

# IRANIAN PHARMACEUTICALS INDUSTRY ANALYSIS REPORT

JANUARY 2016



## Iranian Pharmaceuticals Industry Analysis Report

### Summary

This report provides a brief overview on macro pharmaceutical Industry in Iran. It identifies and gives a broad introduction to the investment opportunities in this sector. As well as assessing the actual and potential advantages and challenges of the industry, this report includes a briefing on global market, followed by the strengths and weaknesses of the industry in regional terms. It has also been tried to get an in-depth insight

to the efficiency of the domestic companies by investigating the structure of productions and compare these productions in the existing consumer market. In this regard the optimal production structure and effective control over the market sales, as well as high quality productions and productions in the saturated market has been reviewed to observe the appropriate investment options in this sector.

## **Global pharmaceutical industry**

The pharmaceutical industry is one of the most profitable industries in the world. The stable upward trend along with low fluctuations are the distinctive features of this sector. Increase in population growth with fundamental and sensitive individual's need to health care, has led the industry to undertake a growing trend. The pharmaceutical sector has been less and later exposed to economic fluctuations and it has been less affected by the economic cycle of boom and recession in comparison to other industries.

At present, the volume of pharmaceutical industry in the world is almost over one trillion US dollars, although this amount will have been exceeded to 1600 billion dollars by Income increase, change in the world's population by age, increase in health status of population and changes in life style behavior of the public, has led us to face a variety of more different illnesses than in the past. For example, infectious diseases have been reduced while chronic diseases and special disease (cancer, diabetes, neurological, and cardiovascular) are increasing, however, their treatment regime is long, complicated and expensive.

2018. Key factors affecting the pharmaceutical industry in the world on both the supply and demand sides can be divided into the following categories:

### **a. Population (including population and age distribution of the population)**

According to the World Health Organization (WHO) world's population is expected to increase by one billion people over the next 10 years and respectively there will be 500 million people increase to the population of aged over 50 years.

### **b. GDP per capita**

General increase in income and living standards has always been associated with health cost.

### **c. Health insurance development and increase in government health expenditure**

Increase in living standards is always associated with governmental public health concern, increase in government spending, and the growth in health insurance.

### **d. Research and Development:**

High level of cost in research phase is as a key factor affecting pharmaceutical industry's supply side. Patent protection

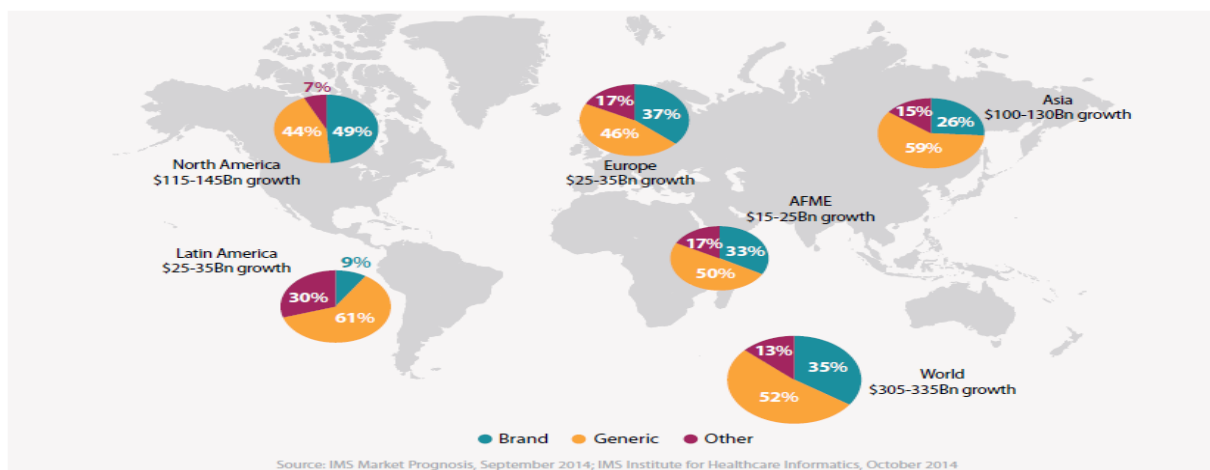
allows a manufacturing company to recoup the cost of developing of a particular drug and to enjoy a period of exclusive right to market, an innovator drug called “brand name”. After expiring a patent on a drug any pharmaceutical company can manufacture and sell the drug that defines as “generic”.

The global annual spending on research and development is worth US\$300 billion, a

figure expected to rise to US\$400 billion within three years. The 30% global R&D funding share in respect to the whole Industry reflects its impact on Pharmaceutical manufacturing.

The figure blow illustrates the geographic distribution of generic and brand drugs consumption:

**Geographic distribution of medicine spending**



**IMS Outlook for the Global Pharmaceutical Industry:**

- Spending levels will be driven by branded drugs primarily in developed markets, along with the greater use of generics in pharma emerging markets—offset by the impact of patent expires.
- the uptick in the number of approvals of the new molecular entities (NMEs), leading to a new wave of innovation and invention in the industry
- Sales of drugs related to the cancer will have the most growth with consideration to

- approval of new invented drugs and increase in the number of patients.
- Consumer spending on diabetes medications in developed and developing countries will experience an increase of 10%.
- New hepatitis drug sales growth will be the next focus by reducing the period of treatment, definitive treatment and side effects
- Focus on therapeutic areas related to cancer, diabetes and hepatitis will be important for companies’ growth at the global level.

- The industry sales will experience slower growth until 2018 after the increasing trend in 2014 and 2015,
- Major growth is related to reduction of expired brand drugs in this period, the production of new medicines and price increases. The growth rate is projected to be between 4 to 7 percent.

