplace are likely to possess what they believe to be competitive advantages within the particular market e.g. superior underwriting capabilities economics of scale, name recognition etc. the arrival of such competitors may change the competitive dynamics of the market place and thus current insurers in the market place must adjust their strategic and resource allocation accordingly. Some competitors are willing to sacrifice profitability in the short term in exchange for market share growth. This kind of competition creates smaller profit

margins for insurers attempting to maintain competitive pricing structures. Therefore we expect this variable, that is pricing of risk to share a negative relationship with the dependent variable that is profitability. Most firms in the real world face a lot of competition because they are members of industries in which firms can enter and exit relatively freely. Therefore firms have to worry about competition already in the industry and those that may potentially come into the industry (Antonioni,2011). White et al (2004) opined that in an industry in which many competitors are producing identical products or services, none of the firms has any control over the price they charge. Marco, et al (2012) in one of their write-ups on smart pricing considered competition as one of the popular price setting approach. This approach is sometimes refer to as strategic pricing, where a firm simply checks out its competitors price and then sets the price of its own product at about the same level plus or minus a few percent. They were of the opinion that it is an easy way to make a pricing decision without having to conduct any thorough market research. Cowling and Waterson (1976) identifies an inverse relationship between the price elastically of demand and market profitability in their theoretical model. Price elastically of demand is defined as the change in demand as it relates to the change in price.

### **Regulatory Supervision**

Porter (1991) noted the potential influence of regulatory supervision on market place competition this was significantly supported in the infrastructure by the concentration – profitability relationship. Considering the fiduciary nature of the insurance mechanism its activities are traditionally heavily monitored. The relationship rate regulation shares with an insurance market price structure and/or profitability is a subject of significant debate. The significant of rate regulation systems is bounded by tariff regulation on one end and open competition on the other. Tariff regulation refers to formal establishment of rates by regulators is which insurers must adhere. Conversely, open competition implies the freedom for insurers to use whatever rates they choose while the objectives of insurance regulation are to assure fair competition (whatever that means), monitor the solvency of insurers, help make insurance available to those who need and are entitled to coverage, and to assure equitable treatment of the insuring public. The pricing/profitability implications associated with rate regulation is difficult to assess, however, some have found evidence that significant regulatory involvement in rate regulation has resulted in relatively higher market insurance rates as promoted in the excessive rate hypothesis (Joskow, 1973). On the other hand, the rate suppression hypothesis theorizes that regulatory involvement leads to relatively lower market insurance price levels (Tennyson, 2001). To protect public from incompetent and fraudulent insurers the business is carefully regulated by the government. Insurance requires public confidence. Incompetency and dishonesty caused many insurer failures in early history. As the public had no indication the insurance business ever would conduct itself in the public interest without government supervision, public regulation was inevitable.

Effectively regulated price competition should increase the availability of quality insurance and reduce insurer insolvencies by discouraging the formation of marginal insurers to supply the market avoided by established insurers because of inadequate rates. Regulation and competition should reinforce each other in the interest of the consumer, with prime competition the prime factor for allocating resources to and within the industry

and regulation the main factor for assuring fair competition. ParvizRad (2002). State regulatory authorities must recognize that price competition adversely affecting profit levels of less efficient insurers could lead many to offer inferior products and economize on service. These insurers might

- a. Introduce excessive policy exclusion,
- b. Engage in undesirable claims practices,
- c. Be tempted toward unfairly discriminatory competitive practices by servicing "low-risk" clientele and avoiding or overcharging "high-risk" clientele,
- d. Institute excessive non price competition which might mask the true nature of the product, adding to potential consumer grievances, and
- e. Seek to obtain business by offering established agents unusually high commissions which might lead to excessive premiums to maintain solvency. These practices could seriously damage public confidence in insurance.

Insurance is technical and in some ways mysterious to the public. The buyer usually is at a disadvantage because the seller generally knows more about the product. Policies contain terms unfamiliar to the buyer. Public control is necessary to prevent some insurers from including unreasonable restrictions and exclusions in their contracts. Two additional variables have been found to affect the insurance market structure – performance relationship pricing of risk and the profitability of insurance companies the national economy and the operational expenses.

**Economy:** studies have consistently shown that the strength of a nation's economy is highly correlated with demand for insurance products (e.g. Outreville, 1990, 1992, ). Demand is a key component, along with supply, in pricing equilibrium theory. Increase in demand prior to adjustments in supply may be accompanied by increase in price leading to higher market profitability in the short term. Such profitability is expected to disappear due to competition in the market place. This Scenario would be particularly acute during periods of rapid economic growth. The opposite would also be true during periods of contraction in profitability may be either positive or negative depending on market conditions and how quickly supply is able to adjust.

