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## THE PRIVATIZATION EFFECTS ON IRAN INSURANCE INDUSTRY

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### **Abstract**

*Two methods of privatization through ownership transfer and privatization from below are more proper than other ones. The privatization program in Iran insurance industry is performed through privatization from below initiated from 2000 and proceeded in recent years by ownership transfer according to general policies of Iran Law. This paper shows how privatization from below is effective more than ownership privatization in competition extension in insurance industry and spread of its supporting businesses. This method have had more effects on insurance industry by extending insurance industry practices, leading to differentiation in insurance products, improving public firms' performance and extending insurance relevant businesses.*

**Key Words:** *privatization from below, competition, business atmosphere, insurance industry performance*

### **JEL Classification: G22**

### **1. INTRODUCTION**

Iran Insurance Industry is not operating well compared to other countries because the industry performance indices are low, the combination of received premiums is poor, the management structure of the industry is inefficient, and the industry share out of national saving is low. There are numerous reasons for lack of development in Iran insurance industry including public and monopolistic insurance market, non-competitive business environment and the existence of complicated rules and regulations.

Privatization, by creating and expanding competition, can be considered as one of the most important ways of coping with undeveloped insurance industry. If we define privatization as expanding private sector activities relative to public one then it will be implemented through downsizing public sector activities or enlarging private one. There are different methods for privatization and in each one a certain level of business risk is distributed between government and

private investors. Each method requires a different time for privatization period and it is not possible to select a unique method for any firm or any subsection of economy. Selecting privatization method depends on the company's features or target section, regulatory environment, political elections and the goals which are sought. Additionally, selection of privatization method not only is influenced by economical factors but also it is affected by political ones because it is a part of a political process. Therefore, factors affecting privatization include property ownership history, financial and competitive situation of public company, ideological view of government to markets and deregulation, potential perspective of industry regulatory structure, the need for compensation of influential stakeholders, capital market situations, expertness of potential investors, and government willingness to transfer properties to foreigners. (Megginson, 2005:84-6) Complexity of goals induces countries to use various methods for privatization of their properties. By considering these conditions we can summarize privatization methods into the four categories. (Brada, 1996:68)

- Outsourcing, a company can organize its activities in two ways of purchasing or producing. In this method, privatization means that the company purchases its required products and services instead of producing them. This method is applied when government is not willing to transfer core activity to private sector.
- Public Private Partnership (PPP), in which investment is done by private sector and government delegate the management to investor by the hope that after a specified time the ownership is transferred to it. This method often is used in infrastructural sectors such as transportation.
- Privatization through sale of state property or transfer of ownership, which is the most prevalent and simplest method of privatization meaning transfer of government properties to private sector.
- Privatization from below (releasing and deregulation), which provides the possibility of private sector cooperation in those activities which were previously public. This leads to competition between actors of private and public sectors and thereby it can be prior to privatization. So, the public sector is urged to gain a favourable level of efficiency to survive in the market. Releasing can be a good alternative for privatization, such as sale of state properties, since it can lead to competition with lower costs. It can also be done in cases such as entering to market and establishing new firm in the industry, transacting in the market, exporting an importing products, deregulating in firms' establishment and their activities, and release of financial and employment system and other relevant markets. Havrylyshyn and McGettigan (2000) stress the importance of this type of privatization in the transition economies.

Privatization plan in Iran, initiated from 2000, can be considered as privatization from below which is known as release of insurance industry. This method is usually applied in industries which are completely in hands of government and permits private sector to enter the industry leading to competition in market. This method, at first, creates quantitative competition in the market and then extends increasingly the price competition in markets related to insurance companies such as labour, finance and properties. Consequently, it influences the private and even public insurance companies' performance and total insurance market. The privatization through sale of public insurance companies has also initiated from 2009 and continues till now.

This paper tries to investigate the effects of privatization on total performance of Iran insurance industry, insurance activities volume, variety of insurance products and public insurance companies' performance.