### Iranian Pharmaceuticals Industry

#### Key facts:

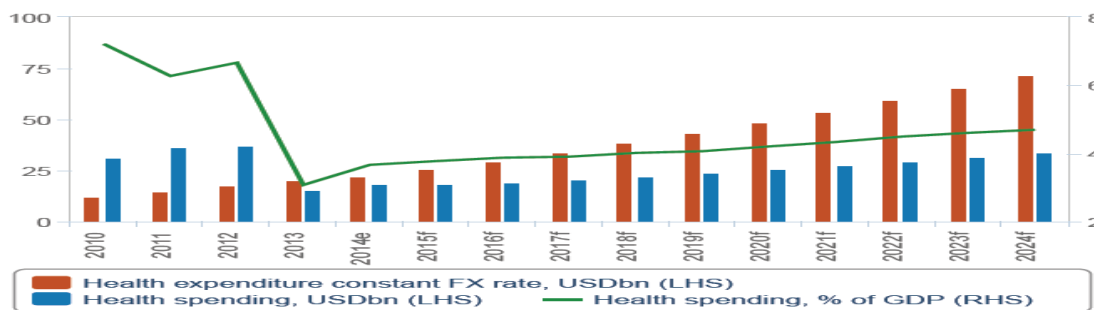
- Iran is a large pharmaceutical market in the region and has undergone great growth in comparison with developing countries and the pharma emerging group, and the market is expanding quickly while a major share goes to biotechnology drugs, which implies the need to commercialization activities in novel

fields like pharmaceutical biotechnology

- Pharmaceutical spending is close to 20% of total treatment costs
- 10 largest companies hold close to 50% market share and 10 importing drugs companies hold more than 73% of the importing drug market.
- In terms of value, Antibiotics consumption is nearly a quarter of all drug consumption in Iran
- Nearly a third of market sales is linked to sales of brand medicines.
- 15 percent increase in the pharmaceutical industry's sales is predicted by the World Health Organization (WHO).

#### Healthcare Expenditure Forecast

2010-2024



*In the following table, market share of medicines in Iran, according to their therapeutic areas are specified.*

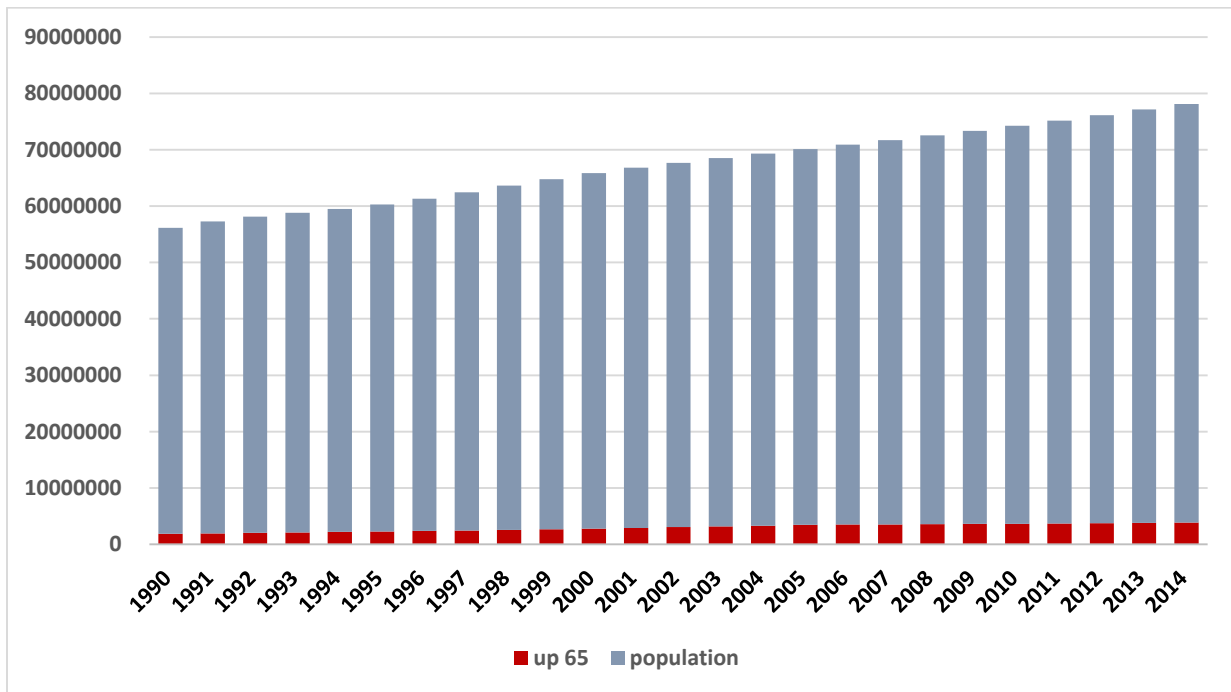
Therapeutic group	Shares in drug
Infection	%17
CNS	%10
Cardiovascular	%8.3

Cancer	%8
Endocrinology	%5.8
Hematology	%5.2
Respiratory	%4
Dermatology	%2.6
Gynecology	%2.1

## Population

**Population** growth is an important variable which affects the drug consumption and consequently profitability of pharmaceutical industry.

