



BP WEALTH

Initiating Coverage Report
Fermenta Biotech Limited

A Big Dose of Transformation



March 2021



Table of Content

Summary of Business Profile & Explanation on why we like this company.....	2&4
Investment Rationale.....	5-15
Only Vitamin D3 API manufacturer in India with strong global positioning.....	5-8
⇒ Global VD3 Market: Dominated by Chinese Players	
⇒ Feed-grade VD3 prices cooled off from the highs which provides comfort on margins	
Fresh capacity addition in existing products coupled with new product introduction to aid revenue growth	9-10
⇒ Entering into complex 25-Hydroxy- Feed grade (VD3 Analog)	
⇒ Backward integration into Cholesterol to improve gross margin by 300bps	
Focusing to become nutraceuticals company	11-14
⇒ Fortified food market opportunity in India	
⇒ Global Nutraceutical Industry	
⇒ Domestic Nutraceutical Industry	
Strong Financials; Improving return ratios bode well.....	15
Company Background	16
Key milestones and Management team.....	17
Peer Comparison.....	18
EV/EBITDA band & Key Risks.....	19
Valuation & Outlook	20
Financial Statements.....	21-24
Disclaimer.....	25

Company Background

Fermenta Biotech Ltd (FBL), incorporated in 1986, was a subsidiary of DIL Limited (DIL) till September 2019. As per NCLT order dated September 19, 2019, DIL Limited's amalgamation (formerly holding company) with Fermenta Biotech Limited was approved. Post this amalgamation, DIL Limited was renamed as 'Fermenta Biotech Limited'. Post amalgamation, FBL has two business segments; i.e, lease rental business for commercial properties developed in Thane and manufacturing of active pharmaceutical ingredients (APIs). FBL's API business can be classified majorly under four major categories: Vitamin D3 APIs, specialty APIs, biological enzymes, and biotech-based environmental solutions. The company's manufacturing facilities are located at Kullu (Himachal Pradesh) and Dahej (Gujarat).

Investment Rationale

Only Vitamin D3 API manufacturer in India with strong global positioning

Fermenta is the only manufacturer of Vitamin D3 API (cholecalciferol) in India, supplying more than 300 customers worldwide. This business segment generates a majority (~79%) of the company's top-line. In India, the vitamin D3 along with its derivative comprises 9% (of the overall vitamins market) and has been posting 15% CAGR over the past five years. The importance of Vitamin D3 for health underlines its essentiality in human and animal nutrition. Further, it can also be used as a rodenticide, with proven efficacy and safety for non-targets. This diversified mix gives Vitamin D a narrow but deep purview – Fermenta offers value-added variants across this wide range of applications. The company is one of the three players globally to obtain a Certificate of Suitability from European Directorate for the Quality of Medicines (EDQM) to manufacture Vitamin D3 API. Globally, FBL has a strong market share of about ~25% in the Vitamin D3 API market for humans. In the animal feed market for Vitamin D3, market share is about 5-6 % in volumes. On Human VD3 side, FBL is operating at nearly 100 % utilization levels. To tap the increasing demand, the company has undertaken a brownfield expansion to increase its human VD3 capacities by 25-30 %, which is expected to get commission by Q4FY21. Management believes the increased capacity can be absorbed as there is a strong demand for human VD3 APIs in the market. On Animal Feed VD3 side, company currently operates at around 35-40 % capacity utilization levels due to contraction in demand for Animal VD3 impacted by Covid 19 pandemic and African swine fever. However, we expect the demand environment to improve in FY22, which is likely to boost Animal VD3 volume growth. Overall, we expect the VD3 segment to report 16.8% CAGR over FY20-23 on the back of strong traction in Human VD3 and demand recovery in the Animal VD3 market.

Fresh capacity addition in existing products coupled with new product introduction to aid revenue growth

Currently, FBL has two manufacturing units, one in Kullu and the other in Dahej, Gujarat. To tap increasing demand for existing FBL's products and diversify into new products, the company has undertaken brownfield capacity expansions, which could lead to volume growth with higher realizations. The company has embarked on a capex of INR300mn for Dahej (funded through partially debt and internal accruals). This capex will enhance capacity by 25% at an overall production level. As part of its future expansion plans, FBL has entered into a 99-year lease and acquired about 40,000 sq meters of land from the GIDC Authority in Ankleshwar (Sayakha). This will be a greenfield expansion with capex of ~INR 2bn funded through mix of internal accruals and Debt financing. Sayakha manufacturing facility will be implemented in a phased manner with the first phase to be commissioned by Q4FY23E. Interestingly, this facility will manufacture many Nutraceutical products (such as minerals, vitamins and derivatives) apart from existing products like Vitamin D3 (Feed + Food) with different varieties and Phenylamido HCl etc. FBL is expected to generate a 2-2.5x asset turn on the upcoming capacity. Hence, we expect incremental revenue of INR4-5bn at peak utilization level with ROE of over 20%.

Stock Rating

BUY	HOLD	SELL
> 15%	-5% to 15%	< -5%

Sector Outlook

Positive

Stock

CMP (Inr)	277
Target Price (Inr)	402
BSE code	506414
NSE Symbol	na
Bloomberg	FERMENTA.IN
Reuters	DILL.BO

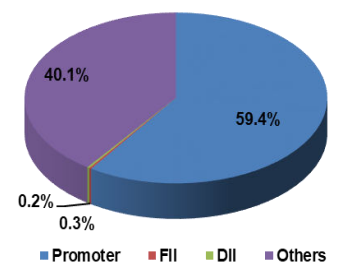
Key Data

Nifty	14,529
52 Week H/L (Inr)	442 / 151
O/s Shares (Mn)	29
Market Cap (Bn)	8.15
Face Value (Inr)	5

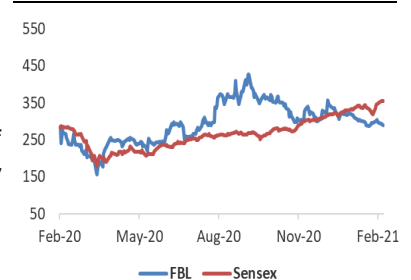
Average volume

3 months	33,600
6 months	53,750
1 year	41,490

Share Holding Pattern (%)



Relative Price Chart



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Strong Financials; Improving return ratios bode well

We expect FBL to register a 16.9% CAGR in revenue, to INR4,681mn, over FY20-23E. The growth is likely to be driven by growth mix of both VD3 portfolio and new products launch. We expect the EBITDA margin to improve 501bps over FY20-23E with a strong absolute EBITDA CAGR of 25% over FY20-23E, powered by strong revenue growth in both VD3 portfolio and Other products segment. We expect a 27.1% CAGR in PBT over FY20-23E, to INR892mn, boosted by healthy revenue growth and a strong EBITDA margin improvement. The growth in net profit would be considerably more than that in revenue, largely because of strong operational performance coupled with a sharp improvement in EBITDA margin led by backward integration. With the twin levers of scale and operating efficiencies playing out, FBL's return ratios have improved substantially from RoE/RoCE of ~0.4%/6.4% in FY15 to 12.2%/16.4% in FY20 (on adjusted basis). Going forward, we expect steady improvement in return ratios (RoE/RoCE of 16.8%/17.2% in FY23E) resulting in healthy operating cash flow generation (Avg FCF of INR 370mn/year) backed by mid-teen top-line and substantially higher profitability growth. We expect consolidated net adjusted leverage (Net Debt/EBITDA) to reach 0.9x in FY23e from 2.7x in FY20, largely driven by the improvement in EBITDA generation. With the monetization of real estate asset (Valued at INR 4.5bn) in coming years, we expect it to substantially fund future capex and help FBL reduce its debt level. However, we have not considered any real estate monetization in our forecasted numbers.

Why we like this stock & valuation methodology

We believe FBL is on the verge of transforming itself to nutraceutical company led by its strong R&D capability. It is expanding into value-added formats of vitamins like A, E, D2, and K, development of smart minerals, novel antioxidants, pre and probiotics, customized premixes and a huge opportunity in food fortification opportunity in India. We expect the VD3 segment has enough headroom left and can continue to grow at a CAGR of 16.8% over FY20-23 on the back of capacity expansion supported by a healthy demand outlook in Human VD3 and recovery in Animal VD3 volumes. High barriers to entry in terms of technology requirements (photochemistry replication) and regulatory permissions make a supportive case. Moreover, Backward integration into cholesterol to improve gross margin by 300bps in the next 3-4 quarters. Considering the expected strong growth in profitability, healthy balance sheet with improving return ratios, we are optimistic about the company's long-term growth prospects. We foresee 16.9% revenue CAGR, 501bps margin expansion, and 27.1% growth in adjusted earnings over FY20-23E. At the CMP (INR 277), the stock trades at 11.7x FY23e EPS and 7.3x EV/EBITDA. We believe the stock to witness gradual re-rating on the back of a better product pipeline and improved return ratios. We initiate coverage on the stock & recommend a 'BUY' rating with a target price of INR 402 per share, valuing the company at 17x FY23e earnings.



