STATS WINDOW

The Pacific Business Review International has taken an initiative to start a section which will provide a snapshot of major Global & Indian economic indicators and industry review alternatively.

A snapshot of the section in upcoming issues is hereunder:

January 2013 Economy at a Glance (Global & Indian)

February 2013 Automobile Industry (World): Statistical Review

March 2013Economy at a Glance (Global & Indian)April 2013Healthcare Sector: Global ScenarioMay 2013Economy at a Glance (Global & Indian)

June 2013 Retail Sector: Global Scenario

The current issue covers a brief overview of Global Pharmaceutical Industry. The data covers Medical Expenditure, Growth, Profitability, Pharmaceutical patents, sales, Global Pharmaceutical Market, Health financing, imports and Exports for World as well as for India.

INDUSTRY REVIEW AT A GLANCE

Global Pharmaceutical Industry

The pharmaceutical industry develops, produces, and markets drugs or pharmaceuticals licensed for use as medications. Pharmaceutical companies are allowed to deal in generic and/or brand medications and medical devices. They are subject to a variety of laws and regulations regarding the patenting, testing and ensuring safety and efficacy and marketing of drugs.

This research-based pharmaceutical industry makes a major contribution to the prosperity of the world economy. It is a robust sector that has been one of the pillars of industrialized economies and is increasingly recognized as an important sector in the developing world as well. It contributes to employment (direct, indirect, or induced), trade (through imports and exports), expenditure on research and development (R&D), and technological capacity building. It is also a necessary foundation for the existence of the generic industry.

Data regarding the economic contribution of pharma industry has been provided. Also in particular, development of the Indian pharma sector and it's contribution to our economy is also provided.

Exhibit A Geographic distribution of medical spending in the year 2012

S. No.	Country/Region	Percentage(%)
1.	USA	34
2,	European Union	15
3.	Japan	12
4.	China	08
5,	Rest of the world	31

Source: IMS Health Thought Leadership, September 2013

Populations in developed markets are increasingly aged and obese, driving spend in areas such as oncology and diabetes due to high prevalence; this effect is beginning to become apparent in

European markets as well. In developed markets spending is concentrated in the top 20 classes to a much larger extent than in pharma emerging countries.

Exhibit B
Global Spending on generic and branded medicines

	Branded	Generic	Others	Total Spending
	(%)	(%)	(%)	Bn USD (\$)
Developed	72	16	12	625
Pharma emerging	31	58	11	224
Rest of the world	57	27	16	120

Source: IMS Health Thought Leadership, September 2013

From the above table it is clear that Generics represent a larger share of the market in volume and value terms. Pharmaceutical spend in developed markets continue to be dominated by brands but Generics continue to dominate growth in spending in pharmerging markets.

Exhibit C Global Medicine spending per capita Gross national income (GNI) 2012

S.No.	Country	GNI (USD (Thousands/Capita)
1.	USA	50
2.	Germany	42
3.	Canada	45
4.	UK	38
5.	Japan	38
6.	France	38
7.	Russia	22
8.	Mexico	18
9.	China	10
10.	Brazil	12
11,	India	05

Source: World Bank, 2012; IMS Health Market Prognosis, September 2013

In high GNI countries medicine spend levels have been contained or reduced due to patent expiries and growing emphasis on utilization of generics, particularly for many of the chronic diseases treated in primary care. Spending level increases in high income countries are primarily driven by specialty medicines and diabetes treatments. In countries with income under \$25,000 per

capita, higher levels of spending growth will be driven by increased diagnosis and treatment rates and a change in the nature of the disease burden from acute to chronic disease. Governments in these countries are typically committed to expanding access to healthcare in their populations, although the implementation of this has often been slow.

Exhibit D Highest no. of Pharmaceutical patents by countries (as per 2012 data)

S.No.	Country	No. of Patents
1,	Australia	444
2.	Canada	249
3.	Germany	2,512
4.	France	1,407
5.	UK	1,764
6.	Japan	3,679
7.	USA	21,347

Source: www.ibef.org

From the table it is evident that USA has highest number of patents due to better research and development facilities and higher

technology.

