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IMPACT OF PRICE DETARIFICATION AND PRODUCT DEREGULATION MEASURES ON THE OPERATIONAL PERFORMANCE OF GENERAL INSURANCE COMPANIES IN INDIA – A COMPARATIVE STUDY

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Abstract

The insurance as risk management tool plays very significant role in complex modern world. Insurance provides compensation against the loss which results of incurred of insured event to both life and property in consideration of premium. The insurance provided against the risk exposed to the life is called life insurance and property is called non-life insurance. In India insurance sector (1st half of 19th century) before independency was dominated by private and global players which led to nationalization of life in 1956 and non-life 1971,during this period insurance sector was in stagnant by State monopoly, low coverage, low penetration and density, poor customer services, high premium rates and no customized products. With an aim to overcome the above said problems through assessing of strength and weakness of the industry and to recommend the changes in structure, competition, investment, customer services and regulatory aspects Malhotra committee was appointed in 1993. Based on the recommendations of this committee IRDA bill was came into effect with 1999 in India. As result of this bill various private and global players entered in insurance business in India both in life and non-life insurance. Particularly, in non-life insurance the players in the industry has increased from four public non-life insurers to 28 players with 18 private players as on 2015 march. Consequently, customers have choice of insurers to buy product, but still there is no choice in premium rates and suitable products which were under regulation of Tariff Advisory Committee. Further, to liberalize the industry, IRDA announced the price detarification and product deregulation measures in 2007 and 2009 respectively in all segments except Motor (TP0 which have direct impact on operational performance of the non-life insurers. Thus, the present study examined significance of impact of price detarification and product deregulation measures on the operational performance of selected non-lfie insurers i.e. National, New India, United India and Oriental insurance in public and IFFCO TOKIO, ICICI LOMBARD, BAJAJ ALLIANZ and HDFC ERGO in private non-life insurers during 2002-14. 'T' test was used to examine the significance of the impact before and after price detarification and product deregulation on selected operational variables such as overall premium per policy, net claims per policy, cost per policy, underwriting profit/loss per policy and branch, net profit/loss per employees. The research resulted that the price detarification and product deregulation measures have significant impact on all selected operational variables except net profit/loss per employee during the study period. Key Words- Price detarification, Product deregulation, insurance, operational performance.

INTRODUCTION

The insurance as risk management tool play very significant role in complex modern world. Insurance provides compensation against the loss which results of incurring of insured event to both life and property in consideration of premium. The insurance provided against the risk exposed to the life is called life insurance and property is called non-life insurance. In India insurance sector (1st half of 19th century) before independency was dominated by private and global players which led nationalization of life in 1956 and non-life 1971,during this period insurance sector was in stagnant by State monopoly, low coverage, low penetration and density, poor customer services, high premium rates and no customized products. With an aim to overcome the above said problems through assessing of strength and weakness of the industry and to recommend the changes in structure, competition, investment, customer services and regulatory aspects Malhotra committee was appointed in 1993. Based on the recommendations of this committee IRDA bill was came into effect with 1999 in India. As result of this bill various private and global players entered in insurance business in India both in life and non-life insurance. Particularly, in non-life insurance the players in the industry has increased from four public non-life insurers to 28 players with 18 private players as on 2015 march. Consequently, customers have choice of insurers to buy product, but still there is no choice in premium rates and suitable products which were under regulation of Tariff Advisory Committee. Further, to liberalize the industry, IRDA announced the price detarification and product deregulation measures in 2007 and 2009 respectively which have direct impact on operational performance of the non-life insurers. Thus, the present study examined significance of impact of price detarification and product deregulation measures on the operational performance of selected non-lfie insurers i.e. National, New India, United India and Oriental insurance in public and IFFCO TOKIO, ICICI LOMBARD, BAJAJ ALLIANZ and HDFC ERGO in private non-life insurers during 2002-14.This is a unique attempt as there is no specific research study in this area. The review of literature provides an ample evidence for this.

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REVIEW OF LITERATURE

Taria Zafar (2013)[1] made an attempt to analyse the performance, growth and awareness of selected general insurance companies during the period 2003-07 pre-recession. He employed various financial ratios - Current Ratio (CR) Proprietary Ratio (PR), Solvency Ratio and ANOVA. The author observed that among all the selected companies, IFFCO TOKIO company has outperformed other companies and generated highest CR (0.974372) and Bajaj Allianz generated lowest CR (0.26104). The New India Assurance had performed fairly better in proprietary ratio and managed the higher of 1.43872. Oriental Insurance Company with its proprietary ratio of 0.10772 ranked lowest.

Sahoo (2012)[2] examined the economic growth effects of insurance sector reforms and rate of growth of Insurance reforms. Study revealed mixed results that the contribution of insurance sector to economic development is positive and exhibits a long run equilibrium relationship. He found that reforms did not exert strong relationship, but the rate of growth of reforms has a positive influence on economic development. The study therefore suggested complete deregulation and an increase in the pace of reforms in order to make insurance sector a more important component of the financial intermediation process.