## 2. PRIVATRIZATION ROLE IN IRAN INSURANCE INDUSTRY PERFORMANCE

The privatization method in Iran, started since 2000, was privatization from below but privatization through sale of state property or ownership transfer has initiated from 2009. Now, it is possible to study the effects of these two methods of privatization on the industry performance.

A good measure to show privatization from below degree in insurance industry is the private insurance companies' share out of total insurance premiums in the insurance market. The private insurance companies launch their businesses after the enactment of private insurance companies Rule in 2002. At the first year, these companies gained 99 billion Rials premiums consisting 1 percent of total market premiums. But this share increased in next years and reached up to 22 percent of insurance market share in 2007 (Table 1).

**Table 1: Insurance Activities Share in Public and Private Sector Based on Insurance Premiums**

Year	Total Premiums	Public	Private	Public Share	Private Share
	Billion Rials	Billion Rials	Billion Rials	Percent	Percent
1998	2019	2019	0	100	0
1999	3003	3003	0	100	0
2000	4063	4063	0	100	0
2001	5740	5740	0	100	0
2002	9179	9086	93	99	1
2003	12743	12366	378	97	3
2004	17318	15384	1934	88.8	11.2
2005	21530	18567	2963	86.2	13.8
2006	26561	22227	4334	83.7	16.3
2007	33829	26330	7499	77.8	22.2

Source: Iran Insurance Statistical Yearbook

## 3. PRIVATIZATION EFFECT ON INSURANCE ACTIVITIES VOLUME

Insurance activities volume can be showed by various indicators. All indicators show a remarkable growth in insurance activities volume since privatization enactment in 2000. Insurance activities share in Gross Domestic Product reached to 0.46 in 2007 while it was only 0.25 in 2002. The produced premium share to Nominal Gross Domestic Product was 1 percent in 2002 and reached to 1.17 in 2007. Iran insurance premium per capita was only 17.3 (USD) in 2002 and increased up to 50.2 (USD) in 2007 (Table 2).

The main changes in Iran insurance market during 2002 to 2007 shows the development of this industry (Table 3). The number of insurance companies increased from 5 to 19. Moreover, the number of insurance agents, brokers, insurance companies' branches and insurance employees has grown more than 46 percent.

**Table 2: Insurance Activities Share in Gross Domestic Product in Iran**

Year	GDP (Billion Rials)	Ins. Activities (Billion Rials)	Ins. Activities Share in GDP (%)	Ins Premium to GDP (%)	Premium Per Capita (USD)
1998	300140	495	0.17	0.61	18.6
1999	304941	551	0.18	0.69	8.8
2000	320069	651	0.20	0.70	7.9
2001	330565	826	0.25	0.86	11.2
2002	357671	1028	0.29	1	17.3
2003	385630	1652	0.43	1.13	22.8
2004	410429	1870	0.46	1.19	29.4
2005	438900	2017	0.46	1.16	34.9
2006	467930	2142	0.46	1.17	40.8
2007	499071	2279	0.46	1.17	50.2

Source: National Accounts, Insurance Industry Yearbook.

**Table 3: Iran Insurance Industry During 2002 to 2007**

Item	2002	2003	2004	2005	2006	2007	Growth (%)
Ins. Companies	5	12	17	18	19	19	280
Ins. Agents	5848	6514	6600	7134	7852	8532	46
Ins. Brokers	173	203	233	257	263	266	54
Ins. Com.' Branches	373	400	410	424	535	575	54
Ins. Employees	6263	6500	6828	7218	9519	10718	71

Source: Iran Insurance Industry Yearbook

#### **4. PRIVATIZATION EFFECT ON DIVERSITY OF PRODUCTS IN INSURANCE INDUSTRY**

Another effect of privatization is offering new products into insurance market which determines diversification in insurance industry. In the past years, Iran public insurance companies were operating in traditional and concentrated form of business by offering products like fire, car and third party insurance covers. While, recently, covers such as credit, oil and energy insurances received more importance than before 2001. Additionally, 17 new liability, 4 new life, 6 new health plus rent and train insurances and many other ones have also added to previous insurance covers (Iran Central Insurance, 2009: 87).

