India Dairy

Crème de la crème: Milking the value chain

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Edelweiss
Ideas create, values protect

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

Edelweiss Securities Limited

Executive Summary

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India's dairy sector is a very white, bright and freely flowing opportunity. It's got size (INR5.4trn), leadership (largest milk producer globally, 160mmt) and growth – 15% CAGR over 2016-20E. We believe this scale and underlying momentum will throw up even more possibilities, and the organised market will grow even more rapidly at 20% p.a, doubling into a INR2.5trn market by 2020. This should be driven by a mix of underlying structural trends led by: a) A huge unorganised market (~78%) led by fresh dairy products; b) A consumption and market shift to high-margin emerging VADP; 2.5x over FY16-20E and; c) Large vegetarian population (31%), which has sub-standard protein consumption. This mix has been the backbone of India's dairy market growth over the years, and it's set to accelerate.

Not surprisingly, India's dairy sector is throwing up big investment opportunities; a mix of growth, rising consumer maturity and the shift to more value-added products. But, the key differentiators that will enable businesses to leverage these opportunities will lie in: a) Milk sourcing capabilities - The infrastructure, ability to diversify and scale; b) Product mix - A combination of milk and VADP; c) Channel mix - B2C franchises and strong distribution networks; d) Brands - Ability to build, execute and provide pricing power; and e) Capital efficiency - Ability to manage and improve. It's a huge market – but it is competitive, and businesses will need strong models and scalability to thrive. We believe Parag's strength lies in its well-entrenched VADP portfolio; Heritage Foods boasts of a strong procurement infrastructure and product mix; and Prabhat Dairy is shifting focus to VADP and B2C segment.

The dairy sector should drive high growth and profitability for the leaders - the sector is poised for healthy ~20% plus earnings CAGR and average ~25% plus RoCE. We see meaningful stock returns for investors, and our pecking order is: 1) Parag (initiate with 'BUY') has a robust VADP portfolio (~64% of sales); 2) Heritage (initiate with 'BUY') is straddling high RoCE (milk) and margin (curd) segments to emerge a pan-India VADP player; and 3) We maintain our positive stance on Prabhat Dairy ('BUY') as its at the cusp of transitioning to a B2C VADP player.

Structural levers to script multi-year growth story

We envisage the domestic dairy industry to embark on the growth super highway —value CAGR of 15% over FY16-20. We believe structural growth levers are in place to fuel this spurt: wherein: a) Mere 22% (INR1.19tn) organised pie is set to catapult ~2x, primarily driven by fresh dairy products (milk, curd, paneer, etc) clocking 20% CAGR over FY16-20E; b) Urbanisation is driving strong 2.5x surge in VADP, spearheaded by high-margin emerging categories like cheese, whey, UHT and flavoured milk logging ~25% CAGR versus liquid milk's 15% CAGR over FY16-20E; and c) There's a large vegetarian population (31%) with rising income levels and sub-standard protein consumption.

Fig. 1: Huge unorganised market augurs well for fresh dairy products

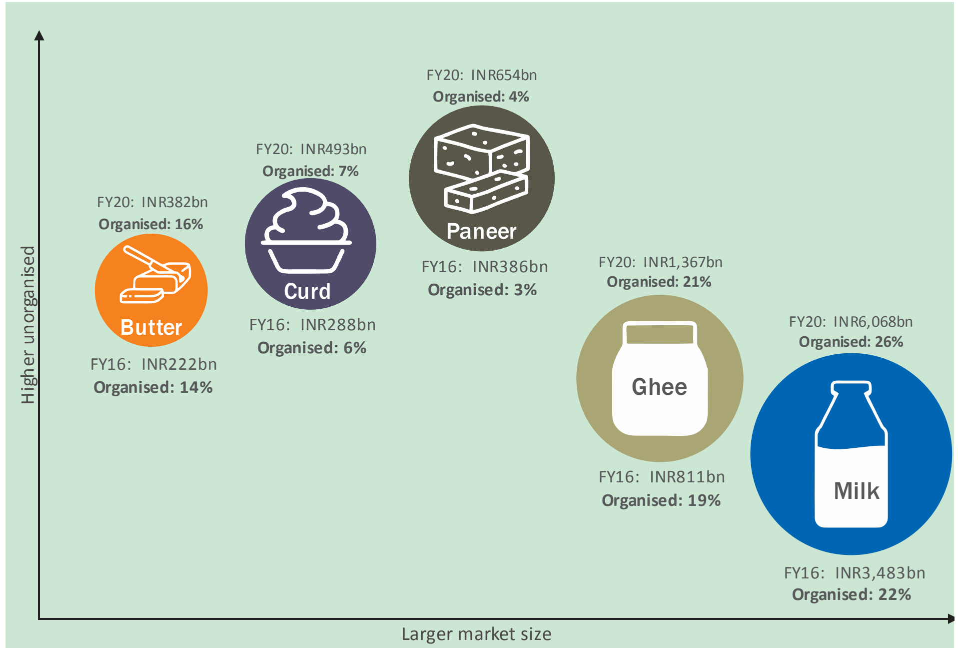
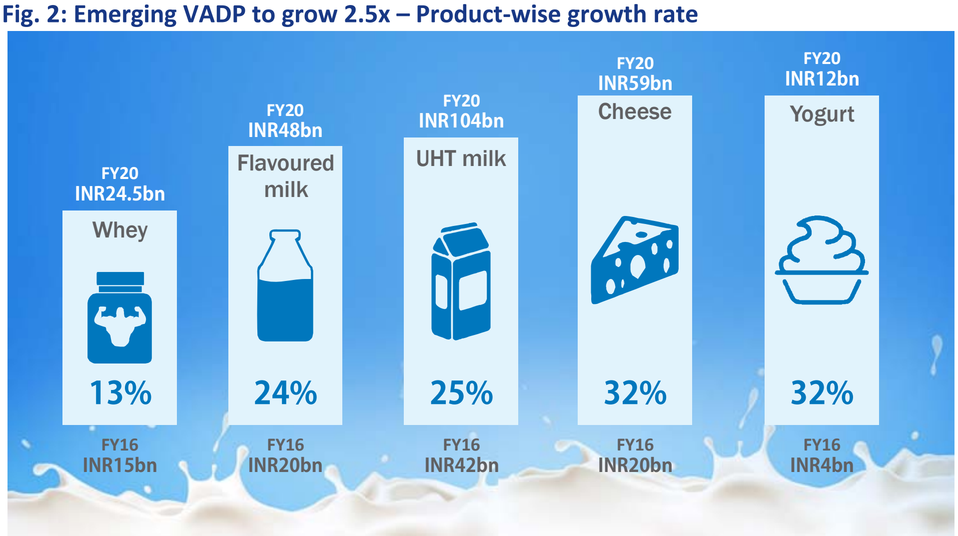


Fig. 2: Emerging VADP to grow 2.5x – Product-wise growth rate



Source: IMARC

Competitive landscape

Factors crucial for success in the domestic dairy industry include:

1) **Procurement infrastructure:** Companies with infrastructure for direct milk procurement from farmers enjoy huge competitive edge as it assures steady milk supply and consistency in milk quality. We have ranked companies based on share of direct procurement, diversification and growth. **Heritage** scores high in terms of direct procurement (95%) and diversification.

2) **Right product mix - VADP + fresh dairy:** Right mix of milk and VADP is vital to maximise growth, margins and return ratios. We have evaluated companies and ranked them on the basis of right mix of high-RoCE milk & fresh dairy products and high-margin & high-growth VADP. **Parag** is strongest in VADP, deriving ~64% sales from the segment, with the high-margin emerging VADP contributing ~27% to sales (majorly driven by cheese). **Heritage** derives 65% sales from the high-RoCE milk segment and is further increasing sales in high-margin fresh dairy VADP like curd, which will sustain high RoCE. **Prabhat,** from being a specialty ingredients B2B player, targets to become a 50% B2C player by 2020 (~30% currently) by enhancing VADP sales to 45% in FY20 from ~26% in FY17.

3) **Channel mix:** Companies with strong distribution networks in their respective territories have established robust B2C franchisees. Rising consumption of VADP has resulted in players expanding their B2C mix too. We have ranked companies based on their mix of B2C and B2B. **Heritage** has a strong B2C franchisee (>90% of sales), reflected in higher return ratios - ~40% pre-tax RoCE. **Parag** is strong in VADP pan India, led by strong brand building with B2C sales at 67% of mix. **Prabhat** is targeting ~50% sales from the B2C segment from ~30% currently.

4) **Branding:** As companies move up the curve into VADP, it becomes important to engage in brand building as it imparts pricing power. We have ranked companies based on brand strength, distribution network and ad spends. **Parag,** with its strong brands like *Go* in cheese, expends 3.0% of sales towards ad & marketing.

5) **Capital efficiency:** Right product mix drives capital efficiency as milk and fresh dairy products are high-RoCE businesses, while VADP, particularly emerging categories, are capital intensive and currently in investment mode with returns anticipated to improve with rising utilisation. **Heritage** ranks the highest on capital efficiency metric.

Table 1: Competitive advantage framework

Company	Procurement network	Product mix	Channel Mix	Branding	Capital Efficiency	Remarks
Parag Milk Foods	2	1	2	1	3	Parag leads with 64% share of VADP and 27% share of emerging VADP and established leading brands Gowardhan and Go.
Heritage Foods	1	2	1	2	1	Heritage is strong end to end with 95% direct procurement and 100% B2C sales with 83% revenue share of high RoCE milk and curd.
Prabhat Dairy	2	2	3	2	3	Specialty ingredients supplier shifting towards higher share of VADP and B2C sales (50% by FY20 from 30% currently).
Hatsun Agro Product	1	2	1	2	2	Established brands Arokya, Arun, Hatsun and Ibaco with differentiated strategies to establish near 100% direct procurement and retail sales.
Kwality	4	3	3	3	2	Largest private dairy leveraging scale to establish direct procuremetn network and brand Kwality to enhance B2C sales.

Source: Edelweiss research

Note: Ranking is 1-5, based on 1 being the best

Valuation: Rerating to trend in line with global & domestic listed peers

Strongest domestic listed dairy player (based on the above-mentioned parameters) Hatsun quotes at ~30% premium to the other well managed and superior RoCE company, Heritage, due to superior procurement network. It is in-line with the FMCG median. Further, in terms of valuation, it quotes at 2x to emerging VADP players like Parag.

Fresh dairy products players can trend in-line with FMCG players which command strong brands, RoCE and have significant scope for growth led by demand shift to organised segment. Hence, we value Heritage at 30x, a mere 10% discount to the Indian FMCG median. Further, we perceive rerating potential for under-penetrated emerging VADP-oriented companies as they follow the footsteps of global VADP dairy players, which trade in line with their FMCG peers. However, led by capital intensity of VADP segment, we value Parag at 28% discount to the domestic FMCG median and 20% discount to Heritage. With huge growth prospects in the underpenetrated and high-margin emerging VADP, we believe the discount will narrow as the company scales up its RoCE. We value Prabhat at 22x FY20E P/E, at 34% discount to domestic FMCG median, 27% discount to Heritage and 8% discount to Parag due to higher B2B sales. With shifting focus to value-added products and B2C segment, the discount will narrow, in our view.

We believe the discount in valuations of fresh dairy player, Heritage and VADP players, Parag and Prabhat, will narrow to Hatsun and FMCG universe median.

Risks and concerns: Challenges in scaling up to VADP

The Indian dairy industry's long-term structural growth is undeniable and demand shift to organised players is also inevitable with transition to VADP. However, the risks are: a) Milk price volatility can impact short-term profitability, but the structural drivers are intact; b) Capital intensive nature of VADP can impact short-term RoCE, but it will reduce margin volatility due to vagaries of milk cycle; c) Rising aggression among large cooperatives like Amul in the VADP space could cap the sector's growth potential in short term, but the long-term VADP transition-led growth remains intact.

Stocks: Our preferred picks

Parag's strong focus on emerging VADP with well-established brands and capex already undertaken are estimated to spur PAT CAGR of 49% over FY17-20, with pre-tax RoCE spiking 1,064bps to 19.0%. The company has higher proportion of emerging VADP (~27% of sales in FY17), where capital intensity is higher versus the high-RoCE traditional dairy companies. Hence, we have valued Parag at 24x FY20E EPS (34x FY19E EPS), at 28% discount to FMCG median and 20% discount to Heritage's target FY20E P/E. However, global dairy VADP players trade in line with their FMCG peers, which we anticipate Parag to gradually follow. We initiate coverage on Parag with **'BUY'** and target price of INR340, implying ~40% upside from current levels. At CMP, the stock trades at 17.1x FY20E.

We envisage **Heritage** to benefit from the structural shift in demand to the organised segment in fresh dairy products even as the company transitions to a VADP dairy player. We estimate robust 23% sales and 21% EBIT CAGR over FY17-20 and adjusted RoCE at 42%, a rare combination in the dairy sector. We value the stock at P/E of 30x FY20E EPS (41x FY19E EPS), at ~10% discount to domestic FMCG players and add the market value of investment in Future Retail with 20% holding company discount. We initiate coverage with '**BUY**' and target price of INR976, implying 29% upside from current levels. At CMP, the stock trades at 25.9x FY20E.

With **Prabhat** shifting focus to value-added products and B2C segment, we estimate sales, EBITDA and PAT CAGR of 15%, 19% and 39%, respectively, over FY17-20. We value Prabhat at 22x FY20E P/E (30x FY19E EPS), which is at 34% discount to domestic FMCG median, 27% discount to Heritage's target FY20E P/E, and 8% discount to Parag's target FY20E P/E, due to higher B2B sales. With shifting focus to value-added products and B2C segment the discount will narrow. We maintain **'BUY'** with TP of INR211, implying 30% upside from current levels. At CMP, the stock trades at 17.0x FY20E EPS.

Table 2: Valuation snapshot

Company Name	Currency	M Cap	FY17-20E Sales CAGR (%)	FY17-20E PAT CAGR (%)	FY17 EBITDA margin (%)	P/E (x)		EV/EBITDA (x)		EV/Sales (x)		RoCE (%)	
						FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
India Dairy													
Heritage Foods*	INR	35,188	22.9	18.4	7.7	35.2	25.9	17.5	13.4	1.2	1.0	38.8	41.7
Hatsun Agro	INR	133,939	18.8	43.4	9.1	61.2	33.9	24.6	17.1	2.5	2.0	32.1	37.7
Kwality	INR	23,939	10.3	19.1	6.6	8.7	NA	6.0	NA	0.5	NA	24.5	NA
Parag	INR	20,339	14.1	48.9	6.2	24.0	17.1	10.8	8.5	1.0	0.8	15.2	19.0
Prabhat	INR	15,911	14.8	38.9	9.0	23.4	17.0	10.3	8.3	1.0	0.8	11.7	14.4
Mean			**16.2**	**33.7**	**7.7**	**30.5**	**23.5**	**13.9**	**11.8**	**1.2**	**1.2**	**19.9**	**26.1**
Median			**14.8**	**38.9**	**7.7**	**24.0**	**21.5**	**10.8**	**11.0**	**1.0**	**0.9**	**17.7**	**21.2**

Source: Bloomberg, Edelweiss research

Note: Kwality's CAGR calculation is for FY17-19. RoCE is pre-tax.

Note: Heritage's RoCE is adjusted for discontinued segments and investment in Future Retail

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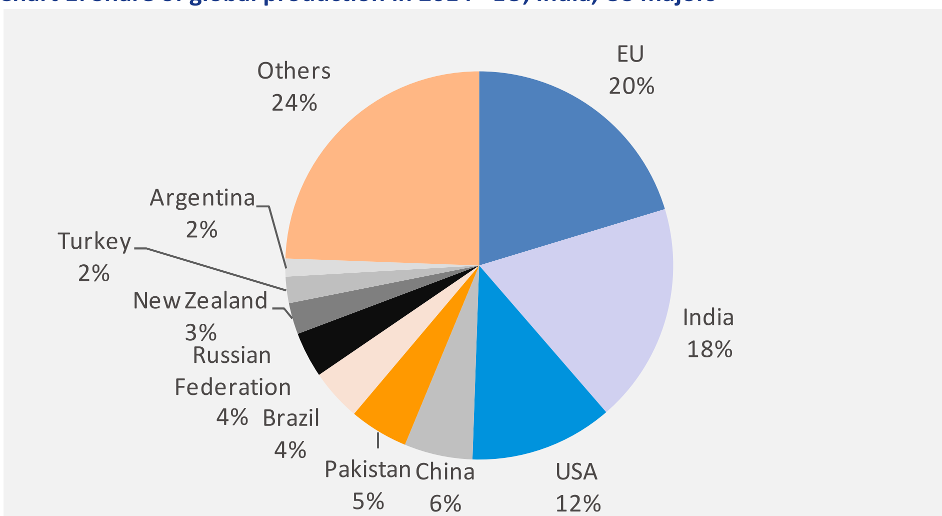
Indian Dairy: Largest market, fastest growth

- India India has come a long way from being in deficit from 20mn MT IN 1970 to being the world's largest milk producing country at 160mn MT—accounting for a huge 18.5% of world production.
- In last 35 years, India's milk production outstripped with 4.5% CAGR as against mere ~1.6% CAGR posted by global milk production.
- Going ahead, India's milk production is expected to outperform global production and grow at similar 4.2% CAGR going ahead to 185mn MT per annum/507mn litres per day and surpass EU to emerge the largest dairy producer by 2020 and improve in value terms at ~15% CAGR to INR9.4tn over FY16-20.

India is the world's largest milk producing and fastest growing country

India has come a long way from being in deficit days to being well embarked to emerge as the world's largest producer and consumer of milk. Globally, the EU, India and the United States are the largest milk and dairy products producers and consumers accounted for 20.3%, 18.4% and 11.9% shares, respectively, in global dairy production in 2014.

Chart 1: Share of global production in 2014 - EU, India, US majors

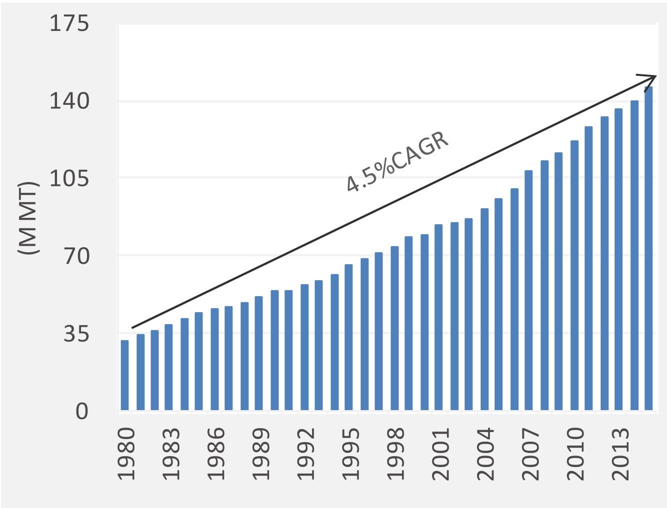


Source: Parag RHP

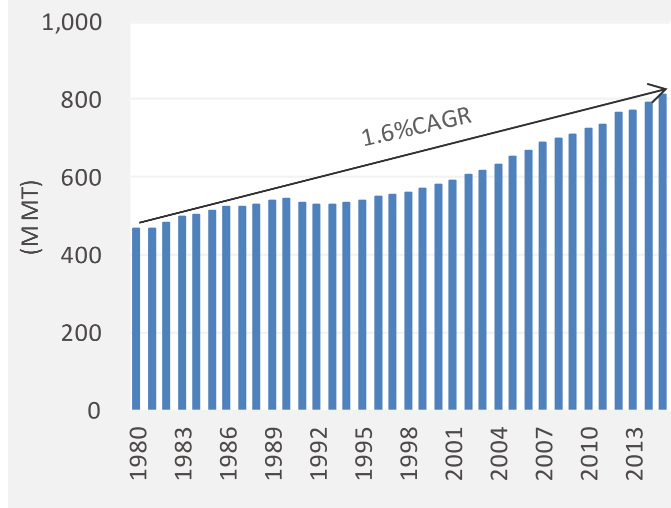
At 4.5% CAGR over past 3.5 decades, India has outstripped global milk production CAGR of mere 1.6%

Interestingly, in last 35 years, India's milk production grew at 4.5% CAGR as against mere ~1.6% CAGR posted by global milk production. India's milk production growth was driven by: 1) Rising productivity of animals by ~70% (2.5% CAGR); 2) Cattle population growing by 30% (1.7% CAGR); and 3) Entry of private players as well as NDDB (National Dairy Development Board) which has provided farmers with better cattle fodder and artificial insemination services. Ergo, going forward while other top milk producing geographies like EU, USA, China, Pakistan are expected to grow their production volumes at <2% CAGR over 2020, India is set to clock 4.2% CAGR in volumes over 2016-20 and overtake the EU to become the largest milk and dairy products producer by 2020.

Chart 2: India outpaced global milk production at 4.5% CAGR



Global production grew at mere 1.6% CAGR in past 35 years



Source: FAO

India is expected to surpass EU to emerge the largest dairy producer by 2020 and improve in value terms at ~15% CAGR to INR9.4tn over FY16-20

While Amul's Operation Flood from 1970-1996, augmented India's milk production at 4% CAGR over over the period making India self reliant, de-licensing of the dairy sector in 1991-92, led to the entry of several private players like Hatsun Agro, Heritage Foods, Parag Milk Foods, Prabhat Dairy, etc helping strong 4% production CAGR during 1992-2015. But, India's milk consumption grew at relatively higher 5% CAGR during the period. We believe continuous increase in productivity will help bridge this gap.

India to emerge largest dairy producer by 2020

The Union Government implemented the Central Scheme National Dairy Plan - Phase 1 during 2012-17 to improve productivity of dairy cooperatives through several input activities. Investments by private players in the domestic dairy sector is also expected to further augment milk productivity. Going ahead, India's milk production is expected to outperform global production and grow at similar 4.2% CAGR going ahead to 185mn MT per annum/507mn litres per day and surpass EU to emerge the largest dairy producer by 2020.

Table 3: Top milk producers' growth – India pacing ahead to emerge largest producer by 2020 (mn MT)

Countries	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E	CAGR 16-20E (%)
EU	156	157	161	163	166	169	172	175	177	1.6
India	134	138	145	151	157	164	170	178	185	4.2
USA	91	91	94	96	97	99	100	102	104	1.7
China	45	45	45	45	46	46	46	46	47	0.5
Pakistan	38	39	39	39	40	40	41	41	42	1.2
Brazil	33	33	34	35	36	37	37	38	39	2.0
Others	270	270	274	281	287	293	298	303	308	1.8
Total	766	773	792	810	829	847	865	883	901	2.1

Source: IMARC report

India's dairy industry is worth ~INR5.4tn by value, having grown at 15% CAGR during 2010-16. Going ahead, the dairy industry is expected to maintain ~15% CAGR over 2016-20, and attain value of INR9.4tn on rising consumerism.

Chart 3: Domestic dairy industry recorded 4.2% volume CAGR...

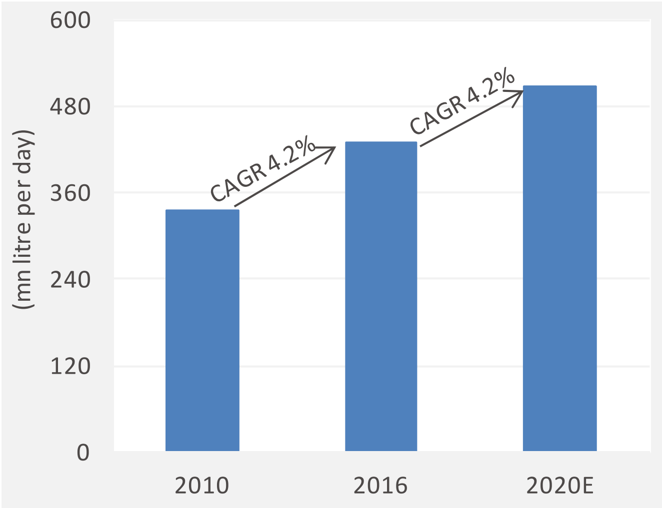
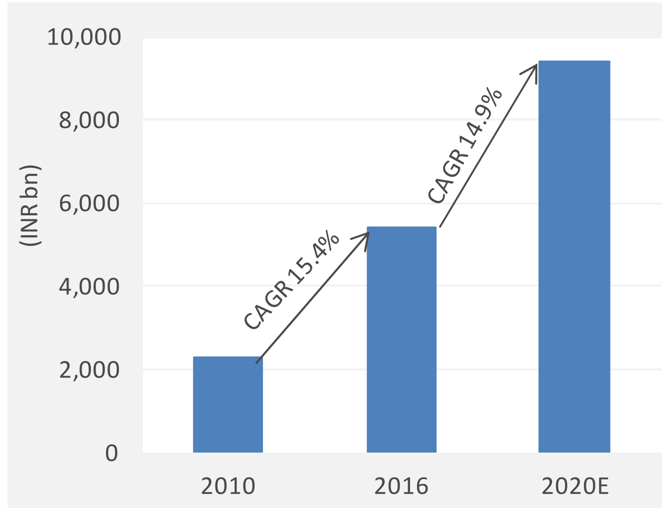


Chart 4: ...with 15% value CAGR during FY10-16



Source: Industry, Edelweiss research

Domestic processed dairy set to become INR9.4tn industry by 2020

Key Structural Trends & Drivers

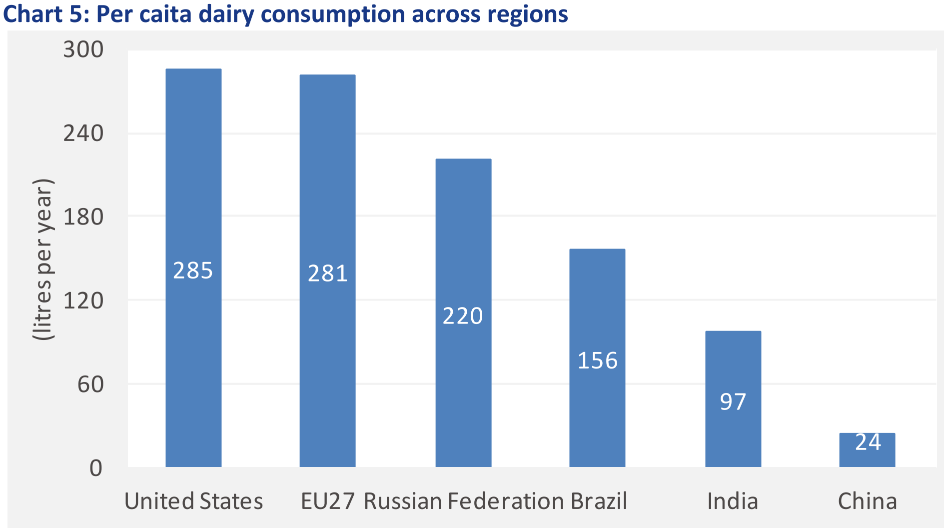
- **Increasing per capita:** India's per capita milk consumption has been increasing at 3% CAGR versus 1% CAGR globally. Further, at 97 litres per year it significantly trails its global peers. We believe there exists humungous scope for India's per capita milk consumption to spurt led by growth in value-added products (VADP), which is at 34% of industry versus 86% for the global mature markets like EU.
- **Vast vegetarian population:** Given rising income levels and sub-standard protein consumption, we believe latent growth potential for India's dairy industry is huge.
- **Rising share of organised sector:** Led by rising disposable income, and growing consumer preference for branded and value-added milk & milk products, investments by organised players in the sector has been on the rise. The organised players are set to grow at 20% CAGR over 2016-20 outpacing industry growth of 15% CAGR, and enhance share in the Indian dairy industry to 26% from 22% in 2016.
- **Value-added products to grow at faster clip:** VADP has been gaining importance with increasing changes in India's demographic and dietary patterns. In medium term, while demand for branded milk is expected to grow by ~15% CAGR, VADP would grow even stronger by ~20% plus CAGR driven by increasing share of organised sector within traditional VADP and rising penetration of high-growth emerging VADP.

Catalyst 1: Rising per capita income

Per capita availability of milk in India is among the lowest at 97 litres / year

India is the world's largest consumer of dairy products, consuming almost 100% of its own milk production. Despite being the world's largest consumer, per capita milk consumption (PCC) in India is 97 litres/year, significantly trailing USA, EU27, Russia Federation and Brazil.

Chart 5: Per caita dairy consumption across regions



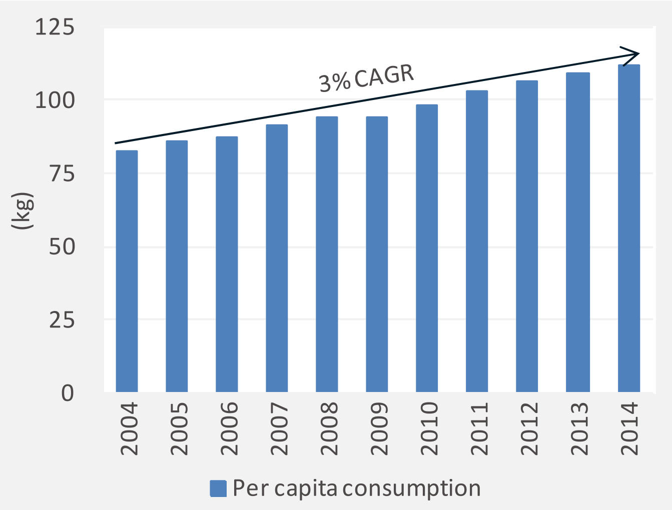
Source: IMARC Report

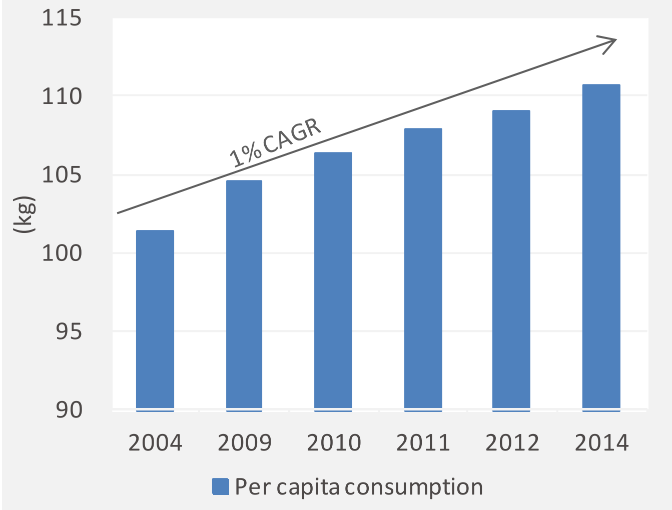
India's per capita milk consumption is clocking 3.1% CAGR at ~3x global average of 0.9% CAGR, where per capita consumption is already high and hence stagnating

India's dairy industry per capita milk consumption grew at healthy 3.1% CAGR during FY04-14. This was unlike the trend seen in developed countries, where per capita is already very high leading to world per capita growth of mere 0.9% CAGR in past 10 years.

We believe there exists huge scope for per capita milk consumption led by growth in value-added products, which stands at 34% of industry as compared to 86% for global mature markets like EU.

Chart 6: India's per capita milk consumption grew at healthy 3% CAGR, while globally it grew at mere 0.9% CAGR





Source: World Dairy Situation

With unorganised segment accounting for substantial share of big categories like ghee, curd, and paneer and strong scope within high-margin yet underpenetrated categories like cheese, whey, UHT milk, there is huge scope for penetration of value added products.

With 31% of India's population being vegetarian, overall protein consumption is extremely low

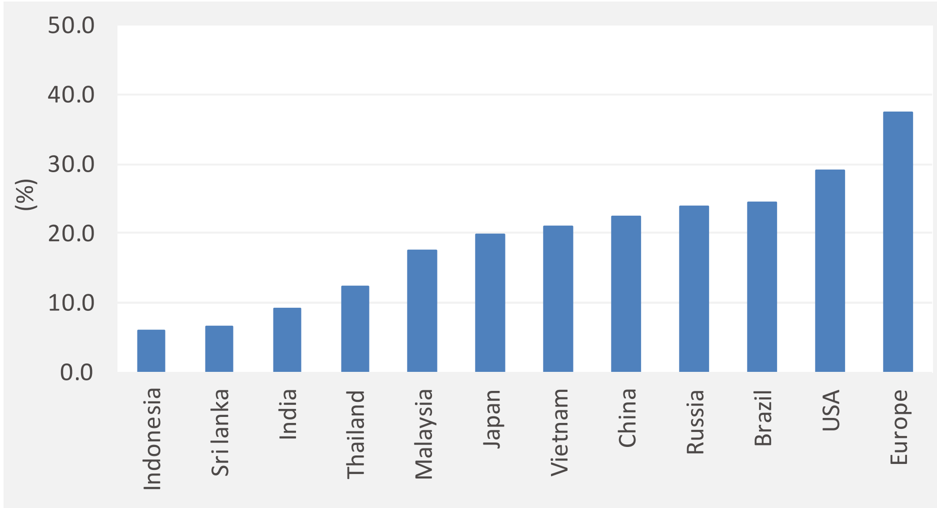
90% of the daily calorie intake from animal-based sources in India is accounted by dairy

Catalyst 2: Vast and growing vegetarian population

India's large vegetarian population is a key driver for the dairy industry with animal-based proteins being one of the lowest here. Even as the vegetarian population comprises a high ~31% of the total population, overall protein consumption in India is significantly lower than other countries, and at mere <10% of total calories consumed. Further, animal-based protein consumption is lowest in India at <15 grams per day and ~90% of the daily calorie intake from animal-based sources is accounted by dairy. Given the strong linkage to income and current sub-standard protein consumption in India, we believe India's dairy industry holds immense potential.

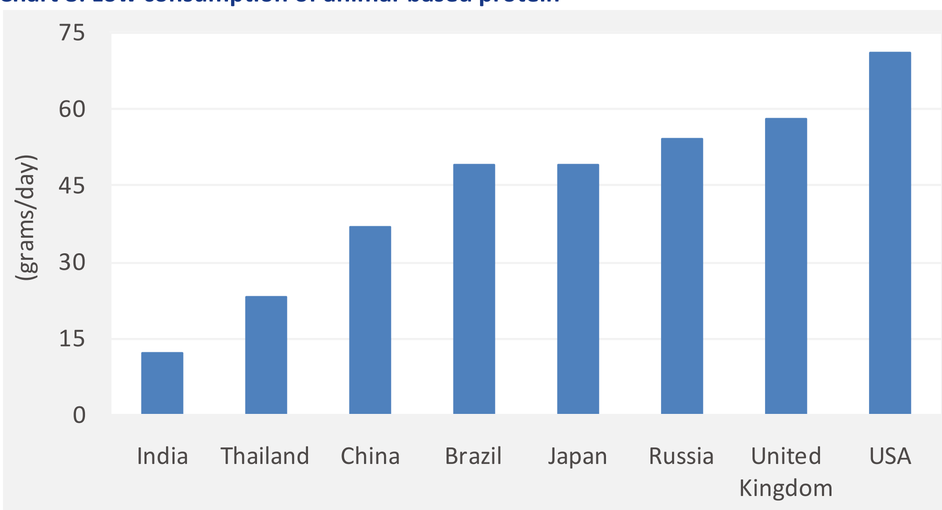
Overall, India's protein consumption is significantly lower than other countries at <10% of total calories consumed

Chart 7: Dismal protein consumption, as a proportion of total calories consumed



Animal-based protein consumption lowest in India at <15 grams per day

Chart 8: Low consumption of animal-based protein



Source: FAO, Edelweiss research

Catalyst 3: Rising share of organised players – to grow to 26% share

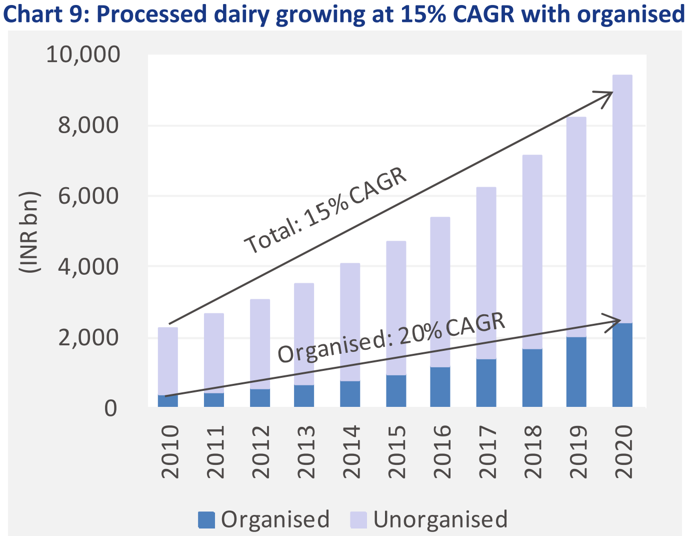
On account of rising disposable income, rising consumer preference for branded and value-added milk and milk products, investments are being made by organised sector players. As such, the share of organised segment has gradually inched up from 16.7% in FY10 to 22% in FY16.