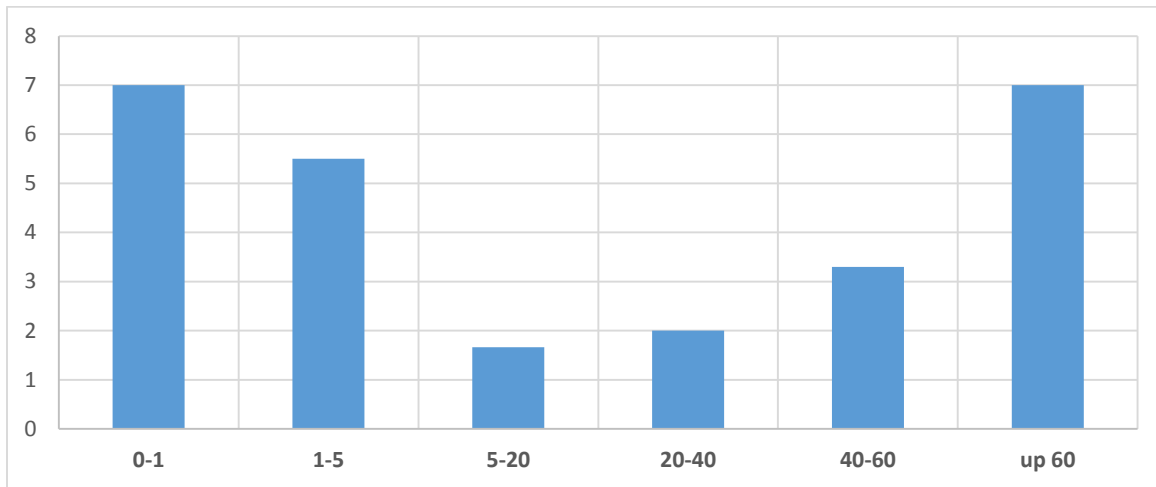
Iran demographic trend for the period 1990-2014 is presented in the following diagram.



Population Growth and Aging are “cost drivers,” that influences spending on prescription drugs, Population growth is the effect of changes in the size of the population on total drug spending. Other things being equal, an increase in population size will increase total spending. Population aging is the effect of changes in the age distribution of the population on spending. An aging population will result in increased spending

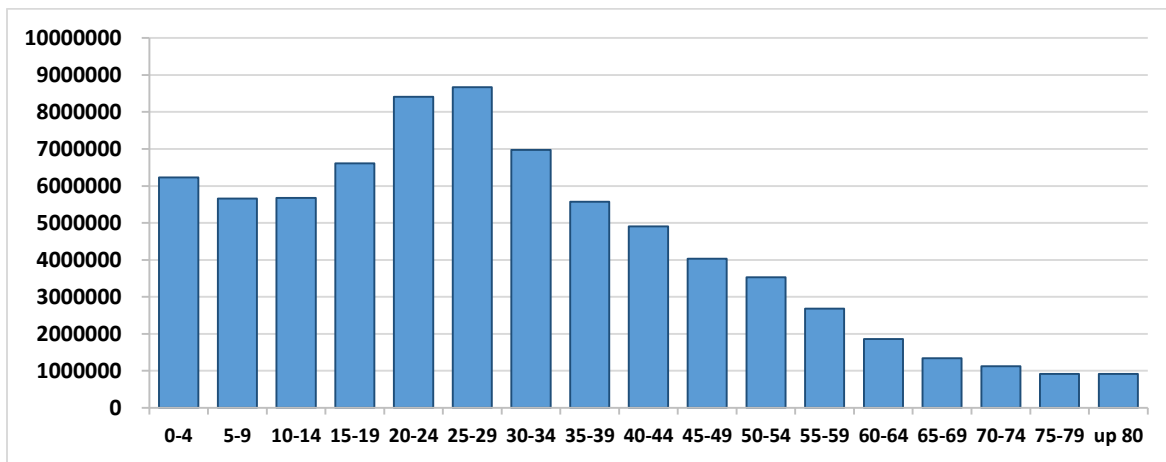
if the use and cost of drugs increase with age for the average individual within the population. According to the statistics, in the last 4 years, Iran population growth rate has been stable at around 1.3%, which shows a slightly growth compared to previous years. Based on population policies, it is predictable that population growth stays constant or increase slightly in near future.

### Age groups and medical expenses:



Above figure shows the relative differences in health care costs by age groups.

Age composition of the population according to 2010 Census is presented in the following graph:



As shows the above figure, the highest share of the population is accounted for by those aged 25–29. currently by aging of this group, there has been an increase in the median age of the Iran’s population which still have the highest share of the population .Considering the different segment of population, healthcare costs and that the large portion of total population is young the level of health care costs and medication consumption is minimum.

Therefor by the aging of the population, spending on health and social care in medium to long term will increase inexorably in Iran.

Indicators of health costs in Iran is provided in the following table:

Health expenditure (% of GDP)			Health expenditure, public (% of government expenditure)	Health expenditure per capita (current US\$)	total population,	Series Name
total	private	public				
3.70	1.94	1.75	7.45	85	61,306,632	1995
4.09	2.10	1.98	8.46	109	62,426,086	1996
4.51	2.32	2.19	9.72	133	63,616,065	1997
4.59	2.65	1.95	9.16	176	6,780,362	1998
4.60	2.68	1.91	10.61	229	65,850,062	1999
5.09	2.87	2.22	11.88	291	66,812,736	2000
5.12	2.87	2.25	10.09	101	67,696,677	2001
4.74	2.57	2.17	9.81	96	68,522,074	2002
4.72	2.67	2.05	10.12	116	69,321,953	2003
5.33	2.97	2.36	9.58	155	70,122,115	2004
5.07	2.72	2.35	9.26	173	70,923,164	2005
5.11	2.83	2.28	10.53	219	71,720,859	2006
6.35	3.87	2.49	10.07	311	72,530,693	2007
7.20	4.19	3.01	13.31	355	73,370,982	2008
7.28	4.44	2.84	13.43	413	74,253,373	2009
6.26	3.56	2.70	13.87	479	75,184,322	2010
6.64	3.96	2.68	17.53	485	76,156,975	2011
6.69	3.96	2.73	17.53	432	77,152,445	2012
..	..	..	..	..	78,143,644	2013

As it shows in the chart, health care spending per capita has an upward trend. With concurrent increase in income and

standard of living, the share of GDP devoted to health care spending is also growing.