Ms Manisha and S.Modi (2011)[3] examined the impact of reforms on operational and financial performance of Public sector general insurance companies (GIPSC) during the period of 2001-02 to 2007-08. Ratios, Chi - square and F test have been used to know the impact on performance. The study found that reforms in general insurance sector could not lead to the improvement in profitability, solvency and financial soundness as expectations. Further he observed that price detariffication led to steep fall in premium rates particularly fire and engineering classes of all GIPSC followed by increased management expenses which put more pressure on underwriting performance and risk bearing capability. The study revealed that all GIPSC did not meet the IRDA investment norms during the study period 2001-02 to 2007-08.

M. Subba Rao (2010)[4] in his thesis evaluated the performance of NICL in terms of Physical, operational and financial aspects at national level during the period 2001 to 2009. It is found that a positive growth rate in terms of policies, premium received, persons covered, number of claims reported and settled. It is also significantly noticed that the claims settled in the personal accident insurance for kissan credit cardholders and the amount released thereon is 31.19 percent of increase in terms of amount paid to policy holders of NICL. Gross premium received reported ups and downs from the scheme of fire and marine insurance while it is constant in case of marine insurance. In case of fire insurance there was growth till 2006-07 and thereafter a down fall is clearly noticed. However, in case of miscellaneous schemes there is a good record of growth rate.

Dr. S.C Das (2007)[5]evaluated the performance selected non-life companies New India, National Insurance and Tata-AIG during pre and post IRDA period (1991-2005) in terms of claims, operating expenses. An attempt was made to understand the cost containment techniques being adopted by the companies and their effectiveness. He suggested two way strategies for claims management they are claims minimization and fraud control. Increasing the volume of business is an important measure of bringing down per unit cost. There are also certain constraints which limit the ability of public sector insurance companies to cut down certain costs. On the one hand, they are expected to run on commercial lines and simultaneously they are expected to implement several socially oriented schemes, which bring down any surplus generated.

OBJECTIVE OF THE STUDY

To examine the impact of price detarification and product deregulation measures on the operational performance of the public and selected private non-life insurers in India.

HYPOTHESES: To know the impact price detarification and product deregulation on selected operational variables of both public and selected private non-life insurers the following alternative hypotheses has formulated and tested.

i. H_1. The price detarification and product deregulation have significant impact on overall premium per policy of both public and selected private non-life insurers.
ii. H_1. The price detarification and product deregulation have significant impact on net premium earned per policy of both public and selected private non-life insurers.
iii. H_1. The price detarification and product deregulation have significant impact on net claims per policy of both Public and selected Private non-life Insurers.
iv. H_1. The price detarification and product deregulation have significant impact on cost per policy of both Public and selected Private non-life Insurers
v. H_1. The price detarification and product deregulation have significant impact on underwriting profit/loss per policy of both Public and selected Private non-life Insurers.
vi. H_1. The price detarification and product deregulation have significant impact on underwriting profit/loss per branch of both Public and selected Private non-life Insurers.

vii. H_1. The price detarification and product deregulation have significant impact on net profit/loss per employee of both Public and selected Private non-life Insurers.

SAMPLE SIZE

The present study makes a comparison of both public and private non-life insurers operating in India. In the public sector, all the four companies presently operating in India - National Insurance company Limited (NICL), New India Assurance company limited (NIACL), United India Insurance Company Limited (UIICL) and Oriental Insurance Company Limited have been taken for the analysis while in private sector out of 17, only top four companies namely IFFCO TOKIO, BAJAJ ALLIANZ, ICICI LOMBARD and HDFC ERGO which are leading in terms of premium collection and market share have been chosen.

RESEARCH METHODOLOGY

In the present study is purely based on secondary data which has been collected and analyzed for a period of thirteen years i.e. from 2001-02 to 2013-14. The present research study is based on secondary data collected from the annual reports of Insurance Regulatory and Development Authority (IRDA) and companies, Published Books, periodicals, journals, Websites of public and private insurance companies, GIC, Dept of Financial services, Govt of India ,Institute of insurance of India. The Impact of price detarification and product deregulation on operating performance is measured in terms overall premium per policy, net premium earned per policy, net claims per policy, cost per policy and underwriting profit/loss per policy, underwriting profit/loss per branch, net profit/loss per employee. Statistical tools have been used for analysis of data include T- test. In addition to this six years before price detarification and product deregulation and seven years after price detarification and product deregulation average values of selected operational variables have calculated and presented in table form.

