A Study on the Public Sector General Insurance Companies in India: Analysing Elasticity and Growth

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Abstract

The general insurance business was nationalized in 1972 with the establishment of General Insurance Corporation of India and its four subsidiaries namely, (1) National Insurance Company, (2) New India Assurance Company, (3) Oriental Insurance Company, and (4) United India Assurance Company. In order to inject greater competition and vitality into this sector, the government opened it up to private participation in 1999. In the year 2003, the subsidiaries were delinked from General Insurance Corporation of India. How have these companies been performing now is what has been studied in this paper. The paper studies the performance of public sector general insurance companies with the objective of analysing (i) elasticity and (ii) growth rates of premium income, underwriting income, investment income and profits during the period of eight years from 2013-14 to 2020-21. Results showed New India is on the top right now. It is using its larger premium, investment and profit volumes to its advantage. United and National even though having fair volumes are not able to increase them over the year. The statistical tools used are ratios, semi-log growth equation and regressing variable values on time.

Keywords:

General Insurance, Elasticity, Premium, Underwriting Income, Investment Income, Growth

INTRODUCTION

The economic liberalization commenced in India in 1991, heralding a comprehensive array of reforms across various sectors including banking, debt and equity markets, foreign exchange, and foreign institutional investments. Notably, reforms within the insurance sector transpired with a lag of eight years, materialising in 1999. This temporal disparity stemmed from a deliberate strategy wherein precedence was accorded to facilitating the expansion of sectors beyond insurance. Subsequently, the opening of the insurance sector was orchestrated concomitant with the attainment of a certain threshold of expansion in other sectors, thereby accommodating the burgeoning demand for insurance necessitated by the burgeoning business activities resulting from the liberalization measures. The main drivers of this growth included sound economic fundamentals, a rising middle class, an improving regulatory framework, and rising risk awareness (Sinha, T. 2007). Historically the advent of insurance in India can be traced back to

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the colonial era, notably introduced by the British. The first insurance enterprise established within Indian shores was the Triton Insurance Company in Calcutta, established in 1850, predominantly under British ownership. Subsequently, in 1907, Indian Mercantile Insurance was founded in Bombay, marking the inception of indigenous insurance endeavours in the country. Upon the dawn of independence, British and other foreign insurance enterprises collectively commanded approximately 40% of the market share, which gradually dwindled in the post-independence era. These entities primarily served the affluent strata of society, neglecting the socioeconomically disadvantaged segments, as well as pivotal sectors such as rural areas and agriculture. This lacuna prompted governmental intervention leading to the nationalization of the insurance sector in 1972. At the juncture of nationalization, India hosted a total of 107 insurance firms, comprising 55 domestic and 52 foreign entities. The culmination of this process saw the establishment of the General Insurance Corporation of India in 1972, along with its four subsidiaries viz., the National Insurance Company Ltd., headquartered in Calcutta (now Kolkata), the New India Assurance Company Ltd., based in Bombay (now Mumbai), the Oriental Insurance Company Ltd., located in New Delhi and the United India Insurance Company Ltd., situated in Madras (now Chennai). These subsidiaries were entrusted with nationwide operations and were mandated to operate in competition with each other. After, nationalization, these entities witnessed commendable progress, diversifying their portfolio to encompass policies catering to a wide spectrum of societal segments, including the economically vulnerable strata, rural locales, and agricultural pursuits.

Despite their commendable performance, certain inefficiencies had permeated the operational landscape of these entities, attributable to multifarious factors. Some of these inefficiencies stemmed from the imperative to extend services to economically unviable yet socially significant sectors of the economy. Additionally, complacency, borne out of their monopolistic position, contributed to suboptimal performance. Recognizing the imperative of infusing heightened competition into the general insurance industry, a discernible need emerged to liberalize the sector and invite private participation. An increasing volume of research literature has also lent support to the idea of deregulating these industries. Empirical evidence has indicated that government-directed allocation of resources tends to lead to misallocation and unfairly benefits certain groups (Sinha R.P., Cvetkovska, V., & Peovski, F. 2022).