## **Iran Pharmaceutical Industry's SWOT Analysis:**

### *Strengths:*

- Large pharmaceutical market in regional terms
- Large and fast-growing population
- Import restrictions
- The government's strategy to achieve self-sufficiency in pharmaceutical industry
- The Foreign Investment Promotion and Protection Act (FIPPA) does give some protection to foreign investors and now allows relatively good terms for the repatriation of profits

### *Opportunities:*

- Low taxes on foreign-made drugs that are not manufactured locally
- Rising regional demand for generics
- Improved intellectual property and regulatory conditions to attract some investment in local
- Facilities gradual modernization of the health care industry
- Plans to improve drug registration times
- Privatization of importing companies

### *Weak points:*

- Most of domestic production are basic and inexpensive medicines and the market is in demand of Hi-Tech medicine imports.
- Nearly half of the required raw material is imported
- Strict governmental price control

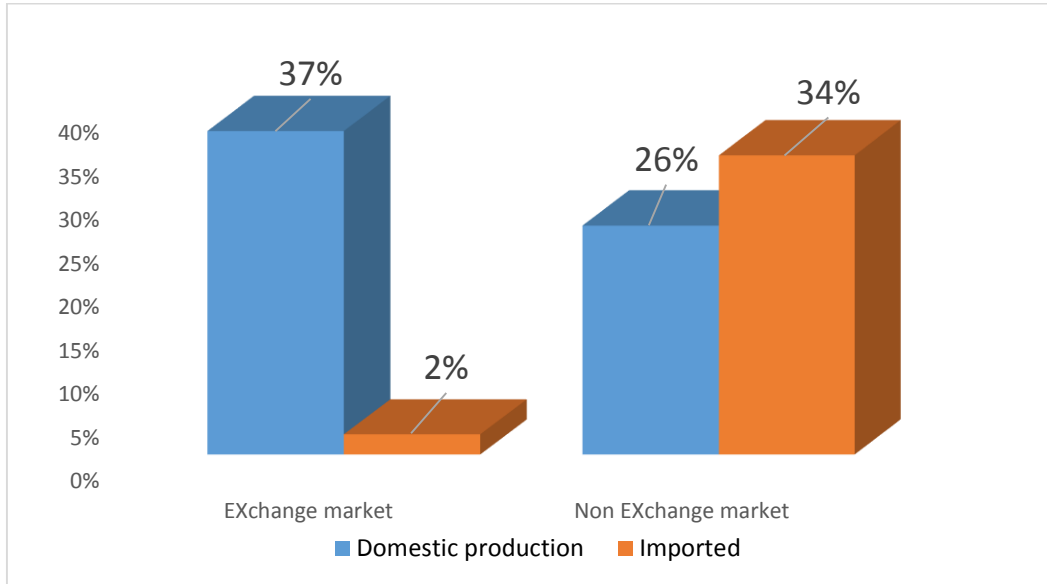
### *Threats:*

- Exchange rate fluctuations
- Weak economic performance that is limiting government spending
- Uncertainty of changes in laws and regulations
- Lack of rules for the protection of patent



## Pharma foreign trade-import & export

Following chart shows the share of imports in the pharmaceutical industry:



The value of imported medicines accounts for about 37% of the value of the whole market and about 63% are produced locally, out of which the import share of listed companies on the Tehran Stock Exchange from this industry is only equivalent to 2%. KBC Company is the only listed company importing pharmaceutical products. The other companies are mainly producers.

The sale of locally produced and imported medicines in the country in 2013 amounted to

IRR 85,000 billion that is increased to IRR105.000 billion in 2015.

A significant share of Iran's pharmaceutical revenue devotes to the Pharmaceutical Social Security Fund Holding affiliated by Social Security Investment Company "Shasta". The holding is a market leader and its affiliated companies are leading players trusted by private sector stakeholders.

## **Evaluating favorable investment opportunities in pharmaceutical industry of Iran**

### ***The need to assess profit margins of pharmaceutical companies:***

This study presents the market environment of the pharmaceutical sector in Iran, and highlights its challenges and future prospects. In order to study a company's profitability, various indicators can be applied, e.g. in this study the profit margin as an accounting measure has been used to determine the relative position of the Iran pharmaceutical companies. In this report there has been tried to review the drug manufacturing companies in terms of production and competitiveness of pharmaceutical products with other manufacturing drug companies. Obviously it has not been examined all the potential advantages and shortcomings of these companies.

### ***Review of the Production structure of pharmaceutical companies in terms of control over the market sales***

In the following table, the listed pharmaceutical companies in Tehran Stock Exchange are sorted from top to bottom by their gross profit margin. Full exclusive production column represents the percentage of the company's sale, which has only one drug manufacturer and the production is not produced by any other company.

Exclusive production column of 70 to 99 percent represents the percentile of the company's sale from the production of the company which is providing more than 70% of the market needs and probably has the most effective control over the market.

NO	Company	Rating production market control	exclusive production between 70 to 99%	Complete exclusive production	% Share from total drug industry	The number of drug	Gross profit margin in 1392	Gross profit margin in 1393	Classification
1	Parenteral and pharmaceutical company	10.07	0%	15%	1%	28	58%	55%	Quarter( 1)
2	Sobhan Darou	3.56	6%	3%	1%	137	62%	55%	Quarter( 2)
3	Sobhan Darou	14.53	10%	17%	1%	76	54%	54%	Quarter( 1)
4	Osveh	6.95	21%	0%	1%	102	57%	51%	Quarter( 2)
5	Sina Darou	9.51	25%	2%	2%	103	49%	51%	Quarter( 1)
6	Alborz Darou	2.52	3%	2%	1%	81	53%	50%	Quarter( 2)
7	Razak	14.29	23%	10%	3%	109	51%	47%	Quarter( 1)
8	Abidi	2.21	6%	0%	1%	109	55%	45%	Quarter( 2)
9	Tolid Darou	2.04	6%	0%	1%	113	48%	44%	Quarter( 3)
10	Amin	0.85	2%	0%	0%	101	48%	44%	Quarter(4)
11	Zahravi	23.39	68%	1%	2%	75	51%	43%	Quarter( 1)
12	Aburaihan	9.06	23%	2%	1%	159	43%	42%	Quarter( 2)
13	Drou Pakhsh-Factory	13.40	5%	18%	3%	259	43%	40%	Quarter( 1)
14	jaber-ebne-hayyan	2.08	5%	1%	2%	99	42%	40%	Quarter( 3)
15	Ian Darou	1.14	2%	0%	0%	87	49%	40%	Quarter(4)
16	Rozz Darou	1.94	5%	0%	1%	96	46%	39%	Quarter( 3)
17	Farabi	4.20	4%	4%	3%	86	48%	34%	Quarter( 2)
18	Pars Darou	1.57	4%	0%	1%	58	46%	33%	Quarter( 3)
19	Axir	1.60	4%	0%	3%	178	32%	31%	Quarter(3)
20	Dbalk	0.00	0%	0%	0%	17	28%	24%	Quarter(4)
21	loghman	0.83	2%	0%	1%	101	25%	20%	Quarter(4)
22	KBC	1.90	1%	3%	1%	71	18%	18%	Quarter( 3)
23	Kosar	1.01	2%	0%	1%	20	32%	17%	Quarter(4)
24	Tehran chime	5.36	15%	1%	2%	131	20%	15%	Quarter(2)