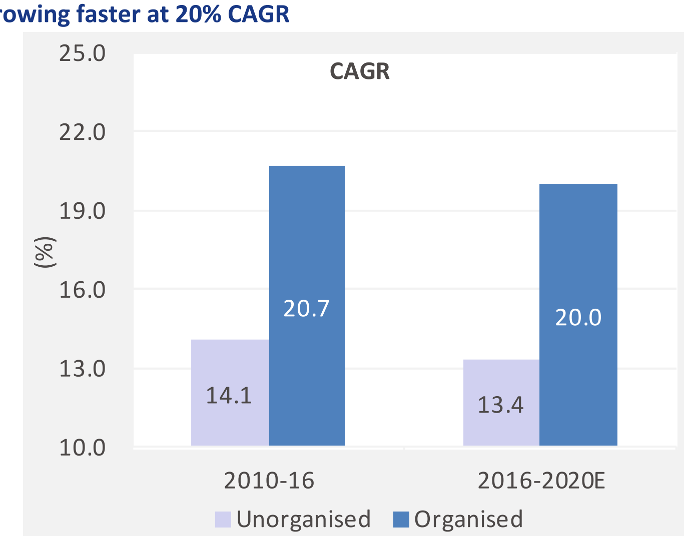
The organised segment comprises 'cooperatives' and 'private dairy companies'. Unorganised segment has the 'local vendors' and 'self-consumption' which command huge ~80% share in value terms.

Fig. 3: By volume, organised dairy contributes mere 14%

Source: Parag RHP, Edelweiss research

Chart 9: Processed dairy growing at 15% CAGR with organised growing faster at 20% CAGR





Source: IMARC Report, Edelweiss research

With organised segment estimated to grow at faster clip of 20% value CAGR over 2016-20E versus overall industry's 15%, we expect organised segment's contribution to expand to 26% from 22% currently

The organized segment is expected to grow at a CAGR of 20% over 2016-20 outpacing the overall industry (growing at 15%), and enhancing its share in the Indian dairy industry to 26% from ~22% currently. We expect private players and cooperatives with increasing investments will be able to gain share from unorganised players.

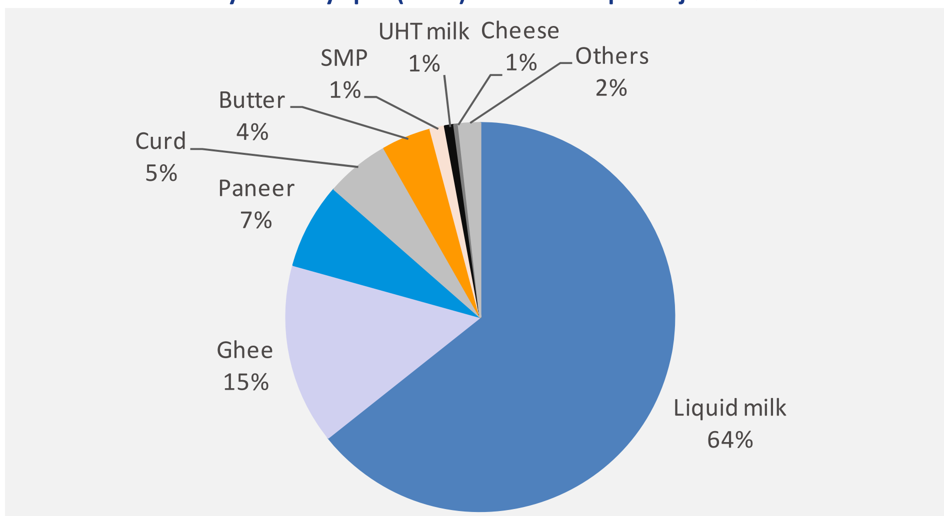
Rising consumerism, increasing nuclearisation of families, growing urbanisation, and preference for packaged branded products will act as key growth levers for this trend.

Catalyst 4: Rising urbanisation propelling VADP

Increasing preference for VADP in India: In recent times, value-added products (VADP) have been gaining preference among customers due to apparent changes in demographic and dietary patterns. The share of VADP has gradually increased and now stands at 34% of total industry. However, contribution of milk and skimmed milk powder (SMP) combined stands at ~66% of industry sales.

Significant scope to increase VADP contribution in India which stands at 34% of industry versus 86% in global markets like EU

Chart 10: Indian dairy industry split (2016) – VADP comprises just 34% of share

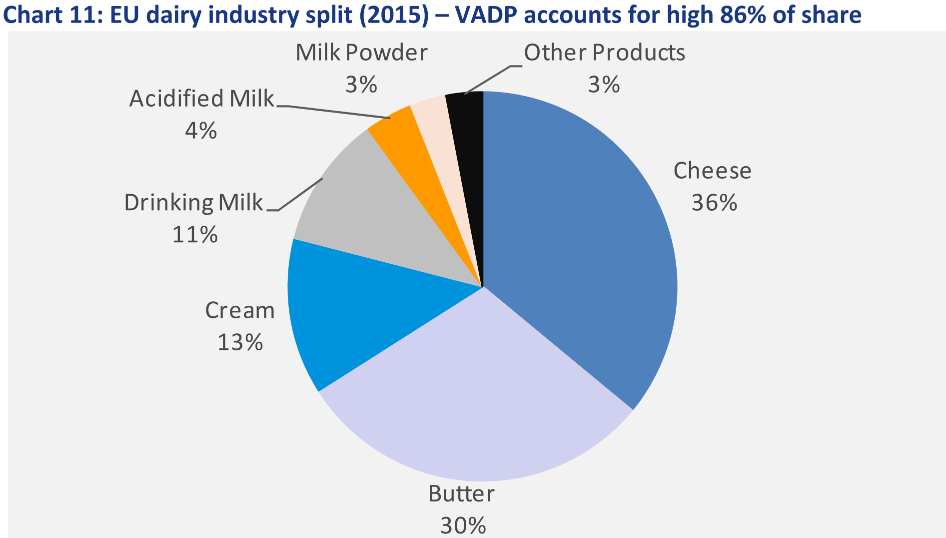


Source: Parag DRHP, Edelweiss Research

VADP accounts for lion's share of EU market: Comparatively, in EU drinking milk share is just 11%, SMP a low 3% with the balance used to manufacture VADP leading to its contribution being at a high 86%. Cheese accounts for lion's share of EU's dairy market with 36% share, followed by butter at 30%. This exemplifies the limited penetration of VADP in the Indian market and humungous scope for growth.

In India, less than 1% of milk procured is utilised for cheese production compared to 36% in Europe

Chart 11: EU dairy industry split (2015) – VADP accounts for high 86% of share



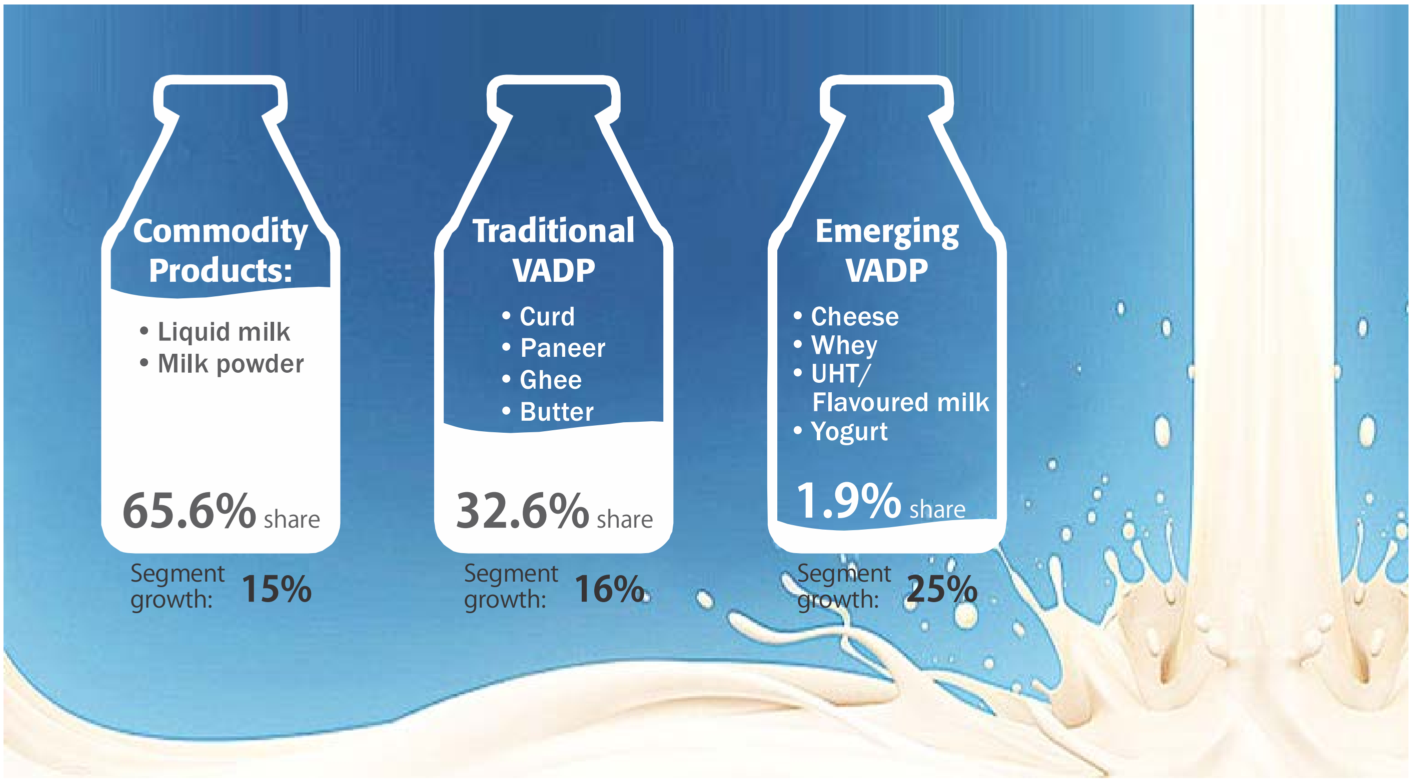
Source: Eurostat, Edelweiss research

** Excluded milk powder and drinking milk in value-added products*

Indian dairy industry can be classified into commodity dairy products like: 1) Raw milk; 2) Skimmed milk powders (SMP); and 3) Dairy whiteners (DW) which are low margin products. Further, milk products like curd, buttermilk, ghee, butter, ice cream and paneer can be classified as traditional VADPs which have a huge unorganised market and driven by increasing nuclearisation of families.

With improving macroeconomic trends like rising consumerism, India is witnessing increasing consumption of emerging VADP like UHT milk, cheese, flavoured milk, yogurt, lassi, whey, etc. These are hugely underpenetrated categories.

Fig. 4: Evolution of key categories - Consumption of VADP on the rise



Source: Edelweiss research

We estimate organised players to clock 20% CAGR in commodity and traditional dairy products led by sizeable unorganised market and 26% CAGR in emerging VADP led by under penetration

Currently, due to conventional culture, commodity dairy products like liquid milk and SMP contribute ~66% of total dairy industry, followed by traditional dairy products (ghee, paneer, curd, buttermilk, butter and ice-cream) forming ~32%, and emerging VADP (cheese, whey, UHT, flavoured milk, yogurt) accounting for mere ~2% of market.

Ergo, there is humungous growth opportunity in traditional milk products like ghee, curd and paneer due to large industry size and unorganised presence, which we expect will lead to strong 20% CAGR in organised players in these segments over 2016-20E. Emerging VADP like UHT milk, flavoured milk, cheese and whey have highly organised market presence, but are hugely underpenetrated (small market size) which we believe will lead to strong 25% CAGR in growth for these segments over 2016-20E.

Table 4: Humungous opportunity for organised segment led by high market growth, low penetration of VADP

Category	2016 Sales (INR mn)	Organized sector sales (INR mn)	2016 Share of organized sector (%)	2020 Sales (INR mn)	2020 Sales of the organized Sector (INR mn)	2020 Share of the organized Sector (%)	Total Market CAGR 2016-2020 (%)	Organized Market CAGR 2016-2020 (%)
Commodity Products							**15**	**17**
Liquid milk	3,483,000	760,000	22	6,068,000	1,593,000	26	15	20
SMP	66,000	66,000	100	112,773	112,773	100	14	14
Traditional VADP							**16**	**19**
Ghee	811,000	154,000	19	1,367,212	288,912	21	14	17
Curd	288,000	17,000	6	492,690	35,421	7	14	20
Paneer	386,000	11,000	3	653,576	22,684	3	14	20
Cream	17,000	17,000	100	29,704	29,704	100	15	15
Butter	221,701	30,183	14	382,238	61,326	16	15	19
Buttermilk	21,000	21,000	100	43,092	43,092	100	20	20
Lassi	19,000	19,000	100	39,298	39,298	100	20	20
Emerging VADP							**25**	**26**
Whey (powder)	15,000	7,000	47	24,457	12,229	50	13	15
Flavoured milk	20,000	20,000	100	47,828	47,828	100	24	24
UHT milk	42,000	42,000	100	103,778	103,778	100	25	25
Yogurt	4,000	4,000	100	12,075	12,075	100	32	32
Cheese	20,000	20,000	100	59,388	59,388	100	32	32
Total	**5,413,701**	**1,188,183**	**22**	**9,436,109**	**2,461,508**	**26**	**15**	**20**

Source: Industry, IMARC report, Euromonitor

Note: Industry numbers for whey are from Euromonitor report and industry input; all other product information is from IMARC report

Pertinently, as one moves up the VADP curve profitability too ramps up over the basic dairy products.

Competitive edge of players

- **Strong procurement infrastructure, key to success:** Companies with infrastructure for direct milk procurement from farmers enjoy huge competitive edge as it assures steady milk supply and consistency in milk quality at relatively lower prices. Heritage at ~95%, Hatsun ~100%, Parag ~80% and Amul at 100% score high in terms of direct procurement and diversifying over the years.

- **Right product mix of milk and high-growth VADP:** A right mix of milk - VADP helps maximise growth, margins and return ratios. Companies with high milk sales (Heritage and Hatsun at 65-70% of sales) have seen their direct procurement network scale up resulting in higher RoCE. It is these players that have been leveraging their established milk brands to expand their VADP share. VADP is an attractive opportunity as: i) These products are poised to grow at higher rate; and ii) Command ~1.5-2x higher EBITDA margins.

- For Heritage, while VADP currently contributes 24% of sales it is well on way to touch 28% levels over FY17-20E. While Heritage has the best product portfolio with majority of its sales from high-RoCE fresh dairy products, it is prudently increasing sales of high-margin VADP. Parag derives ~64% of its sales from VADP, which is expected to go to 70% over FY17-20. Emerging VADP contributes ~27% of sales, however it has been ahead of the curve in these high margin emerging VADP with strong capex already incurred. Ergo, we believe Parag is best placed to capture the advantages of high-growth emerging VADP, which would offset the initial drag of lower RoCE of VADP like cheese.

- **Channel mix - Strong branding and higher B2C sales:** Heritage and Hatsun have a strong procurement & distribution network which has led to creation of a strong B2C franchise (>90% of sales) for them. Rising consumption of VADP is seeing players expand their B2C mix. However, there are certain VADP like cheese which is consumed ~50% out of home. Also, categories like butter, paneer and SMP are institutional in nature. Parag is strong in VADP due to its prowess in brand building in VADP and B2C sales account for ~67% of its mix.

- **Strong branding to scale the value curve:** As competition intensifies and companies move up the value curve to VADP, it has become extremely critical to spruce up brand building activities. Examples being national brands like *Gowardhan* ghee - fetches better realisations and commands brand premium. Parag offers an entire range of cheese products and variants leveraging strength of its core *Go* cheese brand, while also devising a premiumisation strategy.

1. Milk procurement - Driven by direct sourcing and diversification

Raw milk procurement is one most critical requirement in the dairy eco-system. Steady milk supply is an important attribute of a dairy company's supply chain. Consistency in milk quality is also important to manufacture VADP to maintain similar taste. So, it becomes imperative for VADP manufacturing companies to have or develop a direct milk procurement supply chain. As dairy companies are increasingly focusing on B2C segment, an integrated milk supply chain with strong direct procurement becomes imperative to procure quality milk and gain sustainable competitive advantage.

- We have evaluated companies on their procurement trend.
- We have evaluated the proportion of direct milk procurement as it ensures availability of good quality milk and lesser volatility in difficult times.
- Diversification of procurement base is evaluated to see scalability over the years beyond home states.
- Companies equipped with infrastructure to procure milk directly from the farmers enjoy huge competitive advantage as it assures steady milk supply and consistency in milk quality at relatively lower prices.

Parag, Hatsun and Amul are ahead with ~9-14% procurement CAGR in past 4-5 years

Table 5: Procurement trend – Hatsun's procurement has grown the most rapidly

	FY13	FY14	FY15	FY16	FY17	4 year % CAGR
Parag	0.9	0.8	1.0	1.0	1.2	8.8%
Heritage Foods	0.9	0.8	1.0	1.1	1.0	3.4%
Prabhat	0.6	0.8	0.9	1.0	0.8	7.1%
Hatsun Agro products	1.6	NA	NA	NA	2.7	14.0%
Amul	13.1	13.6	15.3	16.0	18.2	8.5%

Source: Edelweiss research

Heritage has expanded procurement from 20,000LPD in 1993 to 1.04mn LPD in FY17, clocking 18% CAGR

As seen from the above table, Parag, Hatsun and Amul are ahead with ~9-14% procurement CAGR in past 4-5 years. For Heritage, however, procurement increased at lower CAGR of 3-4% primarily due to lower procurement from states outside its home states – the company decreased its procurement in Rajasthan in FY17 as it hired out a plant for conversion of milk into SMP in FY16. However, if we take growth till FY16, Heritage's procurement grew at 5% CAGR. Going ahead, with the availability of Reliance Dairy's network, procurement is expected to spurt by ~20% CAGR over FY17-20E.

Over long term (past 24 years), Heritage expanded its procurement from 20,000LPD in 1993 to 1.04mn LPD in FY17, growing at 18% CAGR. Going ahead, Heritage has set itself a stiff target of more than doubling its procurement to ~2.8mn litres/day by FY22.

Table 6: Direct procurement and diversification

Company	Direct Procurement mix (%)	Milk procurement per day (mn liters per day)	Diversification of procurement base
Parag	~80%	1.2	85% Maharashtra, non-Maharashtra proportion reduced from 24% in FY13 to 15% in FY15
Heritage	~95%	1.3	60-65% from Andhra Pradesh; 35-40% from 5 other states
Prabhat	~70%	0.8	100% Maharashtra
Kwality	~25%	3.3	Sources from 3 states - UP, Rajasthan, Haryana
Hatsun	~100%	2.7	70-75% from Tamil Nadu; 25-30% from 4 other states
Vadilal	~35-40%	0.4	
Amul	100%	18.2	Mainly Gujarat (85%) and Maharashtra

Source: Edelweiss research

As evident from above table, Parag, Heritage Foods, Hatsun, directly procure ~80-100% of their milk requirements from farmers and have also diversified outside their home states.

Procuring consistent quality milk involves measures to distribute quality testing equipment to village centers and capital investment in procurement infrastructure

Direct procurement infrastructure key

Setting up a direct milk procurement network entails significant capex (refer chart below). The farmers provide milk to Village Level Collection Centres (VLCC) twice daily where milk analysers are installed which checks the milk quality for fat & SNF parameters. Then, the VLCC tested milk is transported to Bulk milk coolers (BMC) and then to Milk Chilling Centre (MCC) where it is further tested for quality. Thereon, further samples are taken for advanced testing which once approved are transported in specialised milk tanker vehicles to the dairy processing plants for manufacturing the products. Typically, in this model, the companies own the VLCC, MCC and processing plants. This is the most favoured method as it ensures that the quality of milk is maintained with testing done at each stage at the VLCC, BMC, MCC and processing plant.

Fig. 5: Procurement chain of Indian dairy industry

Village level collection centre (VLC)	Bulk Milk Coolers (BMC)	Milk Chilling Centre (MCC)	Dairy Processing Plant
• Handling Capacity: 500-2000 litres • Capex: INR0.2-0.3mn	• Handling Capacity: 10,000-15,000 litres • Capex: INR1.5-2mn	• Handling Capacity: 20,000-50,000 litres • Capex: INR15-40mn	• Handling Capacity: 0.5-1mn litres per day • Capex: INR1bn

Source: Edelweiss research

Organised has been expanding versus unorganised sector by virtue of introducing standardisation and transparency in milk payments. Moreover, educating farmers on best dairy and animal husbandry practices is further bolstering their procurement share

Table 7: Strong procurement network across companies

	Milk Collection Centres/VLC	Bulk Milk Coolers	Milk Chilling Plant/Centre
Prabhat Dairy	481	115	20
Parag	3,400	NA	NA
Heritage	12,774	106	89
Hatsun	10,000	400+	NA
Kwality	NA	NA	29

Source: Edelweiss research

- **Heritage** procures a high 1.34 mn litres per day aided by 195 bulk coolers and chilling centers, which were fortified with Reliance's network in the North.
- **Prabhat** has an established network of 481 milk collection centres (VLCC), 115 bulk milk coolers (located across 600 villages) and 20 chilling centers. The company is looking at widening its milk collection and chilling network by 80% over next 3 years.
- **Parag** has a strong procurement network spread across 29 districts of Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu having tie-ups with 3,400 VLCCs.

The organised sector has been expanding market versus unorganised sector by virtue of introducing standardisation in milk quality testing and transparency in computing the consideration paid to farmers, and the farmers being paid on time without delays for their milk. Further, educating farmers on best dairy and animal husbandry practices with services like artificial insemination, cattle feed and fodder at subsidised rates is also helping private players like Heritage gain further market share.

The above is despite the strength of cooperatives in the respective states. For instance, the Karnataka state government gives subsidy to farmers for supplying milk to the cooperatives. This makes it difficult for private players to procure milk from Karnataka.

Table 8: Share of cooperatives' procurement across states (mn litres)

	State Production	Co-operative milk procurement	Share of Co-operative (%)
Gujarat	12,262	6,381	52
Goa	54	24	45
Karnataka	6,344	2,365	37
Puducherry	48	16	33
Tamil Nadu	7,244	1,110	15
Sikkim	67	10	15
Kerala	2,650	401	15
Maharashtra	10,153	1,330	13
Orissa	1,930	192	10
Bihar	8,288	630	8
Telangana	4,442	260	6
Andhra Pradesh	10,817	486	4

Source: NDDB, Dept of Agriculture

VADP presents an attractive opportunity as: i) These products are poised to grow at higher rate; and ii) They fetch ~1.5-2x higher EBITDA margins

2. Right product mix of milk and high growth and high margin VADP

Given one of the lowest average per capita consumption vis-a-vis other countries with a high unorganised market and low VADP penetration, we believe India's dairy industry is well poised to grow at ~15-30% CAGR across categories over FY16-20E.

It is important to have the right mix of high RoCE milk business along with high growth and margin VADP to minimise working capital and maximise growth, margins and return ratios. To illustrate, companies with higher milk sales like Heritage and Hatsun have scaled up well in terms of establishing a strong direct milk procurement network, clocking higher RoCE with negligible working capital. These players are also leveraging their established brands in milk business to expand their VADP share. VADP have been gaining importance due to increasing changes in demographic and dietary patterns.

We believe VADP presents an attractive opportunity as: i) These products are poised to grow at higher rate; and ii) Fetch ~1.5-2x higher EBITDA margins. We believe Parag is best placed to capture these advantages with VADP at 64% of sales and expected to catapult to 70% of sales in FY20, which would outweigh the initial drag of lower RoCE of VADP like cheese. Over FY17-20, we expect Parag's RoCE to expand by 1064bps to 19.0 (from 8.4% in FY17).

Table 9: Industry dynamics

	Liquid Milk & Milk Powders	Traditional Value Added Products	Emerging Value Added Products
Products	Pouch Milk, Skimmed Milk Powder, Whole Milk Powder, Dairy Whitener	Curd, Paneer, Ghee, Butter, Ice-cream, Buttermilk	Cheese, Whey Protein, UHT Milk, Flavoured Milk, Yogurt
Penetration	High	Medium	Low
Margin	→	→	→
RoCE	←	←	←
Share of Dairy Industry (%)	65.6	32.6	1.9
Key Players (Revenue Share)	Heritage (Milk: 65%) Hatsun (Milk: 68%) Prabhat (Milk Powders: 44%)	Heritage (Curd: 18%) Parag (Butter+Ghee: 27%) Prabhat (Ghee: 20%) Vadilal (Ice-cream 90%)	Parag (Cheese+Whey: 22%)

Source: Edelweiss research

Pouch milk fetches highest RoCE (due to negligible capital requirement), turn of ~10-12x and short working capital cycle

Milk, traditional VADP high RoCE; emerging VADP at investment phase

Pouch milk offers highest RoCE (due to negligible capital requirement), asset turn of ~10-12x, and negative working capital cycle due to low shelf life, despite lower gross margins of ~15%. Inventory is also negligible as milk procured reaches the consumers in 30 hours and receivable days are low as distributors pay within a week of purchasing the milk, while companies have to pay the farmers once in ~10 days for their raw milk purchase. As a result, players like Heritage which have revenues of ~65% from fresh milk generate average RoCEs of ~40%.

Pouch milk: Highest RoCE, basic building block

Direct milk procurement is essential for liquid milk business. Following steady scale up in the direct procurement network and given perishable nature of liquid milk, the segment is dominated by regional private dairies or cooperative dairy companies and faces lesser threat from national players even with pan-India distribution. Further, consumers don't easily switch pouch milk brands. Hence, with consumers' trust reposed on the brands, milk companies like Heritage and Hatsun are leveraging their brands to expand into VADP.

Table 10: Highest RoCE in milk on high asset turn

Particulars	INR/litre
Company Realisation (A)	**33**
Milk Requirement (litre)	1
Milk Price	28
Total Cost (B)	**28**
Gross Profit (C) (A-B)	5
Gross Margin (%)	**15**
Less: Operating Expenses @ 11%	4
EBITDA	1
EBITDA Margin (%)	**4**

Particulars	INR mn
WC Cycle (days)	**5**
Production (mn kgs)	300
Annual Revenue	9,913
Capex	700
WC	136
Total Capital Requirement	**836**
EBITDA	423
Deprecitaion	56
EBIT	**367**
RoCE	**44%**

Source: Industry, Edelweiss research

Fresh products like curd and paneer are highly profitable and also generate higher return ratios considering limited working capital requirement

Curd contributes 18% to Heritage's sales, leading to better margin with high RoCE

Traditional VADP

- **Fresh products: High margins with low working capital**

Companies are moving up the curve into traditional VADP to include fresh dairy products like curd, paneer and buttermilk as it's a natural extension since: 1) They are leveraging the same pouch milk supply chain; and 2) Allows players to utilise the unsold pouch milk to produce fresh dairy products like curd and paneer.

Products like curd and paneer are highly profitable and also generate higher return ratios considering limited working capital. For instance, curd involves lower working capital (as it has shelf life of 3-15 days depending on the pouch quality or whether it is set curd), but fetches higher margins (gross margins of ~30-33% and EBIDTA margins of ~18-22%), leading to higher RoCE. Companies like Heritage have 18% of sales coming from curd, leading to better margins with high RoCE.

On account of limited shelf life, these products can be sold only via direct distribution to retailers. Hence, companies engaged in pouch milk business are better placed to grow in packaged curd as they can leverage their regional processing and supply chain set up to produce curd.

Table 11: Pouch curd fetches high margins, return ratios

Particulars	INR/litre
Company Realisation (A)	**46**
Milk Requirement (litre)	1
Milk Price	32
Total Cost (B)	**32**
Gross Profit (A-B)	14
Gross Margin (%)	**30**
Less: Operating Expenses	6
EBITDA	8
EBITDA Margin (%)	**18**

Particulars	INR mn
WC Cycle (days)	10
Production (mn kgs)	100
Annual Revenue	4,600
Capex	2200
WC	126
Total Capital Requirement	**2,326**
EBITDA	848
Deprecitaion	176
EBIT	**672**
RoCE	**29%**

Source: Industry, Edelweiss research

Note: We have calculated for buffalo milk, taking cue from Heritage

Parag's leading ghee brand, *Gowardhan,* contributes 22% to sales and has ~10-15% EBITDA margin

- **Ghee and SMP: More capital intensive**

  Whenever any milk player receives excess supply of milk from the farmers, they have to accept it. If the demand for fresh products, such as, milk and dahi (curd) is limited, the company converts the excess milk into longer shelf-life products like skimmed milk powder and milk fats. Thus, the milk business can provide raw material for other sub-segments. A litre of cow's milk has 3 components - 3.5% fat, 7.5% SNF (solid not fat, which includes protein, calcium and other minerals), and water. When any company sells standard milk, it sells milk with 3-4% fat and saves some fat for the manufacture of products such as ghee and butter. Ghee can be sold in bulk at ~5% margins.

  Parag has strong ghee brands in *Gowardhan*, which contributes 22% of sales, realizes ~24-28% gross margin and registers 10-15% EBITDA margin. SMP is sold through bulk and wholesale channels.

Table 12: Ghee (B2C) generates 15-20% RoCE

Particulars	INR/kg
Ghee	
Production (kgs)	1
Company Realisation	**417**
SNF generated (kgs)	2.5
Realisation (INR/kg)	160
Company Realisation	**400**
Total Revenue	**817**
Milk Requirement (litre)	20
Milk Price	28
Milk Cost	560
Packaging and Other Costs	60
Total Costs	**620**
Gross Profit	197
Gross Margin (%)	**24**
Less: Operating Expenses @ 14%	114
EBITDA	82
EBITDA Margin (%)	**10**

Particulars	INR mn
WC Cycle	95
Ghee Production (mn kgs)	25
SMP Production (mn kgs)	40
Annual Revenue	26,417
Capex	5000
WC	6,876
Total Capital Requirement	**11,876**
EBITDA	2,663
Deprecitaion	400
EBIT	**2,263**
RoCE	**19%**

Source: Industry, Edelweiss research

Even though emerging VADP, cheese, is capital intensive with lower asset turn, it offers high growth and margins

Players, which have achieved scale in VADP like cheese, can venture into whey consumer—a high gross margin product (45%), entailing higher blended RoCE than pure cheese

Emerging VADP at investment phase; rising B2C, whey consumer to improve RoCE

Going ahead, growth in most emerging VADP categories is expected to be strong given the current landscape (mentioned earlier). Even though emerging VADP like cheese are capital intensive with lower asset turn (1.5x) and higher working capital cycle (cheese needs to be cured and has high inventory of 2 months), leading to relatively lower RoCE than milk and traditional VADP. But, it offers highest growth and margins. Further, around 50% of cheese is sold in institutional and HORECA segments, due to which blended realisations are lower than pure B2C sales.

We believe improving brand awareness and rising B2C sales will lower debtor days and lead to gradual improvement in RoCE for bigger emerging VADP's like cheese, which currently enjoy high share (~50%) of B2B in their mix.

Players that have achieved scale in VADP like cheese can venture out to explore whey consumer, a high gross margin product (45%), much higher than the entire VADP pack. However, it entails significant capital investment. For instance, Parag has invested way ahead of the curve and attained substantial scale in cheese to venture into whey consumer. Hence, we believe investment in emerging VADP like cheese will yield higher for players like Parag (~20% of sales) who have invested in VADP like cheese much ahead of the value curve and ventured into high-margin whey consumer thereby providing a higher blended ROCE than pure cheese players.

However, with the sector at investment phase, return ratios are depressed - Parag has generated average 12% pre-tax RoCE in past 5 years, which we expect will improve to 18% by FY20. Globally, companies well-entrenched in VADP like Glanbia, a leader in whey consumer and Kraft in cheese generate double digit EBIDTA margins of ~16%. Glanbia generates 18% RoCE in performance nutrition division (whey consumer).

Table 13: Cheese (blend of B2B and B2C), whey consumer have potential to generate pre-tax RoCE of 25%

Revenue (for 10l of milk)	INR
Cheese	
Production (kgs)	1
Realisation (INR/kg)	310
Institutional Whey	
Production (kgs)	0.3
Realisation	163
Net Revenue (INR)	49
Consumer Whey	
Production (kgs)	0.2
Realisation	2165
Net Revenue (INR)	433
Total Revenue (A)	**792**

Cost (for 10l of milk)	INR
Milk	
Milk Required (litres)	10
Price of Milk	28
Total Milk Cost	280
Add: Packing and other cost	230
Total Costs	**510**
Gross Profit (B)	**282**
Gross Margin (%)	**36%**
Operating Costs	
Ad Spends @ 6%	48
Other Op Exp @ 10%	79
Total (C)	**127**
EBITDA (B-C)	**155**
EBITDA Margin (%)	**20%**

	INR mn
Cash Conversion Cycle (days)	**90**
Annual Volume	
Cheese (mn kgs)	18
Institutional Whey (mn kgs)	5
Whey Consumer (mn kgs)	1
Annual Revenue	
Cheese	5431
Institutional Whey	791
Whey Consumer	2529
	8751
Working Capital	2158
Capex	3500
Total	**5658**
OP	1715
Less: Depreciation	280
EBIT	**1435**
RoCE	**25%**

Source: Industry, Edelweiss research

Note: Above RoCE of cheese is assuming 55:45 B2C:B2B mix, taking cue from Parag. With improving mix towards B2C, RoCE can further improve. We have assumed 80% capacity utilization for cheese and whey consumer.

Heritage commands highest RoCE in the entire dairy pack with milk contributing 65% to revenue. Further, its increasing scale in traditional and fresh VADP from 24% to ~30% of sales is aiding sustain high RoCE

Product mix of Indian dairy companies

A mix of high-RoCE milk segment, and leveraging established milk brands for high growth and margin VADP is a theme prevailing across all Indian dairy companies, who have set their eyes on continuously increasing the share of higher-margin VADP. These companies include **Heritage and Hatsun who derive highest proportion of their revenues from milk (65-68%)**, while for others majority of their revenue comes from non-milk products. **Heritage commands highest RoCE in the entire dairy pack**.

Parag has the best scale in VADP at 64% of sales along with strong branding and product mix

But, milk entails lower margins and scalability hinges on enhancing procurement reach, which takes time to develop. Competition from cooperatives is also getting fiercer. To succeed it has become imperative for players to leverage their procurement to extend into other VADP.

Penetration of organised players in VADP categories is comparatively lower than in liquid milk, with many of these categories in low-single digit penetration. However, over next 3 years, led by rising income levels, increasing urbanisation and improving dietary habits, emerging (organised) VADP categories are estimated to grow at 25% CAGR.

In the long run, we believe companies with higher share of VADP, strong branding, differentiated products and distribution network for B2C channel will earn higher margins, record higher growth and survive the cooperatives. In our view, Parag has the best scale in VADP at 64% of sales along with strong branding and product mix. Heritage and Hatsun are also moving into traditional VADP, which will lead to better margins and sustain high RoCE.