3.1 OPERATIONAL PERFORMANCE OF PUBLIC NON-LIFE INSURANCE COMPANIES DURING PRE AND POST PRICE DETARIFICATION AND PRODUCT DEREGULATION PERIOD 2002-2014AND POST

VARIABLE	BEFORE PRICE DETARIFICATION AND PRODUCT DEREGULATION (From 2001-02 to 2006-07)					AFTER PRICE DETARIFICATION AND PRODUCT DEREGULATION (From 2007-08to 2013-14)				
	NICL	NIACL	UIICL	OICL	AVG	NICL	NIACL	UIICL	OICL	AVG
OPP (` LAKH)	0.032	0.060	0.063	0.035	0.047	0.045	0.081	0.035	0.077	0.059
NPEPP (` LAKH)	0.023	0.031	0.037	0.025	0.029	0.036	0.076	0.026	0.061	0.050
NCPP (` LAKH)	0.021	0.026	0.041	0.027	0.029	0.032	0.054	0.023	0.055	0.041
CPP (` LAKH)	0.008	0.014	0.017	0.009	0.012	0.012	0.028	0.010	0.023	0.018
UPPP/ULPP(`LAKH)	-0.00557	-0.00431	-0.00554	-0.00462	-0.00491	-0.00154	-0.00016	-0.00595	-0.00937	-0.00425
UPPB/ULPB (` Cr)	-0.63	-0.67	-0.51	-0.53	-0.58	-0.92	-1.46	-0.73	-0.89	-1.00
NPPE/NLPB (` Cr)	0.006	0.028	0.018	0.013	0.016	0.019	0.027	0.028	0.012	0.022

3.2 OPERATIONAL PERFORMANCE OF PUBLIC NON-LIFE INSURANCE COMPANIES DURING PRE AND POST PRICE DETARIFICATION AND PRODUCT DEREGULATION PERIOD 2002-2014

VARIABLE	BEFORE PRICE DETARIFICATION AND PRODUCT DEREGULATION (From 2001-02 to 2006-07)					AFTER PRICE DETARIFICATION AND PRODUCT DEREGULATION (From 2007-08 to 2013-14)				
	IFFCO	BAJAJ	ICICI	HDFC	AVG	IFFCO	BAJAJ	ICICI	HDFC	AVG
OPP (` LAKH)	0.058	0.024	0.150	0.072	0.074	0.052	0.049	0.072	0.082	0.064
NPEPP (` LAKH)	0.017	0.010	0.030	0.043	0.025	0.034	0.036	0.030	0.025	0.031
NCPP (` LAKH)	0.012	0.007	0.023	0.022	0.016	0.026	0.0.26	0.041	0.034	0.032
CPP (` LAKH)	0.006	0.003	0.013	0.021	0.011	0.009	0.011	0.011	0.016	0.012
UPPP/ULPP(`LAKH)	-0.00810	-0.01997	-0.00581	-0.00581	-0.00992	-0.00295	-0.00156	-0.00608	-0.00793	-0.00463
UPPB/ULPB (` Cr)	-0.26	0.04	-0.14	-0.77	-0.28	-1.76	-0.49	-1.15	-1.07	-1.12
NPPE/NLPB (` Cr)	0.025	0.019	0.014	-0.054	0.0009	0.031	0.047	0.013	-0.007	0.021

TABLE 3.3 CALCULATED 'T' TEST VALUES ON SELECTED VARIABLES OF PUBLIC SECTOR NON-LIFE INSURERS

INSURER	IMPACT OF PRICE DETARIFICATION					IMPACT OF PRODUCT DEREGULATION					TABLE VALUE
	NICL	NIACL	UIICL	OICL	All PUB	NICL	NIACL	UIICL	OICL	ALL PUB	Table value of 't' test for the selected period is 2.2009 at 5% significance level
OPP	3.0077	3.6101	2.9376	3.9372	3.8663	7.1400	2.7667	2.7997	2.7428	4.3186	
NPEPP	3.1564	3.7278	2.9454	3.5050	3.7007	6.2404	3.7476	2.8532	3.4159	4.6411	
NCPP	3.9723	5.1145	2.8537	2.9831	2.7545	6.3644	3.1464	2.9962	2.9529	3.1300	
CPP	3.3970	2.6058	2.6639	3.4347	2.7567	5.7983	3.0873	2.2442	3.7018	4.1580	
UPPP/ULPP	3.3079	3.3342	2.2249	4.2236	4.0044	2.2245	3.5432	2.4082	3.0680	3.4452	
UPPB/ULPB	2.8970	3.0465	2.3282	2.8092	2.9860	2.7862	3.2553	3.1253	3.1823	2.8325	
NPPE/ULPE	1.3686	0.0755	1.9986	0.0956	0.6463	1.6153	0.5812	0.9681	0.8905	0.6463	

TABLE 3.4 CALCULATED 'T' TEST VALUES ON SELECTED VARIABLES OF SELECTED PRIVATE NON-LIFE INSURERS

INSURER	Impact Of Price Detarification					Impact Of Product Deregulation					Table Value
	IFFCO	BAJAJ	ICICI	HDFC	Pvt tot	IFFCO	BAJAJ	ICICI	HDFC	Pvt tot	Table value of 't' test for the selected period is 2.2009 at 5% significance level
OPP	2.3159	4.2557	2.6181	2.4847	2.4832	2.6792	4.1292	2.5688	2.2992	2.9980	
NPEPP	3.5548	5.3097	2.8900	2.3008	2.6899	2.7007	6.0308	2.7286	2.5886	2.2523	
NCPP	4.6882	5.3603	3.5303	2.7606	4.4306	3.4357	7.0426	2.3941	2.2291	2.2880	
CPP	3.0406	6.5718	2.7045	2.3673	2.2680	2.3309	6.1860	2.9819	4.1751	2.4845	
UPPP/ULPP	2.2726	2.9121	2.2264	2.3190	2.4532	2.7029	2.5599	2.2338	2.3297	2.4706	
UPPB/ULPB	2.9084	2.7271	2.8903	2.7412	2.9149	2.7817	2.6401	3.6027	2.2315	2.2576	
NPPE/ULPE	0.2261	1.2890	0.0841	0.9771	0.8222	0.8617	1.5807	0.0090	1.3639	1.3042	

