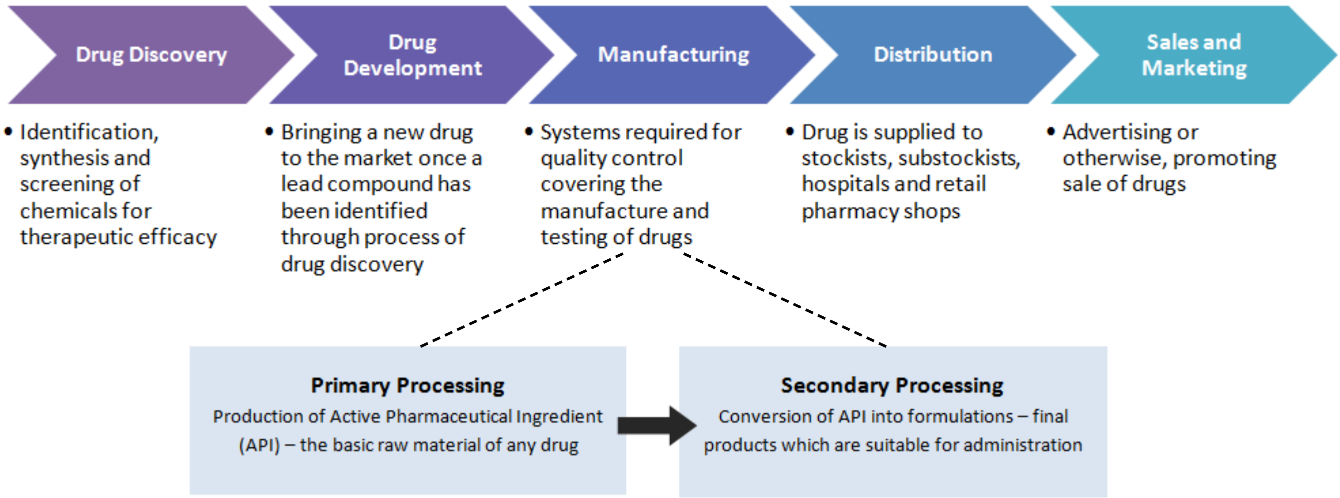
Pharmaceutical

SECTOR UPDATE

March, 2018

The pharmaceutical industry is responsible for development, production and marketing of medications. Therefore, it is considered as the mainstay of public health in any country. Pharmaceutical companies mainly deal in generic[1], branded[2], branded generic[3] and over the counter[4] drugs. Firms may also engage in contract development or manufacturing, where a company provides comprehensive services from drug development through drug manufacturing to another firm. As shown in figure 1, the pharmaceutical value chain commences with raw materials and ends with the delivered product.

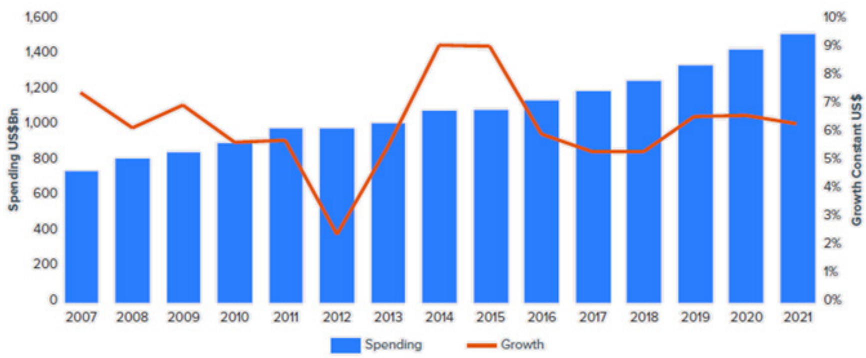
Figure 1: Pharmaceutical Value Chain



GLOBAL PHARMACEUTICAL INDUSTRY

During the past decade, worldwide pharmaceutical sales have witnessed growth to over US$ 1 trillion. In 2015, global revenue fell in nominal US-dollar terms owing largely to exchange-rate effects but gained ground in 2016-17[5]. Growth in spending is attributed to market expansion in emerging countries and favorable demographics including an ageing population in developed nations. Such trends are likely to continue over the coming years with QuintilesIMS Institute (IMS) projecting that global pharmaceutical market will grow to US$ 1.5 trillion by 2021 as depicted in figure 2 below[6].