Table 14: Revenue mix of Indian dairy players – Heritage, Hatsun strong in fresh milk, Parag best-in-class in VADP

Product mix (%)	Prabhat	Parag	Heritage	Kwality	Hatsun	Vadilal	Amul
Commodity Products	**70**	**34**	**66**	**68**	**68**	**0**	**66**
Liq Milk	14	22	65	41	68		55
Milk Powder	44	13	1	27			11
Sweetened Condensed Milk	12						
Value Added products	**26**	**64**	**30**	**25**	**28**	**90**	**34**
Curd	1	5	18	7	7		1
Paneer	1	2	1		0		
Cheese+Whey	2	22			0		3
Others		2	1		13		
Butter	0	5	7	18			10
Ghee	20	22					8
Icecreams	1		2		8	90	
UHT/Flavored milk	1	6	1				11
Others							
Processed foods						9	
Others	4	3	4	7	4	1	

Source: Edelweiss research

3. Channel Mix: Strong branding leading to higher B2C sales

Heritage and Hatsun have strong B2C franchisees in milk - >80% of sales

India's favourable demographics have seen increasing consumerism and rapid urbanisation. As a result, rising consumption of VADP and variants of milk has seen players expanding their B2C mix. Heritage and Hatsun have a strong distribution network in their respective territories which has led to creation of strong B2C franchise and >90% of sales are through this segment._However, there are certain VADP like cheese, which are consumed ~50% out of home. Also, categories like butter, paneer and SMP are institutional in nature. Parag is strong in VADP due to strong brand building. But, its B2B sales only include cheese. Hence, overall B2C and B2B mix stands at 70:30, respectively.

Parag is strong in VADP due to strong brand building with B2C mix at 67%, though diluted by out-of-home consumption of cheese

Table 15: Fresh dairy players lead in retail sales

Channel mix	Heritage	Hatsun	Vadilal	Parag	Kwality	Prabhat
Retail	100	100	100	67	40	27
Institutional	0	0	0	33	60	73

Source: Edelweiss research

4. Branding: Ramping up the value proposition

As companies move up the curve into VADP it becomes critical to engage in brand building. Branding offers multiple advantages viz: 1) Better realisations - National brands like *Gowardhan* ghee enjoy better realisations; 2) Easier to build product portfolio around an established core brand - Parag has been able to offer a full portfolio of cheese products and variants around its core *Go* cheese brand.

Parag and Hatsun spend the highest in brand building at ~2.5-3% of sales

Table 16: Investment in brand-building – ad spends as a % of sales

	FY13	FY14	FY15	FY16	FY17
Hatsun Agro Products Ltd.	1.52	2.02	2.20	2.31	2.60
Parag Milk Foods Ltd.	1.87	1.19	1.71	2.32	2.98
Prabhat Dairy Ltd.	0.30	0.48	0.80	0.80	1.22
Kwality Ltd.	0.09	0.13	0.34	0.07	0.30
Heritage Foods Ltd.	0.10	0.13	0.13	0.20	0.19

Source: Edelweiss research

Table 17: Pricing premium of brands – Gowardhan and Go command 4-5% premium

Brand	Description	Size	MRP	Premium/ Discount (%)
Ghee				
Gowardhan	Premium Cow Ghee (Jar)	1lt	565	
Amul	Pure Ghee (Tin)	1lt	505	11.9
Prabhat	Pure Cow Ghee (Jar)	1lt	550	2.7
Dynamix	Cow Ghee (Jar)	1lt	565	0.0
Cheese				
Go	Cheese slices	200gms	135	
Amul	Cheese slices	200gms	118	14.4
Mother Dairy	Cheese slices	200gms	130	3.8
Britannia	Processed cheddar slices	200gms	145	-6.9

Source: Edelweiss research

Company-wise dynamics

Margins

Heritage is predominantly into pouch milk and hence registers low profitability. Parag owing to its higher VADP share enjoys higher gross margins than peers at 27% (22% for Heritage). Hatsun and Vadilal too records higher gross margins due to presence in higher gross margin ice creams, which accounts for larger proportion of VADP sales. While Heritage had ~8% EBIDTA margins, we believe with the higher investments in brand building the margins will remain range bound. With investments required in A&P spends for B2C business, Parag's EBIDTA margin is only in high single digits (average of 8% in past 7 years). But, with VADP gaining ground we expect Parag's gross margins to improve and impel EBIDTA margins to 9.6% in FY20. Comparatively, Prabhat records higher EBIDTA margins due to proximity to sourcing and customers, which keeps logistics costs low.

Vadilal leads the pack with gross margins at 57%. Higher margin ice-cream business also aids Hatsun's high gross margin at 27%, followed by Parag with higher VADP

Table 18: Product-wise– Whey (consumer), ice-cream fetch highest gross margins

Product	Gross Margin (%)
Milk	15-18
Milk Powders	5-8
Curd	30-33
Paneer	25-30
Ghee	24-28
Butter	15-18
Ice-cream	45-50
Cheese	30-34
Whey (consumer)	40-50
Flavoured Milk	25-30

Source: Industry

Table 19: Company-wise gross margins: Vadilal leads followed by Parag and Hatsun

Company (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Vadilal	40	56	57	58	52	57	57	NA	NA	NA
Hatsun	25	25	24	26	26	28	27	NA	NA	NA
Parag	22	22	25	23	26	27	27	29	30	30
Heritage	20	20	23	22	19	21	22	21	22	22
Prabhat Dairy	NA	21	21	21	23	20	19	22	22	23
Kwality	9	9	8	8	9	8	10	NA	NA	NA

Source: Edelweiss research

Vadilal leads the pack in EBITDA margin at ~12%, followed by Prabhat at ~9-10% due to proximity to sourcing and customers; Heritage and Hatsun clock ~7-9%

With VADP gaining ground, we expect Parag's EBIDTA margin to jump to 9.6% in FY20 from historical average of 8%

Table 20: Product-wise EBIDTA margin – VADP generate higher EBITDA margins

Product	EBITDA Margin (%)
Milk	3-5
Milk Powders	0-2
Curd	18-22
Paneer	18-22
Ghee	10-15
Butter	5-8
Ice-cream	15-18
Cheese	14-18
Whey (consumer)	30-35
Flavoured Milk	16-18

Table 21: Company-wise EBIDTA margin – Vadilal and Prabhat lead with Parag to follow

Company (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Vadilal	10	13	11	11	10	13	12	NA	NA	NA
Prabhat Dairy	NA	10	11	10	10	10	9	9	9	10
Parag	8	9	9	8	7	9	6	9	9	10
Hatsun	7	7	7	7	7	9	9	NA	NA	NA
Heritage	7	7	10	9	6	8	8	6	7	8
Kwality	6	7	6	6	6	6	7	NA	NA	NA

Source: Industry, Edelweiss research

Cash Conversion Cycle and Asset Turns

Heritage and Hatsun have healthy/shorter cash conversion of 14-23 days. Hence, their average CFO/EBIDTA is 80% and 95%, respectively, due to significantly higher presence in pouch milk which entails very short working capital cycle. As companies shift to higher VADP in B2C channel, working capital needs rise as they have to offer higher credit periods to the channel. Further, in VADP like cheese, inventory days are higher at 3-6 months as curing depends on the type of cheese. Hence, for Parag cash conversion takes longer time at 80 days. For Prabhat working capital towards B2B business is high due to higher debtor days, which leads to stretched cash conversion cycle.

Table 22: Product-wise cash conversion cycle – Milk has the fastest operating turnover

Product	Cash Conversion Cycle (days)
Milk	5-7
Milk Powders	20-25
Curd	10-15
Paneer	15-20
Ghee	90-95
Butter	10-20
Ice-cream	30-40
Cheese	90-95
Whey (consumer)	40-60
Flavoured Milk	30-40

Source: Industry, Edelweiss resarch

Table 23: Player-wise cash conversion cycle: Heritage, Hatsun most favourable cash conversion due to higher milk

Company (days)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Heritage Foods	12	12	11	12	15	16	14	14	12	12
Hatsun Agro products	13	18	16	7	14	28	23	NA	NA	NA
Vadilal	122	118	106	111	93	66	64	NA	NA	NA
Parag		71	79	77	57	64	80	81	82	80
Prabhat		29	38	53	67	75	83	93	96	96
Kwality	105	91	82	87	91	97	97	NA	NA	NA

Source: Industry, Edelweiss research

Heritage leads the pack in cash conversion cycle due to high presence in milk, which entails very short working capital cycle

Table 24: Product-wise asset turn – Milk generates the highest asset turn

Product	Asset Turn (x)
Milk	12.0
Curd	2.0
Ghee	2.5
Cheese	1.6

Table 25: Player-wise asset turn – Heritage clocks highest

Company (x)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Heritage	5.9	7.6	8.7	7.7	7.8	8.2	7.2	4.7	4.8	4.9
Hatsun Agro	3.3	3.6	4.2	4.0	3.7	3.8	3.7	NA	NA	NA
Kwality	3.1	3.5	3.8	3.6	3.4	3.0	2.7	NA	NA	NA
Parag	1.8	2.1	1.7	1.7	2.1	2.2	2.0	2.0	2.2	2.5
Prabhat Dairy		1.1	1.3	1.5	1.4	1.5	1.5	1.5	1.6	1.7
Vadilal	1.2	1.0	1.0	1.0	1.1	1.3	1.3	NA	NA	NA

Source: Industry, Edelweiss research

Players in VADP pack have higher working capital needs as they have to offer higher credit periods

RoCE

Heritage scores high on RoCE due to milk and increasing VADP sales: Heritage has higher asset turn due to higher share of milk business and lower working capital resulting in highest RoCE among peers. Leveraging its fresh milk brand, it has now moved into high-margin VADP like curd, which has helped perk up margins. We are enthused by Heritage's strategy of enhancing milk sales and procurement geographically, and extending VADP sales with focus on maintaining their already high RoCE. As for Hatsun, despite having higher milk business, RoCE is at ~22% (versus 40% for Heritage) due to high investments made for increasing procurement beyond the home state, leading to high capital costs.

Investing in high-growth emerging VADP ahead of time to increase RoCE: Parag has low RoCE due to high investment of INR3.5bn in past 8 years in high growth and margin VADP categories like cheese and whey consumer in turn creating significant entry barriers for other prospective players. As Parag scales up its VADP (cheese and whey) sales, we expect RoCE expansion by 1064bps to ~19% over FY17-20.

Milk has highest RoCE, followed by curd

Table 26: Product-wise RoCE – Milk generates the highest RoCE

Product	RoCE (%)
Milk	44-48
Curd	30-32
Ghee	15-20
Butter	5-10
Cheese	20-22

Source: Industry, Edelweiss research

Table 27: Player-wise RoCE – Heritage scores highest

RoCE-Dairy (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E	FY20E
Heritage Foods*	21.4	36.5	66.8	52.0	31.4	52.0	39.4	32.3	38.8	41.7
Vadilal Intl	15.1	16.9	20.7	20.4	14.7	23.3	22.1	NA	NA	NA
Hatsun Agro	15.1	16.9	20.7	20.4	14.7	23.3	22.1	NA	NA	NA
Kwality	18.9	23.3	20.4	20.5	19.6	18.3	17.3	NA	NA	NA
Parag		14.5	11.4	9.1	12.3	16.4	8.4	13.7	15.2	19.0
Prabhat Dairy		0.0	11.6	11.0	11.2	10.8	9.9	9.5	11.7	14.4

**Adjusted RoCE – Adjusted for demerged segments and Future Retail investment*

Source: Industry, Edelweiss research

Heritage leads the pack in RoCE due to milk business with high asset turn

Parag lags in RoCE; however, with high investments over the years, we estimate RoCE to catapult 1064bps to ~19% over FY17-20

Outlook and Valuation

- In the domestic dairy industry, we perceive rerating potential for the under-penetrated but emerging VADP players. Accordingly, we initiate coverage on Parag with a **'BUY'** and target price of INR340, based on P/E of 24x FY20E, which is ~28%/20% discount to FMCG median and fresh dairy players like Heritage, respectively, and implies 40% upside. We believe the discount will narrow, with improving margins and ROCE, and move inline with global trend of VADP players trading in line with FMCG peers.
- We believe fresh dairy products players are comparable to the Indian FMCG players - the latter command strong brands, superior RoCE, and have significant scope for growth led by the shift to organised segment. Accordingly, we initiate coverage on Heritage with a **'BUY'** and target price of INR976, based on P/E of 30x FY20E, which is at ~10% discount to our FMCG universe and implies ~29% upside.
- We value Prabhat at 22x FY20E P/E, which is at 34% discount to domestic FMCG players, 27%/8% discount to Heritage/Parag due to higher B2B sales. However, with shifting focus to value-added products and B2C segment we believe the discount will narrow.

Globally VADP companies trade in line with their FMCG peers

Globally, value-added dairy companies trade in line with their FMCG peers

India has strong potential of ~15-30% plus CAGR in VADP over next few years. We perceive rerating potential for under-penetrated emerging VADP-oriented (cheese, whey, UHT milk etc) companies like Parag due to their growth prospects. They are likely to follow the footsteps of global VADP dairy players, which trade in line with their FMCG peers. However, in the interim as the emerging VADP (~27% of sales in FY17), is capital intensive versus traditional dairy companies, we have valued Parag at 24x FY20E EPS and 28%/20% discount to FMCG players and Heritage's target FY20E P/E of 20x FY20E, respectively. Going ahead, we believe this discount to FMCG peers will gradually reduce with improving return ratios and margins.

Drawing comparisons with Indian FMCG peers

We believe fresh dairy products companies are comparable to the Indian FMCG players, which command strong brands, growth and superior RoCEs, and hence available at median P/E of 33x FY20E. Comparatively, Heritage derives ~83% of sales from fresh dairy products and has strong regional moat, leading to healthy return ratio of ~42%. In fresh dairy segments where Heritage is a major player, the shift from unorganised to organised is huge. Hence, we assign mere 10% discount to Heritage versus its Indian FMCG peers.

Parag: Redefining categories

We have valued Parag at 24x FY20E P/E, which is at 28% discount to domestic FMCG players due to capital-intensive emerging VADP; going ahead, we believe, this discount will narrow with improving return ratios and margins

We believe **Parag** is well placed to capture the dairy opportunity in India as it metamorphoses to a branded dairy consumer player through significant investments in VADP (currently at strong ~64% of sales and set to grow to 70%), dedicating capex much ahead of the curve and incurring high ad spends. This will help it grow EBIDTA ~2.3x and register 49% CAGR in net profit over FY17-20E with 1064bps expansion in pre-tax RoCE to 19%. We initiate coverage on Parag with a **'BUY'** and target price of INR340, implying 40% upside from current levels, based on P/E of 24x FY20E (**at ~28% discount to our FMCG universe and 20% discount to fresh dairy product company, Heritage)**. At CMP, Parag is available at 24.0x FY19E and 17.1x FY20E P/E.

We have valued Heritage at 30x FY20E P/E, mere ~10% discount to domestic FMCG players, led by strong regional moat yielding healthy return ratio at ~40% and scope of shift in the huge fresh dairy segments that Heritage deals in

Heritage: Leveraging moat to take the right stride

We like **Heritage Foods** as: 1) It is a strong franchisee in the high-RoCE milk business in the South; and 2) It targets to be a pan-India VADP player, straddling high-RoCE and margins curd, yogurt and ice-cream segments. We estimate 21% EBIT CAGR and highest pre-tax RoCE at ~42% to sustain over FY17-20. We initiate coverage on Heritage with a '**BUY'** and target price of INR976, implying ~29% upside from current levels, based on P/E of 30x FY20E (which is at ~10% discount to our FMCG universe). At CMP, the stock is available at 35.2x FY19E and 25.9x FY20E P/E.

We value Prabhat at 22x FY20E P/E, which is at 34% discount to domestic FMCG players due to higher B2B sales; with shifting focus to value-added products and B2C segment we believe the discount will narrow

Prabhat: Metamorphosing into value-added B2C player

With **Prabhat** shifting focus to value-added products and B2C segment, we estimate sales, EBITDA and PAT CAGR of 15%, 19% and 39%, respectively, over FY17-20. We maintain **'BUY'** with TP of INR211, 22x FY20E EPS (34% discount to FMCG players, 27%/8% discount to Heritage/Parag), implying 30% upside from current levels. At CMP, the stock trades at 23.4x FY19E and 17.0x FY20E EPS.

We believe Parag, Heritage and Prabhat are well placed to capture the organised milk consumption and increasing VADP uptick in India's dairy space. This, we believe, will enable them to register a sustainable run over competition.

Table 28: Valuation snapshot

Company Name	Currency	M Cap	FY17-20E Sales CAGR (%)	FY17-20E PAT CAGR (%)	FY17 EBITDA margin (%)	P/E (x) FY17	P/E (x) FY18E	P/E (x) FY19E	P/E (x) FY20E	EV/EBITDA (x) FY17	EV/EBITDA (x) FY18E	EV/EBITDA (x) FY19E	EV/EBITDA (x) FY20E	EV/Sales (x) FY17	EV/Sales (x) FY18E	EV/Sales (x) FY19E	EV/Sales (x) FY20E	RoE (%) FY17	RoE (%) FY18E	RoE (%) FY19E	RoE (%) FY20E
Global Dairy																					
Dean Foods	USD	1,016	(1.1)	(18.6)	5.9	7.1	14.0	13.3	12.8	4.3	5.5	5.4	5.5	0.3	0.2	0.3	0.3	20.7	11.7	10.3	10.1
Fonterra	NZD	10,345	6.7	11.4	8.6	13.9	12.1	10.9	10.1	9.9	8.6	8.1	7.6	0.8	0.8	0.7	0.7	10.5	11.7	12.6	13.1
China Mengniu Dairy Co	HKD	78,466	9.2	24.6	7.5	32.4	27.1	19.8	16.9	17.7	14.0	11.7	10.3	1.3	1.2	1.1	1.0	(3.5)	10.7	13.4	14.3
Parmalat	EUR	5,844	4.3	15.0	8.6	39.4	38.4	26.3	22.5	10.4	12.2	10.5	9.6	0.9	0.9	0.8	0.8	2.5	4.0	6.5	7.0
Mean			**4.8**	**8.1**	**7.6**	**23.2**	**22.9**	**17.6**	**15.6**	**10.6**	**10.1**	**8.9**	**8.3**	**0.8**	**0.8**	**0.7**	**0.7**	**7.6**	**9.5**	**10.7**	**11.1**
Median			**5.5**	**13.2**	**8.0**	**23.1**	**20.5**	**16.5**	**14.9**	**10.1**	**10.4**	**9.3**	**8.6**	**0.9**	**0.8**	**0.8**	**0.7**	**6.5**	**11.2**	**11.5**	**11.6**
Global VADP Companies																					
Nestle SA	CHF	26,511	2.9	6.8	18.8	24.8	24.2	22.1	20.0	16.9	16.4	15.3	14.2	3.2	3.1	3.0	2.9	13.4	16.0	17.1	18.9
Danone	EUR	47,138	7.3	11.7	17.8	22.7	20.6	18.5	16.7	16.8	14.9	13.6	12.6	3.0	2.6	2.5	2.4	13.4	15.1	16.0	16.4
Glanbia	EUR	4,574	(3.6)	8.2	10.7	20.0	17.5	16.6	15.3	17.7	16.2	15.7	14.8	1.9	2.3	2.2	2.1	18.7	17.7	16.4	15.6
Almarai	SAR	55,560	4.5	7.3	29.5	26.7	25.0	24.2	21.6	15.5	16.2	15.5	14.7	4.6	4.6	4.3	4.0	16.1	15.4	16.1	16.6
Vietnam Dairy Products	VND	284,455,700	13.0	11.6	25.1	33.6	28.8	25.4	22.7	23.4	20.4	17.9	16.3	5.9	5.3	4.7	4.1	39.3	46.6	48.1	47.8
Mean			**4.8**	**9.1**	**20.4**	**25.6**	**23.2**	**21.3**	**19.3**	**18.1**	**16.8**	**15.6**	**14.5**	**3.7**	**3.6**	**3.4**	**3.1**	**20.2**	**22.2**	**22.7**	**23.1**
Median			**4.5**	**8.2**	**18.8**	**24.8**	**24.2**	**22.1**	**20.0**	**16.9**	**16.2**	**15.5**	**14.7**	**3.2**	**3.1**	**3.0**	**2.9**	**16.1**	**16.0**	**16.4**	**16.6**
Global FMCG																					
Unilever Plc	EUR	140,735	2.7	10.2	18.0	25.5	21.8	20.0	17.8	16.3	14.4	13.7	12.7	2.9	2.9	2.8	2.7	32.6	35.2	45.7	53.0
Procter & Gamble Co/The	USD	228,300	3.1	4.9	26.4	23.0	21.6	20.3	19.0	14.4	14.0	13.4	12.9	3.8	3.7	3.6	3.5	27.8	19.3	20.2	23.4
Reckitt Benckiser Group Plc	GBP	45,478	11.5	9.1	29.9	21.7	19.7	17.9	16.6	20.3	17.7	15.7	14.8	6.1	5.2	4.5	4.4	23.9	24.4	23.4	22.6
Colgate-Palmolive Co	USD	63,619	3.0	4.6	29.1	25.8	25.2	23.6	21.8	62.2	62.6	59.2	56.1	18.1	17.8	17.2	16.6	NA	NA	NA	NA
Mean			**5.1**	**7.2**	**25.9**	**24.0**	**22.1**	**20.4**	**18.8**	**28.3**	**27.1**	**25.5**	**24.1**	**7.7**	**7.4**	**7.0**	**6.8**	**28.1**	**26.3**	**29.8**	**33.0**
Median			**3.1**	**7.0**	**27.8**	**24.2**	**21.7**	**20.1**	**18.4**	**18.3**	**16.0**	**14.7**	**13.8**	**5.0**	**4.4**	**4.1**	**3.9**	**27.8**	**24.4**	**23.4**	**23.4**
India FMCG																					
Nestle India	INR	742,059	9.3	23.2	18.8	79.4	62.4	50.8	42.4	41.8	38.1	31.7	26.9	7.9	7.4	6.8	6.0	31.8	38.6	45.4	51.8
Dabur	INR	600,238	10.5	13.0	19.6	47.0	43.0	37.4	32.6	39.6	36.9	32.2	28.2	7.8	7.3	6.5	5.8	28.3	26.6	26.4	26.7
Britannia	INR	576,998	14.0	19.3	14.3	65.2	56.8	46.8	38.4	44.6	38.3	31.8	26.4	6.4	5.7	5.0	4.3	37.0	33.0	32.3	32.5
Marico	INR	400,655	12.9	13.9	19.6	50.0	46.1	38.8	33.4	33.7	32.3	27.3	23.6	6.6	6.0	5.2	4.6	36.8	34.7	36.8	39.1
GSK Consumer	INR	255,786	12.4	11.5	22.1	39.0	36.6	32.0	28.1	26.8	26.7	23.1	20.2	5.9	5.2	4.7	4.2	22.2	21.5	22.3	22.7
Mean			**11.8**	**16.2**	**18.9**	**56.1**	**49.0**	**41.1**	**35.0**	**37.3**	**34.5**	**29.2**	**25.0**	**6.9**	**6.3**	**5.6**	**5.0**	**31.2**	**30.9**	**32.6**	**34.5**
Median			**12.4**	**13.9**	**19.6**	**50.0**	**46.1**	**38.8**	**33.4**	**39.6**	**36.9**	**31.7**	**26.4**	**6.6**	**6.0**	**5.2**	**4.6**	**31.8**	**33.0**	**32.3**	**32.5**
India Dairy																					
Heritage Foods	INR	35,188	22.9	18.4	7.7	43.1	54.7	35.2	25.9	24.6	25.1	17.5	13.4	1.3	1.4	1.2	1.0	30.2	19.9	26.0	28.5
Hatsun Agro	INR	133,939	18.8	43.4	9.1	100.0	81.7	61.2	33.9	37.2	30.3	24.6	17.1	3.4	2.9	2.5	2.0	46.4	35.3	34.8	49.5
Kwality	INR	23,939	10.3	19.1	6.6	12.3	11.0	8.7	NA	8.5	7.1	6.0	NA	0.6	0.5	0.5	NA	19.7	16.7	17.7	NA
Parag	INR	20,339	14.1	48.9	6.2	56.4	27.8	24.0	17.1	20.3	12.9	10.8	8.5	1.3	1.2	1.0	0.8	7.1	10.6	11.0	13.8
Prabhat	INR	15,911	14.8	38.9	9.0	45.5	37.1	23.4	17.0	14.1	12.8	10.3	8.3	1.3	1.1	1.0	0.8	5.8	6.7	9.9	12.4
Mean			**16.2**	**33.7**	**7.7**	**51.4**	**42.5**	**30.5**	**23.5**	**21.0**	**17.6**	**13.9**	**11.8**	**1.6**	**1.4**	**1.2**	**1.2**	**21.8**	**17.8**	**19.9**	**26.1**
Median			**14.8**	**38.9**	**7.7**	**45.5**	**37.1**	**24.0**	**21.5**	**20.3**	**12.9**	**10.8**	**11.0**	**1.3**	**1.2**	**1.0**	**0.9**	**19.7**	**16.7**	**17.7**	**21.2**

Source: Bloomberg, Edelweiss research

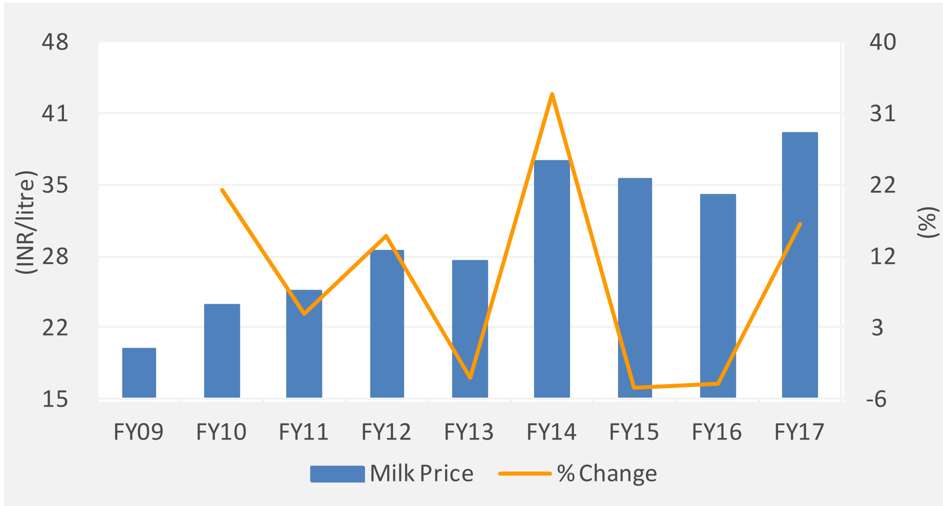
Note: Parmalat has 93% sales from dairy, Nestle SA 16%, Danone 49%, Almarai 76% and Glanbia has 35% sales from Global performance nutrition.

Note: Kwality's CAGR calculation is for FY17-19

Annexure

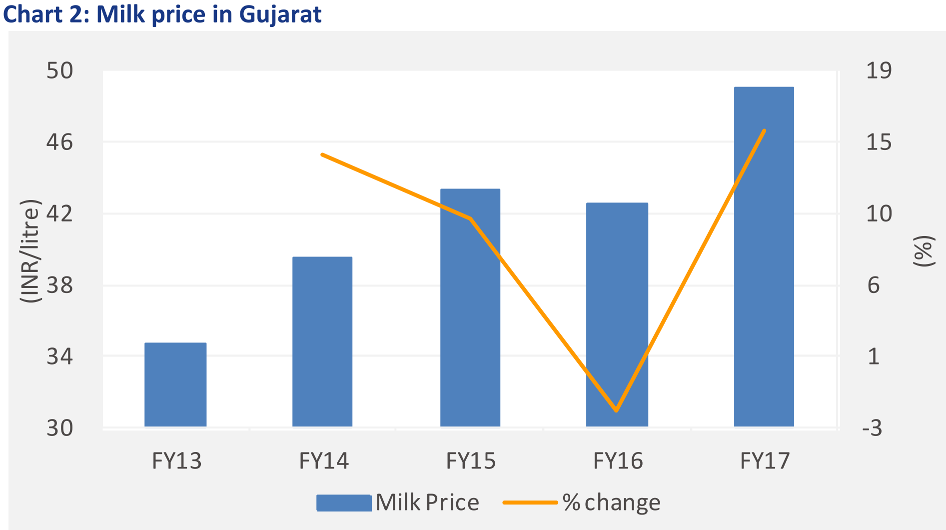
Milk Prices

Chart 1: Milk price in Delhi



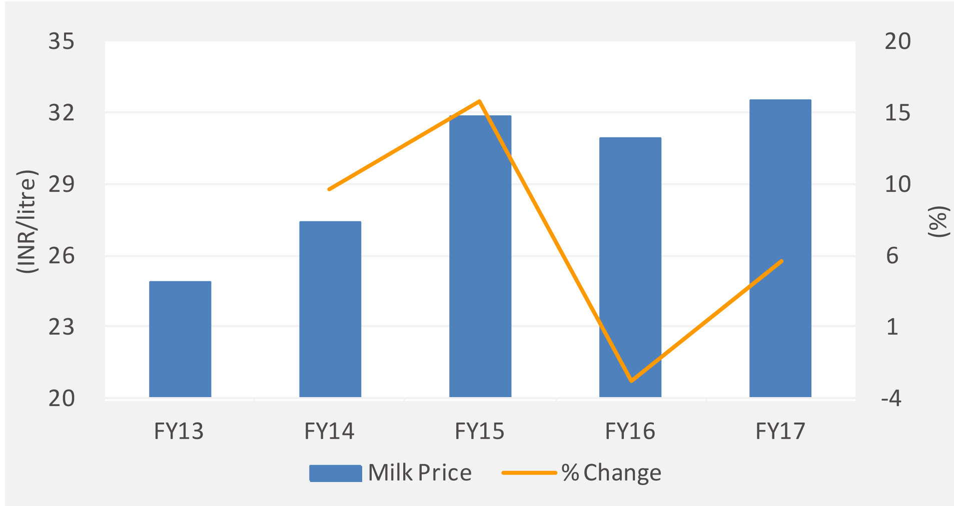
Source: Bloomberg, Edelweiss research

Chart 2: Milk price in Gujarat



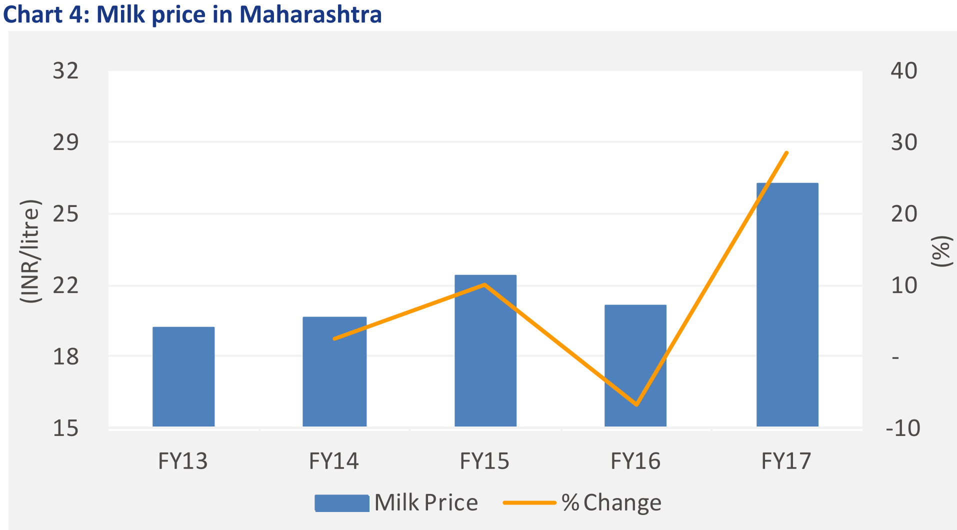
Source: Amul, Edelweiss research

Chart 3: Milk price in Andhra Pradesh



Source: Heritage, Edelweiss research

Chart 4: Milk price in Maharashtra



Source: Prabhat, Edelweiss research

Table 1: State wise milk production – national share and 3 year CAGR

	FY16 (mn litres)	Share (%)	CAGR (%)
Uttar Pradesh	26,387	17.0	4.2
Rajasthan	18,500	11.9	9.9
Gujarat	12,262	7.9	5.9
Madhya Pradesh	12,148	7.8	11.2
Andhra Pradesh	10,817	7.0	(5.4)
Punjab	10,774	6.9	3.5
Maharashtra	10,153	6.5	5.1
Haryana	8,381	5.4	6.0
Bihar	8,288	5.3	6.6
Tamil Nadu	7,244	4.7	1.1
Karnataka	6344	4.1	3.5
West Bengal	5038	3.2	1.2
Telangana	4442	2.9	NA
Kerala	2650	1.7	(1.7)
J & K	2273	1.5	11.7

Source: NDDB, Edelweiss research

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India Midcaps

INITIATING COVERAGE

PARAG MILK FOODS

Redefining categories

India Equity Research| Dairy

Edelweiss
Ideas create, values protect

Parag Milk Foods (Parag) has made a commendable leap in a short span by capturing leading market share in high-margin value-added products (VADP)—No. 2 in cheese (32% market share) and largest cow ghee brand in India. We estimate VADP's share in sales to catapult to 70% (64% currently) over FY17-20 riding sustained innovation focus, investment in high-margin products (whey consumer) and capacity augmentation. Hence, we envisage Parag's EBITDA to jump ~2.3x and RoCE to catapult 1064bps to 19.0% over FY17-20E. Initiate with 'BUY' valuing at 24x FY20E P/E, with TP of INR340, implying 40% upside.

Innovation focus, capacity augmentation to bolster value add share

Parag boasts of strongest value-added portfolio—cheese, ghee, paneer, UHT, curd—contributing 64% to sales, way ahead industry's 34%, with strong 170 plus SKUs. This has resulted in it gaining leading market share in VADP (cheese, ghee) in record time. Further, we estimate its VADP sales share to jump to 70% spearheaded by: a) sustained focus on innovation—introducing 3-4 products per year; b) overall 53% capacity expansion led by—cheese 50%, whey 150%, paneer 4x, UHT 48% and curd 33%. Management is targeting INR1.5bn sales (INR15bn category) in 3 years and INR3bn in 5 years in whey consumer brand *Avvatar* fortifying its VADP sales.

Improving mix to spur earnings and return ratios

The company's biggest competitive advantage is the scale created—invested INR3.5 bn over FY08-17 on high-margin cheese and whey. This has enabled Parag move up value chain into whey consumer, a strong 45% gross margin segment (other VADP 25-40% gross margin). Hence, we estimate the already strong gross margin (27%) to surge 303bps to 30.3% and EBIDTA margin by 335bps to 9.6% over FY17-20. It will also strengthen its moat by enhancing capital efficiency, leading to RoCE expanding 1064bps.