In the eighth column ratings for each company has been defined by exclusively produced products share and the total sales of products that the company has significant market control over it. Top rate refers to more share of exclusive products form the company's sales basket.

The above table shows that there is a direct correlation between exclusive production or effective control over the market and a companies' profitability. The upper rows of the table (companies with higher profit margins) are mainly companies holding the market control.

**Pharmaceutical companies  
manufacturing structure from  
production in saturated market  
point of view**

In the following table, products in a saturated market represents those items that demand will not be accepted by the manufacturer or will not be accepted in the first phase (as becoming saturated soon).

It should be mentioned that the list of medications used in the above categories are taken from the Iranian Food and Drug Administration.

In particular, a greater share of these products in the production structure of pharmaceutical companies may result some risks associating the sale of these products as well as a reduction in profitability or lack of proportional growth in accordance with the growth of the industry. Thus, high production of this category of drugs is considered as a disadvantage for manufacturing companies.

In order to compare companies, rating share of total sale is calculated for saturation products which are given in the eighth column of the following table. The high points of each company represent its inappropriate condition in this parameter.

NO	Company	Rating	total production in saturated Market and those becoming saturated	Soon will be saturated	Saturated	Gross profit margin in 2013	Gross profit margin in 2014	Classification
1	Parenteral and pharmaceutical company.	0	0%	0%	0%	58%	55%	Quarter(1)
2	Sobhan Darou	33	61%	25%	37%	62%	55%	Second Quarter
3	Osveh	36	57%	6%	51%	54%	54%	Quarter(3)
4	Sina Darou	1	3%	2%	1%	57%	51%	Quarter(1)
5	Alborz Darou	31	58%	22%	35%	49%	51%	Second Quarter
6	Razk	46	73%	8%	66%	53%	50%	Quarter(4)
7	Abidi	49	80%	12%	67%	51%	47%	Quarter(4)
8	kimidarou	50	78%	7%	71%	55%	45%	Quarter(4)
9	Tolid Darou	43	77%	26%	51%	48%	44%	Quarter(3)
10	Amin	40	71%	23%	48%	48%	44%	Quarter(3)
11	Zahravi	6	14%	10%	3%	51%	43%	Quarter(1)
12	Aburaihan	21	44%	25%	19%	43%	42%	Second Quarter
13	Darou Pakhsh	18	35%	15%	20%	43%	40%	Second Quarter
14	jaber-ebne-hayyan	24	61%	49%	12%	42%	40%	Second Quarter
15	Ian Darou	23	46%	24%	22%	49%	40%	Second Quarter
16	Roos Darou	37	75%	41%	34%	46%	39%	Quarter(3)
17	Farabi	49	86%	25%	61%	48%	34%	Quarter(4)
18	Pars Darou	55	90%	16%	75%	46%	33%	Quarter(4)
19	Axir	17	35%	19%	15%	32%	31%	Quarter(2)
20	Dbalk	0	0%	0%	0%	28%	24%	Quarter(1)
21	Loghman	45	90%	46%	44%	25%	20%	Quarter(3)
22	KBC	2	6%	5%	1%	18%	18%	Quarter(1)
23	Kosar	49	91%	34%	57%	32%	17%	Quarter(4)
24	Tehran chime	37	72%	32%	40%	20%	15%	Quarter(3)

The chart above shows companies with a large share of products in saturated market from the total sales and they still enjoy a high profit margins in contrast with what mentioned before. But most of these companies are producers of medicine for chronic and infectious diseases which now hold the major market in the country. Considering global trends, it is expected that share of total consumption of these drugs is gradually reduced and, consequently, these firms will encounter difficulties. Although the profitability of these companies are currently suitable but increased competition, competitive pressures, industry developments, this could turn to be a serious challenge and affect the growth of such companies.

Thus it is expected, companies on the top rows of the table, with higher gross profit margin but combined sales of products are in such a way that they produce more market saturated products, will probably encounter profitability reduction in the coming years. Conversely, Companies at the bottom of the table with non-saturated market products will not face profit decline.

It should be noted that any change in the production manufacture, requires approvals from the relevant authorities. Basically, the

process is costly and it is not possible to easily change the structure of the company's production, therefore, with assumption of fixed manufacturing procedure pharma producing companies can be compared and analyzed.

### **Products imported**

It would appear that importation of any goods, including medicines are not only due to shortage of that production but also to the reason of the better quality. Even though, producing the same imported generic drugs can be considered as a potential profitability of pharmaceutical companies.

Net imported drug production column represents those imported drugs which are not saturated in the domestic market and still there is demand for them.