Figure 2: Global Market Spending and Growth 2007-2021



1) contains the same active ingredients as the branded drug but can be sold in the market only after the patent expiry of the branded drug
2) originally developed and manufactured by a company and sold with patent protection
3) off-patented drug that is re-released into the market with a different branded name
4) medicines sold directly to a consumer without a prescription from a healthcare professional
5) Economist Intelligence Unit (2016) World industry outlook December 2016
6) QuintilesIMS Institute (2016) Outlook for Global Use of Medicines through 2021

PAKISTANI PHARMACEUTICAL INDUSTRY

Industry Dynamics

In 2017, Pakistani Pharmaceuticals Industry (PPI) registered sales of US$ 3.1b translating to a global market share of 0.5%. In line with international trend, PPI witnessed healthy growth at a Compound Annual Growth Rate (CAGR) of 10-12% during 2012-2017[7]. Factors such as changing lifestyle patterns with rising per capita income, a growing population and higher prevalence of chronic illnesses have together created significant opportunities for companies.

Figure 3: Pakistani pharmaceutical industry economics

US$ 278.9b Gross Domestic Product	**193.2m** **6th** largest population in the world	**2%** Annual Population Growth
2.6% Health Expenditure % GDP	**~22%** Pharma expense % total health expenditure	**US$ 5,560** GNI per Capita PPP (current international $)
US$ 3.1b Pharmaceutical Industry Sales	**~10-12%** 5-Year CAGR Industry Sales	**US$ 207m** Exports to >50 countries
759 Companies	**27** MNCs	**66:34** Domestic to MNC Sales
~70-80% Finished medicines manufactured locally	**11** Listed firms with ~30% market share	**8.2m** Population aged >65 yr → **41.3m** by 2060

Source: World Bank, IMS, Industry Sources, International Futures forecasting system

In general, pharmaceutical spending exhibits strong correlation with income levels. This has been the case in Pakistan. While population growth may also be linked to increased demand, 60% of the population comprises individuals aged under 30, which generally consume lower volume of medicines vis-à-vis old people. However, an ageing population is expected to be a key driver of drug consumption over next forty years while increase in per capita income is set to continue. Accordingly, pharmaceutical sales in Pakistan are projected to rise by 8.1% a year on average[8].

7) Pakistan Pharmaceutical Manufacturer's Association (2017) Pakistan's Pharmaceutical Industry
8) Economist Intelligence Unit (2016) World industry outlook December 2016

Figure 4: Sales in terms of product type (2014)

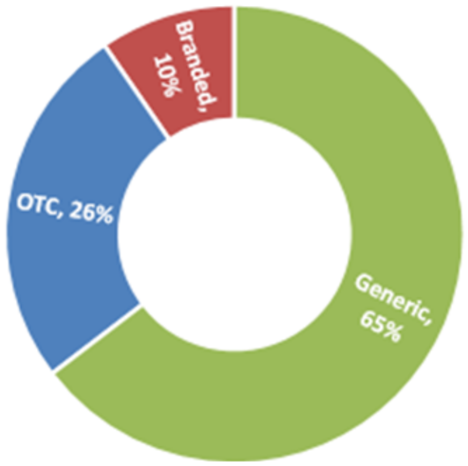
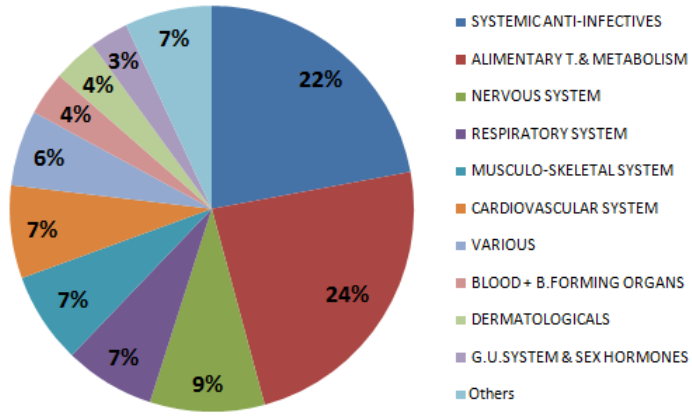