Taking all factors into account, the appointment of the Malhotra Committee ensued. In 1994, the committee presented its findings, proposing extensive alterations to the investment strategies and organizational framework of the GIC. Among its recommendations were reducing directed investments to 45% from 70% and augmenting the GIC's share capital, with a portion allocated to employees and the public. Subsidiaries' capital was also slated for increase, with 50% earmarked for public/ employee ownership and the remaining 50% retained by the government. Moreover, the establishment of an Insurance Ombudsman, facilitating prompt resolution of policyholder claims, was suggested.

The revised investment norm of 45% in socially oriented sectors, as recommended by the Malhotra Committee, was implemented starting April 1, 1995. Additionally, the committee advocated for the creation of an Insurance Regulatory Authority (IRA), akin to the Securities and Exchange Board of India (SEBI).

The committee's recommendations underwent thorough discussions across various platforms, including the Consultative Committee of the Parliament, management of Life Insurance Corporation, General Insurance Corporation, subsidiary companies, trade unions, chambers of commerce, and consumer interest groups. The proposal for an autonomous Insurance Regulatory Authority garnered substantial backing, prompting the government to introduce legislation for its establishment. The Insurance Regulatory and Development Authority Bill, 1999, based on the committee's suggestions, was presented in parliament, passed in December 1999, and subsequently enacted as the Insurance Regulatory and Development Authority Act, 1999.

Furthermore, the government initiated a redressal mechanism for policyholders in November 1998 by instituting an Ombudsman Scheme for life and general insurance, aimed at resolving disputes related to premium adjustment and claims settlement delays.

In accordance with the committee's recommendations,

the government initiated the liberalization process in December 1999, thereby enabling private participation from both international and domestic firms. A clause allowing for a 26% foreign equity involvement in insurance joint ventures was outlined in the policy framework. Simultaneously, the public sector organizations were separated from the General Insurance Corporation (GIC), ending GIC's oversight function over the subsidiaries. As a result, in 2000, GIC took on the role of the country's reinsurer. The decoupling of GIC as the holding company for the four subsidiaries by 2003 marked a turning point in the industry's restructuring.

Some studies had been carried out after the liberalization to analyse the performance of these companies. It was observed (Verma, S. 2014) that during the period from 2001 to 2011. New India was first in terms of elasticity of premium, premium income, underwriting income, investment income and profits. The reason was that it was having large volumes and thus surpassed the other three companies. But an analysis of the growth of these variables reveals that the other three are doing better and growing at a rate higher than New India. United is the highest growth rate followed by National and Oriental. Has the trend been maintained or opening up has taken a toll on these companies, this needs to be seen. This paper undertakes an examination of the performance exhibited by public sector general insurance companies, with a specific focus on analysing the elasticity and growth rates of premium income, underwriting income, investment income, and profits over eight years spanning from 2013-14 to 2020-21.

REVIEW OF LITERATURE

The realm of insurance has emerged as a focal point of scholarly inquiry worldwide, garnering significant attention across various research domains. While historically rooted in research emanating from the United States, recent academic endeavours have broadened the scope to encompass diverse geographic locales including Australia, Nigeria, Switzerland, Germany, Japan, France, China, and Taiwan. This article presents an extensive review of scholarly studies conducted within the domain of insurance.

Mahlberg (1999) employed data envelopment analysis (DEA) to evaluate the technical efficiency exhibited by life and non-life insurers in Austria and Germany. The dataset spanned from 1992 to 1996 wherein Mahlberg's analysed information from 36 Austrian and 118 German insurance companies.

Diacon (2001) conducted a comparative assessment of general insurers across six European nations, namely France, Germany, Italy, the Netherlands, Switzerland and UK, for the year 1999, utilizing DEA methodology. The study encompassed data from 431 insurers, enabling an examination of their technical efficiency.

Hardwick and Guirguis (2002) assessed the overarching degree of cost efficiency within the UK life and general insurance sectors. Employing DEA, they derived technical, allocative, cost, and scale efficiency scores for two sets of 50 life and 50 general insurance companies operating within the UK between 1994 and 2001.

Cummins et al. (2006) pioneered explicit investigations into the interplay between risk management, financial intermediation, and economic efficiency within the insurance sector. Their research underscored the enhancing effect of risk management and financial intermediation on efficiency and solvency scores, albeit with a limited impact on overall efficiency.

Bhise, Ambhore, and Jagdale (2007) employed the claims to premium ratio and loss-cost ratio to assess the effectiveness of different agricultural insurance schemes in India. Their analysis revealed a claims to premium ratio of 3.11 at the national level.