**Operational Expenses:** profitability may also vary significantly across various times of insurance. (Cummins, Denenberg and Scheel, 1972 Chidambaram *et al.* 1997). The operational expenses include the management expenses, the claims cost taxes and other supervision costs. These are expenses that insurance companies must incurred to improve profitability. It is one of the factors affecting pricing of risk. Economic theory indicates that the companies that will survive are those that have the lowest cost structure. One of the ways of having a lower cost structure is to have lower operating expenses. Therefore, control of loss costs and reduction of operating expenses are the primary key to profitability. Tinubu (2012) in his presentation argued that inspite of the government regulation of insurance premium, so many companies do tend to go down below the scientific rate as a result of competition, thereby undercutting. The company is not getting adequate premium from the risk covered and at the same time weakening its financial soundness which may lead to underwriting losses. Operating expenses is the total amount that was spent to run a company at a particular period. That is the amount of money the company will spend on overheads, distribution of taxes, underwriting the

risks and servicing the risks in the portfolio of business. It is a factor in calculating premium rate. An operating expense, is the expense incurred in carrying out an organization day to day activities, but not directly associated with production. Operating expenses include such things as payroll, sales commissions, employee benefits, pensions contributions, transportation, travel, depreciation, rent, and repairs. These expenses are usually subdivided into selling expenses and administrative and general expenses.

**METHODOLOGY**

The target population comprises employees in the underwriting firms and broking firms in Lagos state where we have most of the leading insurance companies and broking insurance firms. The data for this study were collected through audited revenue accounts of insurance companies and the administration of well structured questionnaire using stratified random sampling. Three hundred and twenty questionnaires were distributed while we managed to collect only three hundred back. The reliability of the questionnaire was not tested but was used only for collecting the information needed. The questions were tailored along a four-likert scale of strongly agreed, agreed, disagreed and strongly disagreed. The revenue accounts of 30 leading insurance companies were collected for analysis to determine whether operational expenses are factors in profitability of insurance companies. ( Scib Brokers 2012).

**ANALYSIS AND DISCUSSION**

Data was collected by directing questionnaires to three hundred respondents randomly among nonlife insurance underwriters and insurance brokers. The questionnaires was divided into two parts, part A deals with personal information related questions and part B was designed to get information factors likely to affect pricing of risk. For the purpose of analysis, simple descriptive analysis and percentage were used. Also regression analysis was conducted on the revenue accounts of 30 insurance companies to determine the relationship between their operation expenses and profit.

**Hypothesis Testing**

We decided to test an hypothesis to determine whether all the factors highlighted actually impact the pricing of insurance. The appropriate null hypothesis under the Chi Square test of independence is formulated.

1.  $H_0$  = The factors have no influence on the pricing of risk
2.  $H_1$  = The factors have influence on the pricing of risk

**Table 1** Frequency counts and percentages of the respondents to the factors

Pricing of Risk Factors	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Economy	20 25.00	15 18.75	30 37.50	15 18.75	80 100.00
Competition	40 40.00	35 35.00	15 15.00	10 10.00	100 100.00
Government	50	39	18	13	120

Regulation	41.67	32.50	15.00	10.83	100.00
Total	110	89	63	38	300
	36.67	29.67	21.00	12.67	100.00

Pearson Chi2 (6) = 25.9481 pr = 0.000 at 0.05 level of significance

Source: Researchers 2012

Table 1 shows the responses concerning each of the factors affecting the pricing of risk externally. The data indicates that majority of the respondents rated Government regulation of pricing risk as the most important factor affecting the determination of the price of risks, followed by Competition and the Economy where the respondents strongly agreed in the factors as shown in the table. On the whole 36.7% of the respondents strongly agreed that the factors have effect on pricing, 29.3% agreed with the assertion. 13% strongly disagreed with the assertion that all the factors have effect on pricing of risks. The result of the chi square at 0.05% significance level with 6 degree freedom is 12.59 while the calculated value is 25.94. We therefore reject the null hypothesis that there is no significant way by which the pricing of risk is affected by the government supervision, economy and competition. Therefore the pricing of risk external factors studied have impact on the pricing of risk and this eventually affects the profit of the companies in the market. The price of the risk must cover the claim costs and leave a surplus after deducting the necessary operational cost and others.

Some hypotheses were also tested to confirm the effect of the factors affecting the pricing of risk

Table 2 H<sub>0</sub>: Economy has no impact on pricing of risk

H<sub>i</sub>: Economy has an impact on pricing of risk

Option	Observed	Expected	O-E	(O-E) <sup>2</sup>
Strongly Agree	30	20	10	100
Agree	25	20	5	25
Disagree	15	20	-5	25
Strongly Disagree	10	20	-10	100
Total	80			250

$$\text{Expected frequency} = \frac{E_o}{n} = \frac{80}{4} = 20$$

$$\chi^2 = E \frac{(O-E)^2}{E} = \frac{250}{20} = 12.5$$

$$\text{Degree of freedom} = c-1 = 4-1 = 3$$

**Decision:** critical value at 0.05 significance level = 7.81 from the above table, the calculated  $\chi^2$  is 2.5 is greater than 7.81 at 3df at 0.05 level of significance. This shows that economy has an impact on pricing of risk. The null hypothesis is rejected while alternate hypothesis is accepted.