Figure 5: Therapeutic area wise sales (MAT 11/2017)

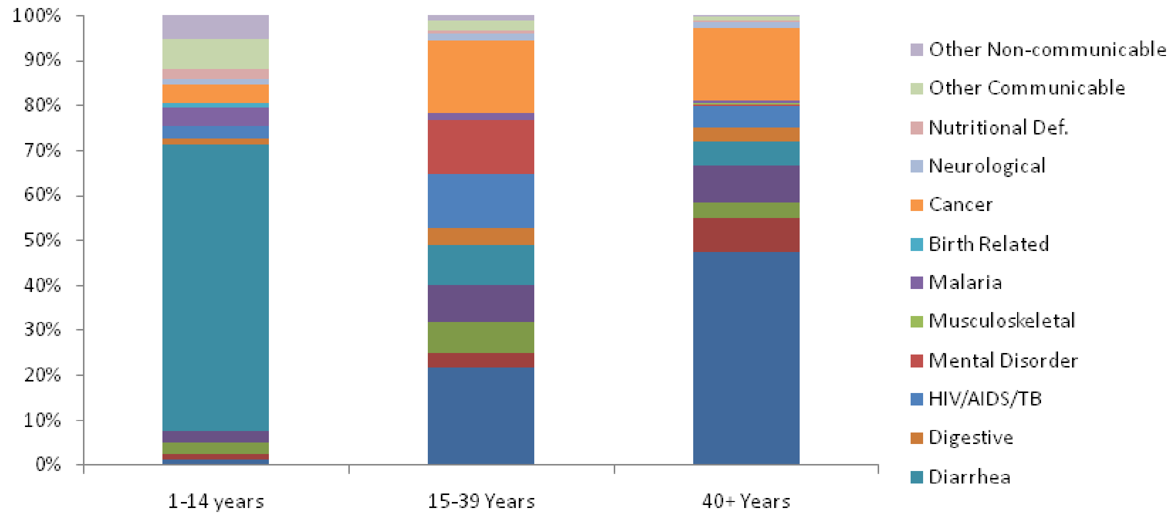


Source: IFPMA Facts and Figures 2017, IMS

At lower income levels, pharmaceutical spending is dominated by communicable disease and childhood conditions, like respiratory infections, malaria and tuberculosis. As living standards improve, non-communicable diseases (NCDs) like heart disease, diabetes and cancer account for a large share of pharmaceutical expenditures. NCDs are much more expensive to treat and tend to impact older people. Accordingly, figure 5 illustrates that pharmaceutical sales in Pakistan (a developing economy) are dominated by two therapeutic segments – systemic anti-infectives[9] and alimentary tract & metabolism[10].

Therapeutic segments can broadly be classified into chronic and acute. Chronic therapy areas pertain to uninfectious diseases of long duration (e.g. cardiovascular, anti-viral, anti-diabetic and oncology). Acute therapeutic category relates to sudden illnesses which run a short, severe course (e.g. acute diarrhea). As depicted in figure 6 below, chronic illnesses tend to become more common cause of death among aged individuals.

Figure 6: Leading causes of death in Pakistan during 2016



Source: IMS

Exports remain on the lower side in relation to regional players like India at ~US$ 207m for 2016 increasing at CAGR of 7% during FY10-16. Major export markets are Afghanistan, Sri Lanka, Philippines and Vietnam. Over medium term, exports are expected to remain constrained by challenges associated with fulfilling regulatory and documentation requirements of foreign markets.