Singh and Kumar (2009) examined the evolving financial performance trends within the Indian general insurance industry, employing traditional financial ratios. The study concluded that the advent of private sector insurance entities notably enhanced the competitive dynamics within the general insurance sector. Private sector insurers demonstrated superior efficiency metrics such as management expense ratios, combined ratios, and underwriting results ratios, with a progressive expansion of their market share annually.

Singh (2010) delved into the intricate relationship between Indian agriculture and its vulnerability to the capriciousness of rainfall patterns. Additionally, farmers

grapple with diverse production and marketing risks across various crop enterprises and agro-climatic regions. Singh advocates for the adoption of crop insurance as a prudent strategy to mitigate production risks. The study adopts a theoretical analytical approach, encompassing an examination of various schemes and pertinent data sets.

Huang and Eling (2013) studied the efficiency of non-life insurance companies in BRIC countries using data envelopment analysis. They studied the differences across countries in terms of variables like political and economic factors. They also studied the difference in managerial efficiency due to environmental factors. The period of analysis is 2000-2008. The study concluded that India has got the lowest efficiency among the four. Brazil is the most efficient which is followed by Russia and China.

Mandal and Dastidar (2014) investigated the impact of the global economic slowdown on general insurance companies in India. Their research indicated that the private insurance companies were more significantly affected by the global economic downturn compared to the public sector insurance companies.

Sinha (2016) carried out a bootstrapped DEA analysis to determine the efficiency of all the general insurance companies operating in India. The analysis covered a five-year period from 2009-10. The study found public companies to be more efficient. Also, it found a significant linkage between ownership and efficiency while the linkage between solvency and efficiency could not be established.

Natalia and Riwayati (2022) conducted a study on the influence of premium, underwriting ratio, return on equity, and return on investment on the profits of general insurance companies in Indonesia. Their research was based on a sample of ten insurance companies, analyzing data from 2015 to 2019. Their findings revealed that premium, underwriting ratio, and return on investment positively impacted profits. However, they observed that return on equity did not have a discernible effect, either positive or negative, on profits.

Sinha, Cvetkovska and Peovski (2022) analysed 15 private and public general insurance companies in India using convex non-parametric least square approach. The period covered was of 5 years from 2011-12 to 2016-17. They studied the effect of environmental variables on the efficiency of the insurance companies. The conclusion drawn indicated a positive relation between efficiency and insurer's age, the share of market and ROE but it is negatively related to size of the company.

Sood, Seth and Grima, S. (2022) analysed the readiness of the product portfolios of insurance companies to meet disruptions caused by emergencies like Covid-19. The study covered both pre and post liberalization periods. It concluded that the insurance sector needs to be more prepared to meet the emergencies like Covid-19 and such other unexpected calamities.

One of the main aim of reforms in the general insurance sector was to inject competition into the complacent working of the existing public sector insurance companies. How far that has been achieved has not been analysed by any of the studies done in India. In order to close this gap, the current analysis looks at these public sector businesses' premium elasticity and growth of premium revenue as well as their investment income, underwriting income, and profits before taxes.

STUDY OBJECTIVES

The objective of the study is to analyse the performance of public sector general insurance companies in India. This is achieved by breaking down the entire analysis into smaller goals which are enumerated below:

1. Estimation of elasticity of premium and its growth rate over the period under study to measure the responsiveness of the premium to increase in GDP of the country.
2. Measurement of growth rate of each of the four components of insurance business, namely, premium income, underwriting income, investment income and net profits.

METHODOLOGY

To determine the elasticity and growth of investment income, underwriting income, premium income and profits before taxes, the data of these companies from 2013-14 to 2020-21 has been taken. The years are ending as on 31st March. The data has been taken from the website

of Insurance Regulatory and Development Authority of India.

The reason for using these parameters is that it is business of an insurance company is to provide insurance cover for a price called premium. This premium the company invests to earn returns. Besides the company also earns profits or may incur losses while providing for insurance coverage. This is its underwriting business. The profits or losses from both the activities of an insurance company goes on to make for the final performance of these companies. Elasticity of premium income is of relevance because it tells how far the insurance company is able to convert an increase in per capita GDP into increase in premium income. The higher the elasticity the higher the premium and therefore, higher the profits.