Key Financials

YE March (INR. Mn)	FY18	FY19	FY20	FY21 E	FY22 E	FY23 E
Revenue	3,027	4,047	2,929	3,597	4,005	4,681
<i>Revenue Growth (Y-o-Y)</i>	84.4%	33.7%	(27.6%)	22.8%	11.4%	16.9%
EBITDA	930	1,489	652	871	1,020	1,277
<i>EBITDA Growth (Y-o-Y)</i>	677.6%	60.1%	(56.2%)	33.4%	17.1%	25.2%
Net Profit	483	1,175	595	434	526	696
<i>Net Profit Growth (Y-o-Y)</i>	660.3%	143.1%	(49.3%)	(27.1%)	21.4%	32.2%
Diluted EPS	16.4	39.9	20.2	14.7	17.9	23.6
<i>Diluted EPS Growth (Y-o-Y)</i>	660.3%	143.1%	-49.3%	-27.1%	21.4%	32.2%
No of Diluted shares (Mn)	29	29	29	29	29	29

Key Ratios

EBITDA (%)	30.7%	36.8%	22.3%	24.2%	25.5%	27.3%
NPM (%)	16.0%	29.0%	20.3%	12.1%	13.1%	14.9%
RoE (%)	35.9%	62.7%	21.3%	13.3%	14.4%	16.8%
RoCE (%)	17.9%	46.4%	28.2%	14.6%	15.9%	17.2%
Tax Rate %	27.8%	8.4%	-37.1%	22.0%	22.0%	22.0%
Book Value Per Share (INR.)	42	85	105	117	131	150

Valuation Ratios

P/E (x)	16.9x	6.9x	13.7x	18.8x	15.5x	11.7x
EV/EBITDA	10.3x	6.1x	15.1x	11.0x	9.3x	7.3x
P/BV (x)	6.6x	3.3x	2.6x	2.4x	2.1x	1.8x
Market Cap. / Sales (x)	2.7x	2.0x	2.8x	2.3x	2.0x	1.7x
Net Debt / EBITDA	1.4x	0.6x	2.7x	1.6x	1.3x	0.9x
Debt to Equity	1.3x	0.8x	0.7x	0.7x	0.6x	0.5x

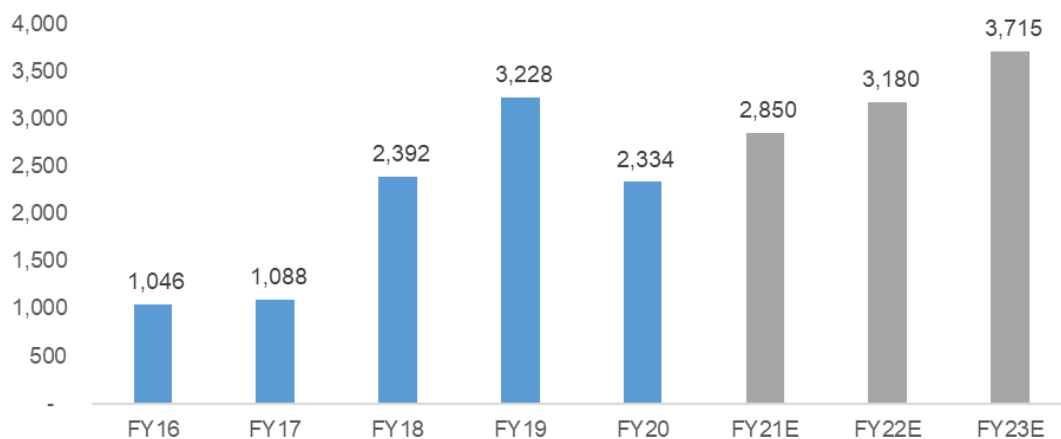
Source: Ace Equity, BP Equities Research

Investment Rationale
Only Vitamin D3 API manufacturer in India with strong global positioning

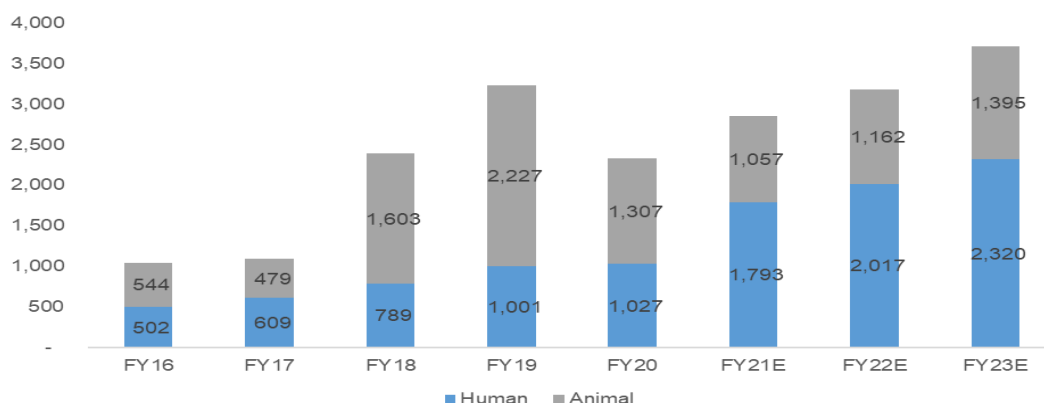
Fermenta is the only manufacturer of Vitamin D3 API (cholecalciferol) in India, supplying more than 300 customers worldwide. This business segment generates a majority (~79%) of the company's top-line. Over the past few years, the Vitamin D market reported a significant growth in applications across pharmaceutical, dietary and nutritional supplements, food, veterinary, feed and rodenticides segments. In India, the vitamin D3 along with its derivative comprises 9% (of the overall vitamins market) and has been posting 15% CAGR over the past five years. The importance of Vitamin D3 for health underlines its essentiality in human and animal nutrition. Further, it can also be used as a rodenticide, with proven efficacy and safety for non-targets. This diversified mix gives Vitamin D a narrow but deep purview – Fermenta offers value-added variants across this wide range of applications. The company is one of the three players globally to obtain a Certificate of Suitability from European Directorate for the Quality of Medicines (EDQM) to manufacture Vitamin D3 API. Globally, FBL has a strong market share of about ~25% in the Vitamin D3 API market for humans. In the animal feed market for Vitamin D3, market share is about 5-6 % in terms of volumes. On Human VD3 side, FBL is operating at nearly 100 % utilization levels. To tap the increasing demand, the company has undertaken a brownfield expansion to increase its human VD3 capacities by 25-30 %, which is expected to get commission by Q4FY21. Management believes the increased capacity can be absorbed quickly as there is a strong demand for human VD3 APIs in the market. On Animal Feed VD3 side, the company is currently operating at around 35-40 % capacity utilization levels due to contraction in demand for Animal VD3 impacted by Covid 19 pandemic and African swine fever. However, we expect the demand environment to improve in FY22, which is likely to boost Animal VD3 volume growth. Overall, we expect the VD3 segment to report 16.8% CAGR over FY20-23 on the back of strong traction in Human VD3 and demand recovery in the Animal VD3 market.

VD3 Global Market share

Human : 25%
Animal Feed: 5-6%
(Volume)

Capacity expansion with healthy demand to drive VD3 growth (INR in Mn)


Source: Company BP Equities Research

Human VD3 revenue contribution to remain high (INR in Mn)


Source: Company BP Equities Research

Global VD3 Market: Dominated by Chinese Players

The global VD3 production capacity (Feed+ Food grade) is approximately 14,600 tons/year (equivalent to 500,000 IU), China's production capacity is approximately 13,100 tons/year, and global demand is approximately ~6,750 tons. In 2019, China's VD3 output was 5650 tons, of which 4,050 tons were exported, 1,600 tons were supplied domestically, and 1,300 tons were consumed. According to statistics from Boya Hexun, in 2019, Zhejiang Garden Biochemical (Largest Chinese player) produced 2,000 tons of VD3, accounting for 35.4% of the total output (in China), which is twice the output of the industry's second largest player in same region. Apart from FBL, other manufacturers are mainly DSM (The Netherlands), Xinhecheng (China), Haisheng Pharmaceutical (China), etc. The addressable headroom is vast in VD3 business as new applications are being developed while the number of players is not increasing as the industry continues to be protected by a high technology (Photochemistry) entry barrier.

Global Feed Production 2019

Total Global Feed production is estimated at 1126.5 mn. MT p.a. On an average it is estimated that about 6-7 gm of vitamin D3 needs to be added for every 1 ton of feed.



POULTRY

	Layer	Broiler
Africa	5.72	10.0
Asia-Pacific	73.14	115.2
Europe	33.49	56.3
Latin America	24.03	61.8
Middle East	4.86	8.4
North America	15.54	51.8
Oceania	0.93	3.8
Total	157.7	307.3

Feed contribution: 41.3%

Vitamin D3 requirement per tonne of feed:

6 gm



PIG

Africa	1.4
Asia-Pacific	93.3
Europe	79.5
Latin America	32.2
Middle East	0.0
North America	53.1
Oceania	1.3
Total	260.9

Feed contribution: 23.2%

Vitamin D3 requirement per tonne of feed:

6-7 gm



RUMINANT

	Beef	Dairy
Africa	2.4	6.0
Asia-Pacific	12.5	22.9
Europe	21.9	44.5
Latin America	13.9	19.8
Middle East	1.5	6.6
North America	62.3	28.3
Oceania	0.9	1.7
Total	115.4	129.9

Feed contribution: 22%

Vitamin D3 requirement per tonne of feed:

20 gm

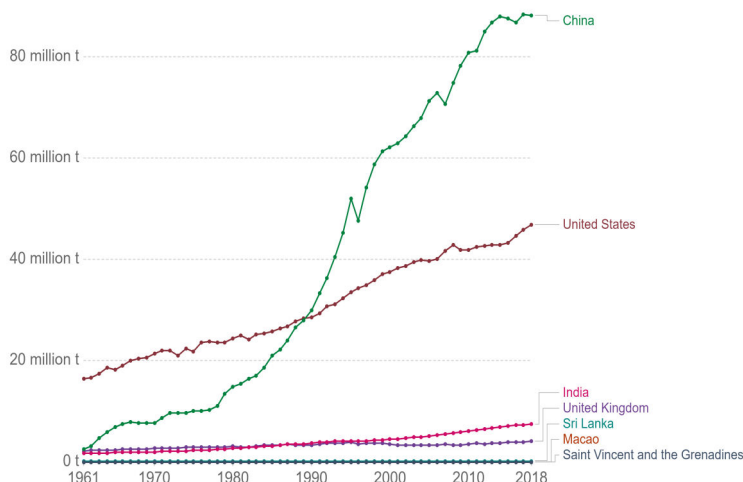
Source: Alltech Global Feed Survey 2020, * All numbers are in million metric tons

Global Meat Market

Sustainably feeding the world is one of the most pressing challenges in the coming decades. Meat plays a pivotal role in this. Meat is an important source of nutrition for many people around the world. Global demand for meat is growing: over the past 50 years, meat production has more than tripled. The world now produces more than 340 million tonnes each year.