Exhibit E Geographical Breakdown (By main markets) of sales of new medicines launched

S.NO.	Country/Region	Percentage
1.	USA	62
2.	Europe	18
3.	Japan	9
4.	Pharma emerging	2
5.	Rest of the world	9

Source: www.efpia.eu

Exhibit F
Total Global Pharmaceutical Market by region

S. No.	Country/Region	Percentage (%)
1.	USA	41
2.	European	26.7
3.	Јарап	11.7
4.	Africa/Asia/Australia	14.7
5.	Latin America	5.9

Source: Source: www.efpia.eu

These tables show that USA is the major research and development centre and manufacturer of medicines. Also USA and Europe has

the largest pharmaceutical market.

Exhibit G Top 20 Global Corporations 2012

	2012	2012 Sales	2011 Sales
	Rank	(US\$Mn)	(US\$Mn)
Global Market		856,086	841,162
NOVARTIS	1	50,761	50,868
PFIZER	2	46,930	56,045
MERCK & CO	3	40,115	39,649
SANOFI	4	37,780	38,038
ROCHE	5	35,069	34,101
GLAXOSMITHKLINE	6	32,714	33,341
ASTRAZENECA	7	31,983	36,688
JOHNSON & JOHNSON	8	27,933	27,047
ABBOTT	9	26,715	25,475
TEVA	10	24,846	24,107
LILLY	11	21,981	23,695
AMGEN	12	17,211	16,642
BOEHRINGER INGEL	13	17,145	15,923
BAYER	14	16,214	15,809
TAKEDA	15	15,961	18,031
BRISTOL-MYERS SQB.	16	13,501	17,196
NOVO NORDISK	17	12,607	11,141

Source: IMS Health, IMS MIDAS, December 2012

From the above table it is clear that major pharmaceutical companies have revenues from sales of pharmaceutical products that are lower than 50% of their total sales. Other products manufactured by these companies usually include medical devices, nutritional products, consumer healthcare products and

products for animal health.

Geographical headquarters of major pharmaceutical companies are approximately evenly distributed between the U.S. and Western Europe

Exhibit H Health financing

BASE YEAR (2010)

BASE YEAR (Per capita total expenditure on health (PPP Int. \$)	Per capita government expenditure on health (PPP int. \$)	Total expenditure on health as a percentage of gross domestic product	General government expenditure on health as a percentage of total expenditure on health	Private expenditure on health as a percentage of total expenditure on health	General government expenditure on health as a percentage of total government expenditure	External resources for health as a percentage of total expenditure on health	Social security expenditure on health as a percentage of general government expenditure on health	Out-of-pocket expenditure as a percentage of private expenditure on health	Private prepaid plans as a percentage of private expenditure on health
Afghanistan	44	5	7.58	11.66	88.34	1.59	31.99		94.00	
Angola	168	139	2.85	82.46	17.54	7.19	2.88		100.00	
Antigua and Barbuda	991	703	6.03	70.97	29.03	16.74	0.13		88.91	11.09
Australia	3,441	2,340	8.73	67.99	32.01	16.84			64.13	25.23
Azerbaijan	579	117	5.88	20.29	79.71	4.22	0.78		87.25	0.71
Bahamas	1,988	907	7.89	45.60	54.40	14.21		3.21	53.98	45.07
Belgium	4,025	3,009	10.71	74.74	25.26	15.12		84.90	80.14	19.10
Belize	378	237	5.20	62.69	37.31	11.35	5.51	2.85	69.55	16.94
Benin	65	32	4.13	49.53	50.47	9.62	35.86	0.47	92.67	7.27
Bhutan	275	239	5.19	86.83	13.17	10.46	10.95		90.78	1.16
Burkina Faso	93	47	6.74	50.97	49.03	13.49	22.94	0.49	73.84	3.72
Burundi	47	18	11.59	38.17	61.83	8.14	45.82	23.03	61.36	0.17
Cambodia	121	45	5.61	37.23	62.77	10.48	23.86		64.35	
Cameroon	122	36	5.13	29.62	70.38	8.53	13.18	2.56	94.48	
China	379	203	5.07	53.60	46.40	12.07	0.09	64.69	78.86	6.89
Colombia	713	518	7.59	72.70	27.30	20.15	0.04	46.44	71.49	28.51