9) medicine for preventing spread of infections and their elimination

10) medicine for disorders associated with impairment of gastrointestinal functions

Industry Structure

PPI is characterized by low entry barriers and significant regulation. The industry is fragmented, with existence of a large number of players – small as well as big, with focus on different therapeutic segments – across acute as well as chronic categories. Firms are primarily engaged in manufacturing formulations using imported API (5% of raw material is produced domestically) alongside contract manufacturing for MNCs. PPI is regulated by a centrally led agency called Drug Regulatory Authority of Pakistan (DRAP). Major areas overseen by DRAP include patents, price and product quality.

Currently, a total of 759 companies operate in the country of which 27 are MNCs. The industry is dominated by large players with top 100 firms accounting for ~97% of market share. As a result, ~600 firms compete for a market of just ~Rs. 10b. A total of 12 companies are listed on Pakistan Stock Exchange and they have a market share of ~30%. Despite limited growth potential, small firms continue to operate on account of profitable export opportunities in neighboring countries like Afghanistan and provision of contract manufacturing to other companies.

Figure 7: Top 25 Pharmaceutical Companies in terms of Market Share (MAT 11/2017)

Symbol	Name	Market Share	Growth in Sales
GSK	GlaxoSmithKline Pakistan	7.45%	3.10%
ABBOTT	Abbott Laboratories Pakistan	6.29%	8.98%
GETZ	Getz Pharma Pakistan	6.22%	13.15%
SAMI	Sami Pharmaceuticals	5.25%	10.12%
MARTIN	Martin Dow	4.12%	11.83%
SEARLE	The Searle Company	3.71%	11.44%
SANOFI	Sanofi-Aventis Pakistan	3.10%	-2.91%
GSKCH	GlaxoSmithKline Consumer Healthcare Pakistan	3.00%	17.42%
OBS	OBS Pakistan	2.98%	0.45%
HILTON	Hilton Pharma	2.95%	8.17%
HIGHQ	High-Q International	2.83%	25.38%
BOSCH	Bosch Pharmaceuticals	2.79%	10.18%
PFIZER	Pfizer Pakistan	2.69%	3.53%
NOVARTIS	Novartis Pakistan	2.64%	-1.41%
BARRETT	Barrett Hodgson Pakistan	2.04%	10.86%
ATCO	Atco Laboratories	1.82%	8.14%
BAYER	Bayer Pakistan	1.76%	17.15%
NESTLE	Nestle Pakistan	1.65%	-5.41%
HIGHNOON	Highnoon Laboratories	1.64%	15.85%
PHARMEVO	Pharmevo	1.59%	31.32%
CCL	CCL Pharmaceuticals	1.45%	19.88%
ICI/WYETH	ICI Pakistan	1.28%	-3.75%
GLOBAL	Global Pharma	1.19%	-5.04%
INDUS	Indus Pharma	1.15%	-7.79%
EL	Eli Lilly Pakistan	1.11%	13.22%

Source: IMS

Margins are a function API rates and retail prices. Firms with multiple suppliers may be able to negotiate better rates for raw material. Retail drug prices are regulated by DRAP. As per the Drug Pricing Policy 2015 a firm may increase price of scheduled drugs by up to 50% of Consumer Price Inflation (CPI) (with a cap of 4%) and non-scheduled drugs by up to 70% of CPI (with a cap of 6%).

As illustrated in Figure 8 below, large players market products across a range of therapeutic segments. Companies offering chronic treatments are viewed favorably by JCR-VIS as these contribute higher margins and volumes. Apart from medicines, firms are expanding their product offerings in the consumer & nutrition segment which offer better margins on account of unregulated prices. A number of companies have also commenced production of biopharmaceuticals[11]. Growth in these markets will continue to be significant owing to increased urbanization and change in lifestyle patterns. Thus, ability of firms to align their portfolio towards aforementioned categories will be important for revenue growth.