The diversity of insurance activities can be analyzed by insurance activities concentration index. The Herfindahl-Hirschman Index is one of the most commonly used indicators to detect anticompetitive behavior in industries. In fact, an increase in the value of the index is usually interpreted as an indicator of actions which may lessen competition or even create a monopoly (Ipczynski et al, 2005, p. 218). By applying Herfindahl-Hirschman Concentration Index, we calculated the share of 4 main insurance covers, except third party insurance, in the industry during 1997 to 2007. The results show that the value of this index equals 7.2 in 2002 and 8.2 in 2007. Therefore, it can be claimed that privatization has partially influenced insurance products diversification during recent years.

**Table 4: Insurance Premium Concentration Index Based on Insurance type (%)**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Simple Concentration Index for Total Market	76.6	75.9	71.8	72.4	72.2	68.8	68.6	74.1	76.2	73.0	73.4
Simple Concentration Index Except Third Party Ins.	68.9	65.7	59.8	62.2	56.9	53.1	51.1	56.6	58.0	50.4	52.1
Hirschman-Herfindahl Concentration Index Except Third Party Ins.	12.4	11.4	9.2	10.0	8.2	7.2	6.9	9.8	10.3	9.0	8.2

#### 5. PRIVATIZATION FROM BELOW EFFECT ON PUBLIC INSURANCE COMPANIES

Privatization from below not only influences total amount of insurance market but also it impacts public insurance companies' performance through increase in competition. In this section we evaluate the privatization from below effect on insurance companies' performance, started at 2000, by applying some performance evaluation measures and available statistics (Table 5).

The coverage ratio of public insurance companies is calculated based on current assets and investment. Comparing to 2001, this measure increased in 2007 for Iran and Dana Insurance Companies and decreased for Asia and Alborz Companies. The coverage ratio in all public insurance companies has increased from 85% to 99% during the period studied. It indicates that the index trend is along with insurance industry privatization.

"Total income to total cost ratio" of public insurance companies shows the income these companies receive against their costs which can be assumed as insurance companies' profitability. The computations indicate that this ratio has decreased in all companies except Iran Insurance Company in 2007, comparing to 2001. Therefore, it demonstrates that with the presence of private insurance companies in the market, public insurance companies' profitability decreased.

"Total profit to total income" ratio involves profitability of all insurance activities and determines the company's turnover over the time. This index, like the total income to total cost index, became worse in the period of privatization from below.

**Table 5: Measures of Public Insurance Companies' Performance during Privatization from below Period**

Index Name	Coverage Ratio	Total Income/ Total Cost	Total Profit/ Total Income	Return on Investment
Index Definition	Acceptable Assets/ Received Premiums	(%)	(%)	Profit/ Assets
1999	103	104.7	4.5	5.4
2000	92	103.6	3.5	4.45
2001	88	103.1	3.0	4.16
2002	85	102.7	2.6	3.14
2003	93	102.9	2.8	3.11
2004	96	105.3	5.0	5.74
2005	101	104.2	4.0	4.81
2006	96	101.5	1.5	1.70
2007	98	102.3	2.3	2.64
Index Name	Total Income/ No. of Employees	Total Claims Coefficient	Voluntary Ins. Claims Coefficient	Compulsory Ins. Claims Coefficient
Index Definition	Million Rials	Total Paid Claims/ Total Received Premiums	Paid Claims in Voluntary Ins./ Received Premiums in Voluntary Ins.	Paid Claims in Compulsory Ins./ Received Premiums in Compulsory Ins.
1999	568	74	55	119
2000	701	71	53	119
2001	1050	81	55	129
2002	1935	80	56	128
2003	2262	74	52	109
2004	3438	79	60	106
2005	4188	82	68	101
2006	4164	78	56	107
2007	4373	75	48	109

“Return on investment” rate indicates the level of company assets usage in producing and increasing profitability. The high value of this proportion reveals that the company has used its available assets efficiently to make profit. This index, like the total income to total cost index, became worse also in the period of privatization from below. The reduction of profitability indices in public insurance companies after the privatization is due to entrance of new competitors which led to decrease in their market share.