	Per capita total expenditure on health (PPP int. \$)	Per capita government expenditure on health (PPP int. \$)	Total expenditure on health as a percentage of gross domestic product	General government expenditure on health as a percentage of total expenditure on health	Private expenditure on health as a percentage of total expenditure on health	General government expenditure on health as a percentage of total government expenditure	External resources for health as a percentage of total expenditure on health	Social security expenditure on health as a percentage of general government expenditure on health	Out-of-pocket expenditure as a percentage of private expenditure on health	Private prepaid plans as a percentage of private expenditure on health
Comoros	49	33	4.51	67.22	32.78	13.09	19.17		100.00	
Cook Islands	416	391	4.35	93.85	6.15	11.93	5.85		100.00	
Côte d'Ivoire	98	21	5.30	21.59	78.41	5.06	9.75		98.80	1.20
Croatia	1,514	1,285	7.76	84.87	15.13	17.66		90.97	95.92	4.08
Democratic Republic of the Congo	27	12	7.91	42.52	57.48	9.11	32.74		62.48	0.16
Ecuador	653	243	8.06	37.21	62.79	7.32	0.42	39.62	78.05	12.45
Equatorial Guinea	1,545	1,173	4.48	75.93	24.07	6.96	1.96		92.11	
Eritrea	16	8	2.66	48.24	51.76	3.60	37.96		100.00	
Ethiopia	51	27	4.90	53.54	46.46	13.46	39.44			1.49
Fiji	198	139	4.86	70.13	29.87	9.40	8.67		65.82	21.76
Gabon	522	276	3.50	52.93	47.07	6.63	2.39	24.85	100.00	
Georgia	522	123	10.13	23.64	76.36	6.87	2.80	79.72	89.50	4.10
Grenada	594	267	5.86	44.97	55.03	8.21	5.64	0.22	97.49	
Guinea-Bissau	100	10	8.50	10.03	89.97	4.14	23.33	2.91	73.84	
Guyana	167	142	5.38	85.40	14.60	14.93	27.20	4.41	99.79	
Honduras	263	171	6.75	65.21	34.79	17.41	6.34	25.46	89.35	10.65
Indonesia	112	55	2.61	49.08	50.92	7.75	1.32	13.93	75.13	3.01
Iran (Islamic Republic of)	836	336	5.60	40.13	59.87	10.53	0.01	55.33	96.57	3.23
Iraq	340	276	8.42	81.18	18.82	8.98	0.77		100.00	

	Per capita total expenditure on health (PPP int. \$)	Per capita government expenditure on health (PPP int. \$)	Total expenditure on health as a percentage of gross domestic product	General government expenditure on health as a percentage of total expenditure on health	Private expenditure on health as a percentage of total expenditure on health	General government expenditure on health as a percentage of total government expenditure	External resources for health as a percentage of total expenditure on health	Social security expenditure on health as a percentage of general government expenditure on health	Out-of-pocket expenditure as a percentage of private expenditure on health	Private prepaid plans as a percentage of private expenditure on health
Jordan	448	303	8.04	67.66	32.34	18.61	3.71	26.47	77.64	18.33
Kiribati	258	212	11.25	82.33	17.67	12.08	17.10		0.64	
Kuwait	1,133	910	2.63	80.37	19.63	6.86			90.56	9.44
Lao People's Democratic Republic	97	32	4.47	33.29	66.71	5.90	15.11	5.02	76.68	0.56
Lebanon	980	384	7.03	39.16	60.84	9.53	4.71	59.70	73.46	22.08
Libya	713	490	3.88	68.78	31.22	5.46	0.59		100.00	
Madagascar	36	22	3.77	60.28	39.72	14.70	9.04		68.27	15.18
Maldives	464	281	6.33	60.49	39.51	8.58	0.57	1.03	71.64	4.56
Mali	56	26	4.98	46.58	53.42	10.58	27.36		99.50	0.50
Mauritania	79	42	4.41	53.11	46.89	7.30	10.07	15.30	94.49	0.64
Micronesia (Federated States of)	451	411	14.15	91.16	8.84	20.02	69.29	15.82	97.54	
Monaco	5,949	5,238	4.30	88.05	11.95	18.82		98.72	58.58	41.42
Montenegro	1,155	776	9.11	67.17	32.83	13.59	0.36	97.92	90.99	
Myanmar	34	4	1.97	12.18	87.82	0.97	8.69	1.30	92.37	-
Namibia	436	254	6.78	58.38	41.62	12.13	19.04	2.64	17.90	61.16
Nepal	66	22	5.52	33.24	66.76	7.92	11.31		72.42	0.36
Nigeria	121	46	5.07	37.89	62.11	4.41	9.16		95.34	3.08
Palau	1,409	1,089	10.25	77.31	22.69	14.26	39.33		40.32	43.32
Papua New Guinea	88	63	3.58	71.55	28.45	8.15	23.98		55.89	5.49