Figure 8: Key Therapy Areas and Major Products of Pharmaceutical Companies

GSK

- Pain management, respiratory health, gastrointestinal health, oral health, skin health
- Panadol, Actified, Eno, Horlicks and Sensodyne

Abbot

- Digestive system, cardiovascular disease, respiratory health, neurological disorders, pain management & women wealth
- Brufen, Klaricid & Entamizole

Searle

- Analgesics, respiratory disease, Hypertension, Gastorintestinal
- Nuberal forte, Hydrillin, Extor, Gravinate & Pediteral

Highnoon

- Alimentary tract & metabolism, cardiometabolic & respiratory
- Trex Orx Forte, Ulsanic & Skilax

Ferozsons

- Cardiology, gastroenterology, hepatoloty, oncology, dermatology and anti-infective
- Sovaldi

IBLHL

- Adult nutrition, infant nutrition & medical disposable products
- Mead Johnson Nutrition, Nestle Health Science, Terumo, Meditech & Mepaco

Macter

- Hepatology, Oncology, Anti-Diarrheal, Hepatology, Broad Spectrum Penicillin, Respiratory, Hepatitis vaccines, Carbapanem Anti-biotic, Vitamin B12, Tranquilizer
- Pec-Heb, Maclinza, Viron, Macdronic, Bismol, Sofomac, Ecavir, Tacip, Adalin, Expectorant, Salmicort, Herberbiovac, Ropen, Cobolmin, Relaxin

Otsuka

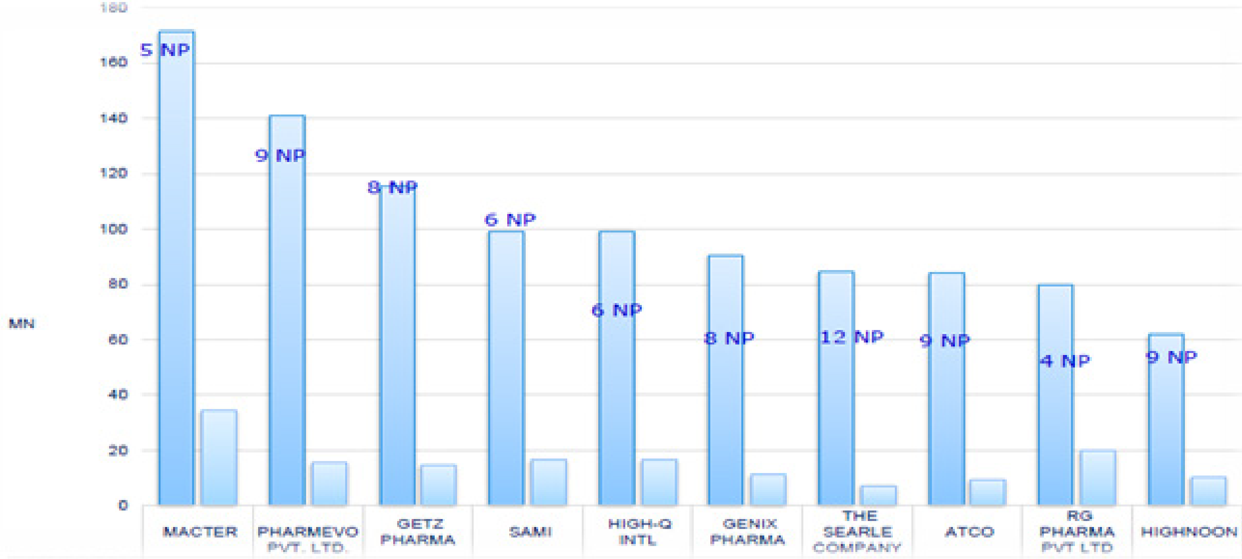
- Intravenous Solution, Anti-platelet Aggregation, Dextrose & Intravenous Solution & Clinical Nutrition
- Ringolact inf, Pletaal tab, Pladexsal, Aminoleban oral powder granules