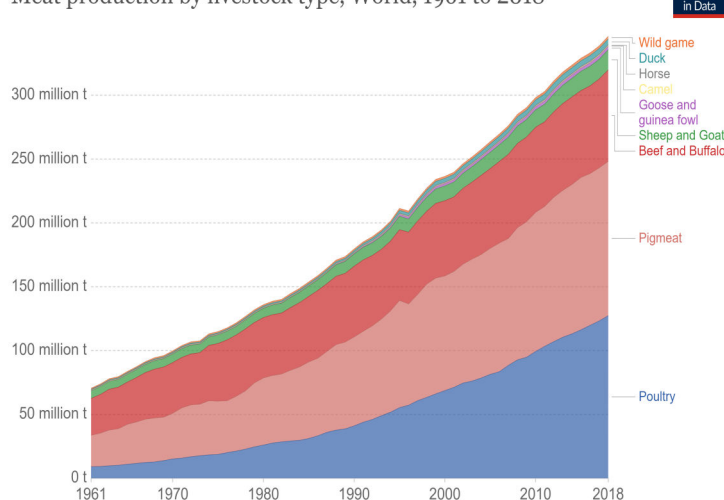
Meat production, 1961 to 2018

Meat includes cattle, poultry, sheep/mutton, goat, pigmeat, and wild game.



Source: UN Food and Agricultural Organization (FAO) OurWorldInData.org/meat-production • CC BY
 Note: Figures are given in terms of dressed carcass weight, excluding offal and slaughterer fats.

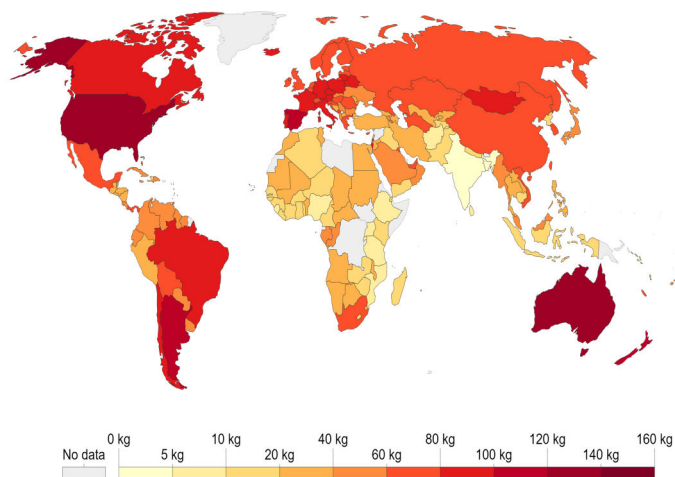
Meat production by livestock type, World, 1961 to 2018



Source: UN Food and Agricultural Organization (FAO) OurWorldInData.org/meat-production • CC BY
 Note: Total meat production includes both commercial and farm slaughter. Data are given in terms of dressed carcass weight, excluding offal and slaughterer fats.

Meat supply per person, 2017

Average total meat supply per person measured in kilograms per year.



Source: UN Food and Agriculture Organization (FAO) OurWorldInData.org/meat-production • CC BY
 Note: Data excludes fish and other seafood sources, figures do not correct for waste at the household/consumption level so may not directly reflect the quantity of food finally consumed by a given individual.

In the chart we see a global map of per capita meat (excluding seafood and fish) consumption, measured in kilograms per person per year.

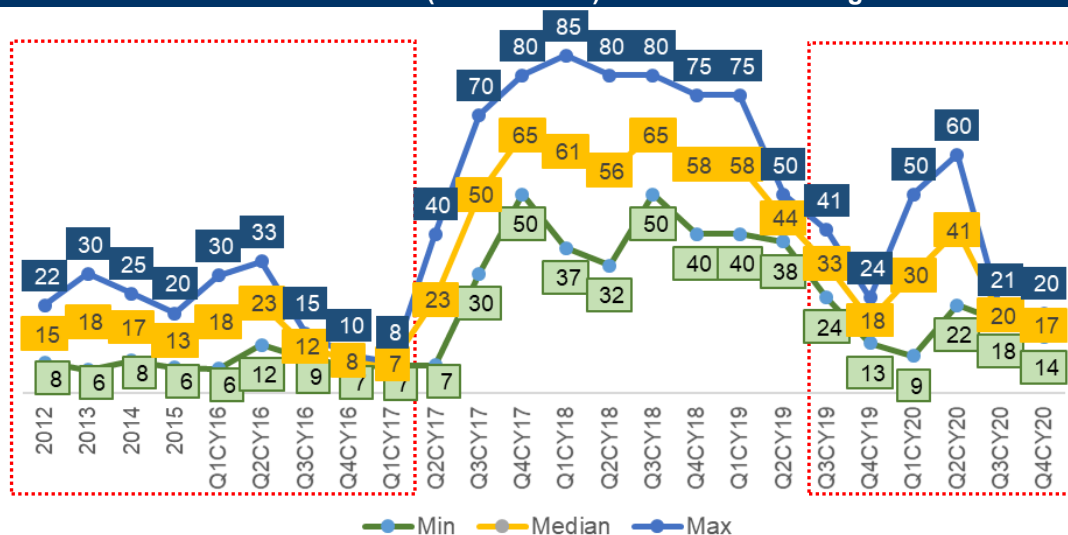
The direction and rate of change across countries has been highly variable. Growth in per capita meat consumption has been most marked in countries who have undergone a strong economic transition – per capita consumption in China has grown approximately 15-fold since 1961; rates in Brazil have nearly quadrupled. The major exception to this pattern has been India: dominant lactovegetarian preferences mean per capita meat consumption in 2013 was almost same as in 1961 at less than 4 kilograms per person.

Meat consumption is highest across high-income countries (with the largest meat-eaters in Australia, consuming around 116 kilograms per person in 2013). The average European and North American consumes nearly 80 kilograms and more than 110 kilograms, respectively

Source: ourworldindata.org

⇒ **Feed-grade VD3 prices cooled off from the highs which provides comfort on margins**

Animal feed grade VD3 price started surging from the third quarter of 2017-18 and went up by 3-4 times within 6 to 9 months' period. This was mainly due to China's Blue Skies Policy that resulted in many manufacturing facilities shutting down or relocating. In early 2017, the FBL had invested in Vitamin D (human and nutrition) capacity. The investment enhanced the Company's Vitamin D capacity by 25%. Therefore, when Vitamin D3 animal feed market revived, FBL possessed the right capacity according to the market environment. FBL was able to provide a larger output for a wider market. As a result, the contribution of animal nutrition product mix increased from 44% to 67% in overall revenue of 2018-19 with a nearly four-fold increase in average realizations per tonne. Based on the last 8 years' price chart it seems like Animal feed grade VD3 prices are now cooled off from CY18 high levels and reached to nearly 8-year median level, which can provide stability to margins of FBL.

Vitamin D3 500 (Feed Grade) Price Trend Euro/Kg


Source: Feedinfo, Company, BP Equities Research (median is avg of minimum and Maximum)

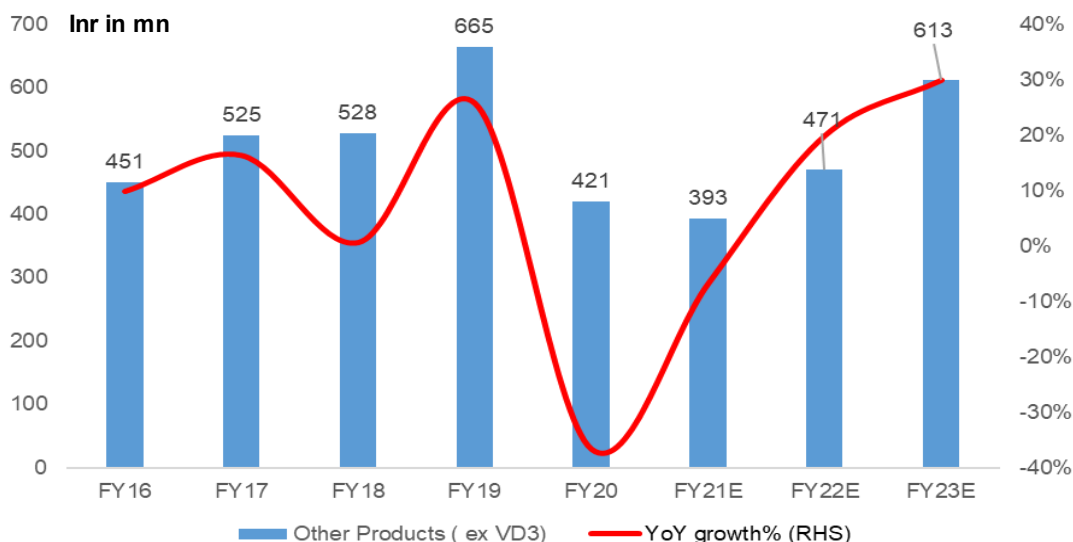
Fresh capacity addition in existing products coupled with new product introduction to aid earnings growth