Overall Premium Per Policy (OPP)

Overall premium per policy refers to the premium earned by writing a policy by non-life insurers during a particular period. It indicates their performance in earning the operating revenue per policy which in turn determinants their earning capacity and profitability. Thus, higher premium per policy indicates higher earning capacity and vice versa. Overall premium per policy is calculated by dividing total premium earned by total number of policies sold. Tables 3.1 and 3.2 depict the average overall premium per policy of the public and selected private non-life insurers before and after price detarification and product deregulation.

It is observed from the data analysis that in public non-life insurers NIACL has reported average OPP of `0.060 Lakh before price detarification and product deregulation but thereafter it has increased to ₹` 0.081 Lakh which is the highest among all public non-life insurers during the study period. Similarly, NICL, and OICL average OPP has increased from `₹ 0.032 lakh and `₹ 0.035 lakh respectively before price detarification and product deregulation to ₹` 0.045 lakh, ` and₹ ` 0.077 lakh respectively. On the contrary, the OPP of UIICL has decreased from `₹ 0.063 lakh to ₹` 0.035 lakh during the same period. In case of private non-life insurers, HDFC's average OPP has increased from ₹ 0.072 lakh before price detarification and product deregulation to ₹` 0.082 lakh which is the highest among all selected private non-life insurers and even compared to public non-life insurers during the study period. Similarly, the average OPP of BAJAJ has increased from ₹` 0.024 lakh to ` 0.049 lakh during the study period. On the contrary, the average OPP of IFFCO and ICICI has decreased from ₹ 0.058 lakh and `₹ 0.150 to `₹ 0.052 lakh and ₹` 0.072 lakh during the same period. Average OPP of all public non-life insurers has increased from ₹` 0.047 lakh before price detarification and product deregulation to₹ ` 0.059 lakh. On the contrary, the average OPP of selected private non-life insurers has decreased from `₹ 0.074 lakh to₹ 0.064 lakh during the same period. It is observed in table 3.3 and 3.4 that the calculated't' test values are higher than table value in case of both public and selected private non-life insurers. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on overall premium per policy of both public and selected private non-life insurers" has accepted.

Overall, the study reveals that, the earning capacity per policy of selected private non-life insurers is much higher than the public non-life insurers during the pre and post price detarificaiton and product deregulation period. This is due to the reason that the private non-life insurers overall premium per policy is higher (an average of ₹0.069 lakh) than pubic non –life insurers (an average of ₹ 0.053 lakh) during the study period by offering innovative riders which provide extra risk coverage at lower premium in each segment, these are available at higher premium rates in public non-life insurers.

Net Premium Earned Per Policy (NPEPP)

Net premium earned refers to the proportion of gross premium retained by the insurers to face the risk on the written policies during an accounting period. It is the residual amount in gross premium after the adjustment for reinsurance and reserve for unexpired risk and hence it is considered as an effective measure of risk bearing capability of non-life insurers compared to gross premium per policy. It indicates the retention of premium which in turn refers to the risk bearing capability of non-life insurers. The net premium earned per policy is calculated by dividing the net premium earned by number of policies sold. Net premium earned per policy should be higher than the claims and cost per policy to generate underwriting profit during an accounting period. Tables 3.1 & 3.2 depict the Net Premium Earned per Policy of both public and selected private non-life insurers before and after price detarification and product deregulations.

It is noticed from the data that in public non-life insurers, NIACL has reported average NPEPP of ₹0.031 lakh before price detarification and product deregulation but thereafter, it has increased to ₹ 0.076 lakh which is the highest among all the public non-life insurers and even compared to selected private non-life insurers. Similarly, OICL and NICL average NPEPP has increased from ₹0.025 lakh and ₹ 0.023 lakh respectively before price detarification and product deregulation to ₹ 0.061 lakh and ₹0.036 lakh respectively. But, the average NPEPP of UIICL has decreased from ₹ 0.037 lakh to ₹ 0.026 lakh during the same period. In case of private non-life insurers, BAJAJ ALLIANZ's average NPEPP has increased from ₹0.010 lakh before price detarification and product deregulation to ₹ 0.036 lakh which is the highest among all the selected private non-life insurers during the study period. Similarly, the NPEPP of IFFICO TOKIO has increased from ₹0.017 lakh to ₹ 0.034 lakh during the same period. The average NPEPP of ICICI is constant at ₹0.030 lakh during pre and post price detarificaiton and product deregulation period. On the contrary, the average NPEPP of HDFC ERGO has decreased from ₹ 0.043lakh to ₹ 0.025 lakh during the study period. The overall average net premium earned per policy of all public non-life insurers has increased from ₹ 0.029 lakh before price detarification and product deregulation to ₹ 0.050 lakh. Similarly, the overall average NPEPP of all selected private non-life insurers has increased from ₹0.025 lakh to ₹ 0.031 lakh during the same period. The calculated 't' test values of NPEPP in the table 3.3 and 3.4 are higher than table value 2.2009. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on net premium earned per policy of both public and selected private non-life insurers" has accepted.