Source: Company accounts, website

11) any pharmaceutical drug product manufactured in, extracted from, or semisynthesized from biological sources

During MAT Q32017, Macter emerged as the leader in terms of revenue from new product (NP) launches with 5 products, followed by Pharmevo and Getz with 9 and 8 new drugs respectively as depicted in figure 9 below:

Figure 9: Leading 10 Companies by New Products (Last 12 Months) MAT Q32017 (Rs. m)



Source: IMS

Over the years, number of MNCs operating in the country has declined. Major reasons for this trend include government regulation on pricing, which restricts ability to pass on R&D expense and lack of intellectual property rights enforcement. For same reason, R&D within Pakistan is very limited while globally, it is a key driver of growth. Unless supportive policies are introduced, MNCs' exit is expected to continue over the medium term.

Going forward, in view of low R&D and new product development, it is expected that growth of PPI will primarily be driven by economies of scale in production and utilization of external research for development of generic substitutes. Lack of R&D may also result in need to import key medicines. PPI may also witness M&A activity as smaller firms are likely to face difficulty in operating in an increasingly competitive environment where costs of production are unlikely to decline.

BUSINESS RISK FACTORS

Market risk
JCR-VIS anticipates PPI to have one of the best long-term sales prospects vis-à-vis other sectors in view of supportive demographic trends with ageing population, growth in income levels and anticipated continuous emergence of new diseases. Globally, the pharmaceutical industry is considered to be a non-cyclical sector with relatively stable demand. Thus, impact of broad economic conditions on a pharmaceutical company's revenues and profitability is likely to be low.

Price risk
Volatility in retail prices is considered low but ability to pass on significant increase in raw material prices is considered limited under the CPI-linked pricing criteria. Companies have to apply for 'hardship cases' in such a scenario and approval of the same will depend on DRAP.

Foreign currency risk
Since API is primarily imported, companies are exposed to risk of currency fluctuation. However, for firms with ample API availability from a range of suppliers, probability of raw material price fluctuation is low. Historical trend analysis indicates that in FY09, a decrease of ~19% in PKR/US$ resulted in decline in gross margins by ~4%. However, after imposition of Drug Pricing Policy 2015, impact of rupee depreciation on margins is likely to be higher. In such a case, firms with product offerings in consumer & nutrition segments are likely to fare better due to greater price flexibility.

Regulatory risk
Delays in approval of new products can impact projected sales growth. Moreover, non-acceptance and/or delay in approval of hardship cases may also impact profitability and cash flows.

FINANCIAL PROFILE

Improvement in financial profile of listed pharmaceutical companies is attributed to higher sales & gross margins and lower finance cost (decline in debt levels and lower borrowing rates). All the aforementioned factors have translated into improved profitability levels during FY17 and FY16. Gross margins of the industry are impacted by API procurement rates. Accordingly, quantum of profits for FY18 will primarily depend on volumetric growth in sales of both, new and existing products while maintenance of margins is also considered important.

Figure 10: Market Share of Listed Pharmaceutical Companies (MAT 11/2017)

Name	Market Share
GSK	7.5%
Abbott	6.3%
Searle	3.7%
Sanofi	3.1%
GSKCH	3.0%
Highnoon	1.6%
AGP Limited (AGP)	1.4%
ICI/Wyeth	1.3%
Ferozsons	1.1%
Macter	1.1%
Otsuka	0.2%
IBLHL	n/a

Source: IMS

Figure 11: Profitability Indicators (Rs. m)