Outlook and valuations: Solid value-added play; initiate with 'BUY'

With strongest position in VADP and further moving up the value chain, along with strong brands and innovative portfolio, we have valued the stock at 24x FY20E EPS (~28% discount to FMCG estimates). With robust earnings visibility with revenue and PAT CAGR of 14% and 49%, respectively over FY17-20E, initiate with **'BUY'.**

Financials

Year to March	FY17	FY18E	FY19E	FY20E
Net Revenues (INR mn)	17,307	19,027	22,144	25,680
EBITDA (INR mn)	1,082	1,715	1,984	2,466
Adjusted PAT (INR mn)	361	733	847	1,190
Adjusted Diluted EPS (INR)	4.3	8.7	10.1	14.2
Diluted P/E (x)	56.4	27.8	24.0	17.1
EV/EBITDA (x)	20.3	12.9	10.8	8.5
RoE (%)	7.1	10.6	11.0	13.8

EDELWEISS RATINGS	
Absolute Rating	BUY
Investment Characteristics	Growth

MARKET DATA *(R: NA, B: PARAG IN)*	
CMP	: INR 242
Target Price	: INR 340
52-week range (INR)	: 292 / 203
Share in issue (mn)	: 84.1
M cap (INR bn/USD mn)	: 20 / 309
Avg. Daily Vol. BSE/NSE ('000)	: 334

SHARE HOLDING PATTERN (%)

	Current	Q1FY18	Q4FY17
Promoters *	48.7	48.2	47.5
MF's, FI's & BKs	12.2	2.7	2.3
FII's	19.9	21.2	24.4
Others	19.2	27.93	25.9
** Promoters pledged shares (% of share in issue)*	:		*NIL*

PRICE PERFORMANCE (%)

	Sensex	Stock	Stock over Sensex
1 month	1.7	(10.4)	(12.1)
3 months	6.2	(2.8)	(9.1)
12 months	28.0	(12.6)	(40.6)

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017

Investment Rationale

"At Parag, we have always led through innovation. We have created products that redefine categories and, in many cases, we have launched products for the first time in the country"

Mr. Devendra Shah
Chairman

Parag has created strong brands in record time—*Go Cheese* captured strong No. 2 spot within 8 years of launch

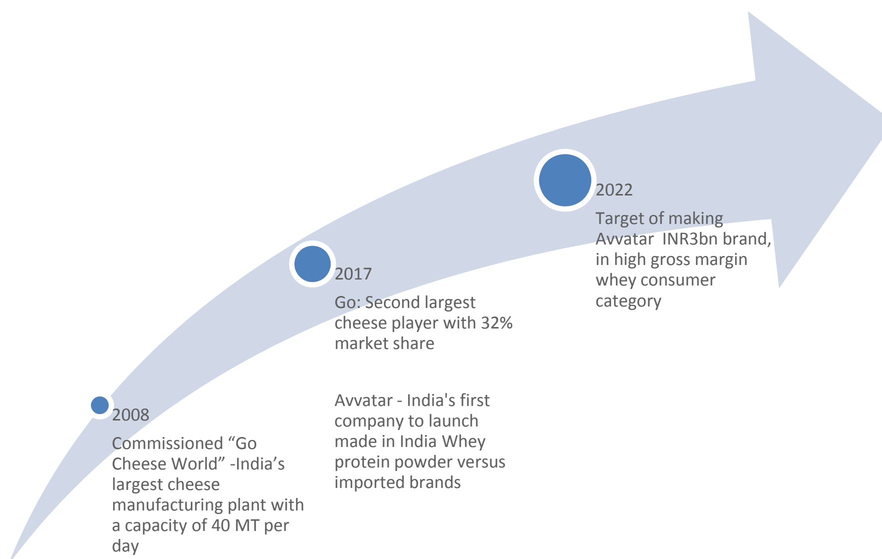
Vibrant brand portfolio underpinned by prudent marketing strategy

Parag has the distinction of having created strong brands—*Gowardhan, Go* and *Pride Of Cows* (premium milk)—over the years, lending it competitive edge. Besides creating brands, the company's USP is scaling them up in record time. Case in point is *Go Cheese*, which captured the No. 2 spot within 8 years of launch. Parag's brand push is underpinned by robust 31% CAGR in ad spends to INR520mn over FY13-17. We estimate ad & marketing spends to jump to ~4.5% of sales from ~3.0% in FY17 further led by rationalisation of in-store expenses.

Parag, since inception, has focused on creating brands. A well thought out marketing & branding strategy with distinct brands for different products lends competitive edge. It has created strong and recognisable brands like *Gowardhan* (fresh milk, ghee, paneer), *Go* (cheese products, UHT milk) and *Pride Of Cows* (premium milk). The company's focus now is on creating the *Avvatar* brand in the whey consumer segment. Leveraging its product diversification strategy, the company has been scaling the value curve from traditional to niche branded products.

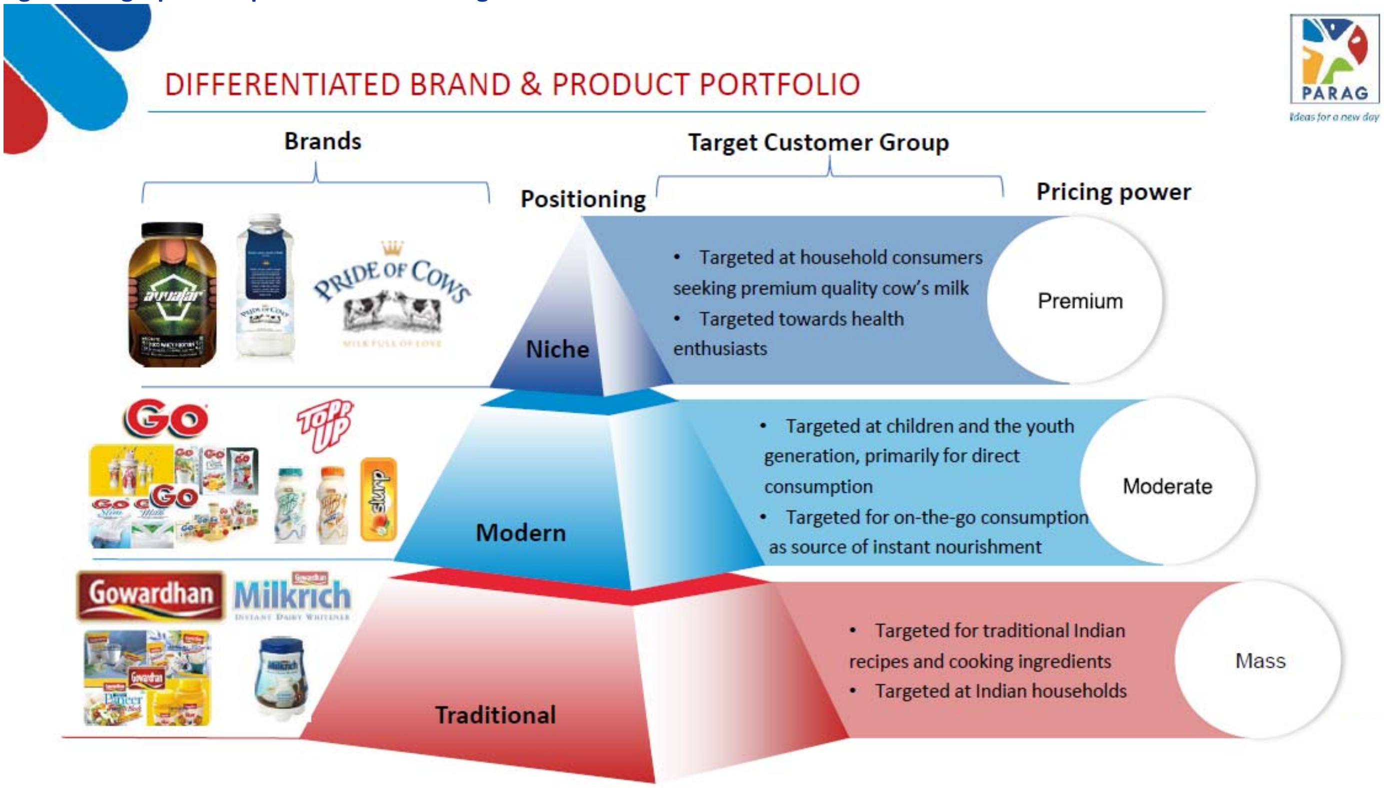
Besides creating brands, Parag's USP is scaling up new brands in record time. Case in point is *Go Cheese*—production commenced in 2008-09 and it captured strong No. 2 spot with 17% sales CAGR over FY13-17. Reinvestment from the growth of cheese has given way to movement up the value chain into whey consumer (a by-product while manufacturing cheese), a high gross margin product, with the introduction of brand Avvatar. Management is targeting to attain INR1.5bn sales in 3 years, INR3bn sales in 5 years in Avvatar.

Fig. 1: Strong market share in record time



Source: Edelweiss research

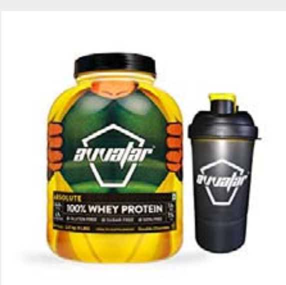
Fig. 2: Parag's product portfolio across categories



Source:Company, Edelweiss research

Ad & marketing spends to jump to ~4.5% of sales in FY20E from ~3.0% in FY17

Parag reinforces brand recall via social media and consumer engagement programmes like free sampling of *Avvatar* whey protein in gyms along with distribution of free jars

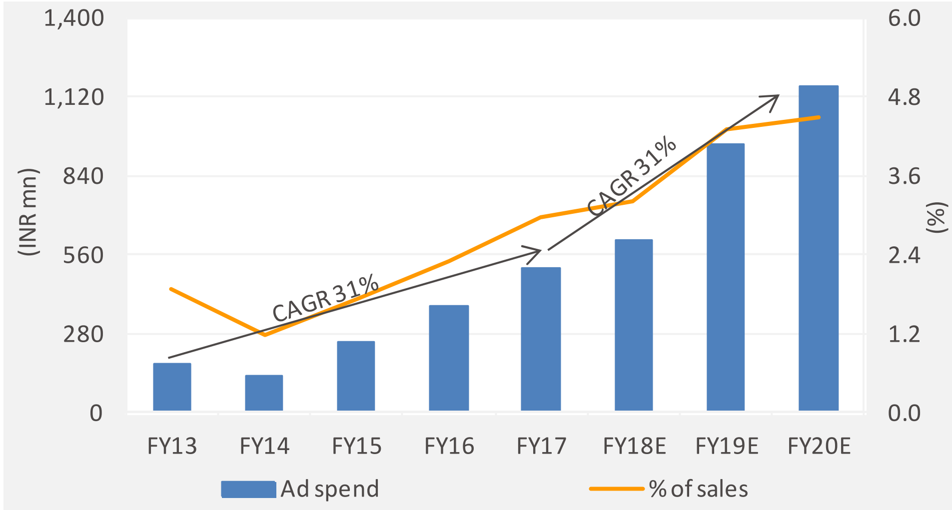


Aggressive ad spends strengthening brand equity

Parag uses various media channels to promote its brands and extensively promotes them in stores and supermarkets through in-shop activities. Its ad spends have clocked a robust 31% CAGR to INR520mn over FY13-17 helping the company garner a strong brand image. It aims to enhance brand recall of products via strategic branding initiatives through use of social media and consumer engagement programmes. *For example, for its recently launched Avvatar brand, Parag has introduced free sampling in gyms along with free jars.*

We estimate the company's ad & marketing spend to jump to ~4.5% of sales from ~3.0% in FY17, further led by rationalisation of in-store expenses (BTL activities). Parag has strong combined marketing and in-store expenses at ~8.5-9% of sales.

Chart 1: Sharp rise in ad spend fuelling strong brand equity



Source: Company, Edelweiss research

Parag's brand equity enables it to command pricing premium of ~4-5% versus organised players in key categories like cheese & ghee and 20% in paneer.

Parag commands ~4-5% pricing premium over organised players in cheese and ghee underpinned by its strong brand equity

Table 1: Pricing of ghee, cheese and paneer of Parag versus peers

Brand	Description	Size	MRP	Premium/ Discount (%)
Ghee				
Gowardhan	Premium Cow Ghee (Jar)	1lt	565	
Amul	Pure Ghee (Tin)	1lt	505	11.9
Prabhat	Pure Cow Ghee (Jar)	1lt	550	2.7
Dynamix	Cow Ghee (Jar)	1lt	565	0.0
Cheese				
Go	Cheese slices	200gms	135	
Amul	Cheese slices	200gms	118	14.4
Mother Dairy	Cheese slices	200gms	130	3.8
Britannia	Processed cheddar slices	200gms	145	-6.9
Paneer				
Gowaradhan	Classic Block Paneer	200gm	85	
Mother Dairy	Fresh Paneer	200gm	70	21.4
Amul	Fresh Paneer	200gm	65	30.8
Prabhat	Fresh Malai Paneer	200gm	75	13.3
Punjab Sind	High Protein Low Fat	200gm	75	13.3

Source: Edelweiss research

Sub-segmentation, premuimisation driving innovation DNA

Sustained product innovation reflected in 75 SKUs in cheese plant

As a policy, it introduces 3-4 products every year, differentiating it from other players

Parag, as a policy, introduces 3-4 differentiated products every year. This lends it a distinctive edge as it presciently invests in future categories, bolstering a strong sustainable business model. Moreover, the company has steadily developed a portfolio of variants of core brands, while also devising a premiumisation strategy. This is envisaged to not only differentiate it from peers, but also help garner & retain customers as well as boost realisations and margins.

Parag has, anchored by sustained innovations, introduced multiple new products based on consumer preferences and also to tap additional demand. This is demonstrated by their capability of manufacturing 75 SKUs in their cheese plant.

As a policy, it introduces 3-4 products every year, differentiating it from other players. This lends Parag a distinctive edge as it presciently invests in future categories bolstering a strong sustainable business model. Comparatively, peers with lower share of value added products are more dependent on milk, where the competition from co-operatives is intense.

Fig. 3: Strong thrust on R&D

Source: Company

Sub-segmentation strategy across products

What differentiates Parag is the steady development of a portfolio of variants around core brands. Post launching Go cheese cheese, it has launched a slew of cheese variants such as mozzarella, cheddar, ricotta and processed cheese. The company also sells different formats of cheese such as cheese sauce for nachos, cheese slices in different flavours, pizza cheese, cheese cubes, cheese spread and cheese triangles. This strategy is envisaged to not only differentiate it from peers, but also help garner and retain customers.

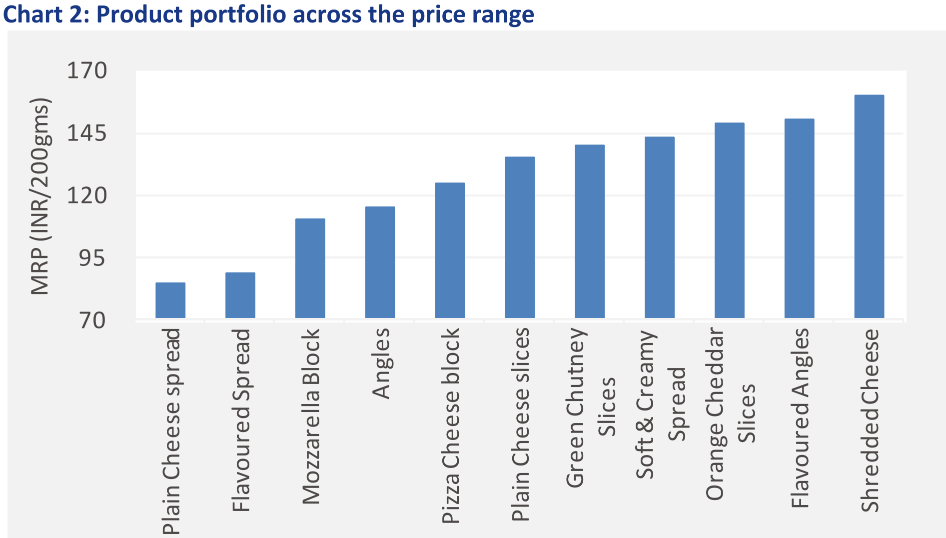
Fig. 4: Parag's cheese range

Source: Company

Premiumisation strategy

Parag is undertaking premiumisation strategy for its cheese products. Most products are priced at a premium to the base cheese product range. As consumer preferences evolve, the company aims to cater to a larger set of consumers, which is envisaged to improve its realisation and margin.

Chart 2: Product portfolio across the price range



Source: Edelweiss research

Pride Of Cows: Premium milk offering

Parag sells premium milk through its subsidiary Bhagyalaxmi Dairy under the *Pride Of Cows* brand. The company has set up a dairy farm with ~2,000 Holstein cows in Manchar. Thus, the product is integrated right from the farm till branding, enabling it to charge ~INR90/ltr for milk, 2x normal fresh milk. This is a high-margin brand with ~45-50% gross margin, leading to premiumisation in a basic commodity product such as milk.

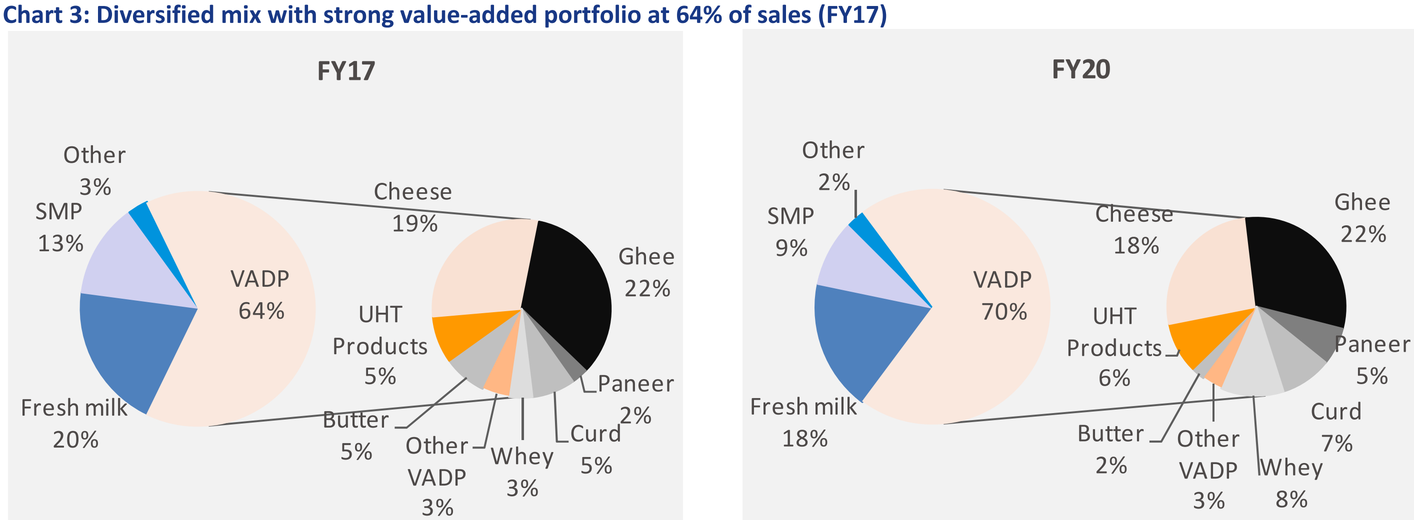
Strongest VADP at 64% of sales versus overall dairy industry's 34%

Strong value added products portfolio

Parag boasts of a vibrant range of value-added products—cheese, UHT, whey, curd, flavoured milk,etc—which contributed 64% to FY17 sales. As a result of sustained focus on innovation, we estimate overall VADP share to jump to 70% of sales and clock 17% CAGR over FY17-20 versus 14% overall sales CAGR. This growth in VADP will be led by cheese, whey consumer, paneer and curd.

Parag has the largest range of value-added products amongst—cheese, UHT, whey, curd, flavored milk and more—which contribute 64% to sales. This is way ahead of industry's 34%. This differentiates the company from other dairy players, who focus only on fresh milk products.

Chart 3: Diversified mix with strong value-added portfolio at 64% of sales (FY17)

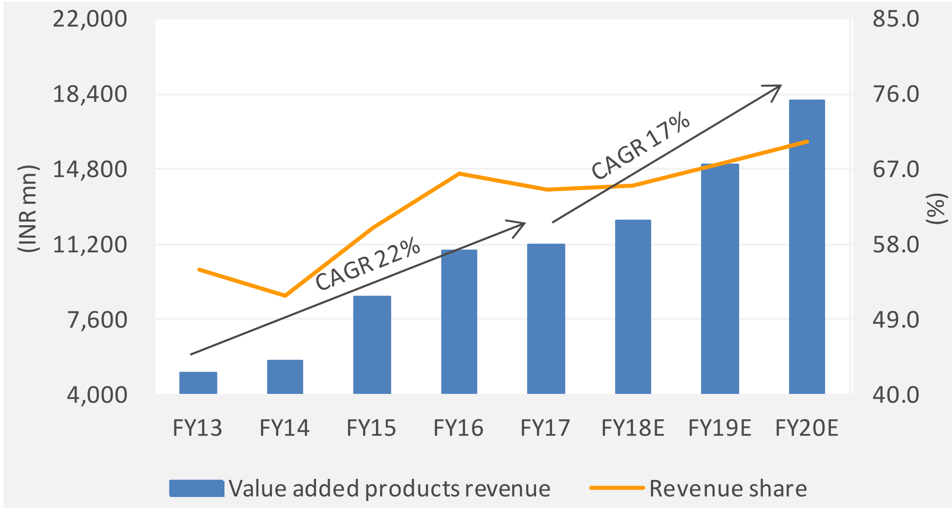


Source: Company, Edelweiss research

The company has a strong 32% market share in cheese (~19% of revenue in FY17), making it the second largest player after Amul (~40% share). Also, it has the largest cow ghee brand in India with the distinction of having created the category.

The value-added category in the company's portfolio has posted a strong 22% CAGR over FY13-17, surpassing Parag's overall 17% CAGR. With sustained focus on innovation and increasing capacity in VADP, we estimate 70% of sales from VADP in FY20.

Chart 4: Improving mix leading to strong 17% CAGR in VADP sales



Source:Company, Edelweiss research

A) **Cheese: Strong innovator**

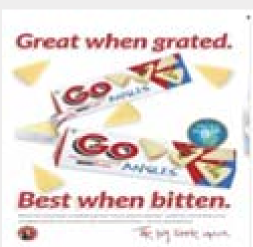
Cheese contributed 19% to sales, but 28% to gross profit in FY17.

Parag's value proposition

- **Strong market share:** Parag is a strong player in the high-growth cheese segment with 32% market share, second largest after Amul (~40% share).
- **Widest portfolio:** The company has created widest portfolio of cheese products with strong (75) SKUs. Apart from selling different types of cheese such as mozzarella, cheddar, ricotta and processed, the company also sells different cheese formats—rolled out cheese sauce for nachos, cheese slices in different flavours, pizza cheese, cheese cubes, cheese spread & cheese creamy spread and cheese triangles.
- **Premiumisation strategy:** Apart from a wide range of portfolio, Parag has continuously introduced new products at a premium to the base cheese product range, such as flavoured slices, flavoured spreads, nacho cheese, etc. This will help improve realisations and margins with changing consumer preferences.
- **Strong capacity addition:** Cheese is a high-margin segment with ~32% gross margin. Parag has been strategically expanding capacity in this value-added segment. With IPO proceeds, the company has expanded its cheese facility by 50% to 60MT per day to cater to expanding retail and institutional demand. According to management, Parag is running at ~60-65% utilisation post cheese division's capacity expansion.
- **Strong player across cheese segments:** The company has a strong leading position in the institutional segment, which contributes 55% to cheese sales; retail contributes 45%. While Parag has strong presence in the institutional segment (supplies to McCainFoods, Jubilant Foodworks, Yum Foods, Sam's Pizza, MTR Foods, Mother Dairy, etc), increasing advertisement & promotional expenses and network expansion are envisaged to expand B2C sales as well.

Cheese manufacturing is a high capital intensive business, hence it is largely organised

Parag is leagues ahead of competition underpinned by prescient capex—INR3.5bn investment in cheese & whey in past 8 years



We estimate whey consumer to contribute 5% to sales (INR1.3bn) with robust gross margin of ~45% in FY20—highest in value-added products—leading to 7% contribution at the gross profit

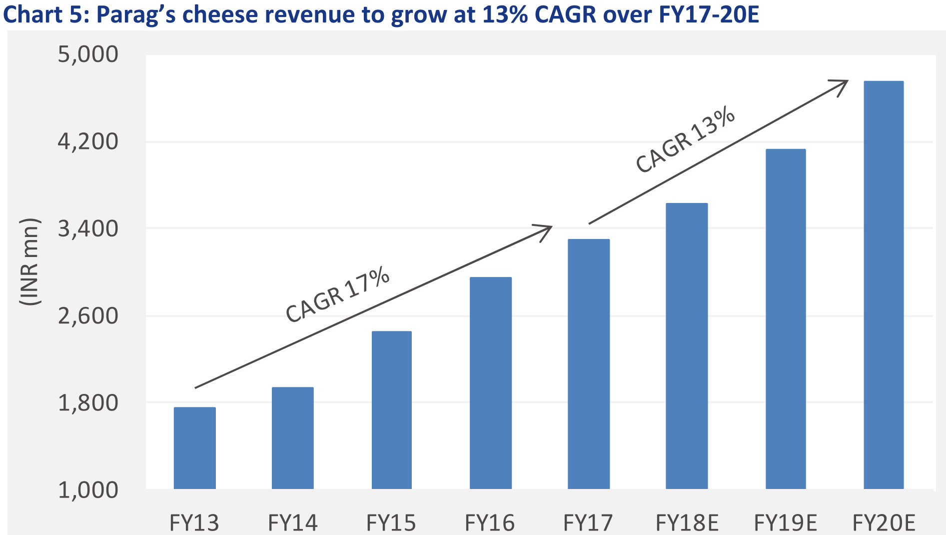
The company has roped in Chef Ranveer Brar to promote its cheese brand to gain further traction among consumers. Further, it has hired Vector Consulting with a mandate to ensure doubling of the HORECA (Hotels, Restaurants and Caterers) direct customers base.

- **Huge first-mover advantage:** Cheese manufacturing is a high capital intensive business, requiring capex as well as working capital. Hence, the cheese market is largely organised.

  Parag leagues ahead of competition underpinned by prescient capex, INR3.5bn investment in cheese & whey over the past 8 years, further bolstered by strong innovation & branding. Further, huge cheese volumes impart Parag the scale to produce the hugely profitable whey consumer, lending it strong first-mover advantage.

While growth in cheese sales was strong till FY16, weak macroeconomic factors took a toll on sales of QSR & restaurants leading to weak volumes over the past 18-24 months. With improving economy and increasing utilisation in the expanded capacity we see gradual pick up in the segment and estimate cheese sales to clock 13% CAGR to INR4.7bn over FY17-20. We have been conservative in our cheese revenue forecasts due to Amul's increasing aggression in the segment, particularly HORECA.

Chart 5: Parag's cheese revenue to grow at 13% CAGR over FY17-20E



Source: Company, Edelweiss research

B) **<u>Whey consumer (*Avvatar*):</u> Huge gross margin driver -** With focus on high gross margin products and having attained scale in cheese, Parag has expanded capacity in whey consumer. Till now, the company was selling whey protein to institutional customers. However, it has recently launched whey protein consumer in retail markets under the *Avvatar* brand. While whey consumer commands 12-13x higher realisation (INR2000, ex factory realisation) over institutional whey (net realisation of ~INR150), it also entails strong gross margin of ~45% —highest in value-added products (average gross margin for value-added products stands at ~30%).

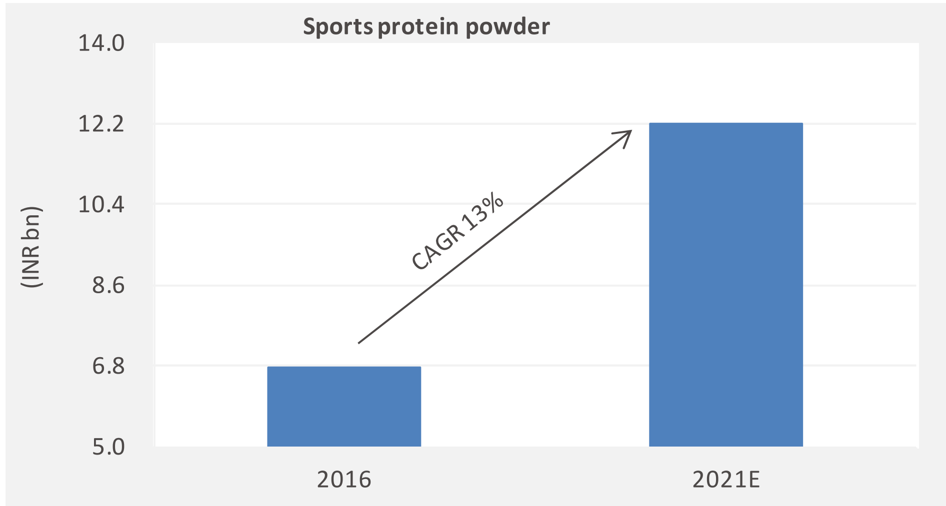
As of FY17, whey contributes mere ~3% to Parag's total sales and 3% to gross profit. However, we expect total whey sales to catapult 4x from INR470mn in FY17 to

INR2.1bn in FY20, led by the rapid growth of Avvatar sales at INR1.3bn in FY20. Further, this segment is estimated to contribute ~8% to the company's sales (5% from whey consumer), but strong 11% (7% from whey consumer) to gross profit in FY20.

Sports nutrition industry: Euro Monitor pegs the sports protein powder category at INR7bn, which is estimated to post 13% CAGR over 2016-2021E to INR12.2bn by FY21. With unorganized segment constituting ~50% of the market, overall addressable market stands at ~INR15bn.

Whey consumer's overall addressable market stands at ~INR15bn as unorganised segment constitutes ~50%

Chart 6: Sports protein powder industry to grow at 13% CAGR over 2016-21E



Source:Euromonitor, Edelweiss research

Entry barriers in consumer whey

Separating whey protein from whey is a cumbersome process entailing high investments, which precludes competition like Amul from entering the segment

Parag is estimated to generate 25% plus RoCE in cheese & whey consumer compared to other pure cheese players' RoCE of ~20-22%

- **Scale advantage:** Parag has scale advantage, which will be difficult for other players to replicate since producing whey consumer becomes feasible only after reaching a certain scale of production in cheese. The company has touched 40MT capacity in cheese and has further expanded it to 60MT.
- **Investment in infrastructure:** Parag has invested ~INR2bn in creating whey products' filtration processing infrastructure over the past 8 years. It is further investing INR323mn for additional technological infrastructure to increase concentration and grading of whey proteins and sell them directly to retail consumers. As per large competitors like Amul, creating infrastructure for separating whey protein from whey is a cumbersome process with high investments required, which precludes competition. Parag has recently expanded whey capacity from 0.4mn to 1.0mn ltr per day, which will help it cater to retail consumers with branded health supplements at a capex of INR146mn. *Further, after receiving overwhelming response from consumers, the Board has approved for capex of INR177mn to be redirected to expansion in the whey processing facility in the Manchar Plant.*

Whey consumer to increase RoCE for cheese, strong advantage versus peers

We believe, Parag will have strong advantage over peers and generate 25%+ RoCE on cheese and whey consumer plant on full utilisation compared to ~20% for other players purely in cheese as:

1. Parag has invested INR3.5bn in cheese & whey plant over FY08-17, thereby entailing lower incremental investments for the whey consumer business. Players can enter whey consumer only after reaching certain scale in cheese, lending advantage to Parag. Further, whey consumer is a high ~45% plus gross margin product compared to cheese (~32% gross margin).

2. All other players are entering HORECA in a big way, which Amul is targeting. Amul has tripled cheese capacity and is targeting 50% spurt in cheese sales over the next 1 year primarily driven by HORECA, where gross margins will be below ~30% and debtor days will remain high.

The above factors result in lower return ratios for other pure cheese players. We believe, once the brand Avvatar is established and the end-consumer cheese demand picks strongly, Parag's realisations and return ratios will improve steadily**.**

Table 2: Cheese (combination of B2B and B2C) & whey to generate pre-tax ROCE of ~25%

Revenue	**INR**	**Cost (for 10l of milk)**	**INR**		**INR mn**
Cheese		**Milk**		**Cash Conversion Cycle**	**90**
Production (kgs)	1	Milk Required (litres)	10		
Realisation (INR/kg)	310	Price of Milk	28	**Annual Volume**	
		Total Milk Cost	280	Cheese (mn kgs)	18
Institutional Whey		Add: Packing and other cost	230	Institutional Whey (mn kgs)	5
Production (kgs)	0.3	**Total Costs**	**510**	Whey Consumer (mn kgs)	1
Realisation	163				
Net Revenue (INR)	49	**Gross Profit (B)**	**282**	**Annual Revenue**	
		Gross Margin (%)	**36%**	Cheese	5431
Consumer Whey				Institutional Whey	791
Production (kgs)	0.2	**Operating Costs**		Whey Consumer	2529
Realisation	2165	Ad Spends @ 6%	48		**8751**
Net Revenue (INR)	433	Other Op Exp @ 10%	79		
		Total (C)	**127**	Working Capital	2158
Total Revenue (A)	**792**			Capex	3500
		EBITDA (B-C)	**155**	**Total**	**5658**
		EBITDA Margin (%)	**20%**		
				OP	1715
				Less: Depreciation	280
				EBIT	**1435**
				RoCE (%)	**25%**

Source:Industry, Edelweiss research

Note: Above data is based on our interactions with industry participants, however, there may be some variations company wise. We have assumed 80% utilisation for cheese and whey consumer.

Parag is targeting INR1.5bn whey consumer sales over next 3 years and INR3bn of whey consumer sales over 5 years

"Our go-to-market strategy is in place and is customised with an emphasis on reaching out to nutrition supplement stores, pharmacies, modern retail stores and e-commerce portals. Educating gym trainers and owners who are key influencers in this category is going to be our key platform."

-Parag management

We believe *Avvatar's* success will be crucial to drive profitability of cheese.

Strategy to penetrate *Avvatar*

- Parag is creating a completely new division for whey consumer as it is a hugely profitable product with strong 45% plus gross margin.
- **Separate SBU head:** The company has appointed Mr. Vinay Jain from Amway to head the whey consumer division.
- **Targeting INR1.5bn over next 3 years and INR3bn of whey consumer sales over 5 years.** Management pegs the market size of whey consumer (organised and unorganised) at INR15bn.
- Parag's go-to-market strategy is in place and has been customised with an emphasis on reaching out to nutrition supplement stores, pharmacies, modern retail stores and e-commerce portals.
- **Tying up with e-commerce partners:** The product will be distributed via tie ups with premium sports gyms, nutrition outlets and e-portals. **Parag has tied up with the biggest e-tailer Amazon India to sell *Avvatar* since 35-40% of whey sales are via e-commerce.**
- **Tying up with gyms:** The company has been educating gym trainers and owners who are key influencers in this category. It has been providing free sachets to gym trainers to increase outreach of the product.
- **Right tie ups:** Parag is tying up with *Shivoham* for certification classes for trainers. *Shivoham* runs a complete fitness programme which includes fitness of body and mind. He has been in the fitness industry for almost a decade and opened the first CrossFit box in India.

Fig. 5: Product available on Amazon India from 5 Sep

Source: Amazon.com, Edelweiss research

Avvatar is priced ~10% lower per scoop versus leader ON despite higher protein per scoop (BCAA)

- **Product and price proposition versus leader**:
  - **Higher protein per scoop and better pricing**

    Avvatar is priced ~10% lower per scoop versus leader ON despite higher protein per scoop (BCAA).

Table 3: Pricing comparison of Avvatar versus leader ON

	Avvatar 1kg (2.2lbs)	Optimum Nutrition 2lbs
Servings	29	29
Price (Amazon)	2,720	3,035
INR/scoop	94	105
Per Scoop (gms)		
Size	35.0	30.4
Protein	24.0	24.0
BCAAs	7.8	5.5
Glutamic Acid	4.9	4.0

Source:Edelweiss research

Avvatar boasts of Sports Certification

  - It is gluten and soya free.
  - It is fresh and 100% vegetarian versus 7-9 month old products and unknown sourcing of peers being imported.
  - **Informed Sports Certification:** Parag has obtained Informed Sports Certification for *Avvatar*, certifing that the product is abusive substance free. This is a strong advantage for *Avvatar* as even market leader *ON* does not have this certification.

- **Reinvesting whey profits into cheese:** The company is planning to reinvest ~25% of the higher profit from whey business into cheese, which will further boost future production.