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Paraguay	302	110	5.87	36.41	63.59	11.49	2.35	43.55	89.72	10.28
Philippines	142	50	3.61	35.34	64.66	7.55	1.35	29.67	83.57	10.58
Qatar	1,622	1,257	1.81	77.45	22.55	5.55			71.01	27.87
Republic of Moldova	360	165	11.68	45.79	54.21	13.11	9.55	88.09	82.79	0.07
Saint Kitts and Nevis	868	525	6.66	60.57	39.43	8.20	0.30	17.63	94.64	5.36
Saint Lucia	804	486	8.70	60.50	39.50	12.82	3.03	2.54	98.47	1.53
Saint Vincent and the Grenadines	466	403	4.47	86.45	13.55	7.77	5.58		100.00	
Samoa	283	248	6.47	87.66	12.34	23.44	13.39	0.59	62.97	
Senegal	109	60	5.66	55.49	44.51	11.56	18.46	4.07	78.53	17.88
Serbia	1,169	723	10.36	61.87	38.13	14.08	0.78	94.21	95.55	0.87
Seychelles	785	721	3.40	91.87	8.13	9.11	4.16	1.18	67.70	22.96
Sierra Leone	107	12	13.07	11.33	88.67	6.35	20.60		89.54	0.98
Singapore	2,273	825	3.96	36.30	63.70	8.02		15.60	84.80	12.59
Solomon Islands	227	212	8.55	93.39	6.61	23.09	31.63		54.22	
South Africa	935	412	8.94	44.10	55.90	11.87	2.18	2.55	29.64	66.14
Sudan	141	42	6.32	29.82	70.18	9.76	3.25	11.73	95.70	0.98
Suriname	523	250	7.02	47.80	52.20	11.89	8.88	41.67	21.90	16.67
Syrian Arab Republic	174	80	3.41	46.00	54.00	5.58	0.70		100.00	

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Thailand	330	247	3.88	75.04	24.96	12.70	0.27	10.08	55.77	31.42
Timor-Leste	84	47	9.12	55.83	44.17	4.71	33.66		25.57	
Tonga	229	187	5.07	81.50	18.50	12.93	17.40		67.82	17.91
Tunisia	483	262	6.21	54.30	45.70	10.69	0.34	48.36	87.03	11.21
Turkmenistan	199	118	2.50	59.38	40.62	9.86	0.26	6.50	100.00	
Tuvalu	473	472	17.49	99.89	0.11	14.37	12.60		100.00	
Uganda	124	27	9.01	21.74	78.26	12.11	25.88		63.60	0.16
United Republic of Tanzania	83	56	6.01	67.32	32.68	13.79	48.83	3.03	41.66	10.14
Vanuatu	240	217	5.25	90.61	9.39	18.19	23.39		56.70	20.64
Yemen	122	30	5.18	24.16	75.84	4.32	4.31		98.61	1.29

Source: WHO

Exhibit I Pharmaceutical sales

PHARMACEUTICAL SALES (2011)