Currently, FBL has two manufacturing units, one in Kullu and the other in Dahej, Gujarat. To tap increasing demand for existing FBL's products and diversify into new products, the company has undertaken brownfield capacity expansions, which could lead to volume growth with higher realizations. The company has embarked on a capex of INR300mn for Dahej (funded through partially debt and internal accruals). This capex will enhance capacity by 25% at an overall production level. As part of its future expansion plans, FBL has entered into a 99-year lease to acquire about 40,000 sq mtrs of land from the GIDC Authority in Ankleshwar (Sayakha). This will be greenfield expansion with capex of ~INR 2bn funded through mix of internal accruals and Debt financing. Sayakha manufacturing facility will be implemented in a phased manner with the first phase to be commission by Q4FY23E. Interestingly, this facility will manufacture many nutraceutical products (such as minerals, Vitamin and Pyrophosphate & derivatives) apart from existing products like Vitamin D3 (Feed + Food) with different varieties and Phenylamidol HCl etc. FBL is expected to generate a 2-2.5x asset turn on the upcoming capacity. Hence, we expect incremental revenue of INR4-5bn at peak utilization level with ROE of over 20%.

⇒ Entering into complex 25-Hydroxy- Feed grade (VD3 Analog)

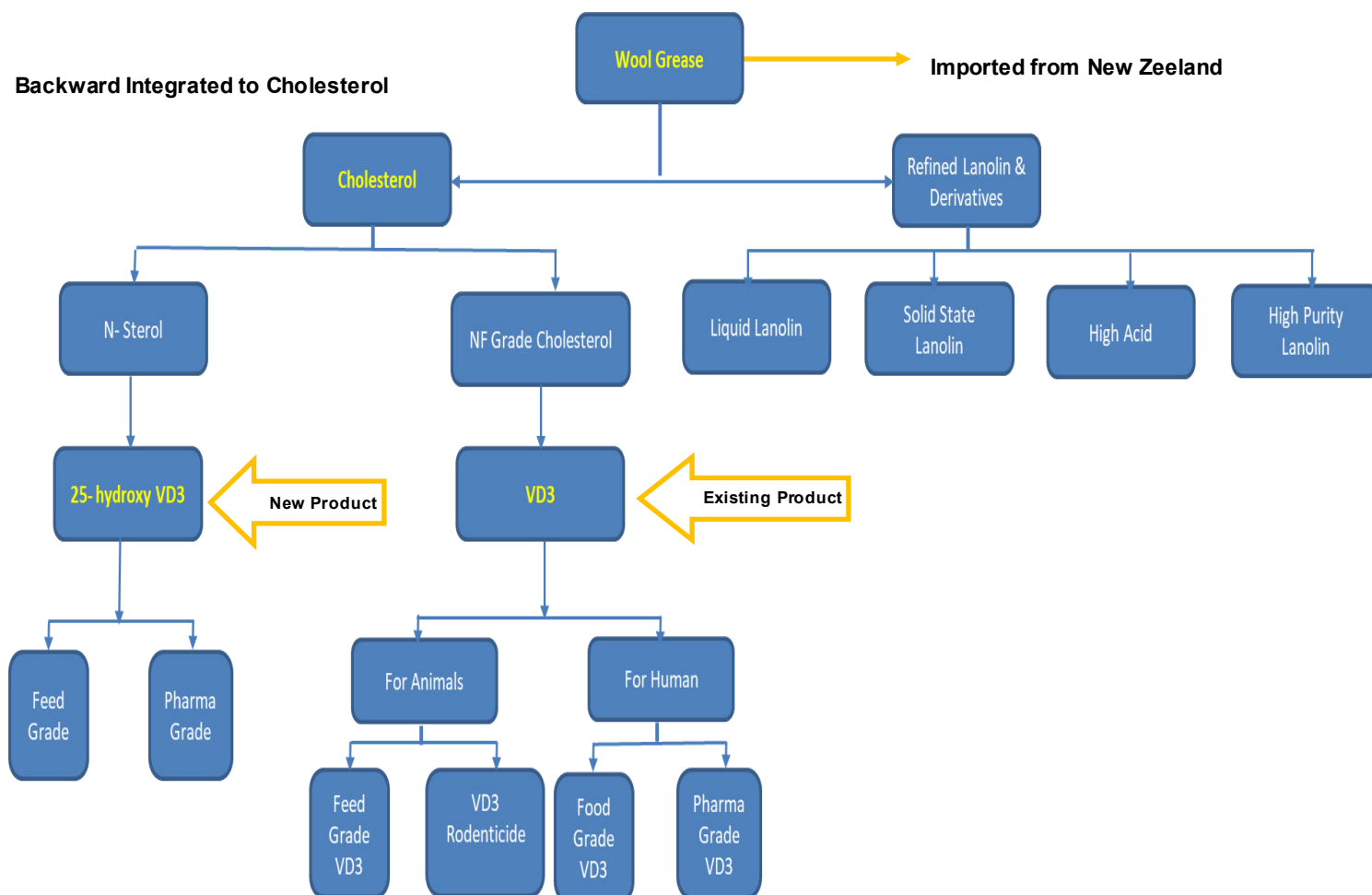
The company has extended to the downstream of the industrial chain and breaks through the production technology of 25-hydroxy VD3 which expect to get commercialize in Q2FY22. It is the fourth company in the world after DSM, Dishman (Netherland) and Zhejiang Garden that have acquired this technology. 25-Hydroxy VD3 has high added value, helping people and animals with poor liver function to absorb the active ingredients of VD3. As per management, 25-Hydroxy VD3 is a high margin-low volume product with healthy demand globally. As per our understanding, this product can carry an EBITDA margin higher than 25%.

New product introduction to accelerate revenue growth of ex VD3 segment



⇒ **Backward integration into Cholesterol to improve gross margin by 300bps**

The company has also completed backward integration project at Dahej plant for manufacturing key starting material cholesterol, strengthening its competitiveness (completed in Q2FY21). By FY22 company plans to use completely inhouse manufactured cholesterol as Raw Material for producing VD3 which will meet entire requirements. Cholesterol currently forms 45 % of overall Raw Material cost. With backward integration project, FBL will save around 20-25% on cholesterol sourcing cost which translates into ~300bps improvement in gross margin. However, the entire benefit of reduced raw material cost can be witnessed by Q3FY22 once it is scaled to optimum levels.