The various estimations have been made as under:

I. To estimate elasticity the ratio of premium per capita to GDP per capita has been calculated.

$$\text{Elasticity} = \frac{\text{Premium per capita}}{\text{GDP per capita}}$$

II. Growth rates for the variables listed—Elasticity, Gross direct premium income, and Investment income—have been computed using the following equation:

$$\ln(Y) = a + bT + \mu$$

In this equation:

- ln(Y) represents the natural log of the dependent variable (elasticity, premium income, or investment income).
- 'a' denotes the intercept of Y.
- 'b' signifies the slope of Y, and when multiplied by 100, provides the rate of growth of variable Y.
- 'T' indicates the time period spanning from 2014 to 2021.
- 'μ' represents the error term for T.

The analysis has been done using MS Excel software. The use of semi-log equation gives the growth rates as well as the p value which helps in deciding whether the calculated growth rates are significant or not.

III. Growth trend had been estimated for the following:

- Underwriting income
- Profits before tax

Due to the presence of negative values in losses, the semi-log growth equation could not be applied. Therefore, we employed a regression analysis of actual values over time to calculate the trend. The analysis has been done using MS Excel software. The use of regression gives actual values of increase or decrease instead of rate. It also gives the p value which helps in deciding whether the calculated growth rates are significant or not.

RESULTS AND DISCUSSION

Elasticity

Table 1A exhibits premium elasticity per capita of public sector general insurance companies in terms of per capital GDP showcasing how per capita premium responds to a one-unit change in per capita GDP. A value exceeding 1 signifies elasticity, while a value below 1 indicates inelasticity to GDP changes. The table indicates a high degree of inelasticity in the premium to GDP ratio. New India consistently displays highest elasticity across all years, steadily increasing over time. In 2020-21, United and National show elasticities of 0.00085 and 0.00072, respectively, while Oriental demonstrates the lowest elasticity of 0.00065 in the same period. The collective elasticity of all public companies displays a steady increase from 0.00365 in 2013-14 to 0.00381 in 2020-21. Despite this improvement, a one-rupee change in per capita GDP yields negligible changes in per capita premium, indicating overall inelasticity. This inelasticity in India can be attributed to the significantly low levels of premium in relation to the country's population, or in other words, low insurance density.

Table 1B presents the growth rate of elasticity, with New India exhibiting the highest growth rate of 3.58%, statistically significant at the 5% level. Oriental follows with a growth rate of 1.13%, though statistically insignificant. Both National and United show negative growth rates of elasticity, with National recording the lowest at -3.37%, also statistically significant. Interestingly, despite having the lowest absolute value of elasticity, Oriental shows a steady increase over the 8-year period, while United and National, with higher absolute values of elasticity, experience a decline. When considering all four companies collectively, they exhibit a positive growth rate of 0.73%, though statistically insignificant. The growth rate of elasticity is also depicted in figure 1 through a bar chart.

Table 1a: Elasticity of Public Sector General Insurance Companies*

Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
New India	0.00122	0.00124	0.00129	0.00140	0.00147	0.00141	0.00146	0.00160
Oriental	0.00065	0.00061	0.00063	0.00072	0.00069	0.00071	0.00069	0.00065
National	0.00091	0.00090	0.00087	0.00093	0.00095	0.00080	0.00075	0.00072
United	0.00086	0.00086	0.00089	0.00104	0.00102	0.00087	0.00086	0.00085
Public Total	0.00365	0.00361	0.00368	0.00410	0.00413	0.00380	0.00376	0.00381

Source: Author's Calculation

* Elasticity Is The Ratio Of Premium Per Capita To Gdp Per Capita.

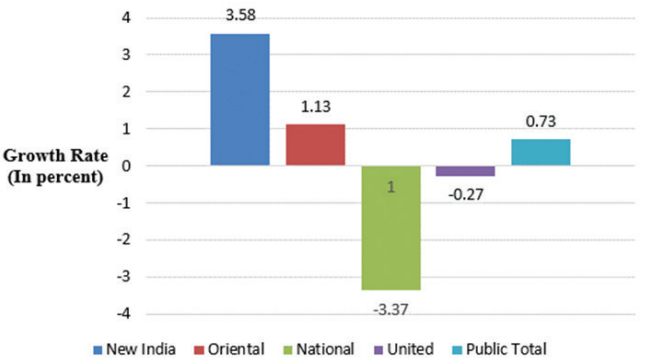
TABLE 1B

GROWTH RATE OF ELASTICITY OF NON-LIFE INSURERS (2013-2020)

INSURER	Growth rate (in percent)	p value	Significance (p< 0.05)
New India	3.58	0.00041	significant
Oriental	1.13	0.27794	insignificant
National	-3.37	0.01969	significant
United	-0.27	0.85409	insignificant
Public Total	0.73	0.39432	insignificant

Source: Calculated by the author using semi-log growth equation.