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMACEUTICAL IMPORTS, US\$MN
	PHARMACEUT! SALES, US\$BN	PHARMACEUTIC SALES, US\$ PER CAPITA	PHARMA(SALES, % EXPENDI	PHARMACEUTICA EXPORTS, US\$MN	PHARMACEUTICA IMPORTS, US\$MN
Afghanistan	0.336	10			
Albania	0.211	66	25.10	1.9	155.5
Algeria	2.998	83	41.20	0.9	1,895.0
Angola	0.286	15	5.60	0.0	209.2
Argentina	7.582	186	20.10	784.5	1,743.8
Armenia	0.128	41	27.80	5.8	104.9
Australia	13.268	587	10.50	3,446.0	9,959.6
Austria	6.251	743	14.60	0.0	0.0
Azerbaijan	0.277	30	7.90	54.9	240.0
Bahamas	0.051	148	8.40	2,2	36.0
Bahrain	0.241	182	21.00	0.4	192.8
Bangladesh	1.499	10	40.30	77.5	179.0
Barbados	0.140	510	51.30	39.5	78.0
Belarus	0.692	72	28.20	121.4	559.4
Belgium	8.507	791	15.70	45,278.5	32,171.0
Belize	0.012	38	15.10		8.8
Benin	0.171	19	41.50	0.3	123.9
Bolívia	0.214	21	17.60	2.4	142.6
Bosnia-Herzegovina	0.403	108	20.70		

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMAGEUTICAL IMPORTS, US\$MN
Botswana	0.205	101	15.10	13.0	139.3
Brazil	28.718	146	12.70	1,134.6	6,189.1
Brunei Darussalam	0.063	155	16.50		
Bulgaria	1.492	200	41.00	649.0	1,035.9
Burkina Faso	0.232	14	42.00	0.2	160.3
Burundi	0.059f	6.9f	26.9f		
Cambodia	0.177	12	24.10	3.0	116.4
Cameroon	0.226	11	16.60	0.3	144.8
Canada	26.057	759	13.60	5,212.1	11,860.1
Cape Verde	0.018	36	17.20		13.1
Central African Rep.	0.048	11	45.00	0.5	32.7
Chad	0.052	5	10.50		37.3
Chile	3.068	178	16.70	137.5	849.5
China	66.863	50	18.70	2,580.3	9,970.1
Colombia	3.829	82	23.60	379.1	1,530.4
Congo	-			0.2	165.2
Congo, Dem. Rep.	0.184	3	29.80	0.9	122.5
Costa Rica	0.714	151	16.00	323.8	542.3
Cote d`Ivoire	0.416	21	32.10	4.1	292.2
Croatia	1.380	314	28.90	448.7	696.7
Cuba	0.159	14	1.90		
Cyprus	0.305	273	19.20	279.6	293.7
Czech Republic	4.563	433	27.00	1,384.9	3,905.1
Denmark	2.437	437		7,735.8	3,275.2

Djibouti 0.047 52 44.40 34.4 Dominica 0.003	
Dominican Republic 0.788 78 23.70 21.6 524.2 Ecuador 1.254 86 29.30 28.3 861.1 Egypt 3.066 37 29.30 241.4 1,284.8 El Salvador 0.535 86 34.40 111.0 336.8 Equatorial Guinea 0.007 9 0.90 4.1 Estonia 0.336 251 25.70 65.6 315.7	
Ecuador 1.254 86 29.30 28.3 861.1 Egypt 3.066 37 29.30 241.4 1,284.8 El Salvador 0.535 86 34.40 111.0 336.8 Equatorial Guinea 0.007 9 0.90 4.1 Estonia 0.336 251 25.70 65.6 315.7	
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Estonia 0.336 251 25.70 65.6 315.7	
Ethiopia 0.383 5 46.60 1.4 280.7	
Fiji 0.038 27.8	
Finland 4.281 796 17.80 1,105.1 2,347.6	,
France 48.664 771 14.90 35,482.0 23,660.	7
Gabon 0.135 88 24.90 1.8 94.3	
Gambia 0.014 8 34.40 13.6	
Georgia 0.330 76 25.00 25.2 225.3	
Germany 55.148 671 14.60 61,926.0 44,793.	5
Ghana 0.303 12 17.50 10.0 127.0	
Greece 9.347 821 30.80 1,196.0 4,046.9	
Grenada 0.016	
Guatemala 0.652 44 20.30 205.0 434.3	
Guinea 0.067 6 20.10 0.0 49.3	
Guinea-Bissau 0.008 5 29.50 5.4	
Guyana 0.061 81 48.30	
Honduras 0.463 60 43.00 3.9 351.6	