Flow chart : Wool Grease to VD3


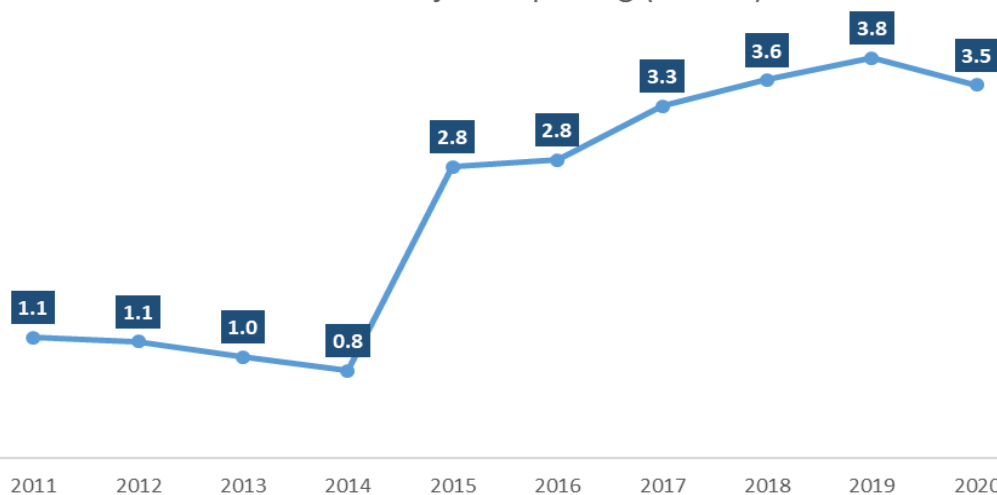
Source: Industry, BP Equities Research

⇒ **Vitamin K1**

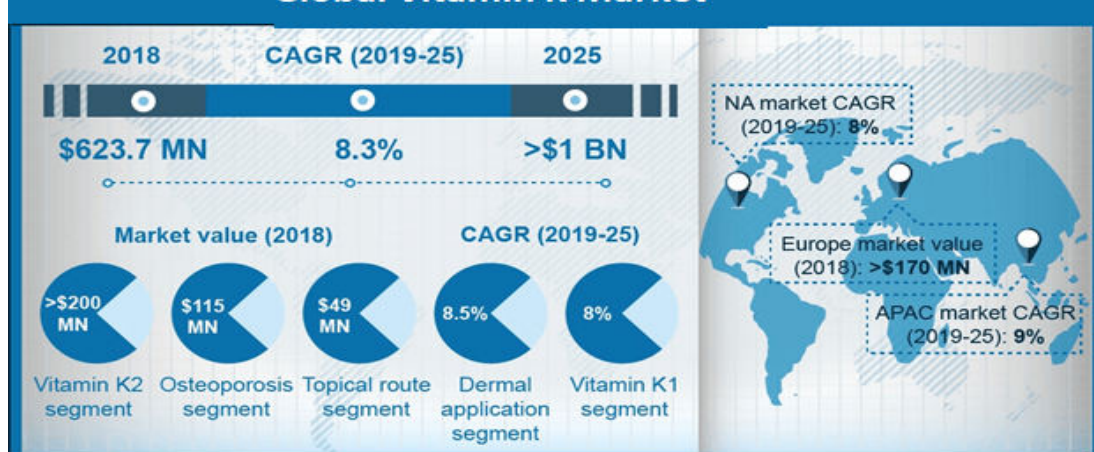
Vitamin K is an essential nutrient involved in regulating blood coagulation, tissue mineralization and immune response. Various vitamin K types are manufactured, mainly by chemical synthesis, for use as dietary supplements and drugs in both humans and domestic animals. The largest single application of vitamin K supplements (in the form of the vitamin K analog menadione) is in intensive chicken farming. Vitamin K1 is the most common form found in the natural diets of both humans and chickens. Research in humans has shown that vitamin K1 has additional health benefits compared to other types of vitamin K, and there is evidence to suggest this is also the case in chickens. FBL plans to add capacity in Vitamin K at Dahej (Gujarat), which is expected to be commercialized by Q4FY21. India being a Net importer of Vitamin K provides a huge opportunity in the domestic market. FBL can leverage its network of over 300 customers in 50 countries for tapping the vitamin K1 market globally.

Vitamin K1 Inj prices remained steady over last five years

Vitamin K1 Inj Price per Mg (in Euro)



Source: Bloomberg, BP Equities Research

Global Vitamin K Market


Source: Global Market Insights

Focusing to become nutraceuticals company

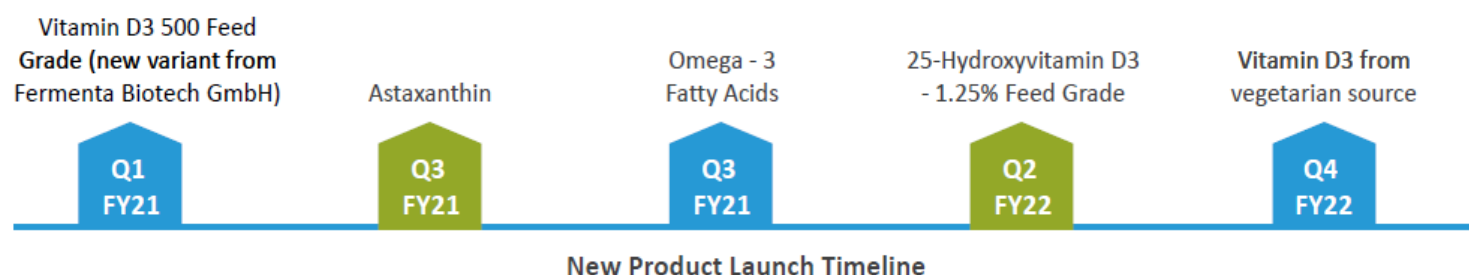
In order to expand its product portfolio, the company is foraying into nutritional ingredients such as antioxidants, Omega 3 fatty acids and minerals. Moreover, FBL expands into value-added formats of vitamins like A, E, D2, manufacturing Vitamin K, and further focuses on developing smart minerals, novel antioxidants, pre and probiotics, customized premixes, etc. To expand in this segment, FBL has established subsidiaries and made one acquisition in the US. Since the market for nutritional supplements is massive, FBL is banking on its well-developed global supply and distribution channels to expand its footprint in the segment rapidly. It intends to explore opportunities to service its existing customers with new ingredients and strengthen its position in the nutraceutical segment. The outlook of the business is positive in the light of a growing focus on the food fortification segment.

⇒ Fortified food market opportunity in India

As per industry report, The total annual market for fortification of rice, wheat and milk, as per 2018-19 demand provided by the Union Ministry of Consumer Affairs, Food and Public Distribution (MOCAFDP) and the volume of fortifying mixture required given by the Food Safety and Standards Authority of India (FSSAI), is over INR 30bn. Fortified rice alone will create an assured INR 17bn market because its process is costlier than the other items. Globally, just five multinationals — Germany's BASF, Switzerland's Lonza, France's Adisseo and the Netherlands' Royal DSM and ADM — manufacture micronutrients and all Indian entities that sell micronutrients import from them.

Nutraceutical Product Pipeline

Vitamin D3 and its various formats for	Variants of Fat soluble vitamins	Other Nutraceuticals
Pharmaceuticals	Vitamin A	Smart Minerals
Dietary & Nutritional Supplements	Vitamin E	Novel Anti-oxidants
Food	Vitamin D2	Pre and Pro - Biotics
Feed	Vitamin K	Customized Premixes
Veterinary Science		
Rodenticide		



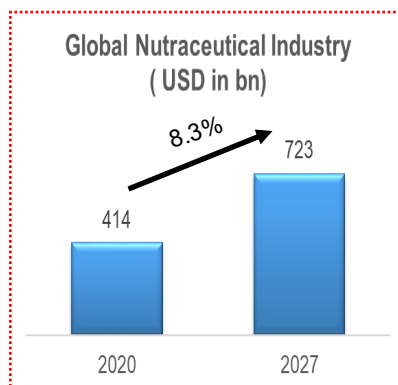
Source: Company Presentation

Global Nutraceutical Industry

As per Grand view research, the global nutraceutical market size was valued at USD 382.51 billion in 2019 and is expected to expand at a CAGR of 8.3% over 2020 to 2027. Nutraceuticals are products that provide additional nutrition and health advantages to the human body. They contain fortified nutrients, such as CoQ10, taurine, omega-3, antioxidants, calcium and zinc, which improve the overall health of consumers. These nutrients also help in averting medical conditions like diabetes, hypertension, allergies and heart diseases. As nutraceuticals enhance the immune and digestive systems and improve the cognitive behaviour of consumers, their demand is being spurred on the global level.

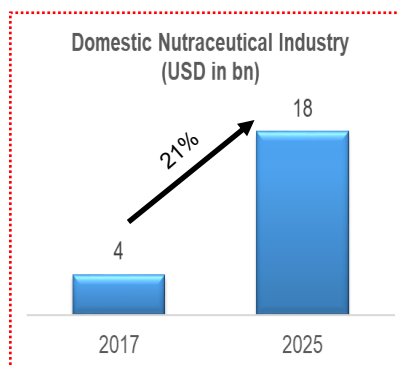
The Asia Pacific emerged as the key region in the market for nutraceuticals in 2019 on account of growing health concerns among consumers and increasing awareness regarding nutraceuticals. Additionally, growth in the ageing population, changing spending patterns on healthcare products, and changing lifestyles has enhanced the growth of the nutraceutical industry in the Asia Pacific. Vast product portfolio and government regulations on nutraceutical products are a few factors suppressing the nutraceuticals industry growth. However, the growing trend of food fortification with nutraceutical products is anticipated to create a growth opportunity for the nutraceuticals industry.

The omega-3 fatty acids -based functional foods industry size is expected to reach USD 38.76mn by 2027, expanding at a CAGR of 9.3% from 2020 to 2027. Omega -3 is considered a heart-healthy fat that reduces the risk of heart diseases. According to the statistics provided by America's Health Rankings, over 40% of the U.S. citizens are not meeting the recommended requirement, thereby increasing the risk of heart diseases



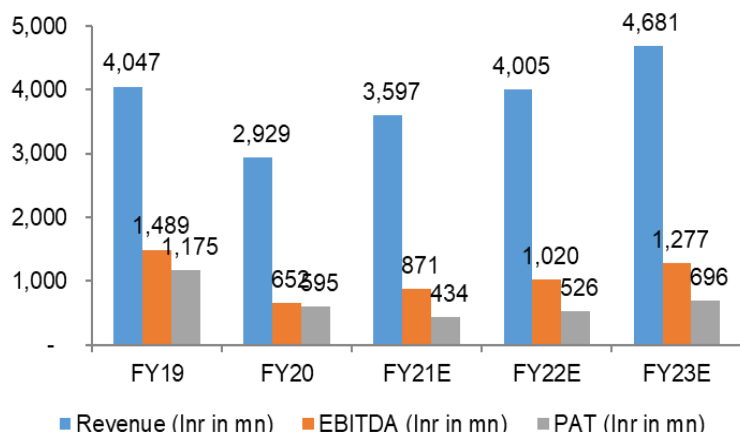
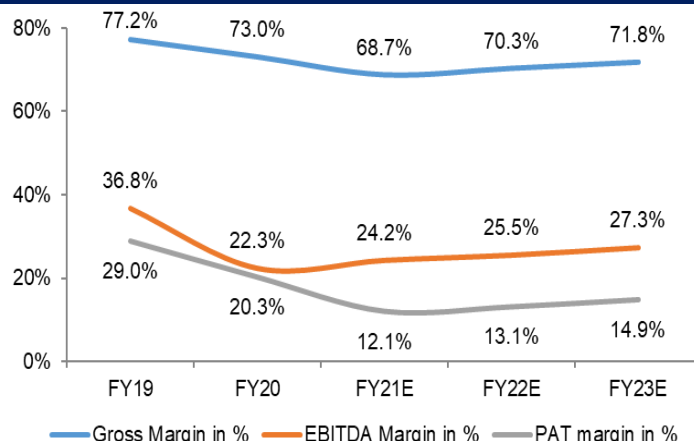
Domestic Nutraceutical Industry