FIGURE 1
GROWTH RATE OF ELASTICITY OF NON-LIFE INSURERS (2013-2020)



GROWTH RATE AND TRENDS

The functioning of the non-life insurance companies has been examined with reference to the growth in premium income, underwriting income, investment income and profits before tax utilizing the semi-log regression equation:

$$Y = a + bT + \mu$$

In this equation:

- Y denotes the natural logarithm of the dependent variable (premium income, underwriting income, investment income, or profit).
- 'a' stands for the intercept of Y.
- 'b' represents the slope of Y, where multiplication by 100 yields the rate of growth of variable Y.
- 'T' symbolizes the time period from 2001 to 2011.
- 'μ' indicates the error term.

Growth in Gross Direct Premium

TABLE 2

GROWTH RATE OF GROSS DIRECT PREMIUM INCOME OF NON-LIFE INSURERS (WITHIN & OUTSIDE INDIA) (2013-2020)

INSURER	Growth rate (in percent)	p value	Significance (p< 0.05)
New India	12.45	0.0000042	Significant
Oriental	10.00	0.0006346	Significant
National	5.50	0.0131451	Significant
United	8.60	0.0033377	Significant
Public Total	9.59	0.0002815	Significant

Source: Calculated by the author using semi-log growth equation.

FIGURE 2
GROWTH RATE OF GROSS DIRECT PREMIUM INCOME OF NON-LIFE INSURERS (WITHIN & OUTSIDE INDIA) (2013-2020)

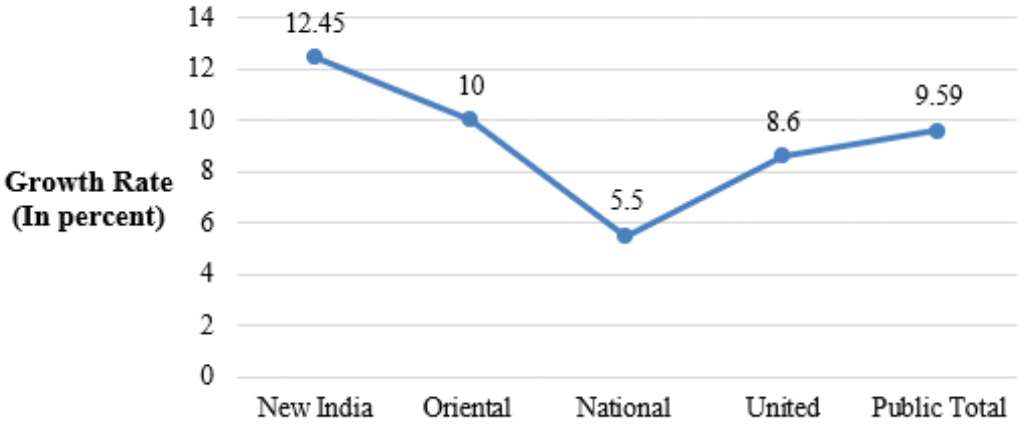


Table 2 summarises the gross direct premium and its growth rate for the companies under study. New India has the highest growth rate—12.45%—while Oriental has the second-highest growth rate—10%. United grows at a pace of 8.60%, whereas National grows at a slower rate of 5.50%. All companies combined have grown at a rate of 9.59%, and all growth rates are statistically significant ($p < 0.05$). According to this data, all four firms' premium income is rising, with New India leading the way.

Comparing the total premium income of these companies (as shown in Appendix 1, Table A1), Oriental currently has the lowest total. However, its growth rate is rapid, suggesting that it may soon surpass United and National in total premium income. The growth rate has been depicted in figure 2 via a line graph.