Overall, the study reveals that, both the public and selected private non-life insurers have retained an average of 62 and 34 percent in gross premium during the pre price detarification and product deregulation period indicating their by that they have allocated 38 and 66 percent for reinsurance. This implies their higher dependency on reinsurance and low risk bearing capability per policy (Defensive strategy). However, during the post price detrification and product deregulation period the public and selected private non-life insurer's retention has increased substantially to an average of 85 and 52 percent in respectively in gross premium which indicates their increased risk bearing capability and reduced dependency on reinsurance thereby giving scope for higher proportion of funds for investment.

Net Claims Per Policy (NCPP)

Net Claims per policy refers to the amount of claims incurred per policy during a particular period. Net claims are arrived at by additing claims on reinsurance to the claims incurred and subtracting claims on reinsurance ceded from it. The claims incurred per policy should always be lower than the premium per policy to generate the sufficient underwriting profits. Otherwise it causes underwriting loss and hence it is important to assess the risk involved in the policy at the time of issue to fix correct premium. Otherwise claims may exceed the premium which leading to the losses from underwriting. Tables 3.1 &3.2 depict the net claims per policy of both public and selected private non-life insurers before and after price detarification and product deregulation.

It is noticed from the data that in public non-life insurers, OICL has reported an average NCPP of ₹ 0.027 Lakh before price detarification and product dregulation but thereafter it has increased to ₹ 0.055 Lakh which is the highest among all the public non-life insurers and even compared to selected private non-life insurers during the study period. Similarly, NIACL and NICL's average NCPP has increased from ₹ 0.026 lakh and ₹ 0.021 lakh respectively before price detarification and product deregulation to₹ 0.054 lakh and ₹ 0.032 lakh respectively during the same period. On the contrary, the average NCPP

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of UIICL has decreased from ₹ 0.041 lakh to ₹ 0.023 lakh during the same period. In case of selected private non-life insurers,

ICICI's average NCPP has increased from ₹0.023 lakh before price detarification and product deregulation to ₹0.041 lakh thereafter, which is the highest among all the selected private non-life insurers during the study period. Similarly, the average NCPP of HDFC, IFFCO TOKIO and BAJAJ ALLIANZ has increased from ₹ 0.022 lakh, ₹0.012 lakh and₹ 0.007 to ₹ 0.034 lakh, ₹0.026 and `₹0.026 lakh during the study period. The average net claim per policy of all the public non-life insurers has increased from `₹ 0.029 lakh before price detarification and product deregulation to ₹` 0.041 lakh. Similarly, the average NCPP of selected private non-life insurers has increased from ₹0.016 lakh to ₹` 0.032 lakh during the same period. It is observed in the table 3.3 & 3.4 that the calculated 't' test values are higher than table value in case of both public and selected private non-life insurers. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on net claims per policy of both public and selected private non-life insurers" is accepted.

Overall, the study reveals that, the average claims per policy of all selected private non-life insurers (`₹ 0.032 lakh) is doubled during the post price detarification and product deregulation period compared to the position pre-reforms period when the average was ₹` 0.016 lakh. Similarly, average claims per policy of all the public non-life insurers' has also increased substantially from ₹ 0.029 lakh to ₹ 0.041 during the same period. This is mainly due to the reason that the net incurred claims ratio in the two major segments- motor and health is in the range between 90-110 percent of retained premium during the entire study period in both public and selected private non-life insurers. At the same time, the claims ratio in fire and marine segments has increased from 40 to 50 percent before price detarificaiton and product deregulation to 70-80 percent in case public non-life insurers and even in case of private non-life insurers the claims ratio in these segments has increased from 20-30 percent to 30-50 percent. ICICI Lombard is a special case which has reported the highest claims per policy among the private non-life insurers due to highest claims ratio in all segments which ranged between 70-100 percent. Add on covers increased the claims ratio in different segments particularly fire and marine.

Cost Per Policy (CPP)

Cost per policy refers to the cost incurred in selling each unit of policy during a particular period. In non-life insurance, total cost comprises of both direct cost (commission) and indirect cost (Management expenses). Thus, measurement of cost per policy helps the insurers to assess the level of cost incurred per policy and to exercise control over it. Cost per policy can be calculated by diving total cost by total number policies. Insurers should keep the cost per policy under control and reduce it to generate sufficient underwriting profits. Low cost per policy is a good indicator of cost efficiency. Tables 3.1 & 3.2 depict the cost per policy of both public and selected private non-life insurers before and after price detarification and product deregulation.