**Table3: Hypothesis to test the impact of competition on pricing of risk.**

H<sub>0</sub>: competition has no impact on pricing of risk

H<sub>1</sub>: competition has an impact on pricing risk

Option	Observed	Expected	O-E	(O-E) <sup>2</sup>
Strongly Agree	40	25	15	225
Agree	35	25	10	100
Disagree	15	25	-10	100
Strongly Disagree	10	25	-15	225
Total	100			650

$$\text{Expected frequency} = \frac{100}{4} = 25$$

$$x^2 = E \frac{(O - E)^2}{E} = \frac{650}{25} = 26$$

Degree of freedom = 3

Since 26 > 7.81 at 3df at 0.05 level of significance reject null hypothesis.

**Decision:** competition is a factor having an impact on pricing of risk.

Table 4: Hypothesis to test the impact of government regulation on the pricing of risk.

H<sub>0</sub>: Government regulation has no impact on the pricing of risk.

H<sub>1</sub>: Government regulation has no impact on the pricing of risk.

Option	Observed	Expected	O-E	(O-E) <sup>2</sup>
Strongly Agree	50	30	20	400
Agree	39	30	9	81
Disagree	18	30	-12	144
Strongly Disagree	13	30	-17	289
Total	180			914

$$\text{Expected frequency} = \frac{120}{4} = 30$$

$$x^2 = E \frac{(O - E)^2}{E} = \frac{914}{30} = 30.46$$

Degree freedom = c-1 =4-1 = 3.

Decision: from the tables, the calculated x<sup>2</sup> value of 30.46 is greater than the critical x<sup>2</sup> value of 7.81 at 3df at 0.05 levels of significance. This shows that null hypothesis is rejected while the alternative hypothesis is accepted which implies that government regulation has an effect on the pricing of risk.

**Table 5 Regression of profit on operation expenses**

Profit	Coef.	Std. Err.	t	p> t	[95% Conf.	Interval]
expenses	-4972853	.0840782	5.91	0.000	.325059	.6695116
cons	709.4467	161.544	4.39	0.000	378.5387	1040.355

The above table helps us to draw a line of best fit between the two variables to help us find out the relationship between profit and operational expenses:

$$Y = 709.45 - 497 X \quad \text{where } Y = \text{Profit and } X = \text{Expenses}$$

The model shows that as expenses are increasing, the profit continue to go down. This shows a strong negative relationship between profit and operating expenses. The revenue accounts of the 30 insurance companies selected for this research show that the management expenses are on the high side. The percentage of management expenses to the total premium is on average of 50% and above, this no doubt has a reducing effect on the net profit of the various companies. Also the uncollected premiums are also on the high side despite the government regulation of a "no premium no cover" (insurance decree 2003)

### **SUMMARY & CONCLUSION**

The research investigates the pricing of risk and market profitability relationship within the non-life insurance market. The analysis takes place at the Nigeria insurance market, special attention was given to the relationship shared by pricing of risk and market profitability. Our results show that economy, competition and government regulation have effect on pricing of risk. These findings will have special significance for both the insurance industry policy makers and market competitors. Policy holders can use these findings to develop long term policy strategies for market development. The research shows that competition has a significant effect on pricing of risk. Where competition is so stiff, the underwriters may need to reduce or cut rates to be able to survive. They see rate cutting as a survival strategy, this will invariably reduce profit of the company. When the economy is not doing fine, the tendency is for people to stop buying insurance or reduce their patronage, which implies the possibility of insurance companies reducing rate to be able to compete. The research shows that the economy is very important when pricing for profitability. The state of the economy is crucial to the purchase and the demand for insurance. The insurance market has long been subjected to pricing cycles. During the so called soft market, pricing may produce breakeven profitability results or even operating losses for some companies, this is then followed by a hard market economy where insurance prices are relatively high, then pricing falls and a soft market slowly erodes profits. Economic theory indicates that the companies that will survive are those that have the lowest cost structure. One of the ways of having a lower cost structure is to have lower operating expenses. Also, government regulation determines the premium to charge. Insurance regulator either encourage profitability, when concerned with solvency, or seek to curtail it, when regulating rates. If it is too low compared with the claim cost, insurers will definitely call for increase of premium from the rating authority. The profit was also regressed over the operation expenses it was observed that they are strongly negatively correlated, which shows that increase in the operation expenses will definitely reduce the profit of the insurance companies.

### **RECOMMENDATION**

Considering the various factors highlighted in this research work influencing the pricing of risk to experience maximization of profit in the Nigeria insurance industry, the following recommendations are made.

- It is crucial to understand and be able to influence consumers' perceptions of pricing fairness. When prices seem fair, consumers often buy more and are more willing to pay a premium. Conversely, when prices seem unfair, consumers will look for alternative.
- The insurance companies in the industry should try as much as possible to reduce their operation expenses. It is compulsory that the loss costs and expenses should be controlled as a primary key to profitability.
- The Insurance regulators should constantly review their rating system to protect the the public from incompetent and fraudulent insurers. The regulatory authority must recognize that price competition adversely affecting profit levels of less efficient insurers could lead many to offer inferior products and economize on service.
- Insurance companies should stay with the regulated price which was arrived at through scientific rating. Undercutting of rates should be avoided as prices plummet downward, the financial soundness of insurance companies weakens. Eventually, operating losses take their toll on the capital stock of the insurance business leading to underwriting losses

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