Underwriting Income Growth

TABLE 3

GROWTH TREND OF UNDERWRITING INCOME OF PUBLIC NON-LIFE INSURERS (2013-2020)

INSURER	Growth trend (in rupees, crores)	p value	Significance (p< 0.05)
New India	-319.35	0.0427	Significant
Oriental	-417.98	0.0266	Significant
National	-473.33	0.0783	Insignificant
United	-398.03	0.0521	Insignificant
Public Total	-1608.69	0.0180	Significant

Source: Calculated by the author using regression equation.

FIGURE 3
GROWTH TREND OF UNDERWRITING INCOME OF PUBLIC NON-LIFE INSURERS (2013-2020)

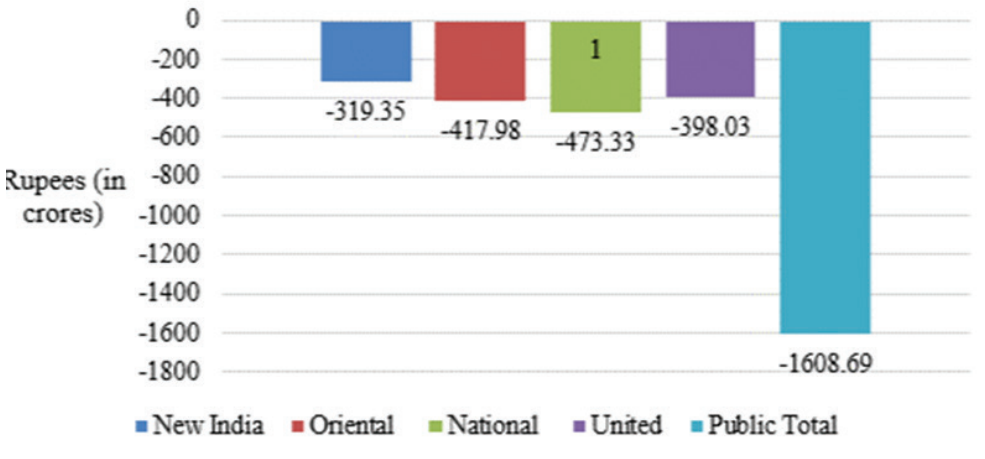


Table 3 gives the growth trend of underwriting income of non-life companies which comprises of income from fire insurance, marine insurance and miscellaneous insurance activities. The functioning in this domain is disappointing, as all companies have incurred losses throughout the study period. This can be attributed to the significant number of claims these companies are obligated to settle. Due to the presence of negative values for losses, the semi-log growth equation could not be applied. Therefore, the trend was calculated by regressing actual values on time. For better visual understanding, the growth trend is represented in Figure 3 through a bar graph.

National has the steepest decline amounting to INR -473.33 crores. This suggests that National has been experiencing a decline in underwriting income at an average rate of INR -473.33 crores per year. New India shows the lowest decline, with an average of INR -319.35 crores, followed by United with INR -398.03 crores, and Oriental with INR -417.98 crores. Overall, the combined decline for all companies is INR -1608.69 crores.

Investment Income Growth

TABLE 4

GROWTH RATE OF INVESTMENT INCOME OF PUBLIC NON-LIFE INSURERS (2013-2020)

INSURER	Growth rate (in percent)	p value	Significance (p< 0.05)
New India	11.24	0.000017	Significant
Oriental	6.79	0.062248	Insignificant
National	-1.26	0.759195	Insignificant
United	6.57	0.034562	Significant
Public Total	6.85	0.004002	Significant

Source: Calculated by the author using semi-log growth equation.

FIGURE 4
GROWTH RATE OF INVESTMENT INCOME OF PUBLIC NON-LIFE INSURERS (2013-2020)