### *Comments:*

- KBC whole sale is importation of specialty pharmaceutical and medical products which are not manufactured domestically.
- In addition to KBC Company, Exir Pharmaceutical Company has a small share in the domestic market of the imported drugs which is not included.

NO	Company	Net percentage of imported drugs production	Imported drugs which are domestically produced and will have a saturated market soon	Imported drugs which are domestically produced and have a saturated market	Imported drugs which are domestically produced	Gross profit margin in 2013	Gross profit margin in 2014	Classification
1	Parenteral and pharmaceutical company.	38%	0%	0%	38%	58%	55%	Quarter( 4 )
2	Sobhan Darou	16%	5%	24%	45%	62%	55%	Quarter(3)
3	Osveh	37%	2%	48%	87%	54%	54%	Quarter(4)
4	Sina Darou	25%	0%	0%	26%	57%	51%	Quarter(3)
5	Alborz Darou	18%	3%	17%	39%	49%	51%	Quarter(3)
6	Razk	3%	1%	45%	49%	53%	50%	Quarter(1)
7	Abidi	12%	2%	28%	42%	51%	47%	Quarter(2)
8	kimidarou	11%	1%	13%	26%	55%	45%	Quarter(2)
9	Tolid Darou	2%	12%	5%	19%	48%	44%	Quarter(1)
10	Amin	12%	7%	3%	22%	48%	44%	Quarter(2)
11	Zahravi	78%	0%	1%	79%	51%	43%	Quarter( 4 )
12	Aburaihan	33%	17%	17%	67%	43%	42%	Quarter(3)
13	Darou Pakhsh	20%	4%	9%	33%	43%	40%	Quarter(3)
14	jaber-ebne-hayyan	12%	24%	0%	35%	42%	40%	Quarter(2)
15	Ian Darou	7%	0%	14%	21%	49%	40%	Quarter(2)
16	Roos Darou	16%	23%	10%	48%	46%	39%	Quarter(3)
17	Farabi	1%	3%	3%	8%	48%	34%	Quarter(1)
18	Pars Darou	1%	0%	1%	3%	46%	33%	Quarter(1)
19	Axir	53%	8%	5%	66%	32%	31%	Quarter( 4 )
20	Dbalk	100%	0%	0%	100%	28%	24%	Quarter( 4 )
21	Loghman	3%	12%	4%	19%	25%	20%	Quarter(1)
22	KBC							
23	Kosar	0%	0%	0%	0%	32%	17%	Quarter(1)
24	Tehran chime	12%	8%	12%	31%	20%	15%	Quarter(2)

### Comparing companies based on the evaluated parameters:

In the context of comparing peer groups, the key parameter used is gross profit margin as only a few important aspects affecting the market has been reviewed. It is assumed that all aspects that affecting the profitability of the company is incorporated in the profit margin, so regarding the selection of top companies the priority has given to those with the gross profit margins above the industry average (40 percent).

In this comparison, companies will be divided in the following groups:

**Companies group (A) Top Groups:** The gross profit margin is higher than the industry average (40%), the percentage of the products sale in saturated market and effective control over the market:

NO	Company	Production in saturated market	Imported drugs after deduction from products in saturated market	Control over market products	Gross profit margin in 1392	Gross profit margin in 1393
1	Zahravi	14%	78%	23%	51%	43%
2	Parenteral and pharmaceutical company.	0%	38%	10%	58%	55%
3	Sina Darou	3%	25%	7%	57%	51%

**Companies group (B) Average Group (1):** The gross profit margin in the range above the industry average, rated for control over the market sales and percentage of the

accepted sale in saturated market. All these parameters are compared to each other and then prioritized.

NO	Company	Production in saturated market	Imported drugs after deduction from products in saturated market	Control over market products	Gross profit margin in 1392	Gross profit margin in 1393
1	Darou Pakhsh-Factory	35%	20%	13%	43%	40%
2	Aburaihan	44%	33%	9%	43%	42%
3	Osveh	57%	37%	15%	54%	54%
4	Alborz Darou	58%	18%	10%	49%	51%
5	Iran Darou	46%	7%	1%	49%	40%
6	Sobhan Darou	61%	16%	4%	62%	55%
7	jaber-ebne-hayyan	61%	12%	2%	42%	40%



**Companies group (C) Average Group (2):**

These companies' gross profit margin is similar to Group B in a way that it is equivalent to the industry average or higher but the difference is that control over the

market for their products is low or they produce a very high percentage of products in saturated market which this is a serious threat to the profitability of these companies in the future.

NO	Company	Production in saturated market	Imported drugs after deduction from products in saturated market	Control over market products	Gross profit margin in 1392	Gross profit margin in 1393
1	Abidi	80%	12%	14%	51%	47%
2	Roos Darou	75%	16%	2%	46%	39%
3	Amin	71%	12%	1%	48%	44%
4	Kimidarou	78%	11%	2%	55%	45%
5	Rzak	73%	3%	3%	53%	50%
6	Tolid Darou	77%	2%	2%	48%	44%

In long-term, these companies' growth will not be consistent with industry growth and will fall to the lower ranks in the profitability table.

**Companies group (D) weak Group:** Companies which their profit margins are below the industry average.

NO	company	Production in saturated market	Imported drugs after deduction from products in saturated market	Control over market products	Gross profit margin in 1392	Gross profit margin in 1393
1	Dbalk	0%	100%	0%	28%	24%
2	Axsir	35%	53%	2%	32%	31%
3	KBC	6%		2%	18%	18%
4	Tehran Chime	72%	12%	5%	20%	15%
5	Farabi	86%	1%	4%	48%	34%
6	Loghman	90%	3%	1%	25%	20%
7	Pars Darou	90%	1%	2%	46%	33%
8	Kosar	91%	0%	1%	32%	17%

Exir Pharmaceutical and Dbalk are in unfavorable profitability condition but in terms of type of production manufacturing are propitious. It is likely that in long term these companies ascent to the top rows.