	Abbott		GSK		Highnoon		IBLHL		Macter	
	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17
Sales	22,335.4	24,479.0	25,061.8	30,855.3	4,772.3	5,393.9	1,156.4	1,189.8	3,064.4	3,630.0
Gross Margin	39.5%	39.2%	26.7%	27.4%	48.1%	47.4%	33.1%	33.4%	41.0%	46.1%
Net Margin	17.1%	16.3%	10.8%	10.3%	10.9%	10.8%	15.5%	16.7%	4.8%	7.6%
ROA	23.7%	23.0%	14.7%	15.8%	22.8%	21.9%	17.5%	15.9%	n/a	10.7%
ROE	31.0%	30.7%	23.0%	25.5%	44.3%	37.8%	22.4%	19.6%	n/a	25.8%
	Otsuka		Sanofi		Searle		ICI/Wyeth		Ferozsons	
	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17
Sales	1,550.7	1,829.6	11,075.0	12,803.7	9,561.5	10,753.8	595.1	1,351.7	10,186.5	4,311.4
Gross Margin	17.3%	27.3%	29.1%	35.6%	39.4%	38.9%	16.6%	17.1%	40.3%	41.2%
Net Margin	-7.2%	6.0%	1.7%	10.8%	21.9%	24.5%	-16.8%	-0.2%	20.7%	9.1%
ROA	-7.1%	7.2%	2.5%	20.2%	21.5%	20.8%	-6.2%	-0.1%	41.7%	6.9%
ROE	-130.9%	131.2%	7.5%	43.5%	32.8%	29.1%	-9.2%	-0.2%	62.2%	9.7%
	AGP		GSKCH							
	CY16	CY17	CY16	9MCY17						
Sales	4,205.8	4,724.9	5,375.8	5,917.2						
Gross Margin	58.5%	60.8%	28.1%	38.1%						
Net Margin	25.9%	26.1%	10.2%	8.3%						
ROA	12.9%	14.5%	20.0%	20.2%						
ROE	29.1%	25.2%	34.2%	35.7%						

With an increase in earnings and cash flows, liquidity profile of listed firms has showcased improvement. Most of the companies have healthy cash flows in relation to outstanding obligations. Given that profits have largely been retained while debt levels have reduced, gearing ratio for listed players has decreased. Over the last year, a number of companies have laid out plans for capacity expansion. Accordingly, gearing is expected to increase though likely to remain within manageable levels.

Figure 12: Liquidity Indicators (Rs. m)

	Abbott		GSK		Highnoon		IBLHL		Macter	
	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17	FY16	FY17
Sales	22,335.4	24,479.0	25,061.8	30,855.3	4,772.3	5,393.9	1,156.4	1,189.8	3,064.4	3,630.0
Gross Margin	39.5%	39.2%	26.7%	27.4%	48.1%	47.4%	33.1%	33.4%	41.0%	46.1%
Net Margin	17.1%	16.3%	10.8%	10.3%	10.9%	10.8%	15.5%	16.7%	4.8%	7.6%
ROA	23.7%	23.0%	14.7%	15.8%	22.8%	21.9%	17.5%	15.9%	n/a	10.7%
ROE	31.0%	30.7%	23.0%	25.5%	44.3%	37.8%	22.4%	19.6%	n/a	25.8%
	Otsuka		Sanofi		Searle		ICI/Wyeth		Ferozsons	
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Net Margin	-7.2%	6.0%	1.7%	10.8%	21.9%	24.5%	-16.8%	-0.2%	20.7%	9.1%
ROA	-7.1%	7.2%	2.5%	20.2%	21.5%	20.8%	-6.2%	-0.1%	41.7%	6.9%
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ROE	29.1%	25.2%	34.2%	35.7%						

OUTLOOK

JCR-VIS expects credit metrics of leading drug makers to remain stable on the back of steady growth prospects (increasing penetration, accessibility, continued new launches by players and relatively strong balance sheets). Capital structure and coverage indicators are likely to remain strong despite some pressure on margins in view of rupee depreciation and marginal rise in debt levels to fund capacity expansion. In case of rupee weakness, firms with product offerings in the consumer & nutrition segment are likely to fare better due to greater price flexibility. Regulatory action in terms of price control or delays in new product approvals, remain key threats for the industry. The key sensitivity to JCR-VIS' view remains increasing competition in generics space and achievement of targeted growth in sales of both, existing and new products.

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