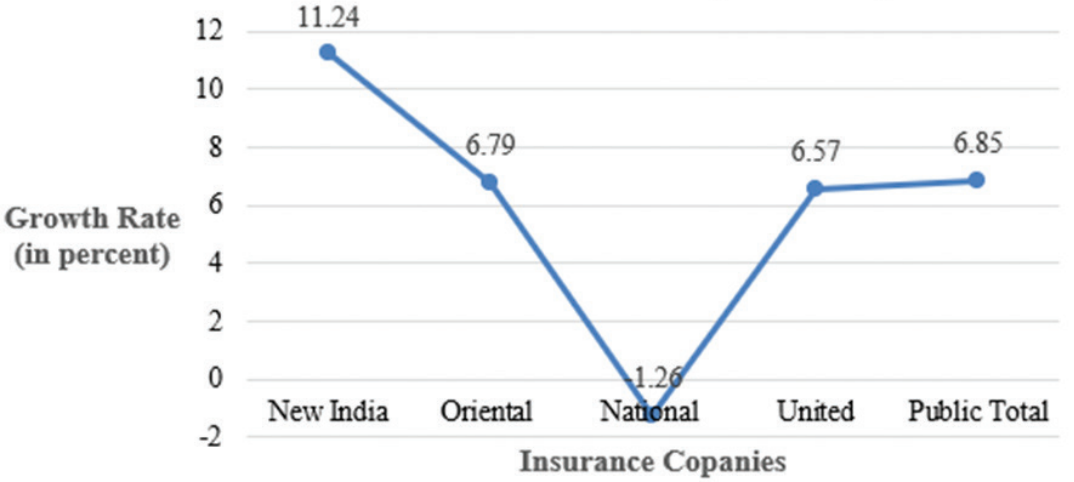


Table 4 Illustrates the growth rate of income from investment during the study period. The highest growth rate of investment income is observed in New India Assurance Company, growing at a rate of 11.24%. Oriental follows with a growth rate of 6.79%, and United with a growth rate of 6.57%. All of these growth rates are statistically significant. National once again occupies the last position, with not only the lowest growth rate but also a negative rate of -1.26%, indicating a decrease in investments over the eight-year period. When we compare absolute values the investment income of New India is higher than that of other companies , while Oriental's investment income is the lowest (as shown in Appendix 1, Table A3). This information has been visually represented in Figure 4.

Profits Before Tax Growth

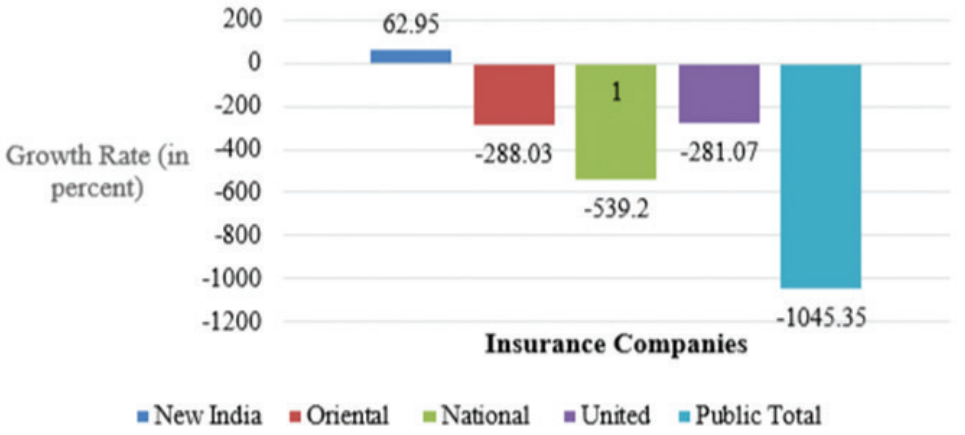
TABLE 5

GROWTH TREND OF PROFITS BEFORE TAX OF PUBLIC NON-LIFE INSURERS (2013-2020)

INSURER	Growth trend (in rupees, crores)	p value	Significance (p< 0.05)
New India	62.95	0.5821	Insignificant
Oriental	-288.03	0.1439	Insignificant
National	-539.20	0.0377	Significant
United	-281.07	0.1495	Insignificant
Public Total	-1045.35	0.0470	Significant

Source: Calculated by author using regression equation.

FIGURE 5
GROWTH TREND OF PROFITS BEFORE TAX OF PUBLIC NON-LIFE INSURERS (2013-2020)



The growth of profits before taxes is seen in Table 5. It was not possible to determine the growth rate of earnings before taxes directly since different years had a combination of positive and negative figures. As a result, the values of earnings before taxes were regressed to establish the growth trend. The sole company showing a positive annual growth of INR 62.95 crores is New India. National has the biggest decline, with an average annual decline of INR -539.20 crores. With annual decreases of INR -281.07 crores for United and INR -288.03 crores for Oriental, they follow. All public enterprises' combined average growth in profits before taxes points to a decrease in INR 1045.35 crores per year.