It is noticed from the above data that in public non-life insurers, NIACL has reported an average CPP of `₹ 0.014 lakh before price detarification and product dregulation but thereafter, it has increased to ₹ 0.028 lakh which is the highest among all the public non-life insurers and even compared to the selected private non-life insurers. Similarly, OICL and NICL's average CPP has increased from `₹ 0.009 lakh and ` 0.008 lakh respectively before price detarification and product deregulation to ` 0.023 lakh and `₹ 0.012 lakh respectively. But, the average CPP of UIICL has decreased from `₹ 0.017 lakh to₹ ` 0.010 lakh during the same period. In case of private non-life insurers, the HDFC's average CPP has decreased from ' 0.021 lakh before price detarification and product deregulation to ₹ 0.016 lakh, even though, this is the highest among all the selected private non-life insurers during the study period. Similarly, the average CPP of ICICI has decreased from₹ `0.013 lakh to ₹`0.011 lakh during the same period. On the contrary, the average CPP of IFFCO and BAJAJ has increased from `₹ 0.006 lakh and ` 0.003 to₹ 0.009 lakh and ₹0.011 lakh during the study period. The overall average cost per policy of all the public non-life insurers has increased from ₹ 0.011 lakh before price detarification and product deregulation to ₹0.018 lakh. But, the overall average CPP of selected private non-life insurers remains constant at₹ 0.012 lakh during pre and post price detarifcaiton and product deregulation period. It is observed in table 3.3 &3.4 that the calculated 't' test values are higher than table value in case of both public and selected private non-life insurers. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on cost per policy of both public and selected private non-life insurers" is accepted.

Overall, the study reveals that the average cost per policy of private non-life insurers has increased marginally from ₹ 0.011 lakh and ₹ 0.012 lakhs during the study period. Similarly, the average cost per policy of public non life insurers has increased substantially, from ₹ 0.012 lakh before price detarification and product deregulation period to ₹ 0.018 lakh thereafter. This indicates that private non-life insurers could control their cost efficiently, on the other, hand public non-life insurers could not reduce the operating cost like salaries to employees (fixed in nature) which occupy the major portion in management expenses. Another reason is that the public insurers are acquiring major portion of business through individual agents while Private players acquiring major business through direct business leading high cost of operation in public sector compared to private sector companies.

Underwriting Profit/loss Per Policy (UPPP or ULPP)

Underwriting profit refers to the profit earned through the underwriting of insurance business which is the core function of non life insurers. Underwriting profit indicates the operating profitability of the insurers. Underwriting profit is calculated by subtracting claims insured and cost from the net premium. Thus, the excess of net premium earned after payment of claims and cost is called underwriting profit and the extent to which net premium falls short of claims and cost is the underwriting loss. The underwriting loss indicates improper risk assessment on the one hand and inadequate premium rates on the other. Underwriting profit/loss per policy is the important measures of operational performance of non-life insurers. Tables 3.1 & 3.2 depict the underwriting profit/loss per policy of both public and selected private non-life insurers before and after price detarification and product deregulation.

It is noticed from the data that in public non-life insurers, NIACL has reported average underwriting loss per policy of ` 0.00431 lakh before price detarification and product deregulation but thereafter, it has increased to ` 0.01998 lakh which is the highest among all the public non-life insurers and even compared to selected private non-life insurers during the study period. Similarly, OICL, NICL and UIICL's average ULPP has increased from ' 0.00462 lakh,₹ 0.00557 lakh and ` 0.00554 lakh respectively before price detarification and product deregulation to ₹ 0.00581 lakh₹ 0.00810 lakh and ₹ 0.00581 lakh respectively during the study period. In case of private non-life insurers HDFC's average ULPP has decreased from `₹0.00937 lakh before price detarification and product deregulation to₹ 0.00793 lakh thereafter, which is the highest among all selected private non-life insurers during the study period. But the average ULPP of ICICI, IFFCO and BAJAJ has increased from `₹ 0.00595 lakh, ₹ 0.00154 lakh and ₹ 0.00016 to ₹ 0.00608 lakh₹ 0.00295 lakh and ₹0.00156 lakh during the same period. The overall average underwriting loss per policy of public non-life insurers has increased from ₹ 0.00491 lakh before price detarification and product deregulation to ₹ 0.00992 lakh. Similarly, the overall average underwriting loss per policy of selected private non-life insurers has increased from `₹ 0.00425 lakh to ₹ 0.00793 lakh during the same period. It is observed in table 3.3 & 3.4 that the calculated 't' test values are higher than table value in case of both public and selected private non-life insurers. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on underwriting profit/loss per policy of both public and selected private non-life insurers" has accepted.

Overall, the study reveals that, during pre price detrification and product deregulation period all public non-life insurers have reported underwriting losses with an average of 0.0049 lakh per policy. The selected private non-life insurers have also reported overall average underwriting losses during same period. However, IFFCO TOKIO in 2004-05, ICICI LOMBARD during 2004 and 2005 BAJAJ ALLIANZ during 2004-07 has reported underwriting profits due to low claims per policy. During the post price detarification and product deregulation period both public and private non-life insurers have reported underwriting losses without any exception. This is mainly due to increased claims ratio in all segments, particularly health and motor segment claims ratio of which ranged between 90-110 percent during that period. The fire and marine segments in which claims ratio was much lower during the period before price detarification and product deregulation also have registered an increase during the post reforms period. The cumulative effect of this is reflected in underwriting losses.