The Indian nutraceuticals market is expected to grow from USD 4bn in 2017 to USD 18bn in 2025, clocking a CAGR of 21% between 2018 and 2025. Among the other factors, propelling the demand for nutraceuticals in India, one of the major factors is the fact that 15% of the population is undernourished in the country, and the Government has taken several measures to address this issue through various initiatives such as Integrated Child Development Services (ICDS), National Health Mission (NHM) and the mid-day meal scheme. According to a World Bank, India loses nearly USD 12bn in Gross Domestic Product (GDP) to malnourishment. However, interventions to alleviate the loss would cost ~USD 524 mn annually. This would render a benefit-to-cost ratio of almost 23 times. The focus towards preventive care has also been accentuated due to the increasing costs of healthcare: 62% of the healthcare costs incurred in India are out-of-pocket expenditures; 60% of medical prescriptions by doctors in India include supplements. (Source: Invest India)

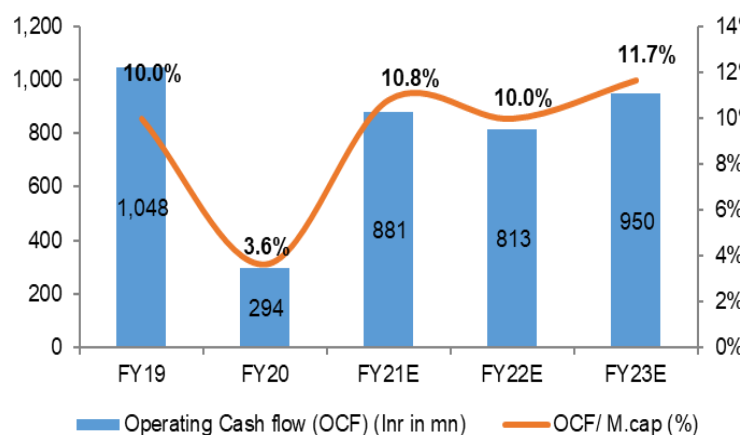
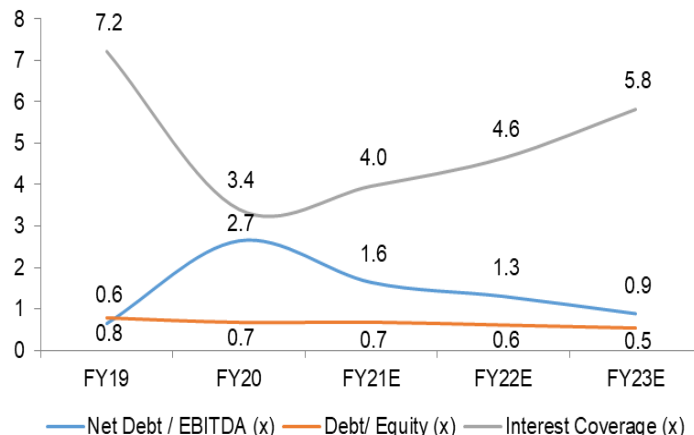


Strong Financials; Improving return ratios bode well

We expect FBL to register a 16.9% CAGR in revenue, to INR4,681mn, over FY20-23E. The growth is likely to be driven by growth mix of both VD3 portfolio and new products launch. We expect the EBITDA margin to improve 501bps over FY20-23E with a strong absolute EBITDA CAGR of 25% over FY20-23E, powered by strong revenue growth in both VD3 portfolio and Other products segment. We expect a 27.1% CAGR in PBT over FY20-23E, to INR892mn, boosted by healthy revenue growth and a strong EBITDA margin improvement. The growth in net profit would be considerably more than that in revenue, largely because of strong operational performance coupled with a sharp improvement in EBITDA margin led by backward integration. With the twin levers of scale and operating efficiencies playing out, FBL's return ratios have improved substantially from RoE/RoCE of ~0.4%/6.4% in FY15 to 12.2%/16.4% in FY20 (on adjusted basis). Going forward, we expect steady improvement in return ratios (RoE/RoCE of 16.8%/17.2% in FY23E) resulting in healthy operating cash flow generation (Avg FCF of INR 370mn/ year) backed by mid-teen top-line and substantially higher profitability growth. We expect consolidated net adjusted leverage (Net Debt/EBITDA) to reach 0.9x in FY23e from 2.7x in FY20, largely driven by the improvement in EBITDA generation. With the monetization of real estate asset (Valued at INR 4.5bn) in coming years, we expect it to substantially fund future capex and help FBL reduce its debt level. However, we have not considered any real estate monetization in our forecasted numbers.

Revenue to grow at healthy pace

EBITDA margin to enhance by 501bps over FY20-23E


Source: Company, BP Equity Research

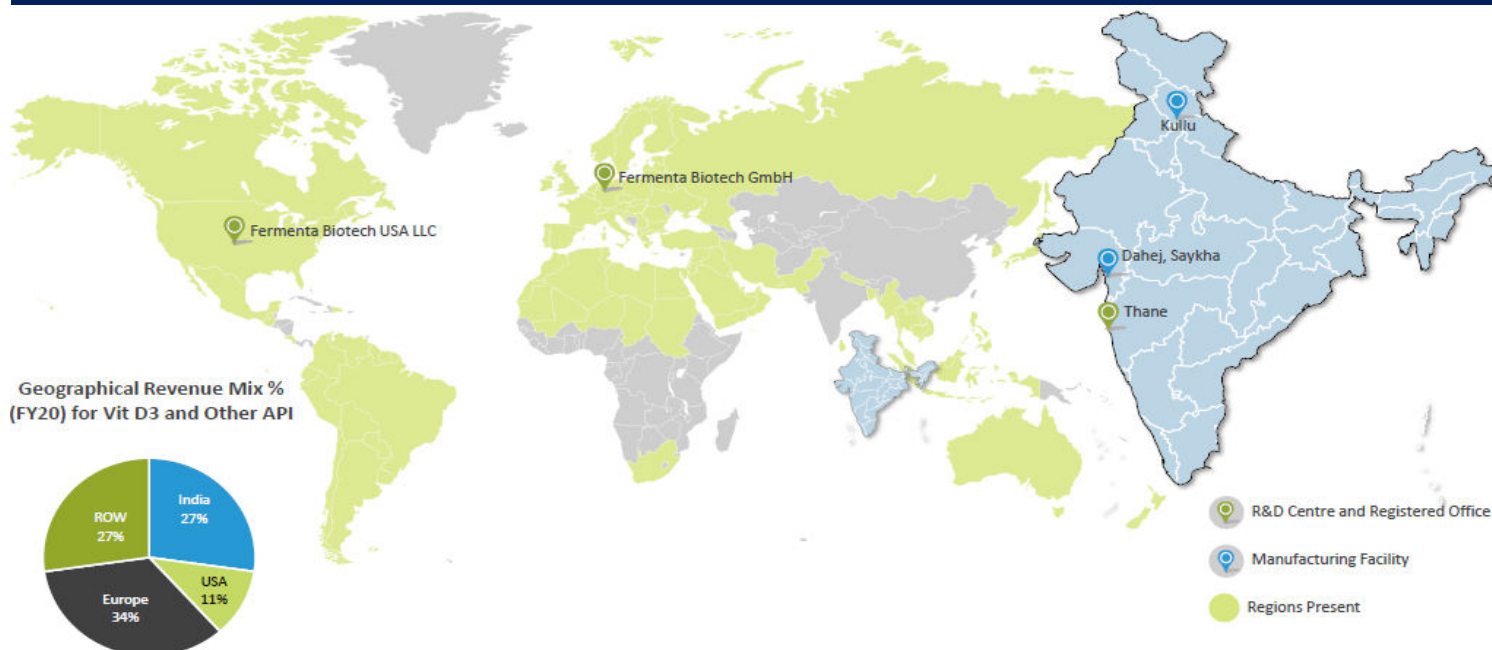
Cash flow generation to improve further

Leverage ratios at comfortable level


Source: Company, Bloomberg, BP Equity Research

Company Background

Fermenta Biotech Ltd (FBL), incorporated in 1986, was a subsidiary of DIL Limited (DIL) till September 2019. As per NCLT order dated September 19, 2019, DIL Limited's amalgamation (formerly holding company) with Fermenta Biotech Limited was approved. Post this amalgamation, DIL Limited was renamed as 'Fermenta Biotech Limited'. Post amalgamation, FBL has two business segments; i.e, lease rental business for commercial properties developed in Thane and manufacturing of active pharmaceutical ingredients (APIs). FBL's API business can be classified majorly under four major categories: Vitamin D3 APIs, specialty APIs, biological enzymes, and biotech-based environmental solutions. The company's manufacturing facilities are located at Kullu (Himachal Pradesh) and Dahej (Gujarat).

Geographical Presence



Source: Company, BP Equities Research

Manufacturing Facilities

Kullu (Himachal Pradesh)

- Set up the Biotech plant in 1987 to manufacture Penicillin G Amidase and Acylase enzyme. A new bulk drug division in 2004 to manufacture various APIs like Vitamin D3, Phenyramidol HCl and Silicon Powder.
- This plant is certified by HALAL, KOSHER, Vegetarian Society Certificate, American Vegetarian Association Certificate, BRC, FSSC, FSMA, HACCP, USFDA etc.



Dahej (Gujarat) – Vitamin D3

- Established a dedicated green field manufacturing facility in 2011 to primarily manufacture Vitamin D3.
- This plant is certified WHO-GMP, FAMI-QS, HALAL, KOSHER, HACCP, BRC, FSSC, FSMA etc.