Case Study: Global giant Glanbia

Performance nutrition is a USD12bn category globally

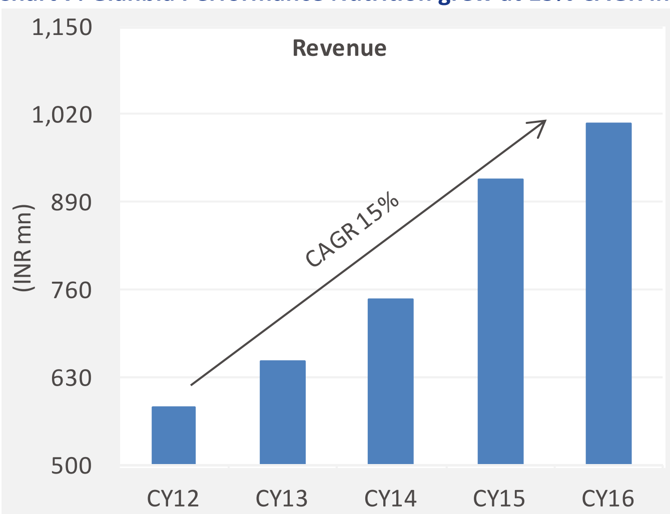
Performance nutrition is a USD12bn category globally. Glanbia, a global nutrition company with annual turnover of EUR2.8bn, is the market leader in global whey protein. It clocked EUR1bn sales in Glanbia Performance Nutrition (GPN) segment, having delivered 15% sales CAGR in this division over past 4 years with 16% EBIT margin and 18% RoCE. Growth has been driven by brand development and strategic acquisitions.

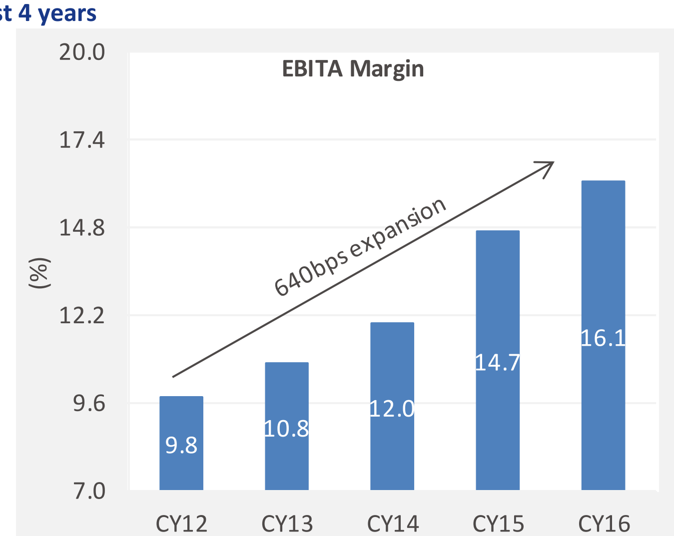
GPN is the No.1 global performance nutrition brand portfolio comprising Optimum Nutrition, BSN, Isopure, thinkThin, Nutramino, ABB and Trusource. It produces the entire range of performance nutrition products with broad consumer appeal and is the market leader in innovation and new product development.

Glanbia Performance Nutrition (GPN) segment has EUR1bn sales, having delivered 15% sales CAGR in past 4 years with 16% EBIT margin and 18% RoCE in CY16

Fig. 6: Glanbia performance nutrition product portfolio

Chart 7: Glanbia Performance Nutrition grew at 15% CAGR in past 4 years



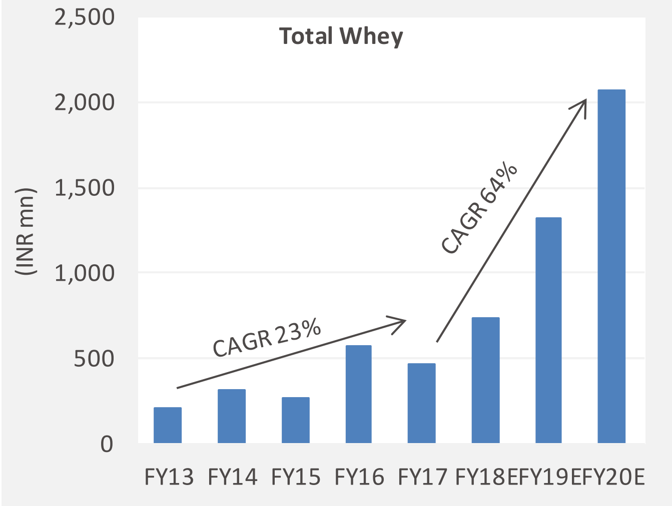


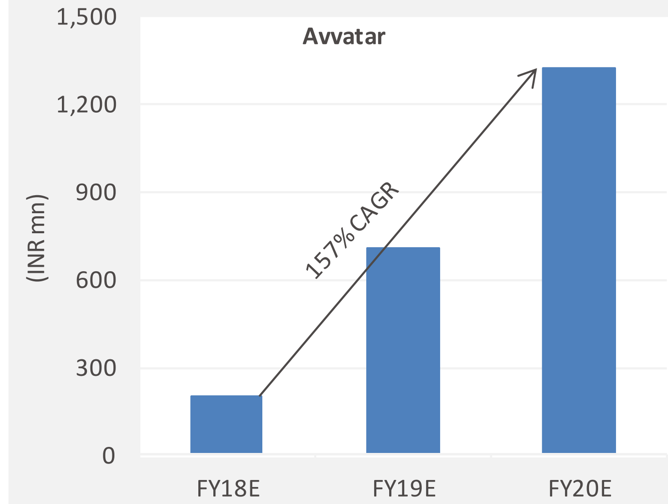
Source:Company, Edelweiss research

The company has strong reach in US in nearly 10,000 specialty retail stores, gyms and fitness centers as well as in major grocery chains and drug stores. Optimum Nutrition (Glanbia's flagship brand) products are also distributed in over 70 countries worldwide.

Parag is following the Glanbia route, whereby it is focusing on high margin nutrition based dairy products, which entail high growth and margin (in excess of 16% plus EBITA margin).

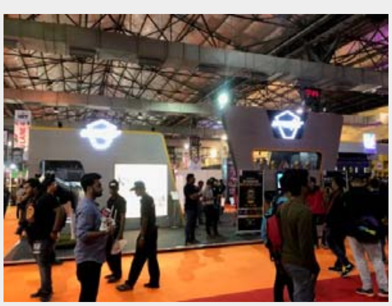
Chart 8: Parag's whey sales to grow 4.4x over FY17-20, driven by Avvatar sales growth





Source: Company, Edelweiss research

Market leader ON's sales have expanded exponentially from merely INR540mn in FY12 to INR6.4bn in FY17 (~12x in 4 years), which highlights the category's growth potential



On ground industry check: Huge expanding market

We visited the International Health, Sports and Fitness Exhibition held on 13-15 October, 2017 to gain on-ground perspective on the whey protein and sports supplements market and competition in the space. The industry is dominated by Glanbia brands - ON (market leader), BSN and Isopure. However, beyond such global brands, the industry is highly fragmented. There are a large number of Indian players who source whey externally and process, pack & sell it under their own brand name. MuscleBlaze is the largest Indian brand.

Parag utilised International Health, Sports and Fitness Exhibition to showcase and launch *Avvatar*, catering directly to its target market—sports and fitness enthusiasts.

Insights from Glanbia: Its India (ON, BSN, Isopure brands) sales have grown exponentially over the past 5 years—from merely INR540mn in FY12 to INR6.4bn in FY17 (~12x in 4 years). This rapid surge highlights the growth potential of the category. This spurt will be spearheaded by rising awareness of health and fitness in the country. Further, to penetrate deeper into the rapidly growing Indian market, ON has launched a mass variant targeted at the wider public, with more country specific products in the pipeline.

MuscleBlaze is the largest Indian manufacturer. It sources whey from external sources (including Glanbia Nutritionals' ingredients segment) and manufactures and packs it in India. It has implemented verification codes on products to provide assurance of their genuineness to combat widespread issue of fakes sold. It has 2 variants of whey protein—Whey and Whey Gold. The latter competes with *Avvatar* and *ON*. It is priced at similar level as Avvatar. MuscleBlaze is present in all states and across tier I & II towns.

Parag, the largest cow ghee brand in India and is also known as the category creator

Expanded paneer capacity to 4x with German machinery, which keeps paneer 15-20% softer and improves shelf life to 75-90 days

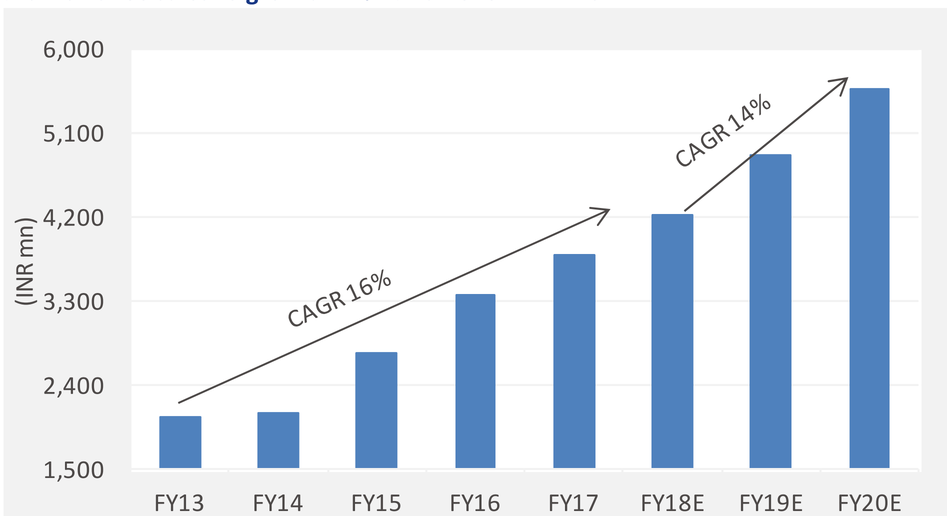
C) Ghee: Big category shifting from unorganised to organised

Parag is the largest cow ghee brand in India and is also known as the category creator. Pure cow's ghee currently accounts for less than 10% of India's total ghee market and is growing faster than the overall ghee market with higher margin.

Ghee contributes around ~22% to Parag's revenue and 28% to gross profit. It has posted CAGR of 16% over FY13-17. We estimate the company's ghee revenue to post 14% CAGR to INR5.6bn over FY17-20 led by the company's strong brand positioning of 100% cow's milk & purity and rising shift from traditional & unorganised to organised players as ghee is the largest consumed dairy product in India after liquid milk at INR811bn with organised penetration at ~19% (INR154bn).

Further, Parag is moving towards premiumisation. On the anvil is premium ghee priced at INR1,500/kg, which will be made with a malai and cream base versus butter and fat base currently.

Chart 9: Ghee sales to grow at 14% CAGR over FY17-20E



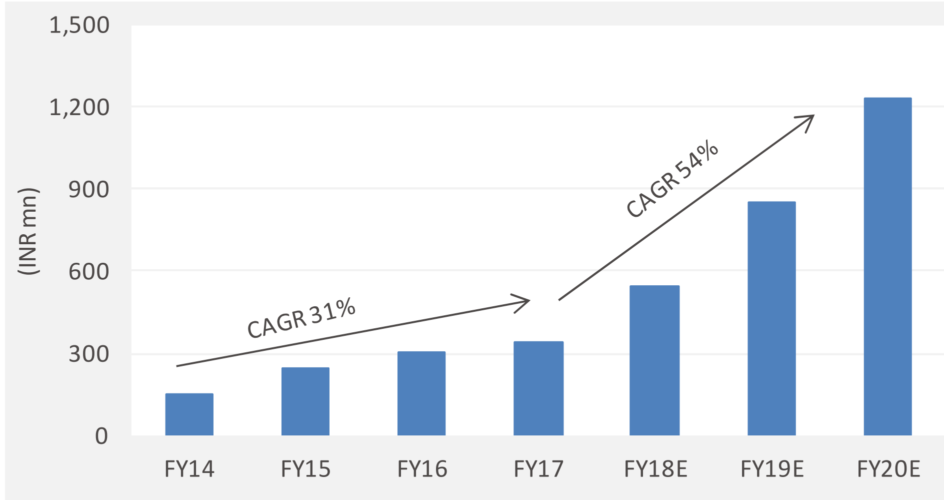
Source:Company, Edelweiss research

D) Paneer: To clock strong 50% plus CAGR

Parag has expanded its paneer manufacturing capacity from 5MT to 20MT per day with German machinery and an automated plant, which keeps paneer 15-20% softer and increases shelf life to 75-90 days.

According to management, they are running at ~40% capacity utilisation (8MT on a 20MT per day capacity) post capacity expansion in the paneer division. We expect improving utilisation, leading to 54% revenue CAGR over FY17-20E to INR1.2bn. Further, we expect this strong growth to be led by rising shift from traditional & unorganised to organised players as paneer is the third largest consumed dairy product in India at INR386bn with organised penetration at mere ~3% (INR11bn). With increased capacity, we estimate paneer's sales as well as gross profit contribution to jump from 2% to 6% by FY17-20.

Chart 10: Paneer sales to grow at 54% CAGR over FY17-20E

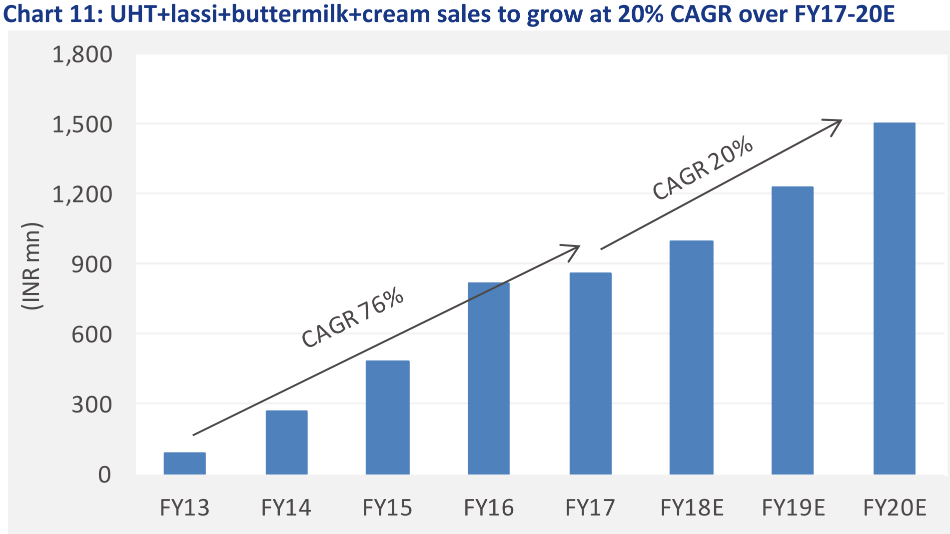


Source: Company, Edelweiss research

Parag's UHT sales are estimated to clock 20% CAGR to INR1.5bn over FY17-20 aided by 48% capacity expansion

E) **<u>UHT (ultra heat treated) milk + lassi + buttermilk -</u> High growth products:** UHT milk has a longer shelf life than regular liquid milk and demand for it is expected to surge due to urbanisation and changing consumer preference for value-added UHT milk with low fat content and added nutritional value. <u>UHT milk contributed 5% to Parag's FY17 sales, but 7% to gross profit.</u> We estimate the company's UHT sales to clock 20% CAGR to INR1.5bn over FY17-20E aided by 48% capacity expansion.

Chart 11: UHT+lassi+buttermilk+cream sales to grow at 20% CAGR over FY17-20E



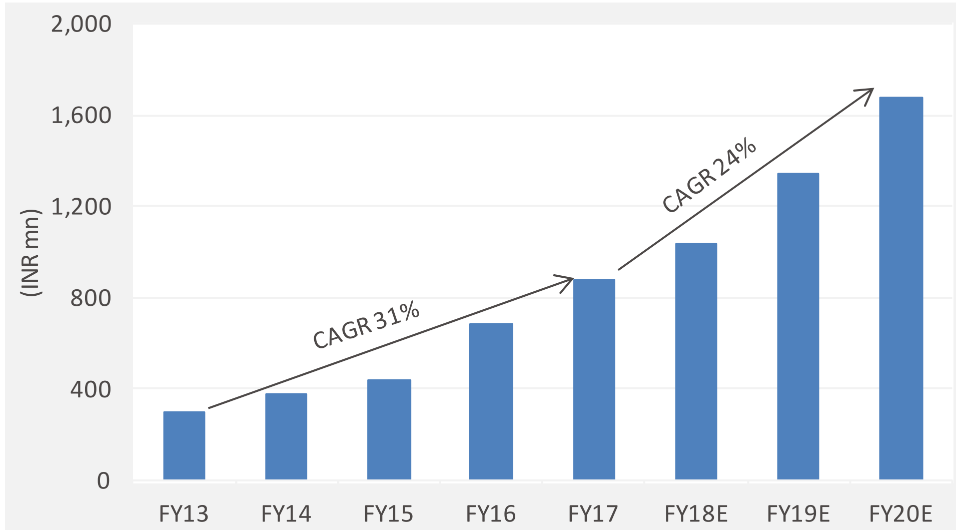
Source: Company, Edelweiss research

Parag's curd sales are estimated to clock 24% CAGR to INR1.7bn over FY17-20E aided by 33% capacity expansion

F) **<u>Curd:</u> Growth driven by demand shift from unorganised to organised** segment <u>Curd contributed 5% to Parag's sales, but ~7% to gross profit in FY17.</u> We estimate the company's curd sales to post 24% CAGR to INR1.7bn over FY17-20 led by: 1) 33% capacity expansion; and 2) nuclear families with working couples spurring sales of packaged curd.

Further, we expect this strong spurt to be led by rising shift from traditional & unorganised to organised players as curd is the fourth largest consumed dairy product in India at INR288bn with organised penetration at mere ~6% (INR17bn) in FY17.

Chart 12: Parag's curd sales to grow at 24% CAGR over FY17-20E



Source: Company, Edelweiss research

High capacities set up raise entry barriers

Parag is fortifying its value-added share by expanding capacity—cheese 50%, whey 150%, paneer 4x, UHT 48% and curd 33%—leading to 53% overall capacity addition. This is estimated to lead to sales CAGR of 17% in VADP versus 14% sales CAGR for overall company over FY17-20 and VADP share growing to 70% of sales in FY20, keeping it ahead of the industry.

Post initial capex, capital requirement has reduced as reflected in Parag's gross block expansion of 35% over FY17-20, post jumping ~123% during FY11-17

Parag has been undertaking several capital investments ahead of the curve in profitable segments to prune cost of operations. The company *has invested INR3.5bn over FY08-17 in cheese and whey.* These capital investments have increased capital intensity in the dairy sector, making it increasingly difficult for a new entrant to enter this sector or match Parag's operating efficiency.

Parag's gross block jumped ~123% over FY11-17. Having scaled up rapidly in recent years, going forward capex requirement is lower. Thereby, capital requirement has waned post installation of initial equipment, as reflected in gross block expansion of 35% expected over FY17-20, primarily in value-added segments cheese, whey and paneer. The company has incurred mere INR261mn to enhance cheese capacity by 50% to 60MT/day (from 40MT/day in FY16) and whey processing capacity by 150% to 10lac ltr/day (from 4lac ltr/day in FY16). Further, capex of INR177mn previously earmarked out of IPO funds for setting up new production line of milk based beverages has been redirected to whey processing facility in Manchar.

Table 4: Additional capacity expansion in cheese and whey

Particulars	Capacity Expansion	Total estimated cost (mn)
Expansion of cheese manufacturing facility	40 MT to 60MT per day	115
Expansion of whey processing facility	0.4mn litre per day to 1mn litre per day	146
Expansion of whey processing facility - Redirected		177

Source: Company, Edelweiss research

This should enable Parag to grow ahead of the market and wrest market share from competitors.

Investing in profitable VADP

Parag is expanding cheese capacity by 50%, whey by 150%, paneer by 4x, curd by 33% and UHT products by 48%. These are profitable segments wherein out-of-home consumption is burgeoning. This is estimated to lead to sales CAGR of 17% in VADP versus 14% sales CAGR for overall company over FY17-20 and VADP share growing to 70% of sales in FY20, keeping it ahead of the industry.

Table 5: Consistent capacity expansion in VADP to support growth and margins

Product	FY16	FY18E	% increase
Milk processing capacity(litres per day)	2,000,000	3,400,000	70%
Milk powders(kg per day)	110,000	110,000	0%
Liquid milk in pouches (packs per day)	375,000	375,000	0%
Flavoured milk (packs per day)	100,000	100,000	0%
UHT Products (litres per day)	165,000	245,000	48%
Cheese (kg per day)	40,000	60,000	50%
Ghee (kg per day)	70,000	70,000	0%
Butter (kg per day)	75,000	75,000	0%
Curd (kg per day)	60,000	80,000	33%
Paneer capacity(kg per day)	-	20,000	NM
Whey Processing (litres per day)	400,000	1,000,000	150%
Overall product capacity increase	**1,395,000**	**2,135,000**	**53%**

Source: Company

Thus, scale and capacity augmentation in high growth and margin value-added products like cheese and whey consumer will keep the company much ahead of the curve.

Bolstering strong distributor network: Edge over competition

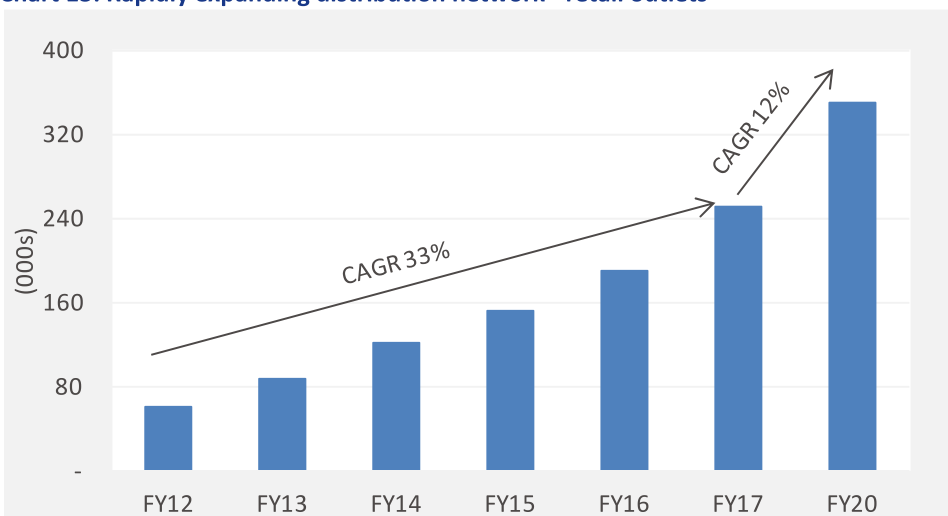
Parag has augmented its pan-India distribution network rapidly over the past 5 years with 250,000 retail outlets (having grown at 33% CAGR) via 3,000 distributors catered to by over 140 super stockists. Further, the company has hired Vector Consulting to help build supply chain and logistics capabilities at the back end and distribution capabilities in the front end, which is envisaged to boost margin further.

A strong network of 3,000 distributors, 15 depots and 104 super stockists catering to 2.5 lakh outlets, to further expand by ~12% CAGR to 3.0-3.5 lakh outlets over next 3 years

Parag has a strong pan-India distribution network, lending it a distinct competitive advantage versus other regional peers.

The company has augmented its pan-India distribution network by rapidly over last 5 years with 250,000 retail outlets (having grown at 33% CAGR) via 3,000 distributors catered to by over 140 super stockists. The company has established 17 sales depots throughout India. Further, it targets to expand network by 6-12% CAGR to 3.0-3.5 lac over the next 3 years.

Chart 13: Rapidly expanding distribution network - retail outlets



Source: Company, Edelweiss research

Parag has prudently established its distribution in 3 ways addressing different product groups and consumer segments to sharpen focus on its pan-India distribution infrastructure:

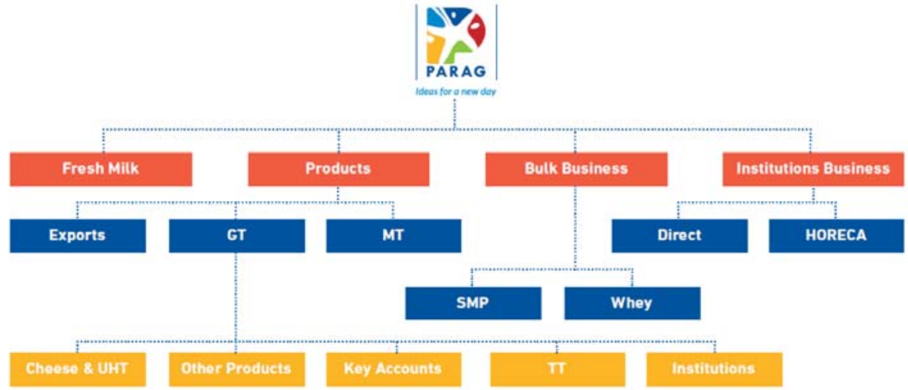
1) **Fresh milk products:** Fresh products like milk and dahi, which have limited shelf life, are distributed in Maharashtra and Mumbai from the Manchar plant. In the South, these are distributed from the Palamner plant.

2) **Cold storage value-added products**: Cheese, paneer and other value-added products like butter are distributed and sold pan-India via distributors and transported via chilled vans.

3) **High shelf life products:** High shelf life products that do not require refrigeration and are shelf stable like ghee and dairy whiteners are sold pan-India via distributors.

Focus is on building cold chain distribution in top 100 cities with focus on paneer and cheese

Fig. 7: Route to market strategy



Source: Company

The expansion focus is on building cold chain distribution in top 100 cities with focus on paneer and cheese. Distribution capabilities are being further enhanced with roll out of SFA (sales force automation) and DMS (distribution management system), which will help with real time data on secondary sales.

Vector Consulting appointed to optimise Parag's distribution model based on theory of constraints with Vector's variable remuneration linked to performance based on revenue growth and margin expansion

Further, Parag has appointed Vector Consulting to optimise its distribution model. Vector Consulting will help build supply chain and logistics capabilities at the back end and distribution capabilities in the front end. This project is specifically based on the concept of "Theory of Constraints" to improve the distribution reach with lower stock outs and better rationalisation of inventory at dealers, retailers and the company level by reducing non-moving inventory. Vector Consultant's variable remuneration is linked to its performance based on revenue growth and margin expansion.

Vector Consultants has helped create many success stories in the consumer space: a) **VIP Industries'**: Improvement in secondary sales by 50% & same store sales at 20%; and b) **Liberty Shoes:** Working capital improved with reduced inventory days and improved lead time, resulting in robust sales surge.

Fig. 8: Vector Consulting Framework

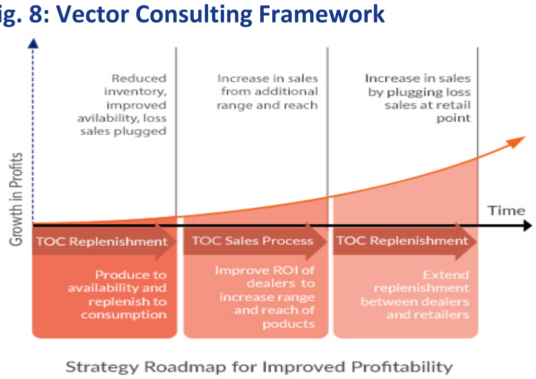


Fig.9: Post implementation benefit in VIP Industries

AFTER TOC IMPLEMENTATION

Stock availability (branches)	More than 90% consistently (from earlier 60 – 65%)
Weekly fill rates	85% (from 60% earlier)
Same store Growth rate (Co-owned Stores)	20% (much higher than the earlier growth rate)
Secondary Sales (pilot in distribution channel)	More than 50% increase (compared to previous sale levels)

Source:Vector Consulting, Edelweiss research

Parag's total selling and distribution expenses have stood at 7-8% of sales over the years, of which distribution stands at ~4.0-4.5%. Led by sales growth with better supply chain management, margins will continue to improve.

Valuation

- Bolstered by strong positioning and riding strong market penetration & capacity addition in high growth and margin VADP, the stock entails immense potential.
- Underpinned by strong industry drivers along with structural shift from unorganised to organised players we estimate: 1) Parag to clock revenue, EBITDA and PAT CAGR of 14%, 32% and 49%, respectively, over FY17-20; and 2) its pre-tax RoCE to jump 1064bps to 19.0% in FY20.
- We initiate coverage with 'BUY' valuing Parag at P/E of 24x FY20E EPS, at 28% discount to domestic FMCG players. Globally, value-added dairy companies trade in line with their FMCG peers.

We perceive rerating potential for under-penetrated emerging VADP oriented companies. Hence we initiate coverage on Parag with a 'BUY' and target price of INR340, based on P/E of 24x FY20E (at ~28% discount to our FMCG universe) and 20% discount to fresh dairy product players like Heritage, implying 40% upside from current levels.

We estimate Parag to clock revenue, EBITDA and PAT CAGR of 14%, 32% and 49% (17%, 10% and 32% CAGR during FY14-17), respectively, over FY17-20E. Riding superior earnings matrix and increase in value-added sales, we estimate RoCE to jump 1064bps to 19.0% over FY17-20E.

Parag, derives ~64% of sales from value-added dairy products, is best-placed to benefit from the shift towards organised and value-added dairy consumption and trades at 17x FY20 versus the median of 33x FY20 for Indian FMCG peers. Globally, value-added dairy companies trade in line with their FMCG peers. Owing to its higher emerging VADP (~27% of sales in FY17), where capital intensity is higher versus higher RoCE traditional dairy companies, we have valued Parag at 24x FY20E EPS, which is at 20% discount to Heritage's target FY20E P/E of 30x and 28% discount to FMCG players. While we value Parag at 28% discount to domestic FMCG players, we believe the discount will gradually reduce with improving return ratios and margins.

We initiate coverage on Parag with **'BUY'** recommendation and TP of INR340, implying ~40% upside from current level, based on P/E of 24x FY20E.
This is riding: 1) robust earnings growth visibility & return ratios; 2) pan-India dairy brands (*Go, Gowardhan and Avvatar);* and 3) first-mover advantage in value-added & profitable segments like whey consumer by virtue of scale created in cheese.

Also pertinent to note: a) this is considering cheese utilisation of 71% and consumer whey utilisation of ~42% for FY20 (assuming 4MT/day capacity of whey consumer); 2) Parag is drawing parallel to Glanbia, a global leader in whey consumer and diversified player in dairy products, which earns 16% EBITDA margin and 18% RoCE in the performance nutrition division. Hence, we believe our FY20 valuation entails scope for upward bias.

At current level, the stock is trading at P/E of 24.0x FY19E and 17.1x FY20E for 49% PAT CAGR over FY17-20E. We believe, Parag is well placed to capture the dairy opportunity in India being a branded pan-India dairy player investing strongly in value-added sales.

Key Risks

Volatility in raw milk prices

Any material and sudden rise in milk prices may impact Parag's margin. Milk procurement prices jumped 27% in FY17, which Parag was able to absorb due to premiumisation as demonstrated by 39bps rise in gross margin.

Competitive pressure

The domestic dairy products industry is highly competitive with presence of large multinational companies as well as regional and local players in each of the regions Parag operates in. The company also competes with large dairy cooperatives; incentives offered by central or state governments to these could benefit such entities, which in turn will adversely affects Parag's business. Any steep increase in competitive pressure—Amul getting aggressive in the HORECA segment—may impact Parag's revenue growth prospects. However, according to management, cheese as a category will grow 25%+ leading to growth across players.

Failure of launches

Parag is steadily launching new products. If these products are not successful it may lead to increased expenses with no proportionate sales.

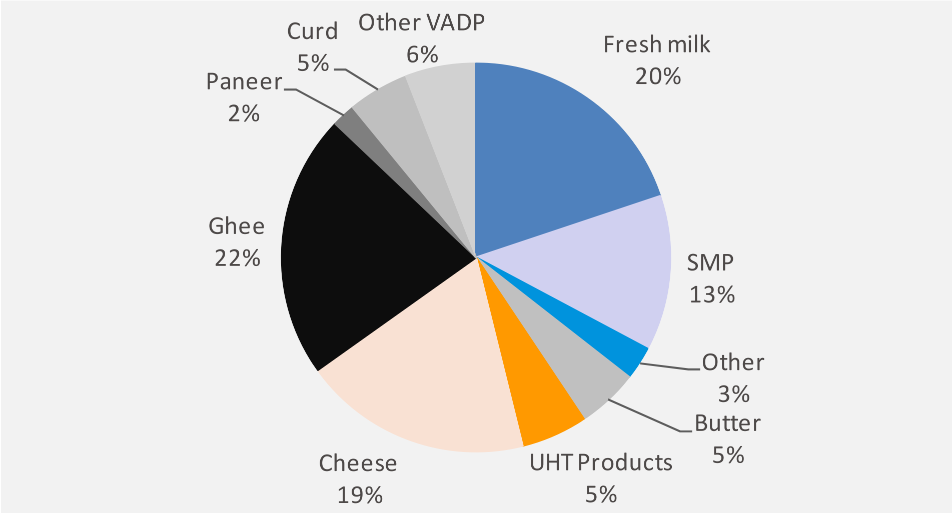
Company Description

Parag is an integrated and diversified private dairy player with 2 of the strongest consumer (B2C) dairy brands—*Gowardhan* and *Go*

Parag, incorporated in 1992 with operations in just collection and distribution of milk, has now developed into a FMCG dairy company. It has diversified its product portfolio with 170 plus SKUs to cater to a wide range of customers via 6 brands—*Gowardhan, Go, Pride Of Cows, ToppUp, Milkrich* and *Avvatar*. The company has recently ventured into the whey consumer protein powder segment with *Avvatar* brand and fruit beverages category with *Slurp* brand.

The company's aggregate milk processing capacity stands at 2mn ltr per day. Its cheese plant boasts of one of the largest production capacities in India with raw cheese capacity of 60MT per day.

Chart 14: Revenue mix (FY17)



Source: Company, Edelweiss research

Table 6: Parag—Evolution

Year	Evolution of Parag milk foods
1992	Parag Milk Foods Limited started in 1992 to help farmers by collecting milk on milk holidays during Operation Flood. Back then, Parag was primarily involved in the distribution and collection of milk
1998	Manchar plant was commissioned and began manufacturing traditional products like Butter and Ghee under the brand, 'Gowardhan'
2000	Began exporting products to South-East Asia, the Middle East and Africa (At present company exports products to 36 countries overseas)
2005	Set up of Bhagyalaxmi Dairy Farms (a fully automated cow farm housing over 2000 Holstein breed cows) at Manchar,Pune; a moden dairy farm with international equipment
2008	Raised INR600mn from Motilal Oswal PE; Commissioned "Go Cheese World" - India's largest cheese manufacturing plant with a capacity of 40 MT per day
2010	Palamaner plant established with a world-class UHT facility
2011	Launched 'Pride of Cows' - a first-of-its-kind premium farm-to-home milk brand (Taken from the Bhagyalaxmi Diary Farm and sold in Mumbai and Pune)
2013	Launched 'Topp Up' branded flavoured milk and other products like Emmental cheese, mozzarella cheese, yogurt in 3 new flavours , cheese spread in 6 flavours, Parmesan cheese, cheezlets and vital milk
2014	Launch of B2B Whey products and expanded cheese product ranges
2015	Company was converted into a public limited company pursuant to approval of the shareholders at an extraordinary general meeting and name of the company changed to Parag Milk Foods Limited
2015	Remodelled the brand Parag with a new identity and launched the Parag logo
2016	Got listed on the bourses, becoming a publicly owned entity
2017	Entered into the Juice drink market by launching Slurp - a mango drink with a dash of milk; Launched a 100% Whey protein, first-of-its-kind manufactured in India under the brand Avvatar

Source: Company, Edelweis research

Diverse range of customers

Retail and institutional businesses contribute 67% and 33% to the company's revenue, respectively.