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMACEUTICAL IMPORTS, US\$MN
Hong Kong	1.230	173	9.50	1,635.2	2,126.8
Hungary	3.439	345	34.40	3,930.3	3,478.5
Iceland	0.208	640	16.40	80.1	69.7
India	15.643	13	21.00	8,079.1	1,359.4
Indonesia	6.044	25	27.40	380.3	483.5
Iran	3.260	44	11.60		
Iraq	0.870	27	10.00	0.2	504.2
Ireland	3.239	716	17.00	34,662.8	4,764.3
Israel	1.978	262	10.80	7,003.2	1,519.5
Italy	34.630	570	16.40	16,960.3	17,987.9
Jamaica	0.242	88	28.00		
Japan	127.377	1,007	21.20	3,353.5	19,049.4
Jordan	0.653	103	26.70	498.2	381.2
Kazakhstan	1.335	82	18.80	18.2	1,010.1
Kenya	0.440	11	28.70	74.5	336.5
Kiribati	0.004				0.0
Kosovo	0.109f	59.5f			
Kuwait	0.737	262	19.60	27.8	490.4
Kyrgyzstan	0.215	40	52.50	2.9	158.2
Laos	0.037	6	10.90		
Latvia	0.405	181	23.00	461.9	620.0
Lebanon	1.301	306	43.60	36.2	951.1
Libya	0.352	55	15.70	0.1	263.9
Lithuania	0.659	199	23.50	359.6	831.5

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMACEUTICAL IMPORTS, US\$MN
Luxembourg	0.359	695	7.90	103.4	434.7
Macedonia	0.252	122	39.50	72.7	140.6
Madagascar	0.093	4	19.00	0.0	65.0
Malawi	0.214	14	62.90	0.3	142.5
Malaysia	1.814	63	15.30	161.1	1,120.3
Mali	0.230	15	31.20		160.3
Malta	0.223	534	34.30		
Mauritania	0.020	6	19.20		13.7
Mauritius	0.134	102	29.30		88.9
Mexico	12.978	113	18.30	1,579.4	4,212.5
Moldova	0.211	59	27.40	76.5	208.3
Mongolia	0.063	23	19.00		
Morocco	1.247	39	24.00	66.5	514.2
Mozambique	0.080	3	11.40	0.0	54.0
Namibia	0.273	117	35.80	1.6	197.7
Netherlands	9.380	563	10.70	15,047.6	11,880.3
New Zealand	1.065	241	7.00	199.2	853.0
Nicaragua	0.401	68	61.90	2.7	317.4
Niger	0.277	17	58.60		193.3
Nigeria	0.921	6	9.00	4.5	446.8
Norway	3.486	708	7.70	698.5	1,865.7
Oman	0.391	138	20.30	24.0	255.1
Pakistan	1.982	11	37.50	148.6	528.5
Panama	0.468	131	19.10	1,346.6	1,167.0

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMAGEUTICAL IMPORTS, US\$MN
Paraguay	0.212	32	14.70	27.3	118,7
Peru	1.418	48	16.00	31.0	535.5
Philippines	2.911	31	34.50	43.4	777.1
Poland	11.257	294	29.70	2,076.2	5,662.1
Portugal	6.211	581	22.80	734.4	2,741.2
Puerto Rico	2.808	750	24.90	42,889.6	13,759.9
Qatar	0.390	209	13.50	0.7	331.8
Romania	4.185	195	42.30	993.0	3,099.2
Russia	20.653	145	24.20	297.6	12,730.8
Rwanda	0.106	10	16.20	1.5	76.6
Saint Lucia	0.012	59	14.20	0.2	8.1
Saint Vincent	0.009	93	30.00	0.0	6.2
Saudi Arabia	4.458	159	21.20	193.3	3,485.5
Senegal	0.251	20	28.70	13.1	157.6
Serbia	1.032	142	21.80	209.3	656.3
Seychelles	0.005	61	11.80		2.9
Sierra Leone	0.055	9	50.80	1.8	39.7
Singapore	0.716	138	6.90	4,864.7	1,452.1
Slovakia	2.386	436	29.00	467.4	2,013.7
Slovenia	1.059	521	22.30	2,334.3	966.0
South Africa	3.744	74	10.40	148.3	2,073.9
South Korea	14.796	306	19.60	895.1	3,548.9
Spain	28.009	603	19.20	13,391.0	13,282.3
Sri Lanka	0.444	21	19.60	2.0	242.4