“Total income to total employees” ratio displays the income gained by each employee in insurance company. An increase in this ratio can be due to increase in company income or decrease in number of employees which determines the employees’ productivity in insurance companies. This ratio increased for public insurance companies in 2007 relative to 2001.

“Claims coefficient” presents the share of claims paid out of total received premiums. The total claims coefficient reduced only for Iran Insurance Company in 2007 relative to 2001. So, since

this company has a dominant role in Iran insurance market, it can be claimed that this coefficient has decreased for all public insurance companies.

Although, the claims coefficient for compulsory insurances decreased for three Iran, Asia, and Alborz Insurance Companies in 2007 relative to 2001 and consequently it decreased from 129 to 109 for all public ones but all these changes were influenced by government decisions about Third Party Insurance.

Claims coefficient for voluntary insurances reduced for two Iran and Dana Insurance Companies and increased for Asia and Alborz ones in 2007 relative to 2001. This coefficient decreased from 0.55 to 0.48 for all public insurance companies revealing their better performance during the corresponding years.

To investigate the more accurate relationship between public insurance companies' performance measures and privatization from below we used a regression model with pooling data (Time and Cross Sectional Series) collected from four Iran public insurance companies during 2001 to 2007. The dependent variable in this equation is each one of the insurance companies' performance measures and exploratory variable is privatization from below. The estimation results can be seen in Table 6 verifying the results of statistical analysis.

**Table 6: Relationship between Measures of Public Insurance Companies' Performance and Privatization from below Degree**

Index Name	Coverage Ratio	Total Income/ Total Cost	Total Profit/ Total Income	Return on Inv.
Correlation	-0.12	-0.16	-0.14	-0.14
Significance	N.S	0.95	0.95	0.95
No. of Observations	28	28	28	28
Index Name	Total Income/ No. of Employees	Total Claims Coefficient	Claims Coefficient for Compulsory Ins.	Claims Coefficient for Voluntary Ins.
Correlation	13.68	0.10	0.16	-0.85
Significance	0.99	N.S	N.S	0.90
No. of Observations	28	28	28	28

The estimation results of statistics and econometric model show improvement in public insurance companies' coverage ratio, total income to number of employees, total claims coefficient, claims coefficient of voluntary and compulsory insurances and in contrary, regression in their total income to total cost, total profit to total income and return on investment.

Thus, the public insurance companies' performance decreased after conducting privatization which is due to preventing monopoly in insurance industry. Although, the regression in profitability indices of these companies is along with increase in social welfare but we have to be notified that these companies have had better performance in respect of other indices implying that competition development in insurance market has improved public insurance companies' performance in other respects through privatization.



## **6. CONCLUSION AND RECOMMENDATIONS**

Iran insurance industry privatization plan started at 2000 in the form of privatization from below and continued after 2009 through sale of state property or ownership transfer. By extending competition, privatization from below resulted in consequences such as development of insurance activities volume, variety of insurance products and even improvement in performance in some fields. Therefore, sale of public insurance companies must be done in a way that increases competition in this industry.

Completing privatization plan in Iran insurance industry requires deregulation and revision in regulating authorities. So, it is needed to shift tariff regulating toward financial regulating. Additionally, the regulating authority must be just in insurance market to prevent any damage to competition. Thus, it is required to divest the responsibility of those companies left public from Central Insurance and transfer it to other parts of government like insurance secretary of Ministry of Economics.

Having a fair competition in insurance market, it is necessary to behave with public and private insurance companies fairly and giving rights equally to both of them without any discrimination as well as setting firm budgetary restrictions for public companies like private ones.

Expansion of competition also requires provision of necessary infrastructures for development of businesses related to insurance industry including e-commerce, marketing and sale, training and research, and rating institutions.

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