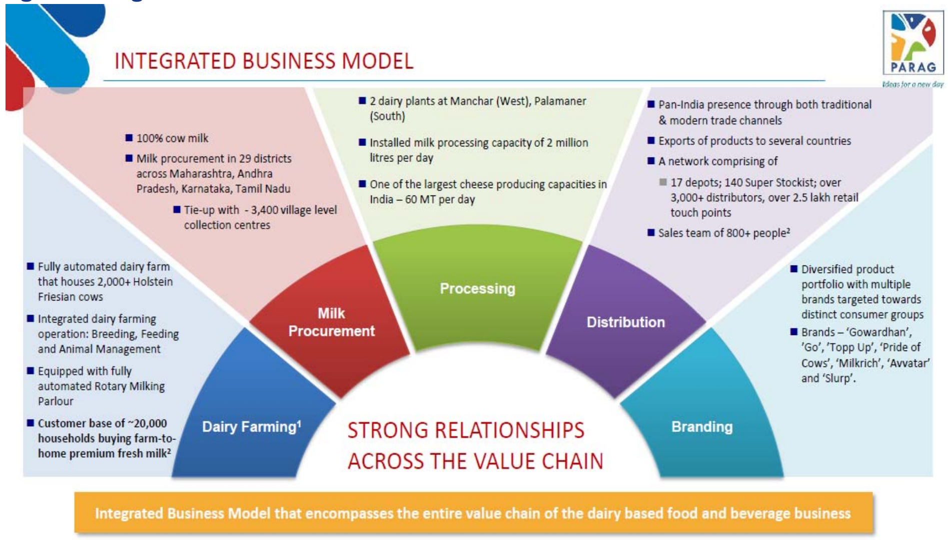
Parag sells products to several customer categories such as retail customers, hotels, restaurants, institutional customers and caterers. Some of its marquee institutional customers include leading restaurants & cafe chains such as Yum! Restaurants (Pizza Hut, Taco Bell, KFC), Jubilant Foodworks (Domino's Pizza) and Sankalp Recreation (Sam's Pizza). Parag is one of the leading whey protein suppliers in India to consumer product companies such as Nestle India and UTH Beverage Factory. Further, its branded products are available in more than 250,000 retail touch points across the country.

Diversified manufacturing and procurement

The company derives all its products only from cow's milk. Its manufacturing facilities are strategically located at Manchar in Maharashtra's Pune district and Palamaner in Andhra Pradesh's Chittoor district, which have a high population of dairy cows. The plants have milk processing capacity of 1.2mn litres per day and 0.8mn litres per day, respectively—aggregate milk processing capacity of 2mn ltr per day. The company produces cheese and whey products only at its Manchar facility, UHT products only at the Palamaner facility and other products at both the facilities.

Parag has an integrated business model encompassing the entire value chain—procurement, manufacturing, distribution and branding.

Fig. 10: Integrated business model



Source: Company

<u>**Currently, Parag has overall milk handling capacity of 2mn ltr per day, which will increase to 3.4mn ltr post the capacity expansion in FY18.**</u>

Strong management team

Strong management team at helm with the former MD of the Gujarat Cooperative Milk Marketing Federation since 2010 as an advisor and director

Parag is building a strong management team with significant industry experience to scale up its market share in the dairy industry. The company is promoted by Mr. Devendra Shah, Chairman; Mr. Pritam Shah, Managing Director; each has over 20 years' experience in the milk & dairy based food business. Further, Mr. B. M. Vyas, former Managing Director of the Gujarat Cooperative Milk Marketing Federation (Amul), has been with the company since 2010 as an advisor and is a Director on Parag's board. This strong management team of qualified and experienced professionals enables Parag identify new growth avenues and develop successful products.

Table 7 : Management Overview

Key Personnel	Profile
Mr. Devendra Shah **Chairman**	Founder of Parag Milk Foods Ltd and currently the Executive Chairman,whole time Director as well as the promoter of the company, he has been on the board since December 1992. He has an experience of 25 years in the industry in which the company operates.His hands-on approach in managing the organisation has involved him in new product development, being being personally involved in branding and advertising.He is a member of the Executive Committee of Indian Diary Association (IDA) West zone and has been nominated by the Government of India to the Managing Committee of National Diary Research Institute(NDRI).
Mr. Pritam Shah **Managing Director**	Currently the Managing Director as well as promoter of the company and brother of Mr. Devendra Shah, he has been on the board since December, 1992. In his current role, Mr. Pritam Shah is responsible for the overall executional strategy of the Company and consolidating the market presence. He is responsible for bringing in the best manufacturing technology for the Company, enabling it to compete globally. His strong understanding of procurement and production process has helped Parag Milk Foods enhance its overall performance.
Mr. Vimal Agarwal **CFO**	Mr. Vimal Agarwal, a Chartered Accountant and MBA, is a professional with experience of over 18 years in the corporate sector. He worked in various corporate finance roles before joining PepsiCo India in 2004. His work experience spans across Financial Planning & Analysis, Process Governance, Financial Reporting, Budgeting, Working Capital Management and Cost efficiency strategies. Mr. Agarwal was recognised with multiple awards by PepsiCo Inc. including worldwide Performance and Purpose award in 2015 for enhancing Governance Standards and in 2010 for creaing Strategic Impact as Project Manager for the F&A Shared Services Outsourcing initiative.
Mr. Shirish Upadhyay **Senior Vice President** **(Strategic Planning)**	He joined the company in 2010 and his role includes Planning & Forecasting, Project Management, Food Procurement, Rural Management, Marketing and Sales Systems, amongst other corporate responsibilities. He has over 17 years of experience in Corporate Strategy & Planning in the diary industry of which, 12 years were with GCMMF (Amul).
Mr. H.S. Oberoi **President - Cheese Manufacturing**	Mr. H.S. Oberoi advises the leadership team on strategic business initiatives and the overall company development at large. A Mozzarella Cheese manufacturing expert, he has a B. Tech degree and over 52 years of extensive experience in the dairy industry. In his career, he has worked with leading dairy and food companies like Modern Dairies Ltd., Road Master Food Ltd., Milk Federation, Indodan Milk Products, Dalmia Dairy Industries and Haryana Milk Foods. He has travelled across the world to study and implement best practices in the dairy industry.
Mr. Vinay Jain	Mr. Vinay Jain joined from Amway and heads the Avvatar division.

Source: Company, Edelweiss research

Financial Outlook

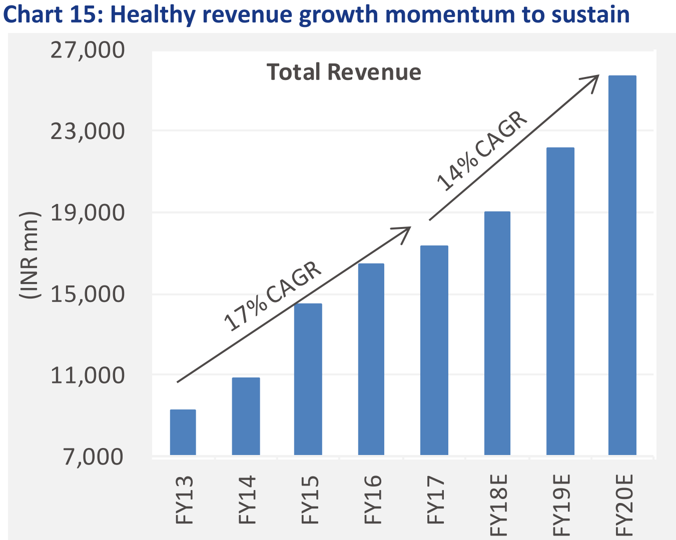
- **Comprehensive product portfolio to sustain revenue momentum: Parag is estimated to sustain sales CAGR of 14% over FY17-20 with strong 17% CAGR in VADP sales.**
- **Rising share of value-add products, B2C mix potent margin kickers: Gross margin is likely to catapult 303bps over FY17-20E to 30.3% aided by rising share of high margin value-added segment sales. EBITDA margin is estimated to jump 335bps to 9.6% in FY20 (6.2% in FY17) on account of rising capacity utilisation.**
- **Improving balance sheet and return ratios: Parag's debt/equity ratio improved from 4.4x in FY15 to 1.1x post IPO and 0.4x in FY17 and will further improve to 0.1x by FY20. Further, pre-tax RoCE is estimated to rise 1064bps to 19.0% in FY20 from 8.4% in FY17 with improving capacity utilisation and higher share of VADP. Superior profitability is envisaged to boost cash flow.**

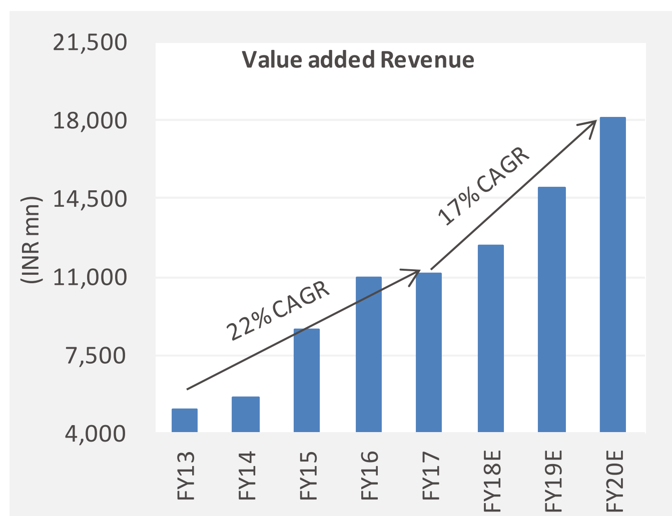
We have built sales CAGR of 14% over FY17-20E led by increasing capacity and penetration in high growth, value- added segments

Strong growth in VADP to drive revenue momentum

Parag clocked 17% revenue CAGR over FY13-17 led by market share gains and strong growth in value-added segments. We estimate sales to post 14% CAGR over FY17-20 bolstered by the company's strong brand spending, enhanced capacity leading to healthy growth in value added-segments (cheese, paneer, ghee, UHT milk, curd), penetration in new product categories like whey consumer and distribution expansion.

Chart 15: Healthy revenue growth momentum to sustain





Source: Company, Edelweiss research

We estimate gross margin to jump 303bps to 30.3% over FY17-20

Rising share of value-added products mix: Potent gross margin kicker

The company's gross margin has expanded 410bps to 27.3% over FY14-17 driven by higher sales of value-added products and premiumisation. We estimate Parag's gross margin to jump 303bps to 30.3% in FY20 led by: a) rising share of high margin, value-added products from 64% of sales in FY17 to 70% in FY20 and improving mix within value-added segments like premium variants within cheese, consumer whey within whey with concentration &

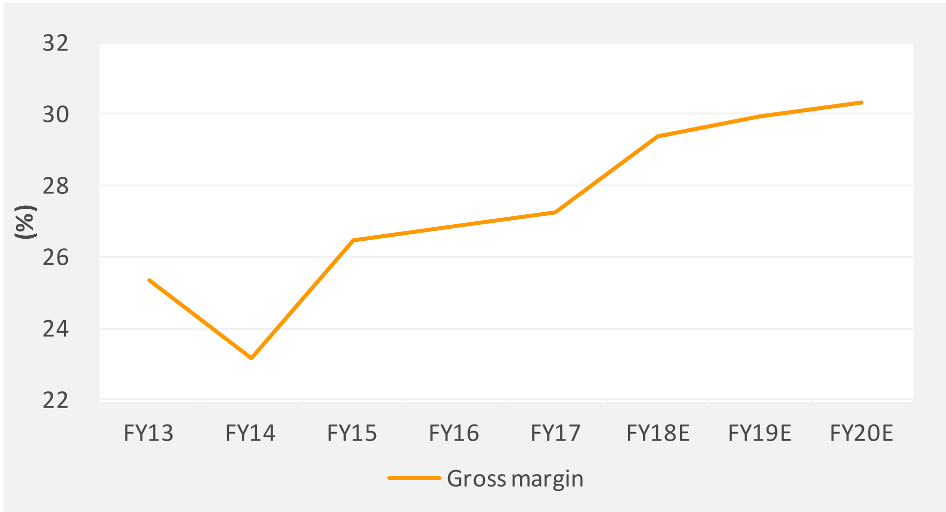
Gross margin is likely to catapult on: 1) rising share of value-added sales to 70% from 64%; and 2) expanding share of B2C sales to 77% over FY17-20E from 67% in FY17

We estimate EBITDA margin to jump 335bps to 9.6% over FY17-20 with operating leverage benefit leading to 32% EBITDA CAGR

grading of whey proteins, premium quality ghee within ghee; b) stable milk prices; c) rising share of B2C sales within the product mix to 77% in FY20 versus 67% in FY17; and d) higher premiumisation.

Further, premiumisation was evident from the gross margin expansion of 39bps in FY17 despite milk prices having gone up by 27%.

Chart 16: Sharp gross margin expansion with higher VADP



Source: Company, Edelweiss research

Improving utilisation to spur 32% EBITDA CAGR over FY17-20E

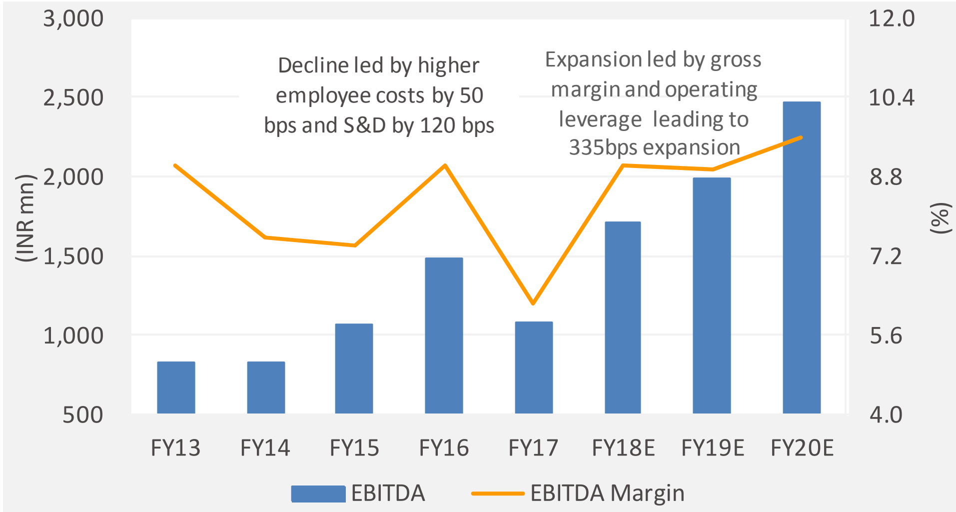
Parag's operating margin expanded from 7.6% in FY14 to 9.0% in FY16. However, lower volumes in VADP sales at mere 2% due to price hikes resulted in EBITDA margin contracting 276bps in FY17 over FY16 to 6.2%. This was led by employee cost expanding 50bps to 4.6% of sales and increase in overall selling & distribution expenses by 120bps from 6.2% to 7.4%.

With implementation of GST, Parag will claim input tax credits for excise on packaging material, service tax, etc. Further, GST will drive operational efficiencies by reducing the complexity of inter-state transportation and uniform laws across states. *This will also enable Parag to reconfigure its logistics and rationalise depot operations, leading to annual savings of INR100-120mn.*

Over FY17-20E, with: 1) improved utilisation across value-added segments leading to gross margin expansion; 2) benefits of GST; and 3) operating leverage benefits, **we forecast EBIDTA margin expansion of 335bps to 9.6% and EBITDA CAGR of 32% .**

We estimate PAT CAGR of 49% over FY17-20, much ahead of 32% EBIDTA CAGR, led by declining capex and financial leverage

Chart 17: EBIDTA CAGR— trajectory at strong 32% over FY17-20E

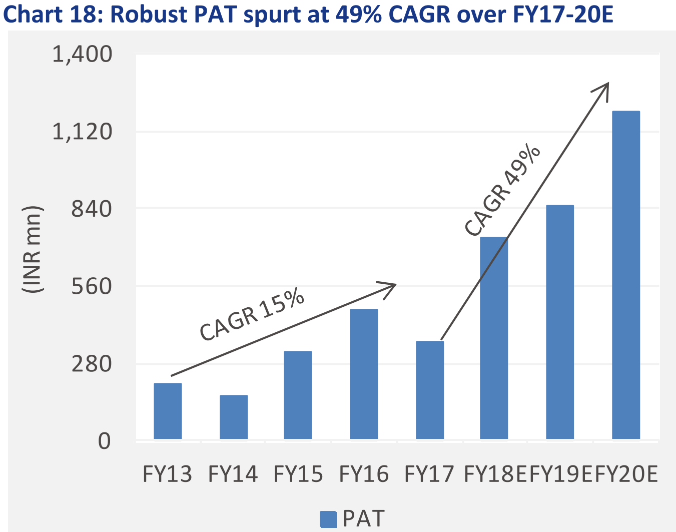


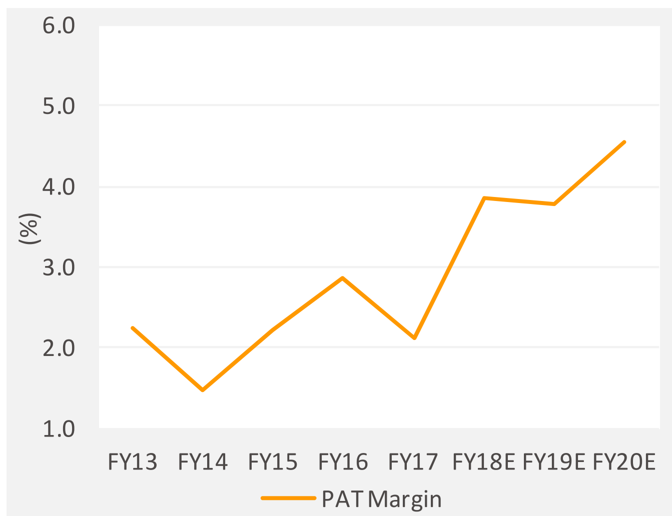
We forecast net profit margin of 4.6% in FY20, in line with management guidance of ~5% plus

Further, we estimate PAT CAGR of 49% over FY17-20 from adjusted PAT of INR365mn in FY17 to INR1.17bn in FY20 led by declining capex and improving balance sheet. This will lead to depreciation and finance expense clocking mere 8% and -22% CAGR, respectively, over FY17-20E.

Hence, we estimate net profit margin of 4.6% in FY20. Management has guided for 5% plus net profit margin.

Chart 18: Robust PAT spurt at 49% CAGR over FY17-20E





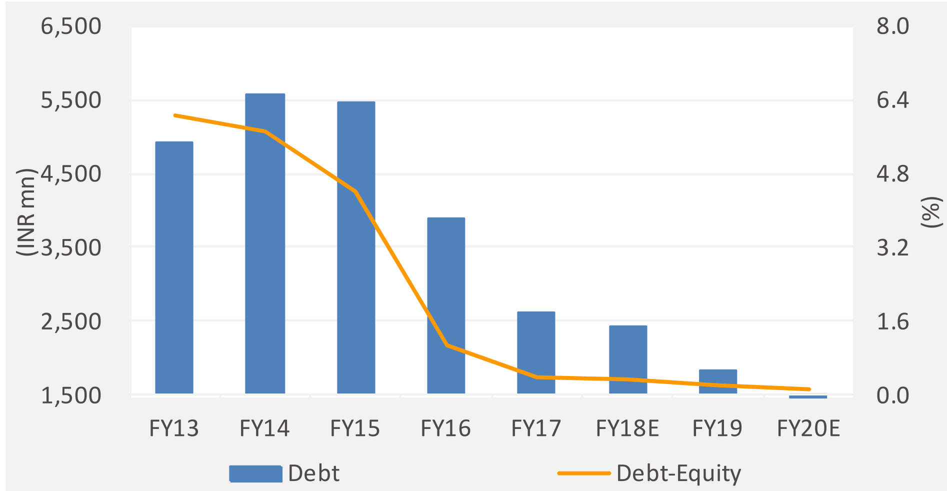
Source: Company, Edelweiss research

Improving balance sheet and return ratios

Parag's debt/equity ratio stood at 4.4x in FY15. The company raised INR3bn equity via IPO in FY16. It has used these funds to repay working capital debt of INR1bn and meet capex requirements of INR1.5bn for expansion & modernisation. As a result, the company's debt/equity improved to 1.1x in FY16 and 0.4x in FY17. Further, **with improved cash flow, we forecast the debt/equity to fall further to 0.1x in FY20.**

With repayment of debt, end of major capex and improvement in cash flows, we estimate debt equity to improve from 0.4x in FY17 (4.3x in FY15) to 0.3x in FY20

Chart 19: Deleveraging balance sheet



Source: Company, Edelweiss research

Parag's cash conversion cycle stands at 80 days, up from 77 in FY14, primarily on account of increasing value-added segment sales (cheese), leading to increased inventory days. Going forward, with scale in cheese, we expect cash conversion cycle to remain at ~80 days.

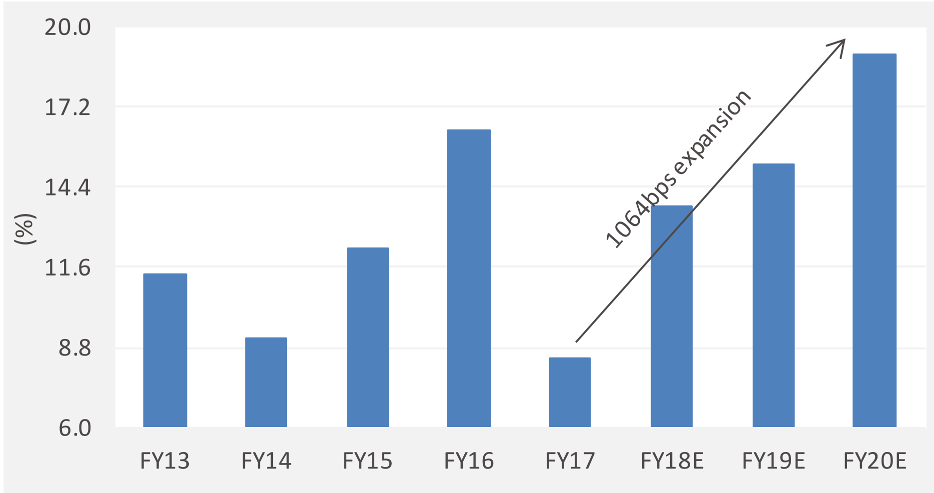
Scale up in RoCE as utilisation ramps up

As of FY17, Parag's pre-tax RoCE stands at 8.4%, down from 16.4% in FY16, due to dip in margin. The company has chalked out INR1.5bn capex over FY17-18 post the IPO for: a) enhancing milk handling & processing capacity from 2.0mn ltr per day to 3.4mn ltr per day; and (b) increasing capacity in VADP—cheese capacity from 40MT/day to 60MT/day, separate paneer manufacturing facility of 20MT/day and upgrading whey infrastructure for consumer whey.

With increasing utilisation in value-added products leading to improving margins by 335bps to 9.6% and relatively low capex requirement leading to higher total asset turn (from 2.0x to 2.3x), we estimate pre-tax RoCE to catapult 1,064bps to 19.0% over FY17-20. Management has guided for 20% plus.

Pre-tax RoCE to improve to 19.0% in FY20E from 8.4% in FY17

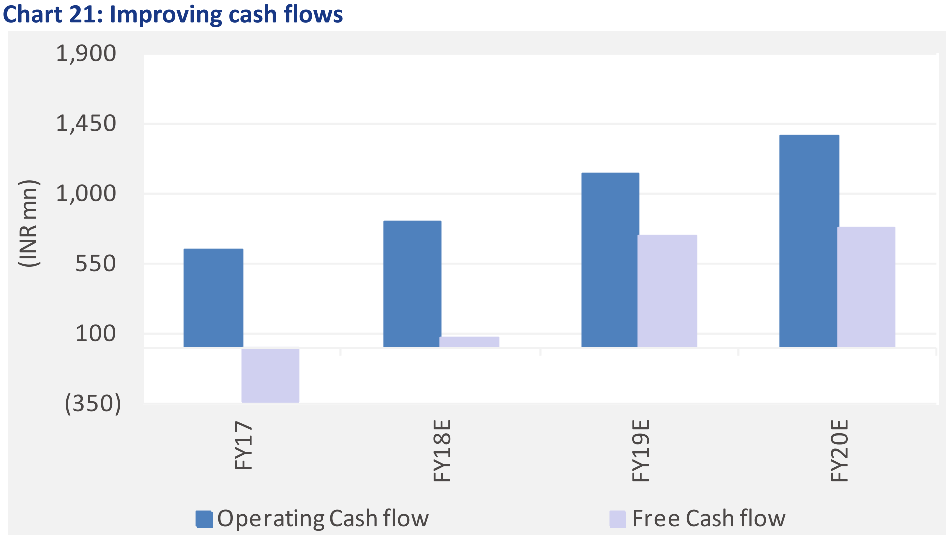
Chart 20: RoCE—On a strong wicket



Source: Company, Edelweiss research

We estimate free cash flows of INR1.5bn over FY19-20 due to improving operating cash flow versus negative FCF of INR277mn over FY17-18E.

Chart 21: Improving cash flows



Source: Company, Edelweiss research

Financial Statements

Key assumptions

Year to March	FY17	FY18E	FY19E	FY20E
Macro				
GDP(Y-o-Y %)	6.6	6.8	7.4	7.4
Inflation (Avg)	4.5	4.0	4.5	4.5
Repo rate (exit rate)	6.3	5.8	5.8	5.8
USD/INR (Avg)	67.1	65.0	66.0	66.0
Company				
Procurement price (INR/litre)	26.8	26.2	27.3	28.3
Procurement price increase (%)	26.8	(2.3)	4.0	4.0
Procurement (mn litres/day)	1.2	1.2	1.4	1.6
Growth (%)	14.4	2.4	13.4	13.0
Sales Growth (%)				
UHT+lassi+buttermilk	4.9	16.2	22.7	22.7
Flavoured milk	9.0	15.1	22.7	21.7
Cheese	11.7	10.0	14.0	15.0
Ghee	13.1	11.1	15.4	14.4
Paneer	11.0	61.6	56.0	44.6
Milkpowder (SMP)	20.3	13.1	(2.2)	(4.2)
Fresh milk	13.7	7.1	12.3	12.3
Butter	(41.5)	(39.4)	(6.4)	(9.5)
Curd	27.5	18.2	30.0	24.8
Whey Processing	(18.2)	13.1	16.5	19.6
Whey Consumer	0.0	0.0	253.6	87.2
Pride of Cows	29.2	25.0	20.0	20.0
Revenue Share (%)				
UHT+lassi+buttermilk+cream	5.0	5.2	5.5	5.9
Flavoured milk	0.5	0.6	0.6	0.6
Cheese	19.0	19.0	18.6	18.5
Ghee	22.0	22.2	22.0	21.7
Paneer	2.0	2.9	3.8	4.8
Milkpowder (SMP)	12.9	13.3	11.2	9.2
Fresh milk	19.9	19.4	18.7	18.1
Butter	5.1	2.8	2.3	1.8
Curd	5.0	5.4	6.1	6.5
Whey Processing	2.7	2.8	2.8	2.9
Whey Consumer	0.0	1.1	3.2	5.2
Others	1.6	1.2	0.9	0.7
Pride of Cows	1.6	1.8	1.9	1.9
B2C Share (% of revenue)	67.3	69.7	73.3	76.6
VADP Share (% of revenue)	64.4	65.0	67.7	70.4
Expenses (% of sales)				
Carriage & Transport	4.4	4.2	4.2	4.1
Ad Spends	3.0	3.2	4.3	4.5
Other Variable Costs	2.9	2.8	2.7	2.7
Fixed Costs	6.1	5.7	5.4	5.2
Financial Assumptions				
Depreciation (% of gross block)	8.4	8.5	8.5	8.5
Interest (% of total borrowings)	12.7	12.7	12.7	12.7
Tax Rate (%)	2.3	26.0	33.0	33.0
Capex (INR mn)	498.9	750.0	400.0	600.0

Income statement (INR mn)

Year to March	FY17	FY18E	FY19E	FY20E
Net revenues	17,307	19,027	22,144	25,680
Raw material costs	12,588	13,442	15,519	17,900
Gross profit	4,719	5,585	6,625	7,780
Employee expenses	794	851	956	1,089
Other expenses	2,843	3,019	3,685	4,225
Operating expenses	3,637	3,870	4,641	5,314
EBITDA	1,082	1,715	1,984	2,466
Depreciation & amortisation	490	528	577	619
EBIT	592	1,187	1,407	1,847
Less: Interest Expense	333	308	232	155
Add: Other income	110	111	88	85
Add: Exceptional items	(194)	-	-	-
Profit Before Tax	175	990	1264	1777
Less: Provision for Tax	4	257	417	586
Reported Profit	171	733	847	1,190
Less: Except. Items (Net of Tax)	(189)	-	-	-
Adjusted Profit	361	733	847	1,190
No. of Shares outstanding (mn)	84.1	84.1	84.1	84.1
Adjusted Basic EPS	4.3	8.7	10.1	14.2
No. of Dil. Sh.outstanding (mn)	84.1	84.1	84.1	84.1
Adjusted Diluted EPS	4.3	8.7	10.1	14.2
Adjusted Cash EPS	10.1	15.0	16.9	21.5
Dividend per share (DPS)	-	-	0.5	1.5
Dividend Payout Ratio (%)	0.0	0.0	5.0	10.6

Common size metrics (% net rever

Year to March	FY17	FY18E	FY19E	FY20E
Gross margin	27.3	29.4	29.9	30.3
Staff costs	4.6	4.5	4.3	4.2
SG&A expenses	16.4	15.9	16.6	16.5
Depreciation	2.8	2.8	2.6	2.4
Interest	1.9	1.6	1.0	0.6
EBITDA margins	6.2	9.0	9.0	9.6
Net profit margin	2.1	3.9	3.8	4.6

Growth metrics (%)

Year to March	FY17	FY18E	FY19E	FY20E
Revenues	5.2	9.9	16.4	16.0
Gross Profit	6.7	18.4	18.6	17.4
EBITDA	(27.0)	58.6	15.7	24.3
PBT	(73.8)	465.0	27.6	40.6
Adjusted Profit	(23.8)	103.2	15.5	40.6
EPS	(36.2)	103.2	15.5	40.6

Balance sheet				(INR mn)
As on 31st March	**FY17**	**FY18E**	**FY19E**	**FY20E**
Share capital	841	841	841	841
Reserves & surplus	5,733	6,466	7,262	8,301
Shareholder equity	**6,574**	**7,307**	**8,103**	**9,142**
Minority interest	-	-	-	-
Long term borrowings	713	713	413	13
Short term borrowings	1,911	1,711	1,411	1,211
Total Borrowings	**2,624**	**2,424**	**1,824**	**1,224**
Long Term Liabilities & Provisions	181	199	231	268
Deferred Tax Liability (net)	99	99	99	99
Sources of funds	**9,477**	**10,028**	**10,257**	**10,733**
Gross block	5,833	6,583	6,983	7,583
Net Block	3,583	3,805	3,629	3,610
Capital work in progress	164	164	164	164
Intangible assets	5	5	5	5
Total Fixed Assets	3,752	3,974	3,798	3,779
Non current investments	0	0	0	0
Cash and cash equivalents	1,008	695	661	648
Inventories	4,285	3,609	4,124	4,708
Sundry debtors	2,150	2,398	2,730	3,166
Loans and advances	1,586	1,586	1,586	1,586
Other Current Assets	475	522	554	642
Total current assets (ex cash)	8,496	8,115	8,994	10,102
Trade payable	3,119	2,025	2,338	2,795
Other Current Liab. & ST Prov.	703	773	899	1,043
Total Current Liabilities & Prov.	3,821	2,798	3,237	3,838
Net Current Assets (ex cash)	4,675	5,317	5,756	6,264
Uses of funds	**9,435**	**9,986**	**10,215**	**10,691**
Book Value per share (INR)	78	87	96	109

Free cash flow				(INR mn)
Year to March	**FY17**	**FY18E**	**FY19E**	**FY20E**
Reported Profit	171	733	847	1,190
Add: Depreciation	490	528	577	619
Interest	333	308	232	155
Add:Others	(153)	(111)	(88)	(85)
Less: Changes in working cap.	(200)	(642)	(439)	(508)
Operating cash flow	641	815	1,127	1,372
Less: Capex	983	750	400	600
Free cash flow	**(342)**	**65**	**727**	**772**

Cash flow metrics				(INR mn)
Year to March	**FY17**	**FY18E**	**FY19E**	**FY20E**
Operating cash flow	641	815	1,127	1,372
Investing cash flow	(1,506)	(750)	(400)	(600)
Financing cash flow	1,225	(397)	(794)	(822)
Net cash flow	360	(332)	(67)	(50)
Capex	(983)	(750)	(400)	(600)
Dividends paid	0	0	(50)	(151)

Profitability ratios

Year to March	FY17	FY18E	FY19E	FY20E
RoACE (%)	8.4	13.7	15.2	19.0
RoAE (%)	7.1	10.6	11.0	13.8
Inventory (days)	102	107	91	90
Receivables (days)	48	44	42	42
Payables (days)	70	70	51	52
Cash conversion cycle (days)	80	81	82	80
Current ratio (x)	2.5	3.1	3.0	2.8
Gross Debt/EBITDA (x)	2.4	1.4	0.9	0.5
Gross Debt/Equity (x)	0.4	0.3	0.2	0.1
Adjusted debt/Equity (x)	0.4	0.3	0.2	0.1
Net Debt/Equity (x)	0.2	0.2	0.1	0.1
Interest coverage (x)	1.8	3.9	6.1	11.9

Operating ratios (x)

Year to March	FY17	FY18E	FY19E	FY20E
Total asset turnover	2.0	2.0	2.2	2.5
Fixed asset turnover	4.9	5.1	5.9	7.1
Equity turnover	3.4	2.7	2.9	3.0

Valuation parameters

Year to March	FY17	FY18E	FY19E	FY20E
Adjusted Diluted EPS (INR)	4.3	8.7	10.1	14.2
Y-o-Y growth (%)	*(36.2)*	*103.2*	*15.5*	*40.6*
Adjusted Cash EPS (INR)	10.1	15.0	16.9	21.5
Diluted P/E (x)	56.4	27.8	24.0	17.1
P/BV (x)	3.1	2.8	2.5	2.2
EV/Sales (x)	1.3	1.2	1.0	0.8
EV/EBITDA (x)	20.3	12.9	10.8	8.5
Dividend Yield (%)	0.0	0.0	0.2	0.6

Additional Data

Directors Data

Mr. Devendra Shah	Chairman	Mr. Narendra Ambwani	Director
Mr. Pritam Shah	Managing Director	Mr. Nitin Dhavalikar	Director
Mr. B.M. Vyas	Director	Mrs. Radhika Pereira	Director
Mr. Sunil Goyal	Director	Mr. Ramesh Chandak	Director

Auditors - Haribhakti & Co. LLP

**as per last annual report*

Holding - Top 10

	Perc. Holding		Perc. Holding
IDFC MUTUAL FUND	8.90	NOMURA	4.29
CANARA ROBECO ASSET MANAGEMENT	3.19	GOLDMAN SACHS GROUP INC	2.92
NEW HORIZON OPP FUND	2.91	IRIS BUSINESS SOLUT LTD	2.75
NORGES BANK	2.66	GOVERNMENT PENSION FUND - GLOBAL	2.66
CANARA ROBECO MUTUAL FUND	2.41	ABU DHABI INVESTMENT AUTHORITY	2.10

**as per last available data*

Bulk Deals

Data	Acquired / Seller	B/S	Qty Traded	Price
27-Dec-16	New Horizon Opportunities Master Fund	Buy	2,479,552	253.43
27-Dec-16	Copthall Mauritius Investment Ltd	Sell	496,200	253
27-Dec-16	Macquarie Emerging Markets Asian Trading Pte Ltd	Sell	1,983,352	253.85
15-Feb-17	New Horizon Wealth Management Pvt Ltd	Sell	438,825	222.16
6-Nov-17	Abu Dhabi Investment Authority - Behave	Sell	496,501	282.5
27-Dec-16	New Horizon Opportunities Master Fund	Buy	2,479,552	253.43

**in last one year*

Insider Trades

Reporting Data	Acquired / Seller	B/S	Qty Traded
18-Apr-17	Mrs.Netra Pritam Shah	Buy	30000
19-Apr-17	Mrs.Netra Pritam Shah	Buy	15000
20-Apr-17	Mrs.Netra Pritam Shah	Buy	148917
21-Apr-17	Mrs.Netra Pritam Shah	Buy	50000
24-Apr-17	Mrs.Netra Pritam Shah	Buy	40000
6-Jun-17	Mrs.Netra Pritam Shah	Buy	20000
1-Aug-17	Mr.Devendra P.Shah	Buy	20000
5-Sep-17	Mr.Devendra P.Shah	Buy	100000
6-Sep-17	Mr.Devendra P.Shah	Buy	200000
13-Sep-17	Mr.Devendra P.Shah	Buy	100000

**in last one year*

India Midcaps

INITIATING COVERAGE

HERITAGE FOODS

Leveraging moat to take the right stride

India Equity Research| Dairy

Edelweiss
Ideas create, values protect

Heritage Foods (HFL), a strong private dairy player in south (AP) with 10% organised market share, has set a target to be a VADP dairy player with INR60bn in sales in FY22 (INR18bn in FY17), implying 26% CAGR over FY17-22E. With a strong franchisee in liquid milk, Heritage is diversifying into VADP with 24% of dairy sales in FY17 and has set a strong target of 40% of sales, potential of ~34-40% sales CAGR over FY17-22E. The strategy is prudently straddling the high ROCE pouch milk and high-growth & margin curd, yogurt, ice-cream segments, leading to Heritage sustaining its highest pre-tax RoCE in the industry at 42% (adjusted) with strong 23% sales and 21% EBIT CAGR over FY17-20E. Initiate coverage with 'BUY' valuing at 30x FY20E P/E, (~10% discount to FMCG players) in light of growing scale in high growth VADP and sustenance of high RoCE.