Underwriting Profit/Loss per Branch(UPPB/ULPB)

While analyzing the underwriting profit/loss per policy in the preceding analysis it is stated that this is the single most important and the ultimate measures of the operational performance of insurers. In the present context underwriting profit/loss is analyzed at branch level which leads to drawing of similar interpretation here also. Tables 3.1 & 3.2 depict the Underwriting Profit/Loss per branch of both public and selected private non-life insurers before and after price detarification and product deregulation.

It is noticed from the data that in public non-life insurers, NIACL has reported an average underwriting loss per branch of ` 0.67 Cr before price detarification and product deregulation and continued to rise thereafter and registered ₹ 1.46 Cr during post price detarification and product deregulation which is the highest among all the public non-life insurers. Similarly, OICL, NICL and UIICL average ULPB has increased from ₹ 0.53 Cr, ₹ 0.63 Cr and ₹ 0.51 Cr respectively before price detarification and product deregulation to `0.89 Cr, `0.92 Cr and ₹0.73 Cr respectively thereafter. In case of private non-life insurers IFFICO TOKIO's average ULPB has increased from ₹0.26 Cr before price detarification and product deregulation to ₹1.76 Cr which is the highest among all the selected private non-life insurers during the study period. Similarly, the average ULPB of ICICI and HDFC has increased from₹`0.14 Cr, and ₹ 0.77 Cr to ₹` 1.15 Cr, and `₹1.07 Cr during the same period. BAJAJ ALLILANZ which is the only company in the present study has reported an average underwriting profit of `₹ 0.04

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Cr during pre price detarification and product deregulation period but these profits disappeared thereafter and turned to underwriting losses. The overall average underwriting loss per branch of all the public non-life insurers has registered an increase of 72 percent, while the same was just 9 percent in the case of selected private non-life insurers. It is observed that the calculated 't' test values are higher than table value in case of both public and selected private non-life insurers. Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on underwriting profit/loss per branch of both public and selected private non-life insurers" is accepted.

Overall, the above analysis reveals that both public and private non-life insurers have reported an average underwriting losses per branch during pre and post price detarification and product deregulation period (except Bajaj during pre price detarification and product deregulation). However, it is noticed that during pre price detarification and product deregulation period the public non-life insurers have reported underwriting losses per branch due to higher net claims per branch (an average of 87 percent) in net earned premium per branch while private non-life insurers have reported underwriting losses due to higher cost per branch (an average of 73.66). During post price detarification and product deregulation period the underwriting losses per branch of both public and selected private non-life insurers has increased further, due to the increase in claims per branch by 3 per cent in public non-life insurers and 9 percent in case of private non-life in net premium earned per branch. It can be conclude that price detarification and product deregulation led to increase in under writing losses in case of both public and selected private non-life insurers particularly private non-life insurers have reported higher underwriting losses per branch due to high claims per branch and cost per branch than public non-life insurers.

Net Profit/Loss Per Employee (NPPE/NLPE)

Net profit/loss per employee refers to contribution of each employee in earning the profit during a particular period. This is an important ratio for inter firm comparison. Every insurance company makes an effort t achieve high net profit per employee as it reflects the competency in generating net profit. Net profit per employee is calculated by dividing net profit by number of employees in the organization. Tables 3.1 &3.2 depict the Net profit per employee of both public and selected private non-life insurers before and after price detarification and product deregulation.

It can be observed from the data that in public non-life insurers, UIICL has reported average NPPE of ₹`0.018Cr before price detarification and product deregulation but thereafter it has increased to ₹ 0.028 Cr which is the highest among all the public non-life insurers during the study period. Similarly, average NPPE of NICL has increased from₹`0.006 Cr to ₹` 0.019 Cr during the same period. On the contrary, the average NPPE of NIACL and OICL has decreased from ₹0.028 Cr and ₹ 0.013 Cr to ₹ 0.027 Cr and ₹`0.012. In case of selected private non life insurers BAJAJ has reported average NPPE of ₹ 0.019 Cr before price detarification and product deregulation but thereafter it has increased to₹0.047 Cr which is the highest among all the selected private non-life insurers and even compared to public non-life insurers. Similarly, the average NPPE of IFFCO TOKIO has increased from ₹` 0.025 Cr to ₹` 0.031 Cr during the same period. But the average NPPE of ICICI has decreased slightly from₹ 0.014 Cr to ₹ 0.013 Cr during the study period. HDFC is the only insurer which has reported net loss per employee during the study period. However, it could reduce its average net loss per employee from an average of`₹ 0.054 Cr to ₹0.007 Cr during the study period. The overall average net profit per employee of all public non-life insurers has increased from ₹ 0.016 Cr before price detarification and product deregulation to ₹0.022 Cr. The overall average net profit per employee of all selected private non-life insurers has increased from ₹ 0.0009 Cr to ₹`0.021 Cr during the same period. It is observed that the calculated't' test values in table 3.3 and 3.4 are lower than table value in case of both public and selected private non-life insurers.Hence, the alternative hypotheses of "The price detarification and product deregulation have significant impact on net profit/loss per employee of both public and selected private non-life insurers"is rejected.