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMAGEUTICAL IMPORTS, US\$MN
Sudan	0.556	16	13.50		286.6
Suriname	0.016	31	5.10		10.7
Swaziland	0.010	9	5.90		8.1
Sweden	6.597	699	13.10	9,916.7	4,485.3
Switzerland	7.629	991	10.40	52,662.2	19,652.3
Syria	0.407	20	20.70	298.9	101.5
Taiwan	4.594	198	14.20	238.3	2,176.3
Tajikistan	0.085	12	25.10		59.8
Tanzania	0.223f	4.8f	19.1f	11.85f	104.64f
Thailand	4.407	64	33.10	241.1	1,573.3
Togo	0.129	21	62.50		94.7
Trinidad & Tobago	0.181	134	11.30	0.8	126.8
Tunisia	0.693	65	25.60	31.9	420.9
Turkey	10.242	139	20.60	531.8	4,510.9
Turkmenistan	0.063	12	12.80		
Uganda	0.265f	7.7f	23.7f		
Ukraine	3.350	74	27.60	186.1	2,791.1
United Arab Emirates	1.515	192	12.30	67.7	1,187.0
United Kingdom	38.334	614	16.50	31,902.4	24,478.4
United States	337.100	1,077	12.40	35,342.2	62,447.2
Uruguay	0.368	109	10.70	149.9	163.4
Uzbekistan	0.498	18	23.50	1.8	331.6
Venezuela	8.449	287	56.60	39.2	2,645.7
Vietnam	2.425	27	31.80	63.1	1,581.4

GEOGRAPHY	PHARMACEUTICAL SALES, US\$BN	PHARMACEUTICAL SALES, US\$ PER CAPITA	PHARMACEUTICAL SALES, % OF HEALTH EXPENDITURE	PHARMACEUTICAL EXPORTS, US\$MN	PHARMACEUTICAL IMPORTS, US\$MN	
Yemen	0.211	9	17.90	1.9	179.3	
Zambia	0.196	15	18.40	1.8	128.1	
Zimbabwe	0.160	13	19.20	3.3	88.0	
Source: Business Monitor International						

Indian Pharma Sector

The Pharmaceutical industry in India is the world's third-largest in terms of volume. India is now among the top five pharmaceutical emerging markets of the world.

In terms of the global market, India currently holds a modest 1–2%

share, but it has been growing at approximately 10% per year. India gained its foothold on the global scene with its innovatively engineered generic drugs and active pharmaceutical ingredients (API), and it is now seeking to become a major player in outsourced clinical research as well as contract manufacturing and research.

Exhibit A
Drugs and Pharmaceuticals: Growth and Profitability in the year 2010-11