Vision 2022 – INR 60 bn sales in 5 years with 26% CAGR

While Heritage commendably expanded its procurement from 20,000 LPD in 1997 to >1.2 mn LPD in 20 years and attained dairy sales of INR18bn in FY17, it has set a strong target of INR60bn of sales with procurement of ~2.8 mn litres per day in 5 years. This will be driven by: ~25% sales CAGR in fresh milk segment led by: a) deepening penetration in current markets and expanding reach in new geographies by inorganic acquisition, and (2) 34-40% sales CAGR in VADP to INR24bn in FY22 (INR4.2bn in FY17).

Unwavering focus on high margins alongside RoCE

The company is prudently straddling the high RoCE pouch milk segment and high-growth & margin curd, yogurt and ice-cream segments to attain its target. Targeting large categories like curd (INR288bn) with organised penetration at mere 6% and high margin segments like ice-cream are envisaged to spur Heritage's growth and margin.

Outlook and valuations: Straddling the right mix; initiate with 'BUY'

Despite transitioning to a VADP dairy player with strong ~23% sales and 21% EBIT CAGR over FY17-20E and adjusted ROCE at ~42%, a rare combination in this sector, the stock entails immense potential. We value it at P/E of 30x FY20E EPS (at ~10% discount to FMCG players) and add the market value of investment in Future Retail with a 20% holding company discount. Initiate coverage with '**BUY**' with TP of INR976, implying 29% upside.

Financials

Year to March	FY17	FY18E	FY19E	FY20E
Net Revenues (INR mn)	26,429	24,665	29,021	34,457
EBITDA (INR mn)	1,413	1,407	2,016	2,600
Adjusted PAT (INR mn)	817	643	999	1,358
Adjusted Diluted EPS (INR)	17.6	13.9	21.5	29.3
Diluted P/E (x)	43.1	54.7	35.2	25.9
EV/EBITDA (x)	24.6	25.1	17.5	13.4
Adjusted RoCE (%)	39.4	32.3	38.8	41.7
RoE (%)	30.2	19.9	26.0	28.5

EDELWEISS RATINGS

Absolute Rating	**BUY**
Investment Characteristics	Growth

MARKET DATA *(R: HEFI, B: HTFL IN)*

CMP	: INR 758
Target Price	: INR 976
52-week range (INR)	: 830 / 412
Share in issue (mn)	: 23.3
M cap (INR bn/USD mn)	: 18 / 274
Avg. Daily Vol. BSE/NSE ('000)	: 68.4

SHARE HOLDING PATTERN (%)

	Current	Q1FY18	Q4FY17
Promoters *	39.9	39.9	39.9
MF's, FI's & BKs	6.0	6.0	5.8
FII's	8.2	7.4	7.2
Others	45.9	46.7	47.1

** Promoters pledged shares (% of share in issue) : NIL*

PRICE PERFORMANCE (%)

	Sensex	Stock	Stock over Sensex
1 month	1.7	(2.9)	(4.6)
3 months	6.2	3.9	(2.3)
12 months	28.0	72.3	44.3

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017

"The vision for our company is to be a INR6000 crores company in the next five years. To achieve that we need to become a nationally recognised brand"

Ms. Brahmini Nara
Executive director

"Our go to market strategy is to always procure milk directly and as close to the market as possible. We have gained an expertise in this over the last 25 years."

Investment Rationale

Competitive advantage

Creating an end-to-end dairy business to strengthen moats

Heritage's capital investments are helping it create a completely integrated dairy business.

- Heritage procures milk in 9 states from 0.35mn dairy farmers. A farmer is tied up with Heritage through its cattle fodder, cattle feed and veterinary services.
- Further, the cattle feed is now being produced at Heritage's own plant.
- It processes and manufactures a range of 22 products at 15 own processing plants as well as 5 leased plants.
- Heritage's dairy products are sold in 15 states through ~120,000 outlets including 1,279 Heritage Parlours (Heritage's franchise outlets).

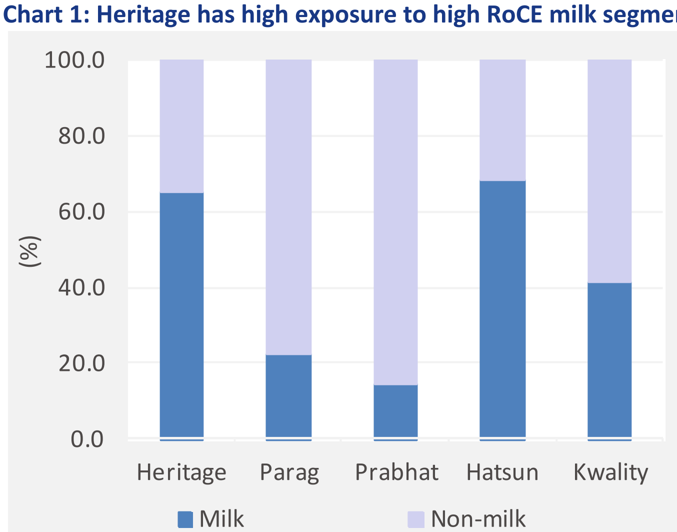
Heritage has steadily built its competitive advantages and strength in milk led by: a) strong procurement, b) infrastructure and c) distribution.

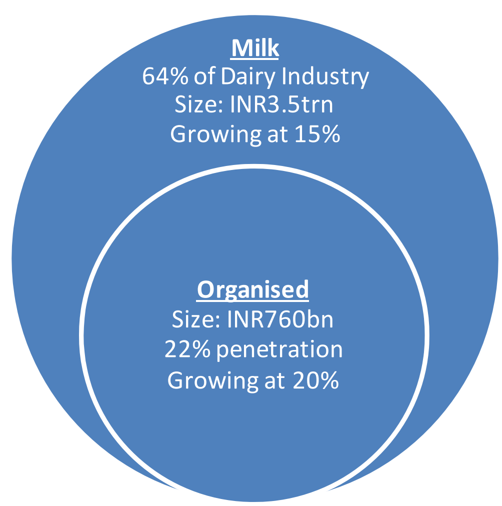
Strength in pouch milk segment

Heritage is a strong player in the dairy business with pouch milk contributing 65% to sales and balance from milk products. The company had focused on the pouch milk category as there is a huge addressable market for this product, at INR3.5trn with organized market at mere 22% (INR760bn).

With strong procurement, distribution and processing plants (15 plants with procurement from 9 states), Heritage's pouch milk sales have clocked 8% CAGR to INR11.7bn over FY12-17. We believe there is strong potential within its high ROCE milk segment led by huge industry size and organized segment clocking a strong 20% CAGR. Hence, company set a strong target of more than doubling procurement.

Chart 1: Heritage has high exposure to high RoCE milk segment with rising organised penetration





Source: IMARC, Edelweiss research

Chart 2: Milk sales to pick up at 22% CAGR over FY17-20E

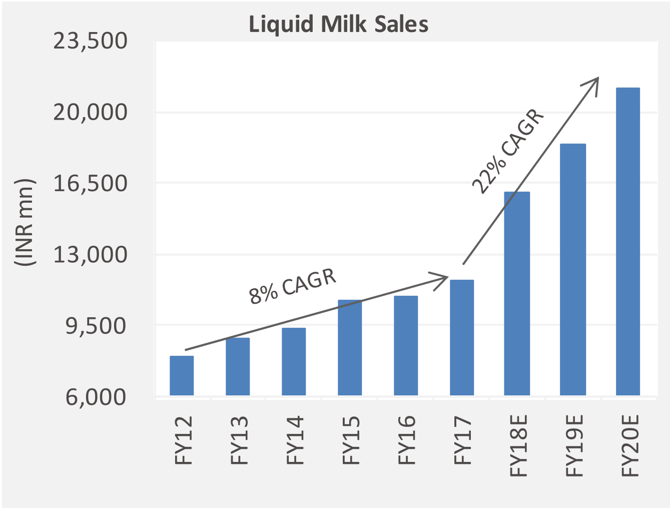
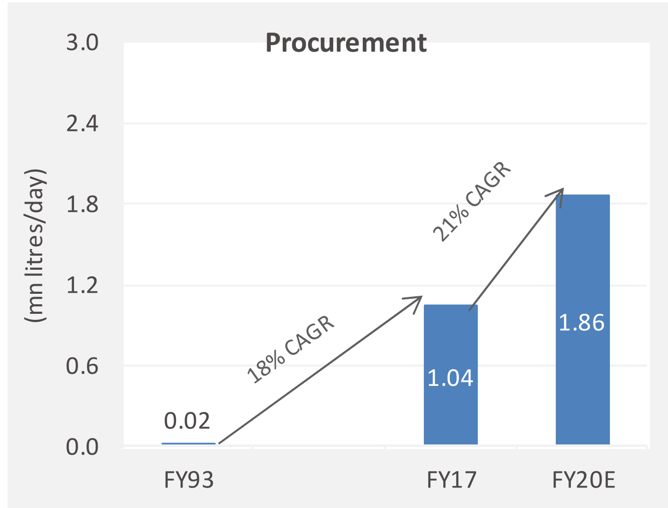


Chart 3: Procurement grew at 18% CAGR during 1993-2017



Source: Company, Edelweiss research

Heritage is a strong player in pouch milk (contributes 65% to sales), which is procured from 0.35mn dairy farmers from 9 states and sold in 15 states currentlv

Having clocked 18% procurement CAGR over 24 years, Heritage has set target of acheiving 22% CAGR over next 5 years

The company has commendably expanded its procurement base from mere 2 states a decade ago to 8 in FY17

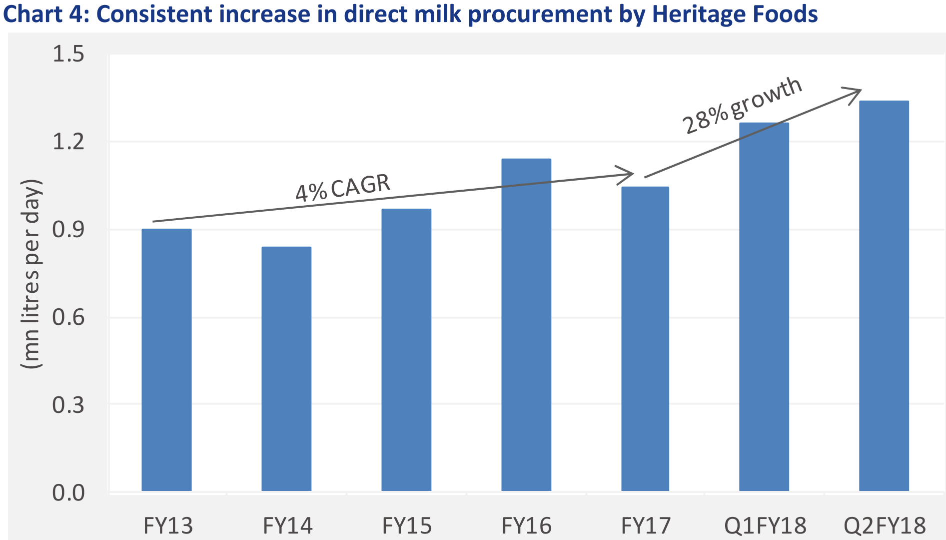
A) Strong procurement in milk segment

Heritage's milk collection of merely 20,000 litres per day in 1993 has grown to 1.04 mn litres per day in FY17, CAGR of 18%. This is led by its strength in following areas:

i) **95% direct procurement**

Among private dairy players, Heritage stands tall in terms of procurement, as it sources ~95% of its requirement directly from farmers. The company has commendably expanded its procurement base from mere 2 states a decade ago to 8 in FY17—Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, Maharashtra, Haryana, Rajasthan and Gujarat. The company has a procurement network of 0.35mn dairy farmers.

Chart 4: Consistent increase in direct milk procurement by Heritage Foods



Source: Company, Edelweiss research

"Looking ahead, we intend to cement our identity as the best supporter of the Indian dairy farmer".
N Bhuvaneshwari
Vice Chairman and MD

Building a milk procurement network is a function of winning farmers' trust. Heritage has built a multi-state milk procurement network by focusing on processes such as complete transparency, timely payments through banks and providing allied dairy services. The transparency in milk procurement process helps the company win the farmer's trust. Further, the company is leveraging this model across regions and creating a scalable model of milk procurement.

ii) Becoming the farmers' trusted brand

Over the past 2.5 decades, Heritage has established its brand equity amongst farmers in South India via multiple support systems

Over the past two and half decades, Heritage, through its milk procurement network, has established its brand equity amongst farmers in South India, leading to sustained expanding procurement reach. This is due to the following factors as the company is offering multiple support systems to them through:

- Facilitating loans from commercial banks for purchase of cattle.
- Facilitating cattle insurance.
- Conducting health camps for animals through mobile veterinary clinics at frequent intervals.
- Supply of high quality cattle feed and fodder seeds.
- Helping farmers source good productive animals.
- Supply of milk analyzers for ensuring accurate measurement of milk quality and complete transparency in measurement in quantity and quality of milk.
- Ensuring punctual payment to farmers.
- Farmers welfare fund, mobile veterinary clinics, certificate courses in dairy farming, amongst others.
- Heritage provides 100% assurance of procuring milk total supply of milk from farmers, even in an oversupply situation.
- Recently, the company commenced a 20 tonnes per day animal feed plant in Anantapur (Andhra Pradesh) to supply to its milk farmers.

Heritage has transferred INR30mn to MCC centers in the past 5 years for veterinary care and social security schemes

Milk collection center development

Heritage Farmer Welfare Trust (HFTW) was set up in 2010 to prioritise areas of veterinary care and social security schemes. A case in point is the company setting up an Executive Committee (EC) at all enrolled milk collection centers whenever their corpus reached INR7,500. The trust has proposed 26 development activities like distribution of milk cans, milk analysers, feeding bowls, mosquito nets for cattle sheds, umbrellas, pressure cookers, water pots, containers, flasks, solar lamps, sprayers, milk machines, cattle insurance etc., for farmers. A total of 1,313 ECs were formed at Milk Collection Centre (MCC) level for execution of above activities. Heritage has transferred INR30mn to MCC centers in the past 5 years.

These measures ensure retention of strong relationships with farmers. As a result, Heritage enjoys ~10% liquid milk market share in South India (AP), which contributes ~65% to the company's dairy revenue. Further, the company has created brand equity which the company can leverage to enter new regions for milk procurement in South India with its credibility amongst farmers.

Established a 1.3mn direct milk procurement network across 9 states with 12,774 collection centres, 195 bulk milk coolers & chilling centres. This has been further augmented ~23% with Reliance Dairy's network of 36 bulk milk coolers and chilling centers

This model for procurement and sales has been replicated across regions by Heritage, growing to one of the largest private dairy company with major presence in AP, Telangana, and growing presence in Tamil Nadu & Karnataka.

B) Created infrastructure to keep distribution costs low

Heritage has built a strong direct milk procurement network and expanded its pouch milk capacity. The company has steadily built a 1.3mn litre per day direct milk procurement network across 9 states. It sources milk directly through 12,774 collection centres and 159 bulk milk coolers & chilling centres combined across villages, further augmented by ~23% with Reliance Dairy's network in North with 36 bulk milk coolers and chilling centers. Totally, post some rationalization of Reliance Dairy's operations, the company's combined procurement network from 195 bulk coolers and chilling centers has come down to 186 currently.

Table 1: Heritage's strong procurement infrastructure

	States	Chilling Centres	Bulk Milk Coolers
Heritage	10	62	97
Reliance	10	27	9
Total	**15**	**89**	**106**

Source: Company, Edelweiss research

The company has invested INR3bn in quality improvement and capacity expansion over the past 5 years.

The key procurement centers are in proximity to key markets. This ensures freshness of milk by cutting down lead time. As a means to this end, Heritage has made sizeable investments in 15 well distributed state-of-the-art production hubs. Thereby, instead of setting up 1-2 large dairy plants, Heritage has set up a network of smaller milk processing and pouching plants across South India.

This network has been mapped in a way that the end-market is within 200km radius of the plant, thus keeping logistics cost low. Higher capacity utilisation of the regional dairy plant increases its profitability. Regional dairy plants also give Heritage more flexibility to adjust to local demands and still have a state-wide brand.

Heritage has made sizeable investments in 15 well distributed state-of-the-art production hubs

Heritage enjoys strong brand recall as it sells 100% of its products in the B2C segment

Heritage sells across 15 states in India via 6,330 distributors, more than 118,500 retail outlets and 1,279 *Heritage Parlours*

Table 2: Heritage's network of 15 factories

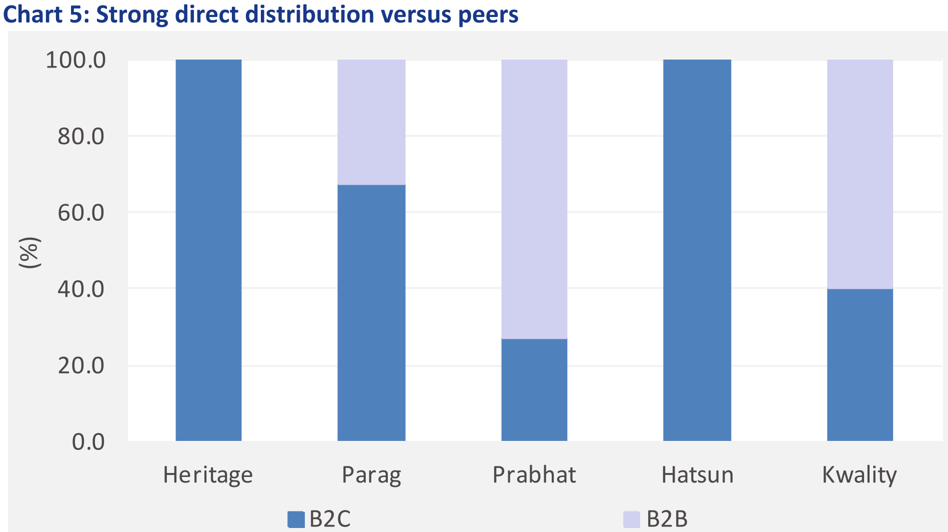
Number	Plant	State
1	B. Kotha Kota	Andhra Pradesh
2	Bayyavaram	Andhra Pradesh
3	Bhattiprolu	Andhra Pradesh
4	Bobbili	Andhra Pradesh
5	Chittoor	Andhra Pradesh
6	Gokul	Andhra Pradesh
7	Pamarru	Andhra Pradesh
8	Bengaluru	Karnataka
9	Sindhanur	Karnataka
10	Vadamadurai	Tamil Nadu
11	Kalluru	Telangana
12	Narketpalli	Telangana
13	Uppal	Telangana
14	Sangvi	Maharashtra
15	Rai	Haryana

Source: Company, Edelweiss research

(C) Strong brand with enhancing distribution

Heritage has created a strong brand recall with direct reach, selling 100% of its products in the B2C segment. Since inception in 1992, the company has now become a household name in dairy business in its home state of Andhra Pradesh, as well as in neighbouring states. The brand has strong credibility in these states, with its image in line with its slogan of 'Health and Happiness' due to its stable and consistent sourcing of raw material.

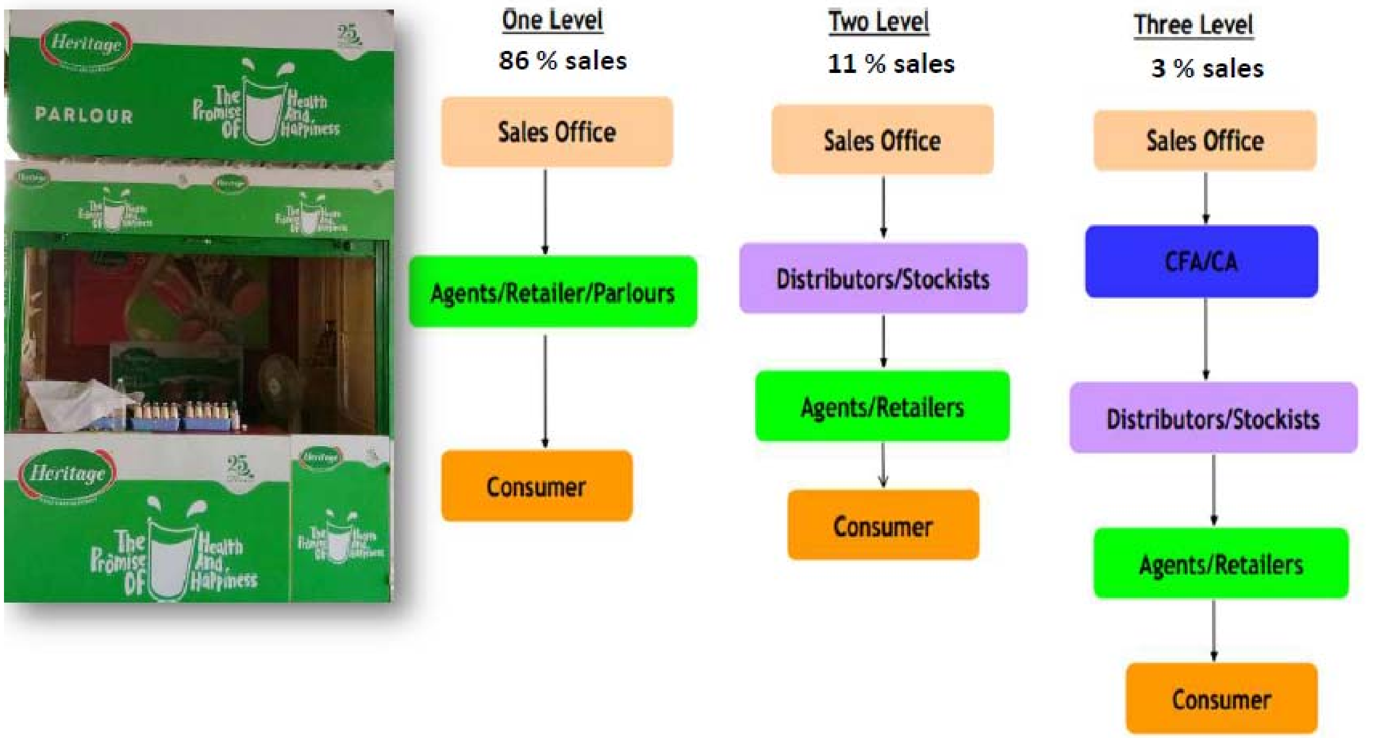
Chart 5: Strong direct distribution versus peers



Source: Edelweiss research

Further 86% of the company's distribution is directly via own agents/parlours enabling stringent control over distribution. Heritage sells dairy products under the *Heritage* brand across 15 states in India via 6,330 distributors, more than 118,500 retail outlets and 1,279 *Heritage Parlours*.

Fig. 1: Robust distribution structure



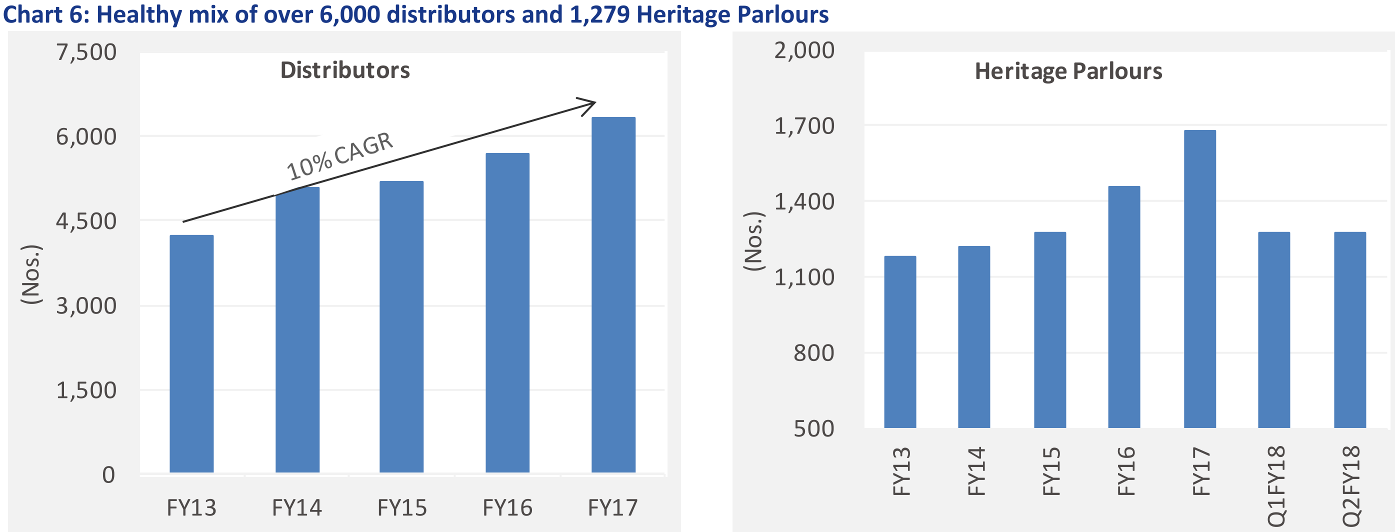
Source: Company, Edelweiss research

86% of the company's distribution is via own agents/parlours enabling stringent control over the network

Heritage Parlours further strengthen brand visibility

Heritage Parlours are modern day kirana stores which exclusively offer a range of Heritage products and authorized products & services. They are operated on a franchisee basis, with strong development support from the company. Heritage has rationalised a few *Parlours* (due to various reasons such as indiscipline amongst some franchisees, conversion of some to milk distributing agents and closure of some unviable outlets).

Chart 6: Healthy mix of over 6,000 distributors and 1,279 Heritage Parlours



Source: Company, Edelweiss research

The integration should help it weather any attack from larger dairy co-operatives.

Fig. 2: Integrated operations

Milk Procurement	Processing	Distribution
•Procurement from 9 states •Direct milk procurement from 0.35mn farmers •Operates 186 bulk coolers and chilling plants	•Operates 15 own processing plants and 5 leased processign plants •Installed processing capacity of 18.9llpd through own plants and 4llpld through leased plants •Manufacture of 22 products and 277 SKUs	•Products sold in 15 states across India •Over ~120,000 outlets across India selling Heritage products •Enjoys loyalty of 15lakh households •Operates 1,279 Heritage Parlours

Source: Company, Edelweiss research

Vision 2022: Strong 26% sales CAGR

Heritage has set the target to emerge as a USD1bn company (revenue of INR60bn) by the year 2022 versus INR18bn in FY17. Further, the company aims to achieve procurement of 2.8mn litres per day by 2022, from just ~1.2mn currently. The target is driven by 25% CAGR in pouch milk sales and ~34-40% CAGR in VADP. Milk is expected to contribute 60% of sales and VADP which currently contributes 24% of dairy sales is expected to contribute ~30-40% of sales by 2022.

Heritage aims to procure 2.8mn litres per day milk by 2022 from mere ~1.2mn currently. This target will be driven by 25% CAGR in pouch milk sales and ~34-40% CAGR in VADP over FY17-22

Heritage has set a target to emerge as a USD1bn company (revenues of INR60bn) by 2022 driving overall sales CAGR of 26% over 5 years. Further, it aims to achieve procurement of ~2.8mn litres per day by 2022 from ~1.043mn in FY17 and 1.3mn currently.

This vision was conceived based on studies and analysis done by KPMG for Heritage, after which it set this towering but achievable target. Growth will be driven by 25% CAGR in pouch milk sales and ~34-40% CAGR in VADP. Milk is expected to contribute 60% to sales and VADP, which currently contributes 24% to dairy sales, is expected to contribute ~30-40% by 2022. Further, this will be met through a prudent combination of organic as well as inorganic growth in liquid milk and VADP.

Fig. 3: Heritage's Vision 2022 implies strong growth trajectory of 26% revenue CAGR versus 11% in history (FY12-17)

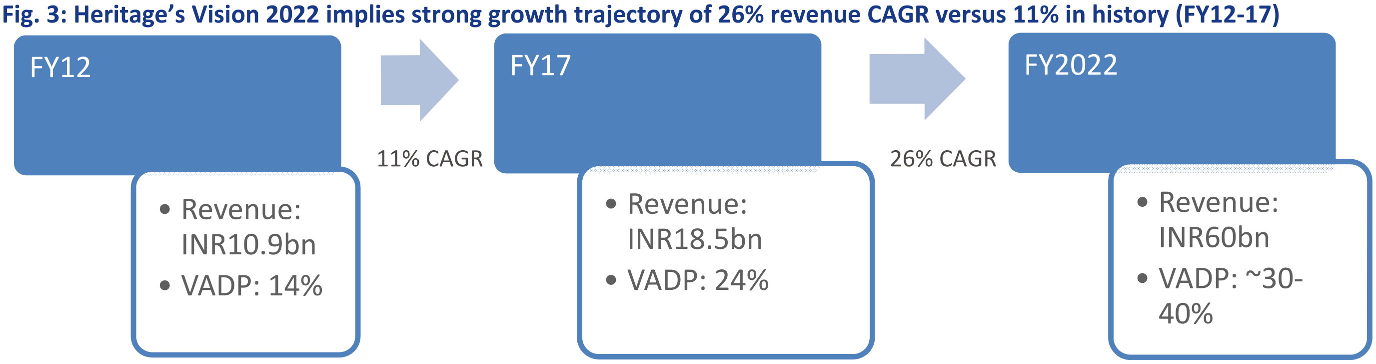
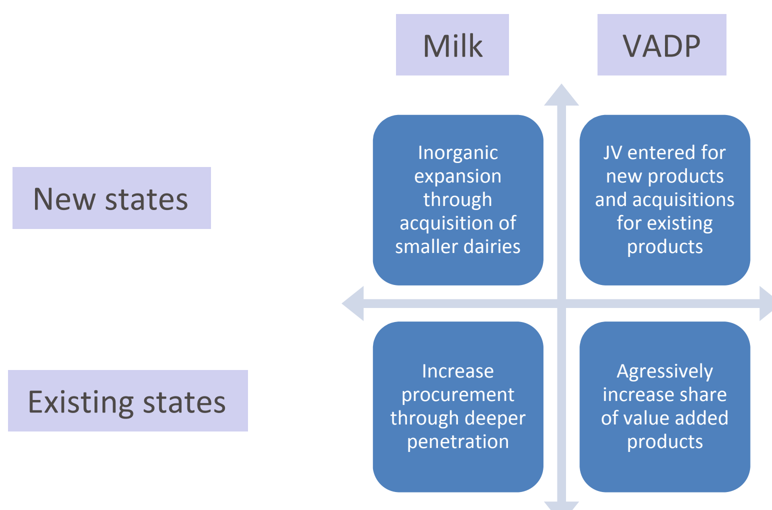


Fig. 4: Strategy for growth in milk and VADP in existing and new states

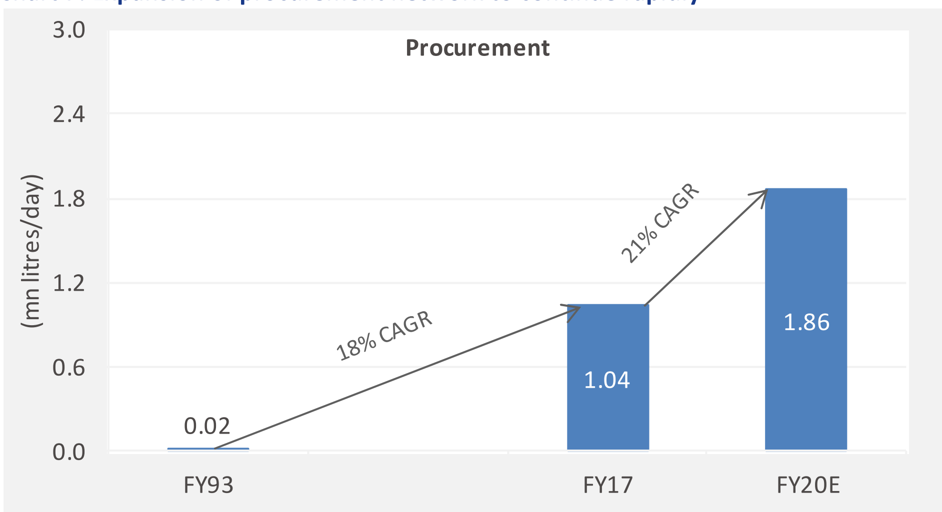


Source: Company, Edelweiss research

Milk procurement to reach 2.8mn lpd by FY22E

Over FY17-22, Heritage has set a target to more than double its direct milk procurement from 1.043mn lpd in FY17 to ~2.8mn lpd in 2022, a 22% CAGR. **Led by investments in procurement network, we expect milk procurement CAGR of 21% over FY17-20 from 1.043 mn lpd in FY17 to 1.86 mn lpd in FY20E.**

Chart 7: Expansion of procurement network to continue rapidly



Source: Company, Edelweiss research

While Heritage has 10% organised market share in South India (AP), its procurement as a percentage of total milk production stands at mere ~1-2% in the key states of AP and Telangana

Strengthening pouch milk segment

We estimate the company's pouch milk business to post 22% revenue CAGR over FY17-20E to INR21bn led by: a) Rising penetration in current states and b) Geographic expansion into other states via organic and inorganic means like recently acquired Reliance Dairy. This is inline with the company's target of 25% CAGR in fresh milk sales. We are inline with company's target.

Heritage is a leading private dairy player with 10% organised market share in South India (AP). We estimate the company's pouch milk business to post 22% revenue CAGR over FY17-20E to INR21bn inline with company's target.

a) Greater penetration in current markets

Heritage's home market is Andhra Pradesh and Telangana, where it is the market leader. Yet, due to the highly fragmented nature of the industry, the company's procurement as a percentage of total milk production stands at merely ~1-2% in AP and Telangana. Further, milk production in Andhra Pradesh and Telangana cumulatively has been clocking CAGR of 7% (FY06-16). We believe Heritage has huge scope to grow in these 2 states.

Hence, despite its already strong positioning in the southern states, there is still huge scope to penetrate deeper into the market and garner further market share in Andhra Pradesh and surrounding states. The company is also targeting Tier II & III towns in the region.