Dahej (Gujarat) – Backward Integration for Cholesterol

- Cholesterol is the key raw material for manufacturing of Vitamin D3, which is derived from wool grease (by-product of sheep wool scouring).
- In 2019, FBL implemented backward integration for manufacturing cholesterol which will cover 100% requirements.



Source: Company, BP Equities Research

Key Milestones

1951	Establishment of International Franchises Pvt. Ltd.
1967	Commercial manufacturing of Vitamin D commenced for the first time
1986	Fermenta Biotech Ltd established with its first enzyme manufacturing plant in Kullu, Himachal Pradesh
2003	Expanded manufacturing capacity with Vitamin D3 at Kullu
2011	Second plant for manufacturing of Vitamin D commenced at Dahej SEZ, Gujarat
2014	Initiated commercial production of Vitamin D3 100 CWD for food and dietary nutraceutical supplements
2016	Enhanced Vitamin D3 capacity at Dahej. Launched new version of Vitamin D3 500 feed grade powder.
2017	Received CEP from EDQM for its Dahej facility for Vitamin D. Received FSSC 22000 and BRC Food Safety Approvals for both its plants for Vitamin D
2020	Backward integration through cholesterol manufacturing. Commenced feed grade manufacturing in Germany through Fermenta Biotech GmbH. Set up Fermenta Biotech USA LLC. Received Environmental Clearance (EC) for proposed facility at Saykha

Source: Company, BP Equities Research

Fermenta Biotech Ltd. - Board of Directors

Name	Designation	Details
Mr. Sanjay Buch	Chairman (Independent Director)	He holds a Bachelors Degree in Economics and Law and has over two decades of experience in wide spectrum of legal work. Currently, he is partner at Crawford Bayley & Co. An advocate and solicitor, specializing in business restructuring, mergers and acquisitions and is a member of various committees of the Board of Directors of the Company.
Mr. Krishna Datla	Promoter & Managing Director	A Commerce Graduate from Mumbai University having around 20 years of experience in the industry. A progressive thinker responsible for the decision making process and overseeing new businesses of the Company. He has infused a strong sense of global vision thereby opening the opportunities across International markets.
Mr. Satish Varma	Executive Director	In 1994, he joined the DIL group as the Executive Assistant to the then Managing Director. In this role he garnered extensive operational, management and legal experience across the full scope of the company. In 2003 he joined the Board of Directors of FBL. In addition to his Executive Board duties, he is also a member of the Stakeholder Relationship Committee.
Ms. Anupama Datla	Executive Director	She is a post-graduate in Biotechnology from the Mumbai University and a Science Graduate from the Boston College, USA. Joined FBL in 2006 and went on to join the board in 2007 as the Executive Director. She has taken executive leadership in R&D, quality control, and implementing safety policies and procedures across the organization. She is the author of various patents within the group, is in charge of introducing and implementing new technology platforms into the company and also spearheads the new business development.

Source: Company



Fermenta Biotech Ltd.

Initiating Coverage Report

⇒ Peer group comparison

Companies	Market Cap (US\$ Mn)	P/E (x)				EV/EBITDA (x)				P/Sales (x)			
		FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E
		CY19	CY20E	CY21E	CY22E	CY19	CY20E	CY21E	CY22E	CY19	CY20E	CY21E	CY22E
Fermenta Biotech	112	13.7	18.8	15.5	11.7	15.1	11.0	9.3	7.3	2.8	2.3	2.0	1.7

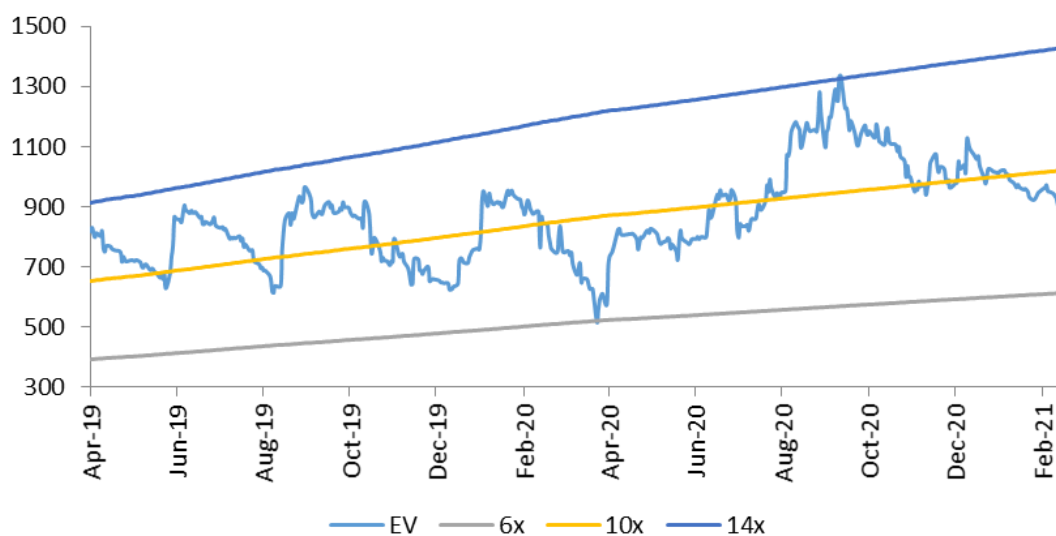
Peers*													
Zhejiang Garden Biochemical	1,140	23.5	23.1	16.3	11.6	14.5	17.3	12.3	10.6	11.0	11.1	9.0	6.7
DSMN.V	30,530	36.0	58.3	26.1	27.5	13.4	19.8	16.1	14.9	3.0	3.3	2.8	2.7

Companies	Revenue				EBITDA Margin				PAT		PAT CAGR %	P/E	PEG
	FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E	FY21E	FY23E			
	CY19	CY20E	CY21E	CY22E	CY19	CY20E	CY21E	CY22E	CY20E	CY22E			
Fermenta Biotech	40	49	55	64	22.3%	24.2%	25.5%	27.3%	5.9	9.5	26.7%	11.7	0.44

Peers*													
Zhejiang Garden Biochemical#	104	103	126	170	53.0%	53.0%	61.0%	63.1%	48.6	96.72	41.1%	11.8	0.29
DSMN.V	10,087	9,255	10,736	11,237	18.9%	20.2%	19.4%	20.0%	806	1129.8	18.4%	27.0	1.47

Source: BP Equities Research, * Bloomberg estimate, # Operating margin instead of EBITDA margin, All numbers in USD, Conversion 1 USD= INR 73

EV/EBITDA Band - Fermenta Biotech Ltd.



Source: BP Equities Research, Ace Equity

⇒ **Key Risks and Concerns:**

- An outbreak of infectious disease carried by animals could negatively affect the sale and production of VD3 for Animal.
- Susceptible to volatile movement of commodity prices and competition from China under feed grade segment .
- Company's profitability remains exposed to adverse fluctuations in foreign currency.

Fermenta Biotech Ltd.

Initiating Coverage Report

Valuation & Outlook

Valuation	Basis	FY21 E	FY22 E	FY23 E
EPS		15	18	24
Growth in EPS (YoY %)		-27%	21%	32%
Implied PE		18.8	15.5	11.7
Assigned PE	(17x PE)	17	17	17
Target Price		250	304	402
(Implied PEG Ratio considering next 2 years: 0.64)				
CMP		277	277	277
Upside Potential (%)				45%

Source: Company, BP Equities Research

We believe FBL is on the verge of transforming itself to nutraceutical company led by its strong R&D capability. It is expanding into value-added formats of vitamins like A, E, D2, and K, development of smart minerals, novel antioxidants, pre and probiotics, customized premixes and a huge opportunity in food fortification opportunity in India. We expect the VD3 segment has enough headroom left and can continue to grow at a CAGR of 16.8% over FY20-23 on the back of capacity expansion supported by a healthy demand outlook in Human VD3 and recovery in Animal VD3 volumes. High barriers to entry in terms of technology requirements (photochemistry replication) and regulatory permissions make a supportive case. Moreover, Backward integration into cholesterol to improve gross margin by 300bps in the next 3-4 quarters. Considering the expected strong growth in profitability, healthy balance sheet with improving return ratios, we are optimistic about the company's long-term growth prospects. We foresee 16.9% revenue CAGR, 501bps margin expansion, and 27.1% growth in adjusted earnings over FY20-23E. At the CMP (INR 277), the stock trades at 11.7x FY23e EPS and 7.3x EV/EBITDA. We believe the stock to witness gradual re-rating on the back of a better product pipeline and improved return ratios. We initiate coverage on the stock & recommend a 'BUY' rating with a target price of INR 402 per share, valuing the company at 17x FY23e earnings.