CONCLUSION

This comprehensive examination of the performance metrics of the four public sector general insurance companies across various dimensions, makes it evident that New India emerges as the frontrunner in terms of elasticity of premiums and the growth rate thereof over the eight years. Although Oriental exhibits the lowest elasticity among the four, it demonstrates a positive growth rate in elasticity. Conversely, National portrays a negative growth rate in elasticity, ranking lowest among the four. Analysing the performance regarding the growth of net premium income, underwriting income, investment income and net profit before taxes reveals New India's superior performance. It leads in both absolute values and growth rates across these variables. Conversely, United displays suboptimal performance during the study period, slightly surpassing National but trailing behind Oriental in terms of absolute values. As Oriental exhibits an increasing growth rate across most variables despite having the lowest absolute values, it signifies a promising trajectory. Consequently, New India's dominance underscores the imperative for others to emulate its strategic approaches, particularly regarding leveraging scale advantages. Failure to enhance performance could result in Oriental outpacing United and National in both volume and performance metrics. Thus, New India's exemplary position underscores the need for the others to heed the lessons it offers.

IMPLICATIONS OF THE STUDY

The findings of the present study give us certain insights into the performance of these four companies which can help them in devising policies to improve the premium income and therefore elasticity and profits.

1. The main implication which stems from the research is that New India should be analysed in greater detail to see why it is performing better than the others despite being a public sector company.
2. Oriental, National and United should try to improve their elasticity by expanding their business to improve their premium volumes.

3. Insurance companies must establish robust databases to effectively forecast claim occurrences, including their frequency and severity. Adequate IT support is essential in this endeavour. Enhanced risk analysis of potential insurance policyholders can significantly decrease claims, thereby reducing underwriting losses and enhancing overall value.
4. Streamlining claims management processes, preventing leaks, and combatting fraud will undoubtedly lead to a decrease in claims expenditure. Consequently, this will mitigate negative underwriting losses and consequently enhance profitability.

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APPENDIX 1

TABLE A1

GROSS DIRECT PREMIUM OF NON-LIFE INSURERS (WITHIN & OUTSIDE INDIA)

(in crores)

Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
New India	13,728	15,480	17,763	21,598	25,159	26,608	29,715	31,573
Oriental	7,283	7,562	8,612	11,117	11,737	13,485	13,996	12,747
National	10,261	11,283	12,019	14,282	16,244	15,180	15,313	14,186
United	9,709	10,692	12,250	16,063	17,430	16,420	17,515	16,705
Public Total	40,980	45,017	50,644	63,060	70,570	71,693	76,539	75,211

Source: Handbook of Indian Insurance Statistics, IRDA

TABLE A2

UNDERWRITING INCOME OF NON-LIFE INSURERS

(in crores)

Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
New India	-1987	-2216	-3100	-3547	-2524	-5246	-4105	-3696
Oriental	-1290	-1532	-1899	-4341	-1919	-3807	-4479	-3729
National	-878	-1464	-3620	-3680	-5617	-4456	-5759	-2855
United	-1224	-1807	-2216	-4445	-2542	-5024	-4398	-3218
Public Total	-5379	-7019	-10835	-16012	-12603	-18533	-18741	-13498

Source: Handbook of Indian Insurance Statistics, IRDA

TABLE A3

INVESTMENT INCOME OF NON-LIFE INSURERS

(in crores)

Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
New India	3215	3829	3956	4518	5167	6026	6994	6597	
Oriental	1949	2101	1828	2341	3323	3324	3179	2410	
National	2263	2654	3764	3746	3486	2935	1950	2724	
United	1967	2142	2599	2636	3725	3319	3177	2799	
Public Total	9394	10725	12147	13241	15700	15604	15300	14529	

Source: Handbook of Indian Insurance Statistics, IRDA

TABLE A4

PROFITS BEFORE TAX OF PUBLIC NON-LIFE INSURERS

(in crores)

Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
New India	1294	1776	906	1164	2725	645	1639	2037
Oriental	661	617	190	-1987	1465	-429	-1499	-1512
National	1008	1197	150	49	-2183	-1696	-4108	-563
United	633	319	256	-1913	1228	-1878	-1486	-985
Public Total	3596	3910	1502	-2687	3235	-3358	-5454	-1023

Source: Handbook of Indian Insurance Statistics, IRDA