As of the nature of KBC operations, which is based on selling imported drugs, this firm has had a lower gross profit margin and with current operational structure show a little or no business growth.

Taking in to the measure the high manufacturing of drugs with saturated markets and lack of control over the market sale, Tehran Chemie Pharmaceutical, Farabi, Loghman, Pars Darou and Kosar are considered ill performed companies. reduction in the average profit margin (by 10%) shows the intense competition and inability of companies to increase sales rate in 2014.

## Overview of companies, Group A:

### Zahravi Pharmaceutical Company

Established in March 1986, Zahravi Pharmaceutical Company, the premises are

located in Tabriz, in a 120 000 sq meters land which 28 000 sq meters are allocated to the plant itself. What makes Zahravi Pharmaceutical a unique manufacturer in Iran is the production of different soft gel capsules & Immunosuppressive agents. Zahravi Pharmaceutical Company is pioneer in the manufacturing of soft gel capsules in Iran. Currently it markets more than 50 products in a variety of dosage forms to supply domestic needs as well as exporting soft gel capsules, tablets, capsules and injections and manufacturing procedures are under cGMP rules and environmental health standards.

Zahravi pharmaceutical company produces its products under license of F.HOFFMANN-La Roche Ltd Swiss-TB drugs and produces CellCep for the prevention of rejection in patients with kidney transplants, liver and heart is consumed. All raw materials, sites, equipment and drugs made in accordance with the requirements of Swiss company F.HOFFMANN-La Roche Ltd.

NO	Shareholders	% share
1	Tamin Pharmaceutical Investment Company	26.40%
2	Razak laboratories s Company.	22.50%
3	Hakim Pharmaceutical Company	21.50%
4	Darou Pakhsh Holding	13.56%
5	Shahid Ghazi Pharmaceutical Company	5.70%
6	Tehran Chemie Pharmaceutical Company	3.80%
7	Other shareholders	6.50 %

## Zahravi Pharmaceutical Company's major manufacturing products:

Zahravi Pharmaceutical Company					
Application	Therapeutic category	Market share	% of sale	Million rial	Generic name
Treatment of muscle pain, back pain, muscle spasms MS and muscle spasticity after brain problems	Muscle relaxants	61%	1%	20,306	BACLOFEN 10MG TAB
	Muscle relaxants	77%	1%	11,498	BACLOFEN 25MG TAB
Treatment of rickets, low blood calcium along with Hypoparathyroidism	Skin and sunscreen	49%	3%	64,322	CALCITRIOL 0.25 MCG CAP
To prevent rejection of the transplants (kidney, liver, heart and other organs) used in combination with corticosteroids. It also uses in acute rheumatoid arthritis, atopic dermatitis, alopecia, cornea transplant and psoriasis	Immunosuppressive	75%	5%	98,265	CICLOSPORIN 25MG CAP
		70%	3%	62,745	CICLOSPORIN 50MG CAP
Treatment of hyperlipidemia	Lipid lowering	100%	1%	13,676	CLOFIBRATE 500MG LIQ CAP
Respiratory infections and sputum	Antibiotics	24%	2%	30,524	GENTAMICIN 80MG/2ML AMP
Treatment of MS	Immunomodulator	72%	13%	256,897	GLATIRAMER ACETATE 20MG/ML PREFILLED SYRINGE
Treatment and control of anemia taken from Malnutrition and Iron deficiency	Supplements	37%	1%	23,011	HEMATINIC CAP
Treatment of severe rash or rash accompanied by neurological problems	Dermatology drugs	35%	5%	107,917	ISOTRETINOIN 20MG CAP
The treatment of anxiety disorders, depression and insomnia	Sedative-hypnotic	34%	1%	11,853	LORAZEPAM 2MG TAB
Blood Pressure Medication	Cardiovascular	88%	1%	25,134	METHYLDOPA 250MG TAB
To prevent rejection of heart, kidney and liver	Immunosuppressive	77%	1%	21,075	MYCOPHENOLATE MOFETIL 250MG CAP
		89%	43%	849,714	MYCOPHENOLATE MOFETIL 500MG TAB
Vasodilator	Cardiovascular	76%	1%	24,655	NITROGLYCERIN 0.4 S.L PEARL
Prevention and treatment of vitamin D deficiency	Vitamins	65%	1%	27,282	VITAMIN D3 (COLECALCIFEROL) PEARL

## Iranian parenteral and pharmaceutical company

Iranian parenteral and pharmaceutical company, formerly known as Iran Don Baxter Laboratories registered under the number in the Companies Registration Office in 1956. After the Islamic Revolution the company changed its name to Iranian parenteral and pharmaceutical company and fully privatized by initially publically offered on the Tehran Stock Exchange.

Currently, due to a long and valuable knowledge and experience in **large volume parenteral drug products (LVP)**, **this company** is a leading manufacturer of such products in the country and is committed to conform the highest national & international standards in order to increase consumer satisfaction and provide health to the society. The company owns three production units of LVP, producing tablets, distilled water. (SVP).

### Shareholders:

NO	shareholders	% share
1	Mohammadhossein Mohtashami	26.30%
2	Sbatamin investment company	14.00%
3	Civil Servants Pension Organization	8.00%
4	Zahra Miri	8.00%
5	Atiye Sabah Investment company	5.00%
6	Other shareholders	33.7%