Profit & Loss A/c (Consolidated)

YE March (INR in Mn)	FY18	FY19	FY20	FY21 E	FY22 E	FY23 E
Revenue	3,027	4,047	2,929	3,597	4,005	4,681
<i>Growth %</i>	84.4%	33.7%	-27.6%	22.8%	11.4%	16.9%
Total Revenue	3,027	4,047	2,929	3,597	4,005	4,681
Less:						
Raw Material Consumed	798	923	790	1,125	1,191	1,322
Employee Cost	398	532	500	550	605	678
Other Expenses	900	1,104	987	1,050	1,189	1,404
Total Operating Expenditure	2,097	2,558	2,277	2,726	2,985	3,405
EBITDA	930	1,489	652	871	1,020	1,277
<i>Growth %</i>	677.6%	60.1%	-56.2%	33.4%	17.1%	25.2%
Less: Depreciation	124	119	150	195	240	285
EBIT	807	1,370	502	676	779	992
<i>Growth %</i>	4785.2%	69.9%	-63.3%	34.5%	15.4%	27.2%
Interest Paid	136	207	191	220	220	220
Non-operating Income	89	124	123	100	115	120
Extraordinary Income	0	0	0	0	0	0
Profit Before tax	760	1,287	434	556	675	892
Tax	211	108	-161	122	148	196
Net Profit before Minority	548	1,179	595	434	526	696
Minority Interest	-60	0	0	0	0	0
Other Consolidated Items	0	0	0	0	0	0
Net Profit	483	1,179	595	434	526	696
Adjusted Profit	483	1,175	595	434	526	696
Reported Diluted EPS Rs	16.4	39.9	20.2	14.7	17.9	23.6
<i>Growth %</i>	660.3%	143.1%	-49.3%	-27.1%	21.4%	32.2%
Adjusted Diluted EPS Rs	16.4	39.9	20.2	14.7	17.9	23.6
<i>Growth %</i>	660.3%	143.1%	-49.3%	-27.1%	21.4%	32.2%

Source: Ace Equity, BP Equities Research

Common Sized Profit & Loss Account

YE March (INR.In Mn)	FY18	FY19	FY20	FY21 E	FY22 E	FY23 E
Total Revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Less:						
Raw Material Consumed	26.4%	22.8%	27.0%	31.3%	29.7%	28.2%
Employee Cost	13.2%	13.1%	17.1%	15.3%	15.1%	14.5%
Other Expenses	29.7%	27.3%	33.7%	29.2%	29.7%	30.0%
Total Operating Expenditure	69.3%	63.2%	77.7%	75.8%	74.5%	72.7%
EBITDA	30.7%	36.8%	22.3%	24.2%	25.5%	27.3%
Depreciation	4.1%	2.9%	5.1%	5.4%	6.0%	6.1%
Interest Paid	4.5%	5.1%	6.5%	6.1%	5.5%	4.7%
Non-operating Income	3.0%	3.1%	4.2%	2.8%	2.9%	2.6%
Extraordinary Items	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Profit Before Tax	25.1%	31.8%	14.8%	15.5%	16.9%	19.1%
Tax Expense	7.0%	2.7%	-5.5%	3.4%	3.7%	4.2%
Profit After Tax	16.0%	29.0%	20.3%	12.1%	13.1%	14.9%
Adjusted Profit	16.0%	29.0%	20.3%	12.1%	13.1%	14.9%

Source: Ace Equity, BP Equities Research



Cash Flows (Consolidated)

YE March (INR in Mn)	FY18	FY19	FY20	FY21E	FY22E	FY23E
PAT	483.1	1,174.7	595.2	433.7	526.4	695.9
(Less)/Add: Extraordinary Income/Expense	0.0	0.0	0.0	0.0	0.0	0.0
Less: Non Operating Income	(89.5)	(123.7)	(123.2)	(100.0)	(115.0)	(120.0)
Add: Depreciation	123.6	118.9	150.0	195.0	240.1	285.1
Add: Interest Paid	136.3	206.5	191.4	219.6	219.6	219.6
Tax Adjustment	0.0	0.0	0.0	0.0	0.0	0.0
Operating Profit before Working Capital Changes	653.6	1,376.5	813.4	748.3	871.0	1,080.6
(Inc)/Dec in Current Assets	(355.7)	(183.8)	(55.1)	(78.8)	(147.8)	(244.9)
Inc/(Dec) in Current Liabilities	246.7	220.6	(55.0)	403.7	148.3	245.7
Changes in Inventory	(122.7)	(364.9)	(409.2)	(192.2)	(58.1)	(131.2)
Net Cash Generated From Operations	422.0	1,048.4	294.1	880.9	813.4	950.2
Cash Flow from Investing Activities						
(Inc)/Dec in Fixed Assets	(111.5)	(148.1)	(374.9)	(500.0)	(500.0)	(500.0)
(Inc)/Dec in Capital Work In Progress	15.6	(182.2)	(463.5)	0.0	0.0	0.0
(Inc)/Dec in Investment (Strategic)	(23.7)	(62.2)	60.3	130.9	(0.2)	(6.0)
(Inc)/Dec in Investment (Others)	79.4	74.1	28.9	0.0	0.0	0.0
Add: Non Operating Income	89.5	123.7	123.2	100.0	115.0	120.0
(Inc)/Dec in Intangible Assets	4.3	1.4	(28.3)	0.0	0.0	0.0
Net Cash Flow from/(used in) Investing Activities	53.6	(193.4)	(654.4)	(269.1)	(385.2)	(386.0)
Cash Flow from Financing Activities						
Inc/(Dec) in Total Loans	902.7	100.9	(97.4)	250.0	0.0	0.0
Inc/(Dec) in Reserves & Surplus	(820.7)	(17.0)	(10.9)	0.0	0.0	0.0
Inc/(Dec) in Equity	0.0	30.4	151.6	0.0	0.0	0.0
Dividend Paid	(36.8)	(36.8)	(147.2)	(86.7)	(105.3)	(139.2)
Less: Interest Paid	(136.3)	(206.5)	(191.4)	(219.6)	(219.6)	(219.6)
Adjustments	(82.8)	(39.4)	(26.7)	0.1	(0.0)	(0.0)
Exceptional Item	0.0	0.0	0.0	0.0	0.0	0.0
Net Cash Flow from Financing Activities	(173.9)	(168.4)	(321.9)	(56.2)	(324.8)	(358.7)
Net Inc/Dec in cash equivalents	301.7	686.6	(682.1)	555.6	103.4	205.4
Opening Balance	24.9	326.6	1,013.2	331.1	886.7	990.1
Closing Balance Cash and Cash Equivalents	326.6	1,013.2	331.1	886.7	990.1	1,195.5

Source: Ace Equity, , BP Equities Research



Balance Sheet (Consolidated)

YE March(INR in mn)	FY18	FY19	FY20	FY21E	FY22E	FY23E
Liabilities						
Equity Capital	23	46	144	144	144	144
Reserves & Surplus	1,222	2,452	2,889	3,236	3,657	4,214
Equity	1,244	2,505	3,094	3,441	3,862	4,419
Net Worth	1,354	2,506	3,094	3,441	3,863	4,419
Minority Interest						
Net Deferred tax liability/(Asset)	103	-98	-303	-303	-303	-303
Total Loans	1,652	1,954	2,061	2,311	2,311	2,311
Capital Employed	3,109	4,362	4,853	5,450	5,871	6,428
Assets						
Gross Block	1,142	1,290	1,665	2,165	2,665	3,165
Less: Depreciation	173	253	376	571	811	1,096
Net Block	969	1,037	1,289	1,594	1,854	2,069
Capital WIP	25	207	671	671	671	671
Long Term Loans & Advances	68	186	196	65	65	71
Other Non Current Assets	134	78	8	8	8	8
Intangible assets under development	10	9	37	37	37	37
Non- Current Investments	818	744	715	715	715	715
Current Assets						
Inventories	512	877	1,286	1,478	1,536	1,667
Sundry Debtors	687	655	698	857	954	1,115
Cash and Bank Balance	327	1,013	331	887	990	1,196
Current Investments	11	11	0	0	0	0
Loans and Advances	183	311	434	277	308	360
Other Current Assets	103	190	91	169	188	220
Total Current Assets	1,823	3,058	2,840	3,667	3,976	4,558
Less: Current Liabilities & Provisions						
Sundry Creditors	401	427	563	890	991	1,158
Provisions	42	56	8	10	11	13
Other Current Liabilities	294	474	331	407	453	529
Total Current Liabilities & Provisions	737	958	903	1,306	1,455	1,700
Capital Applied	3,109	4,362	4,853	5,450	5,871	6,428

Source: Ace Equity, , BP Equities Research



Key Ratios (Consolidated)

YE March (INR in mn)	FY18	FY19	FY20	FY21E	FY22E	FY23E
Key Operating Ratios						
EBITDA Margin (%)	31%	37%	22%	24%	25%	27%
Tax / PBT (%)	28%	8%	-37%	22%	22%	22%
Net Profit Margin (%)	11%	29%	20%	12%	13%	15%
RoE (%)	25%	63%	21%	13%	14%	17%
RoCE (%)	18%	46%	28%	15%	16%	17%
Current Ratio (x)	2.5x	3.2x	3.1x	2.8x	2.7x	2.7x
Dividend Payout (%)	11%	3%	25%	25%	25%	25%
Book Value Per Share (INR.)	42	85	105	117	131	150
Financial Leverage Ratios						
Debt/ Equity (x)	1.3x	0.8x	0.7x	0.7x	0.6x	0.5x
Interest Coverage (x)	6.8x	7.2x	3.4x	4.0x	4.6x	5.8x
Net Debt / EBITDA	1.4x	0.6x	2.7x	1.6x	1.3x	0.9x
Growth Indicators %						
Growth in Net Block (%)	8%	7%	24%	24%	16%	12%
Sales Growth (%)	84%	34%	(28%)	23%	11%	17%
EBITDA Growth (%)	678%	60%	(56%)	33%	17%	25%
Net Profit Growth (%)	395%	248%	(49%)	(27%)	21%	32%
Diluted EPS Growth (%)	395%	248%	(49%)	(27%)	21%	32%
Turnover Ratios						
Debtors Days	83	59	87	87	87	87
Creditors Days	70	61	90	90	90	90
Inventory Days	62	79	160	150	140	130

Source: Ace Equity, , BP Equities Research



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