S. No.	Particulars	Quarterly				Annual		
		June'11	Sept.'11	Dec.'11	March'12	2009-10	2010-11	2011-12
I	Income	10.9	10.0	17.9	17.4	15.0	10.9	14.1
2	Net sales	9.2	11.0	17.1	16.3	11.9	12.4	13.5
3	Total expenses	11.6	-1.8	18.8	14.8	3.1	19.2	10.3
4	Raw materials	13.6	14.0	19.0	16.8	8.0	14.8	15.9
5	Salaries & wages	15.5	13.0	13.3	13.6	18.2	21.1	13.8
6	Power & fuel	10.2	24.0	24.0	10.0	2.5	20.1	17.1
7	Selling & marketing	9.0	15.1	10.0	9.0	0.1	11.9	10.7
8	Other expenses	2.8	28.0	11.1	12.1	-19.3	15.9	13.7
9	Depreciation	9.1	13.0	11.5	12.0	14.3	12,4	11,4
10	Interest expenses	15.6	20.0	25.0	18.0	-0.3	6.6	19.4
11	Tax provision	37.5	-78.6	90.6	75.9	108.8	73.6	-37.2
12	PBDIT	17.3	-4.3	19.9	18.9	105.7	-1.1	12.6
13	PAT	15,7	-	7.1	25.8	210.8	-31.6	55.6
14	PBDIT/Net Sales (%)	18.8	17.2	21.5	17.1	21.4	19.0	18.7
15	PBDIT/Income (%)	22.8	20.8	24.9	20.9	25.4	22,7	22.4
16	PAT/Income (%)	13.7	11.4	14.5	10.9	15.0	9.2	12.6

Source: Center for Monitoring Indian Economy (CMIE) Report November 2011

The sector generates around 40 percent of its sales from exports. Pharma sector imports raw materials like 11 chemicals intermediates and active pharmaceuticals ingredients (APIs).

Imports accounts for 38 percent of the overall raw material cost. A weak rupee will make imports costlier, resulting in a higher rise in raw material cost.

Exhibit B IMPORTS

(Rs. in Crore)

Year	Value of Import of "Medicinal and	Growth (%)
	Pharmaceuticals Products"	
2002-03	2,865	-
2003-04	2,956	3.18
2004-05	3,139	6.19
2005-06	4,515	43.84
2006-07	5,866	29.92
2007-08	6,734	14.79
2008-09	8,649	28.43
2009-10	9,959	15.15
2010-11	10,937	9.82

(Source: Directorate General of Commercial Intelligence and Statistics (DGCIS), Kolkata)

It may be observed that the imports shown declined in growth in the year 2010-11 compared to previous year. The country is almost self-sufficient in production of most of formulations/ pharmaceuticals products. As such imports are being resorted to on quality & economic considerations and not necessarily due to non-availability from domestic sources.

Exhibit C EXPORTS

(Rs. in erore)

Year	Value of Exports of "Drugs and Pharmaceuticals and Fine Chemicals"	Growth
2002-03	12,826	-
2003-04	15,213	18.61
2004-05	17,228	13.25
2005-06	21,230	23.23
2006-07	25,666	20.89
2007-08	29,354	14.37
2008-09-	39,821	35.66
2009-10	42,456	6.62
2010-11	47,551	12,00

(Source : Directorate General of Commercial Intelligence and Statistics (DGCIS), Kolkata)

The share of Exports of the "Drugs Pharmaceuticals and Fine Chemicals" in the total National Exports declined from 4.50% to

4.20% during the period 2006-07 to 2010-11,

Exhibit D
R&D spending of leading Indian and Global pharmaceutical MNEs

Indian Phari	Indian Pharmaceutical Companies			Global Pharmaceutical Companies		
Company	R&D exp. FY 2008/09,	Rank in R&D spending		Company	R&D exp. 2009, million	
	million USS				USS	
Ranbaxy*	99	1		Roche, CH	8,570	
Dr. Reddy's	89	5		GlaxoSmithKlin, UK	6,286	
Sun Pharma	67	10		Elli Lilly, USA	4,300	
Cipla	51	25		Lundbeck, DNK	615	
Lupin Labs	50	50		Watson, USA	197	

Source: Annual report: Department of Pharmaceuticals ,GOI

Exhibit E Geographical Distribution of Pharma Companies

S.No.	State	Number of Manufacturing Units		Total
		Formulation	Bulk Drugs	
1.	Maharashtra	1928	1211	3139
2.	Gujarat	1129	397	1526
3.	West Bengal	694	62	756
4.	Andhra Pradesh	528	199	727
5.	Tamil Nadu	472	98	570
6.	Others	3423	422	3845
	Total	8174	2389	10563

Source: Annual report: Department of Pharmaceuticals, GOI

These Indian states have been arranged in descending order of number of manufacturing units. It is noted that each of these five states account for more than 5 % of total number of pharmaceutical manufacturers in the country.