Overall, it is observed from the analysis the average net profit per employee of public non-life insurers has increased from₹`0.016 Cr to₹ `0.022 Cr during the study period. This is mainly substantial increase in net profit and decrease in employees. However, increase net profit is caused by increase income from investment but not from underwriting profit. Similarly, the private player's average net profit per employee also increased from a meager average of₹ 0.0009 Cr to ₹` 0.021 Cr during the study period which is mainly caused by substantial increase in net profit and low employees. Only HDFC has shown net loss per employee due to incurring of net losses during the study period. It indicates that profitability per employee of both public and selected private non-life insurers has increased during the study period.

FINIDINGS AND RECOMMENDATIONS

1. The increase of OPP public non-life insurers and decrease in private sector reflecting that prevailed competitive premium rates in private sector compared to public non-life insurers due to offering of innovative services at discount rates such as Zero depreciation on the value of the vehicle at the time of claims, the companies tie-up with

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different garages thereby enabling the policy holders to get their vehicles repaired with a lot of flexibility, hassle free aspects, discounts based on age and profession.

2. Due less allocation of gross premium for reinsurance by public non-life insurers their risk bearing capability per policy has increased by 24 percent. Similarly, as result of gradual decrease in dependency on reinsurance by private non-life insurers their retention ratio has increased by 12 percent during the study period which is a positive sign for the industry.

3. The average proportion of NCP in OPP in public non-life insurers has increased from 62 percent during pre price detarification and product deregulation to 69 percent during post price detarification and product deregulation period and 21 to 50 percent in case of private non-life insures during the same period. This attributed to the reason that increased claims ratio in all segments particularly more than 100 percent claims ratio in health and above 90 percent claims ratio in motor segment in the industry. However, still NCP is higher in case of public non-life insurers compared private non-life insurers because in total health insurance the share of public non-life insurers is 70 percent.

4. Hence, it is suggested that to increase the insurance coverage in health coverage in the untapped areas such as rural, unorganized and old aged people through increasing awareness and designing more suitable products in markets. It helps to increase premium pool in health segment and to report underwriting profits.

5. The proportion of average CPP in OPP has increased by 6 percent in public non-life insurers and by 4 percent in case of private non-life insurers during post price detarification and product deregulation period compared to pre price detarification and product deregulation period. This is mainly attributed to the reason that increases in salary expenses in case of public non-life insurers and increase of commission expenses in case of private non-life insurers.

6. Huge salaries in public non-life insurers is a major cause for increase in overall cost because, they getting more than 60 percent of business from individual agents,hence, it recommended to enhance the share of other distributional channel which are economical and potentiality to grow such as bancassuracne , direct business etc.

7. All public non-life insurers have reported underwriting loss per policy during the entire study period. In public non-life insurers the proportion of underwriting loss in gross premium has been increased by 6 percent (i.e. from an average of 9 to 15 percent), and by 4 percent (i.e. from an average of 14 to 18 percent) from pre price detarification and product deregulation period to post pre price detarification and product deregulation.

8. In case of selected private non-life insurersIt is revealed from the analysis that during pre-price detarifcation and product deregulation period both public non-life insurers have reported underwriting losses except , Iffco Tokio in 2005,Bajaj Allianz in 2004-07 and Icici Lombard in 2004 and 2005.

9. The major problem during tarified regime is that charging of same premium rate to the different class of people exposed to different levels of risks which caused the adverse selection. This led decrease increase in claims and decrease premium poll. To overcome this problem freedom is given to fix own premium rates based on risk involved in insurance. But, even today due to heavy completion in market non-life insurers fixing premium rates as “tariff minus discount” strategy instead of following risk based pricing method. This caused increase in underwriting losses further during 2007-14. Hence, it suggesting adopting risk based pricing method in the industry to enhance earning capability to face increasing claims.

10. Underwriting loss per branch of both public and selected non-life insurers has been increased from an average of ` 0.58 Cr and ₹`0.28 Cr to before price detarification and product deregulation to an average of `1.00 and ₹1.12 Cr during post price detarification and product deregulation.

11. Both public and selected private non-life insurers have reported underwriting losses during the study period, however, due to higher income from investment they reported overall net profit per employee during the study period.

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CONCLUSION

Even, after liberalization of insurance industry in 2000 and initiation of price detarification and production deregulation measures still non-life insurers are reporting losses in underwriting of insurance business. Underwriting loss is a major concern of non-life insurance industry due to consideration of discount factor in fixation of premium rates instead of underwriting factor such as risk. Besides, huge claims per policy in health and motor segments turned the insurance business unprofitable during the study period. Adverse selection of pricing is still proble of non-insurance business. Finally, the study can be concluded that the price detarification and product deregulation have shown significant impact of all selected operational variables except net profit per employee.

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