## The major products of the company:

Iranian parenteral and pharmaceutical company					
Application	Therapeutic category	Market share	%of sale	Million rials	Generic Name
Treatment of low blood sugar	Intravenous sugar solution	36%	4%	36,281	DEXTROSE 5% 0.5L INF P-BOTTLE
Treatment of low blood sugar	Intravenous sugar solution	45%	15%	124,787	DEXTROSE NACL 3.33% 0.3% 0.5L INF P-BOTTLE
Treatment of low blood sugar	Intravenous sugar solution	36%	11%	93,599	DEXTROSE NACL 3.33% 0.3% 1L INF P-BOTTLE
Intravenous therapy when intracellular potassium is decreased	Electrolyte	38%	5%	39,859	RINGERS 0.5L INF P-BOTTLE
		29%	5%	42,679	RINGERS 1L INF P-BOTTLE
Washing the body cavity tissue and surgical wounds	Electrolyte	100%	5%	42,830	SODIUM CHLORIDE 0.225% 1000ML INJ
		100%	7%	57,756	SODIUM CHLORIDE 0.225% 500ML INJ
		36%	12%	101,783	SODIUM CHLORIDE 0.9% 0.5L INF P-BOTTLE
		29%	9%	75,053	SODIUM CHLORIDE 0.9% 1L INF P-BOTTLE
		37%	6%	50,371	SODIUM CHLORIDE 0.9% IRRIG 0.5L P-BOTT
		16%	4%	35,095	WATER FOR INJECTION 5ML P-AMP

## Sina Darou Laboratories Company

Sina Darou Laboratories Company ex-Dopar was established in 1962 in Tehran and engaged mostly in pharmaceutical preparation under license of French P.O.S Company.

The company produces pharmaceutical dosage forms comprising sterile and non-sterile semi solids and liquids such as Ophthalmic, Nasal and Ear Drops- Ophthalmic and Topical Ointments- Sterile eye solutions- Injections- Gels- Topical and Vaginal Creams- Lotions- Topical, Inhalation and Nasal Spray

The company was soon expanded in different dimensions and gradually with other drugs produced under license of companies such as Merrell toraude, Denver chemical, Pharma ton, Aspro Nicholas spread. Also has developed specialized lines to produce a variety of sterile eye drops, ointments ,solutions, Aynhalrhay respiratory, nasal drops and sprays, transdermal and injections.

### Shareholders;

NO	Shareholders	% share
1	Kharazmi Investment Company	48.05%
2	National Iranian Investment Company LLP	18.41%
3	Iran insurance company	9.82%
4	Pension Fund Investment Company	1.8%
5	Iranian investment company	6.37%
6	Other shareholders	17.35%

**The major products of the company:**

<b>Sina Darou</b>					
<b>application</b>	<b>Therapeutic category</b>	<b>Market share</b>	<b>% of sales</b>	<b>Million Rials</b>	<b>Generic Name</b>
Treatment for dry eyes	Treatment for dry eyes	83%	3%	29,998	ARTIFICIAL TEARS 10 ML OPH DROP
Inflammation eye and ear Allergic	Inflammation	52%	5%	54,688	BETAMETHASONE 0.1% 5ML OPH DROP
Adjuvant to increase calcium and Treatment of osteoporosis	Bone-Building	88%	5%	48,701	CALCITONIN,SALMON 200 IU/DOS NASAL SPRAY
Treatment for bacterial conjunctivitis	Antibiotics	74%	4%	35,462	CHLORAMPHENICOL 0.5% OPH DROP
Treatment for urinary and gastrointestinal tract infections	Antibiotics	86%	3%	25,344	CIPROFLOXACIN HCL 0.3% OPH DROP
Alone or in conjunction with a beta-adrenergic receptor drugs	Carbonic anhydrase inhibitors.	53%	5%	45,991	DORZOLAMIDE+TIMOLOL 2%/0.5% OPH DROP
Temporary relief of nasal congestion, itching and mild stimulation	Cough and mucus	39%	3%	29,673	NAPHAZOLINE 0.1% 10ML OPH DROP
treatment for asthma and other conditions associated with obstruction <sup>2</sup>	Asthma treatment	43%	21%	206,875	SALBUTAMOL SULFATE 100MCG/DOSE 200DOSE INHALER
To dilute thick secretions and aids their removal from the nose and sinuses and prevent dynes.	Electrolyte	47%	4%	41,604	SODIUM CHLORIDE 0.65% 20ML NASAL DROP

### Compared earnings per share and ratio P / E, Group A:

Company	Market value (Billion rials)	% Of Float share	EPS	Last year financial profit(rials)	% dividend	Gross operating margin	Net profit margin	p/e
Zahravi Pharmaceutical Company	4,391	10%	7,230	6,762	89%	39.21	19.72	7.59
Iranian parenteral and pharmaceutical company	1,508	12%	1,314	1,224	69%	50.33	38.03	5.74
Sina Darou Laboratories Company	2,977	17%	2,831	2,425	87%	48.23	35.61	5.48

A healthcare system has been the most important priority for all governments worldwide. Iran has achieved significant success in extending healthcare and views the healthcare sector as a priority. Therefore the drug manufacturing is considered as a strategic Industry and associated with government supports.

This could not be considered as an advantage, the majority of the Iranian producers are dependent to the government support, on the other hand taking in to account the initial task of government to preserve the low income consumer's rights a serious paradox faces the pharmaceutical sector leading to the government interfere directly with the production, supply, distribution, and consumption of pharmaceuticals.

Despite all the deficits and shortcomings we have discussed the country enjoys several

important advantages in its pharmaceutical industry:

Good industrial infrastructure, an inexpensive and highly educated workforce, a large and growing domestic market and access to other regional markets: Iran is located at the heart of three regions - Central Asia and the Caucasus, the East Mediterranean, and the Middle-East.

Combined with relative advantage of Iran's pharmaceutical industry-including inexpensive labor force, adequate industrial infrastructure, and the necessary expertise-this unique geographical situation provides the opportunity to eye foreign markets. Having achieved 65% of the total nominal capacity of its pharmaceutical industries, Iran does have the potential to expand into neighboring markets. Having considered the realities of the world pharmaceutical market



and the domestic needs of the country, both the large-scale and sectorial.

In long-term, paying attention to combination of products is one the most important factors of pharmaceutical companies' profitability and growth. Therefore, it is recommend that investors should be selected based on the considerations stipulated in the tables regarding A to D groups.