Table 3: Robust potential in already strong home markets (mn litres per day)

	Total Milk production	Heritage Procurement	Market Share (%)
Andhra Pradesh	29.6	0.6	2.1
Telangana	12.2	0.2	1.3
Tamil Nadu	19.8	0.2	0.9
Karnataka	17.4	0.0	0.1
Maharashtra	27.8	0.1	0.3

Source: Company, NDDB, Edelweiss research

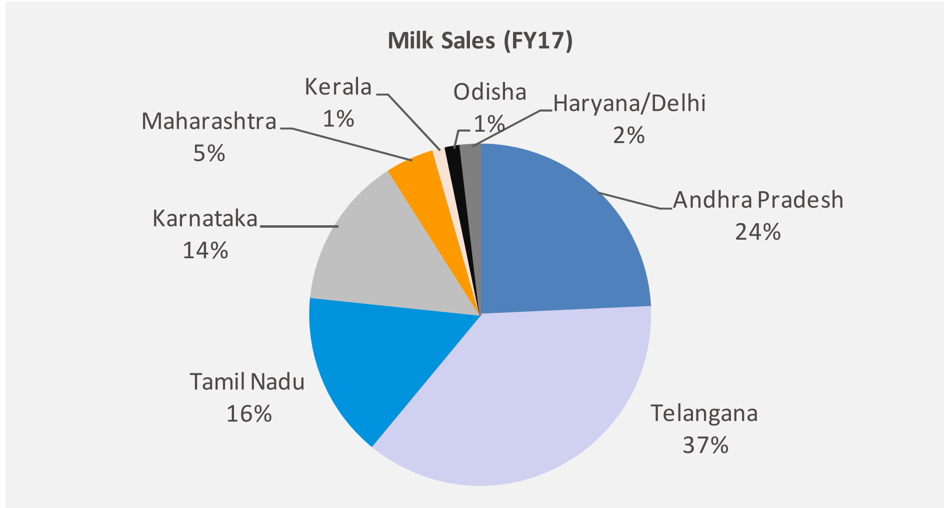
Note: The procurement number is prior to the addition of Reliance Dairy

b) Expansion in other states to open up new opportunities

Heritage's top 4 states (Andhra Pradesh, Telangana, Tamil Nadu and Karnataka) account for 85-90% of its milk procurement and ~90% of milk sales. Hence, large markets of North and West with states like Maharashtra, Delhi and Rajasthan remain untapped and offer a huge opportunity.

Top 4 southern states account for 85-90% of its milk procurement and ~90% of milk sales

Chart 8: Huge opportunity in the untapped northern and western states

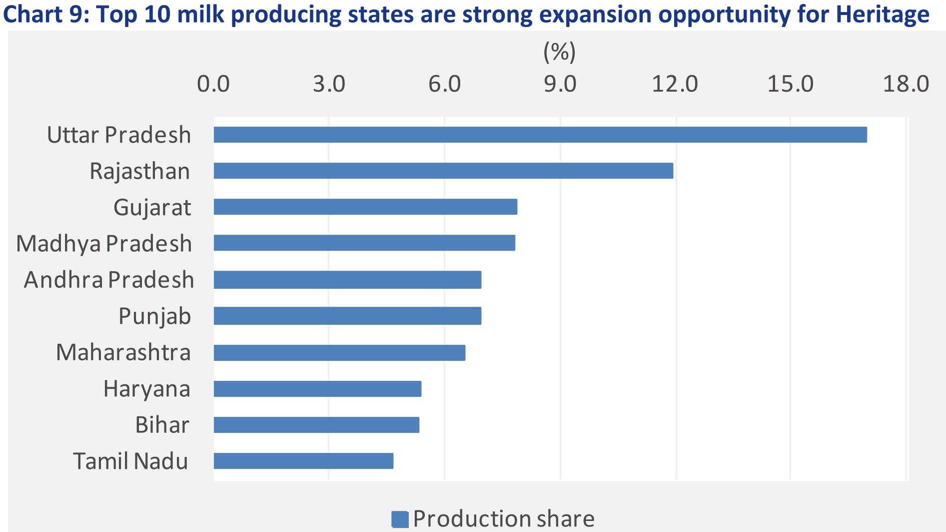


Source: Company, Edelweiss research

Eight of the top 10 milk producing states are in North, West and Central India, where Heritage has little or no presence.

In order to expand its distribution reach in these states, Heritage is expanding its procurement reach both organically and inorganically (Reliance Dairy) which will facilitate Heritage products to tap in to high potential states.

Chart 9: Top 10 milk producing states are strong expansion opportunity for Heritage



Source: NDDB

With Reliance Dairy's acquisition, Heritage's procurement jumped ~20%, adding new states—Punjab, Uttarakhand—and strengthened synergies in Mumbai and Delhi-NCR

Acquisition of Reliance Dairy to boost geographical reach

Heritage has expanded its footprint to North and Western India through the acquisition of Reliance Dairy. The company's products are now sold in 15 states, of which they are present in 5 states through Reliance Dairy. Reliance operates pan-India dairy procurement, processing and distribution operations under 2 brands *Dairy Life* and *Dairy Pure*. It has a milk procurement network of ~0.23 mn litres per day from over 2,400 villages across 10 states with 36 chilling centres and bulk milk coolers combined.

We believe this acquisition will strengthen Heritage's procurement and distribution as it will add new states to its operations—Punjab, Uttarakhand and Rajasthan—and add strong synergies in markets like Mumbai and Delhi-NCR, where Heritage's presence is not strong. This acquisition will also open up *Reliance Fresh* as a customer, to which Heritage was not supplying earlier. Reliance Dairy generated revenue of ~INR5.5bn in FY16.

As a result of the Reliance Dairy acquisition, Heritage's procurement jumped ~21%. We estimate 37% YoY growth in fresh milk sales in FY18 with 23% growth led by Reliance Dairy and 14% growth organically.

Further inorganic expansion on cards

Heritage has also acquired Shah Motilal Foods, based in Telangana, and Vaman Milk Foods, based in Punjab for INR120mn and INR200mn respectively. These are asset acquisitions undertaken to bolster packing capacities for future growth and shift volumes from third party packing stations to its own. Further, the company has taken on board E&Y to assist its inorganic expansion. Management has indicated that this will be an ongoing activity for the next 5 years to expand its milk procurement and increase fresh milk sales.

With increased penetration in current states and geographical expansion via organic and inorganic routes, we forecast fresh milk sales CAGR of 22% to INR21bn over FY17-20E. This is in line with the company's target of 25% CAGR in fresh milk sales to INR36bn over FY17-22E. Further, this potentially implies ~30% CAGR over FY20-22E for the company to attain its stated target.

Scaling up in high-margin, RoCE fresh dairy products

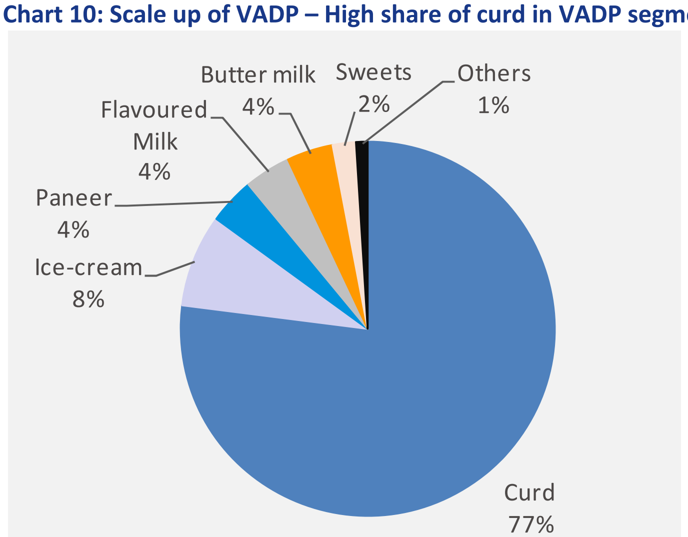
Heritage is smartly straddling the high ROCE pouch milk segment and curd and yogurt segments leading it to the highest RoCEs amongst peers (core pre tax ROCE at 39% versus 22% for Hatsun, 8% for Parag, 10% for Prabhat in FY17). We expect the adjusted pre tax RoCE to expand 230bps to ~42% over FY17-20E as INR1.3bn capital employed in retail and agri is released and value added sales scale up.

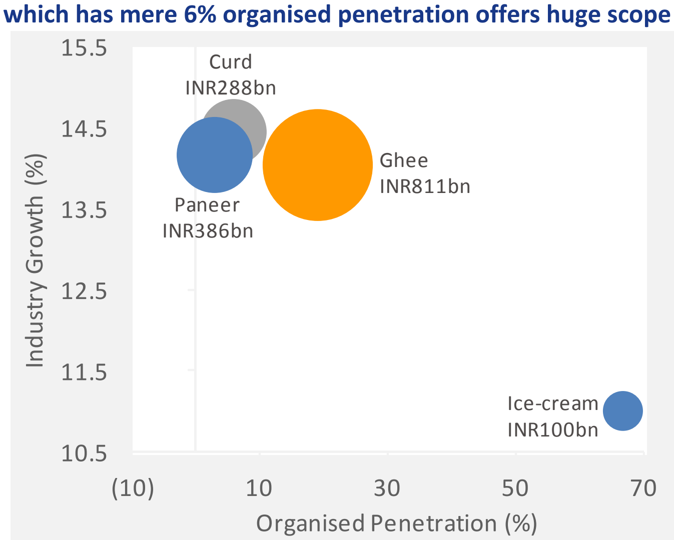
Heritage is expanding its sales in VADP as fresh milk, despite being a strong RoCE business, can be scaled only via strong procurement across states, which happens gradually. Hence the company, leveraging its strong procurement prowess, continues to raise the revenue share of VADP.

Within VADP, Heritage is judiciously moving towards high margin, high value added products—curd, ice cream, paneer and flavoured milk. These products entail, on an average, 2x EBITDA margin versus liquid milk.

Value-added product consumption is also growing at a faster rate than liquid milk, due to the low penetration as well as negligible organised share. With industry growth of these products surging and negligible organized share (~6% in curd – Heritage's highest share of VADP), it will be well placed to ride the VADP wave.

Chart 10: Scale up of VADP – High share of curd in VADP segment which has mere 6% organised penetration offers huge scope





Source: Company, IMARC report, Edelweiss research

We estimate 31% CAGR in curd sales over FY17-20.

Curd is the fourth largest value-added product in the dairy industry in terms of market size (INR288bn in FY16) with organised segment at mere ~6% share and South India accounting for largest share at 35%

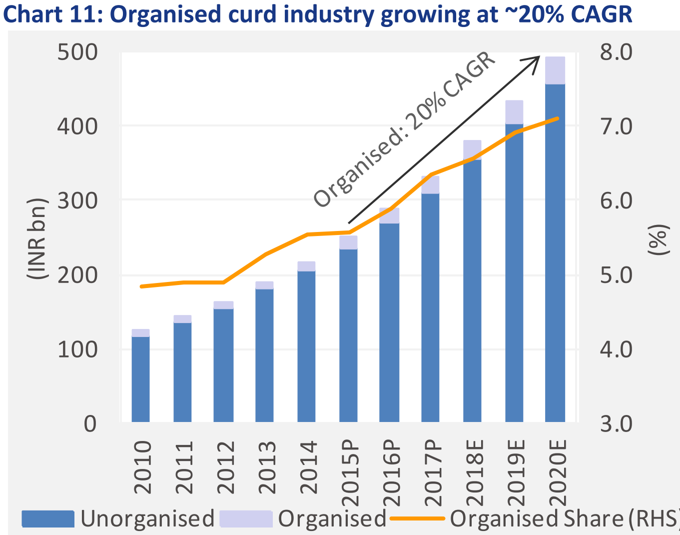
VADP contributed 24% to Heritage's total dairy revenue in FY17, up from merely 14% in FY12. The company has set a target of increasing contribution of value-added products to ~30-40% by 2022 from 24% currently, potentially implying INR18-24bn sales in 2022 from VADP and ~34-40% sales CAGR over FY17-22E. We have given a range as we have assumed fat products to continue at ~10% of sales and hence VADP share at ~30% of sales. We expect 28% of sales from VADP in FY20 driven by:

a) **Low organised penetration in curd offers huge potential**

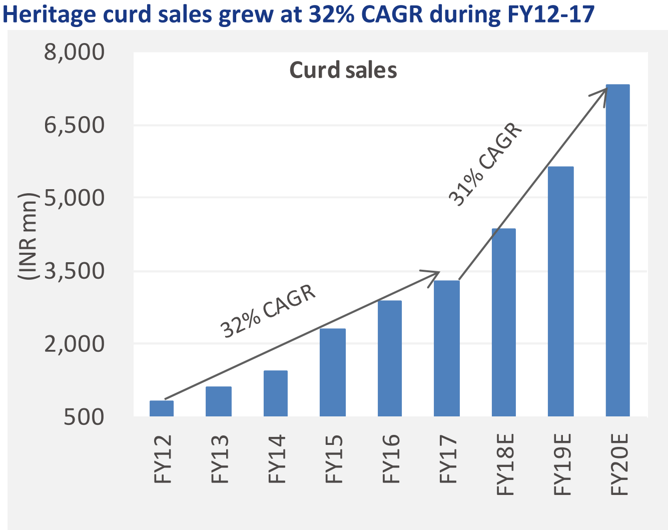
Heritage's curd segment clocked robust 32% CAGR over FY12-17 leading to ~77% strong contribution of the company's VADP and 18% to overall dairy sales at INR3.26bn in FY17. Further, we perceive huge scope as curd is the fourth largest value-added product in the dairy industry in terms of market size (INR288bn in FY16), after milk, ghee and paneer. The curd market is dominated by unorganised players, with the organised segment garnering mere ~6% market share. The industry has clocked ~15% CAGR (FY10-16), though the organised segment has grown at ~20%. We envisage the demand shift to organised players to sustain due to rising income levels, rapid urbanisation and increasing working women.

We believe, Heritage is well poised to capitalise on this opportunity due to its large presence in the segment and expect a strong 31%CAGR in sales over FY17-20E. Further, South India is currently India's biggest curd market, accounting for 35% of total curd consumption which, which will sustain Heritage's growth. The overall curd market is expected to grow to ~INR493bn by FY20E (14% CAGR), of which organised share is estimated at INR35bn from INR17bn currently (20% CAGR over FY16-20E).

Chart 11: Organised curd industry growing at ~20% CAGR



Heritage curd sales grew at 32% CAGR during FY12-17



Source: IMARC Report, Company, Edelweiss research

b) **Inorganic opportunities in VADP – Flavoured yogurt**: Alongside organic growth potential, the company has also forged partnership in VADP and is in discussions with international players for products like curd and yogurt.

Heritage has entered into a JV with a leading French company Novandie SNC for flavoured yogurt and western style desserts to leverage on the globally recognised *Mammie Nova* brand

Joint venture with Novandie to expand capacity and range

Heritage has entered into a joint venture with French company Novandie SNC with a 50:50 partnership for manufacturing and marketing flavoured yogurt and western style desserts. The JV will produce flavoured yoghurt. Later, it will manufacture fruit yogurt lines.

Novandie, a leading yogurt player, is a subsidiary of French food giant Andros. Andros is a family owned and run private company, headquartered in the southwest France, and known as a global leader in fruit processing, frozen desserts, dairy and confectionery. Heritage gets to leverage on technology, recipe and marketing experience of a globally recognized brand *Mammie Nova* with this partnership.

High growth flavored yogurt market

The high growth flavoured and frozen yoghurt market in India posted CAGR of 32% over FY10-16, reaching INR4bn in 2016. Further, the segment is expected to register CAGR of 32% over FY16-20 to INR12.1bn primarily driven by increasing urban middle class.

Management expects ~INR300mn revenue in the first year from the JV, rising up to INR3bn in 5 years bolstered by capacity expansion (INR750mn over 6 years)

Potential from joint venture

A 20MT/ day capacity greenfield plant will be set up in Vashi, Maharashtra, at an investment of INR160mn in the first year to cater to key markets of Mumbai and Pune in FY18. Commercial operations will commence in FY19. Management expects revenue of around INR300mn in the first year, rising up to INR3bn in 5 years bolstered by further capacity expansion (INR750mn over 6 years). The first plant will be able to generate revenue of INR1bn at 100% capacity utilisation. Heritage expects it to breakeven in the second year, while EBITDA margin will scale up from 10% to 20% as utilisation increases. Heritage expects growth in this JV to be led by flavoured yogurts and further expand into stirred yoghurts, European/western desserts and milk & rice based desserts.

Management expects ice cream sales to jump to ~INR3bn from INR340mn in FY17; we have assumed mere INR680mn sales at 26% CAGR over FY17-20 based on pure organic growth

c) Strong growth in other VADP— Ice cream, flavoured milk, butter milk and lassi

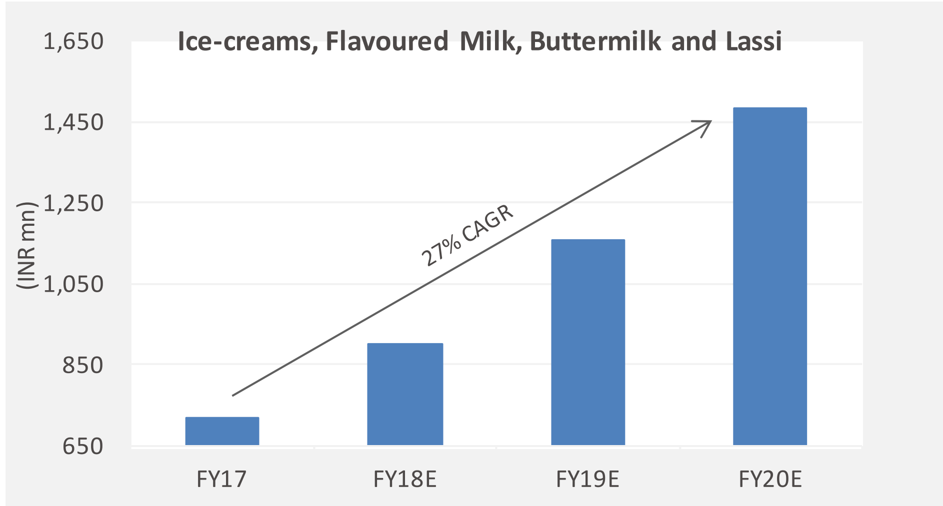
The ice cream market in India is estimated at ~INR100bn with organised sector pegged at 2/3rd of the industry and forecast to clock 11% CAGR over FY16-21.

Ice cream sales at ~INR340mn contribute 8% to Heritage's VADP revenue and the company estimates sales to catapult to INR3bn over the next 5 years. We have assumed mere INR680mn sales at 26% CAGR over FY17-20 based on pure organic growth. Further inorganic plans are yet being firmed up.

Management expects sales of buttermilk, lassi and flavoured milk variants to catapult to ~INR2bn in 2020; we have assumed mere INR800mn sales at 28% CAGR over FY17-20 based on pure organic growth

Overall, we have assumed 30% sales CAGR in VADP over FY17-20 versus management's guidance of ~34-40% CAGR over FY17-22

Chart 12: Growth in other VADP (icecreams, flavoured milk, buttermilk and lassi)

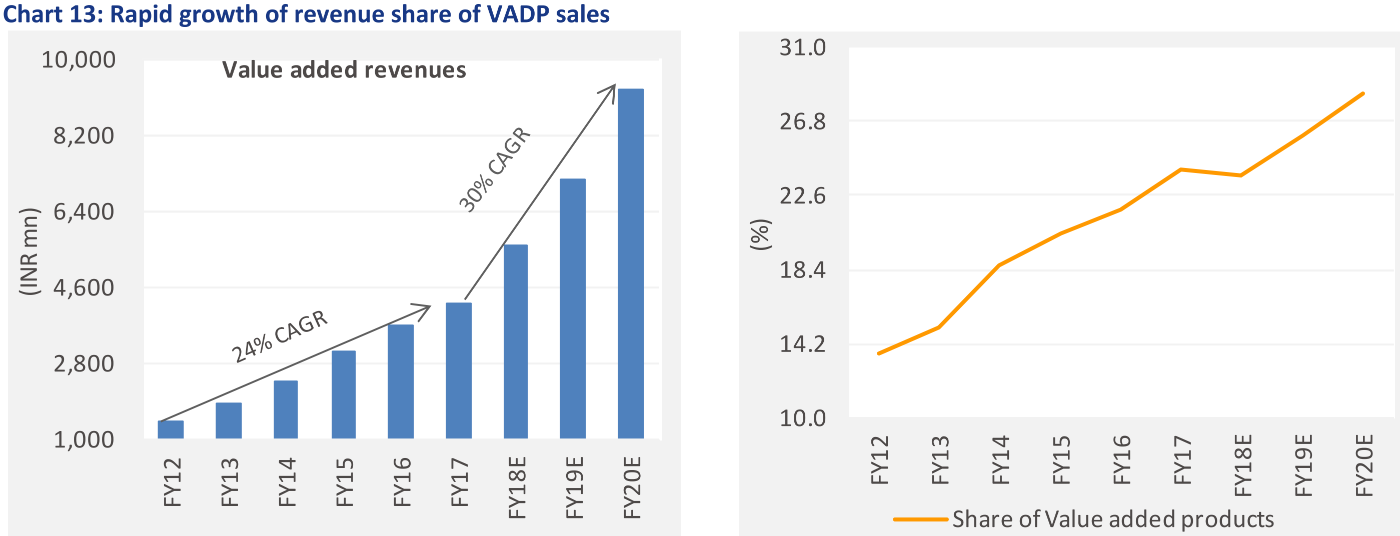


Source: Company, Edelweiss research

Further, the company has ~9% combined revenue share from sales of buttermilk, lassi and flavoured milk variants at INR380mn. Heritage expects sales to catapult to INR2bn over 5 years led by organic and inorganic growth. We have assumed mere INR800mn sales at 28% CAGR over FY17-20E based on organic growth at current capacities.

With acceleration of high growth and margin fresh dairy and VADP going forward, we forecast VADP's contribution to grow from 24% to 28% of sales over FY17-20E and sales CAGR of 30% leading to overall sales CAGR of 23%. This is much lower than the stated target of INR18-24bn, with our forecasts based on organic growth at current capacities. Further, this potentially implies 40-62% CAGR over FY20-22 for the company to attain its stated target which we believe will be via further inorganic acquisitions and entering new categories.

Chart 13: Rapid growth of revenue share of VADP sales



Source: Company, Edelweiss research

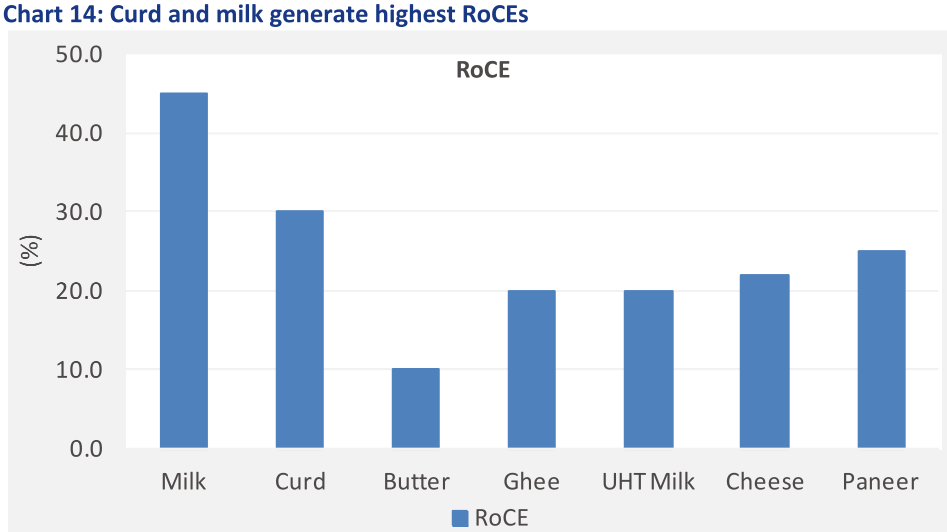
With higher revenue share of high RoCE milk and curd sales at ~83%, Heritage enjoys highest RoCE amongst peers

Focus on right product mix helps maintain high RoCE

While Heritage has a higher share of milk sales (65% revenue share), which is a low-margin business, it generates high RoCE (~44-45%) due to negligible capital outlay requirement as well as low working capital cycle (~5 days). Hence, liquid milk generates the highest asset turnover (10-12x). With strong procurement & distribution and proximity to processing plants (15 plants spread across procurement & distribution regions), the company's asset turn for milk is high, resulting in the segment clocking superior RoCE.

Curd is a high-growth value-added product and generates higher margin than milk without significant capital outlay and working capital requirements. It generates gross margin of ~30% and RoCE of ~30%. Despite being a VADP, moderate capital requirement supports RoCE. Hence, due to high share of curd in VADP, Heritage is able to generate high growth and improve margin without compromising on RoCE.

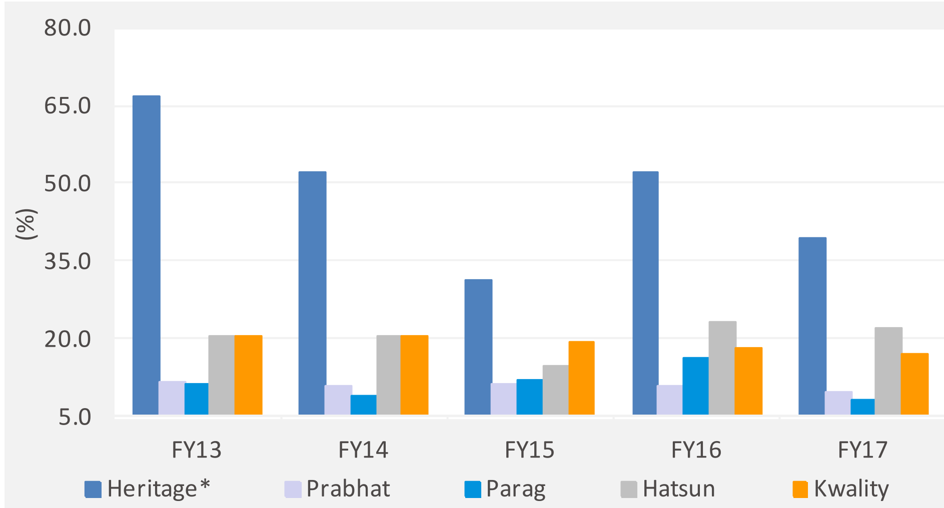
Chart 14: Curd and milk generate highest RoCEs



Source: Industry, Edelweiss research

Due to the high proportion of milk and curd in its portfolio, Heritage enjoys the highest RoCE amongst peers (core RoCE at 39% versus 8% for Parag and 10% for Prabhat in FY17). Further, this is higher than even Hatsun (~22%), which has a strong 14% market share in South in milk, due to Heritage's better product mix and high capital intensity of Hatsun due to its deeper penetration strategy.

Chart 15: Heritage has highest (core dairy) RoCEs due to its product mix



**Adjusted RoCE (excluding demerged segments)*

Source: Edelweiss research

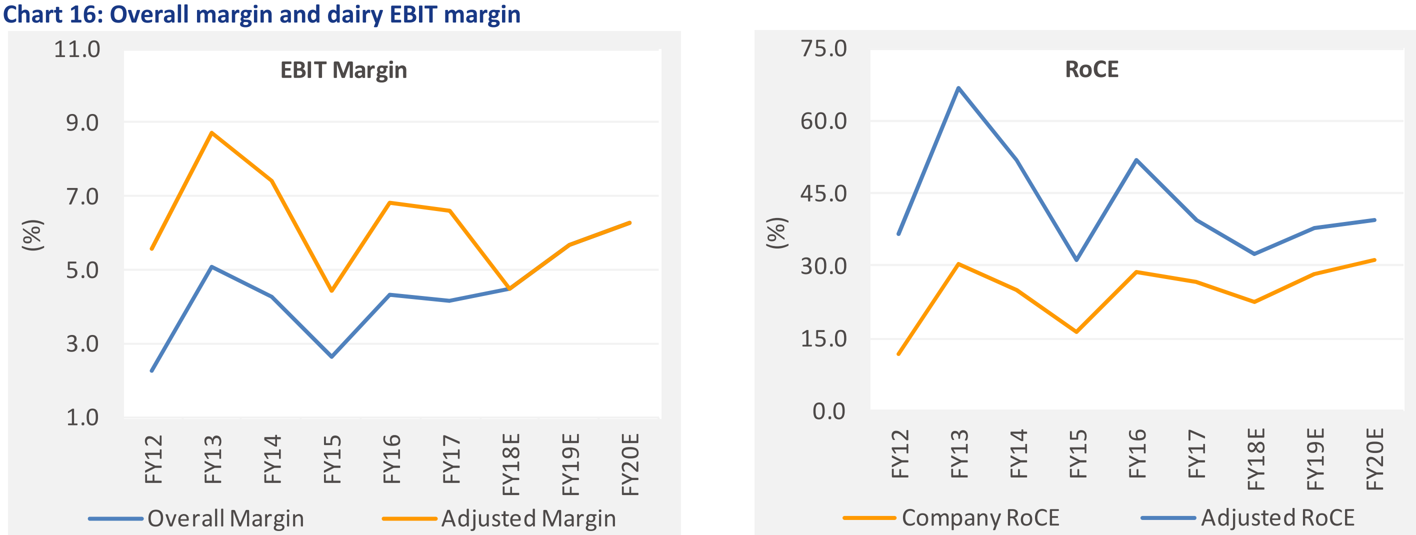
EBIT margin to decline 210bps in FY18 to 4.5%, post which it is envisaged to jump 180bps to 6.3% over FY18-20

Margin and return ratio levers

With increase in VADP from 24% to 28% of sales over FY17-20E, we estimate EBIT CAGR of 21%. The margin expansion is lower since we expect a decline in FY18 due to acquisition of loss-making operations of Reliance Dairy, which is estimated to break even by H2FY18.

Hence, we expect Heritage's EBIT margin to dip 210bps to 4.4% in FY18, post which it is envisaged to jump 180bps to 6.3% over FY18-20E leading to 40% EBIT CAGR over the period for the dairy business.

Chart 16: Overall margin and dairy EBIT margin



Note: EBIT margin has been adjusted to exclude demerged segments

Note: RoCE has been adjusted to exclude demerged segments and investment in Future Retail

Source: Company, Edelweiss research

With operations restricted to the dairy segment currently, we expect Heritage to generate RoCE of closer to that of dairy segment (~45%), adjusting for INR1.48bn investment in Future Retail. We estimate adjusted RoCE to jump 230bps over FY17-20 to 41.7% led by prudently increasing VADP mix from ~24% to 28%.

Even without adjusting for the investment in Future Retail, RoCE will surge to ~32.4% in FY20E from 26.5% in FY17 since the segments sold off generated negative margin (INR158mn of EBIT loss in FY16 and INR132mn EBIT loss in FY17) and returns, while margins and returns will improve going forward with growing VADP sales. Hence, even with the investment generating no revenue returns, it is better off than earlier. Capital employed that was blocked in demerged segments was ~INR1.3bn, while the book value of investment in Future Retail is INR1.5bn.

Valuation

- Transitioning to a pan-India VADP dairy player with strong growth and RoCE, a rare combination in this sector, the stock entails immense potential.
- We estimate Heritage to clock revenue and EBIT CAGR of 23% and 21% respectively over FY17-20 with pre-tax RoCE expanding 230bps to 41.7% in FY20. This will be spearheaded by strong industry drivers and Heritage's drive to be a value added player with USD1bn (INR60bn) revenues.
- As fresh dairy players can be compared to Indian FMCG players which command strong growth and superior RoCEs, we value Heritage at P/E of 30x FY20E EPS (at ~10% discount to FMCG players). Further, adding the market value of investment in Future Retail with a 20% holding company discount. Initiate coverage with '**BUY**'.

Fresh dairy products players can be compared to Indian FMCG players which have strong brands, superior RoCE, significant scope of growth led by shift to organised hence available at a median of 33x FY20 P/E. We initiate coverage on Heritage with a 'BUY' at ~10% discount to FMCG players.

Heritage scores the highest in the industry due to its direct procurement, pure B2C sales and robust RoCE. We believe, the company is well poised for growth along with expanding RoCE, which is already highest in sector, with: 1) sharpened focus on expanding its procurement on pan-India level in fresh milk; and 2) increasing the share of VADP led by high growth & margin and low capital requiring curd and yogurt businesses via JVs.

We believe, Heritage is strongly placed with rising organised penetration in the dairy sector and further transition to a VADP dairy player with strong growth and ROCE, a rare combination in this sector.

Hence, we value the stock at 30x FY20E EPS (at ~10% discount to FMCG players) led by strong regional moat leading to healthy return ratio at ~42% and scope of shift in the huge fresh dairy segments that Heritage deals in. We also add the market value of investment in Future Retail with a 20% holding company discount giving INR98. Thereby, overall we get a target price of INR 976, 29% upside from current levels. At current levels, the stock is trading at P/E of 35.2x FY19E and 25.9x FY20E (unadjusted for the investments in Future retail).

Table 4: SoTP valuation

Particulars	Valuation methodology	Value/Share (INR)	Remarks
Heritage Foods	Earning multiple	878	Valued at 30x FY20E EPS
Future Retail Investment	Market Value	98	Valued at market value with 20% holding company discount
Target Price		**976**	

Source: Edelweiss research

Key Risks

High dependency on low margin milk business

Pouch milk business, wherein margins are low, contributes a sizeable 65% to Heritage's sales. Hence, an increasing milk price scenario impacts the company's margin adversely as the increase in procurement price is passed on with a lag.

Increasing competition

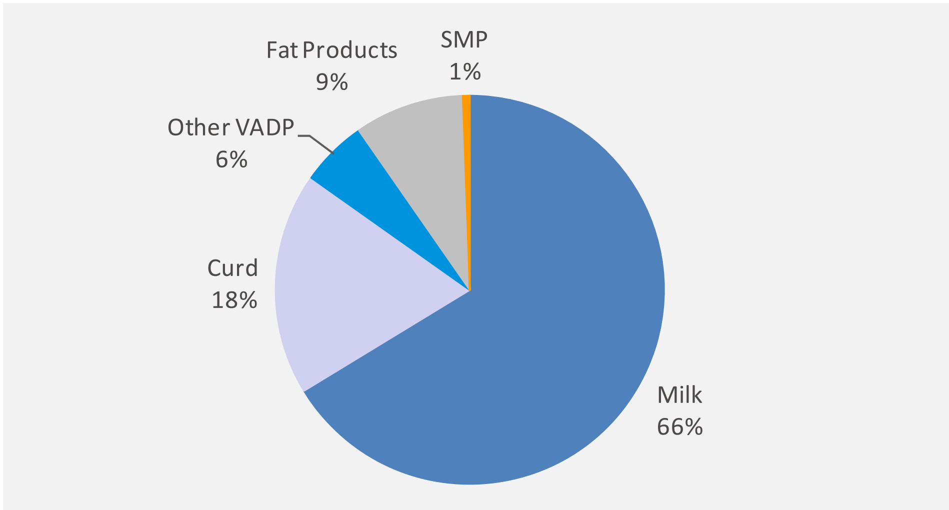
Increase in competition from co-operatives or private players, either in form of procurement (by increasing prices to farmers) or selling price (via lower prices), can impact Heritage's performance. However, increasing procurement on pan-India basis by acquiring dairies and processing plants which are strong in their states will diversify and strengthen Heritage's procurement beyond its home states of AP and Telangana.

Company Description

Heritage was founded by Mr. Chandrababu Naidu in 1992 as a dairy company to provide fresh and healthy products to customers and remunerate dairy farmers. Over the years, Heritage has operated in dairy, retail, agri, bakery and veterinary care. However, it has now demerged its loss making retail, agri and bakery businesses, selling them off to Future Retail for a consideration of 17.85mn shares (3.6% stake), rendering the company a pure dairy play. Veterinary care contributes less than 1% to the company's revenue.

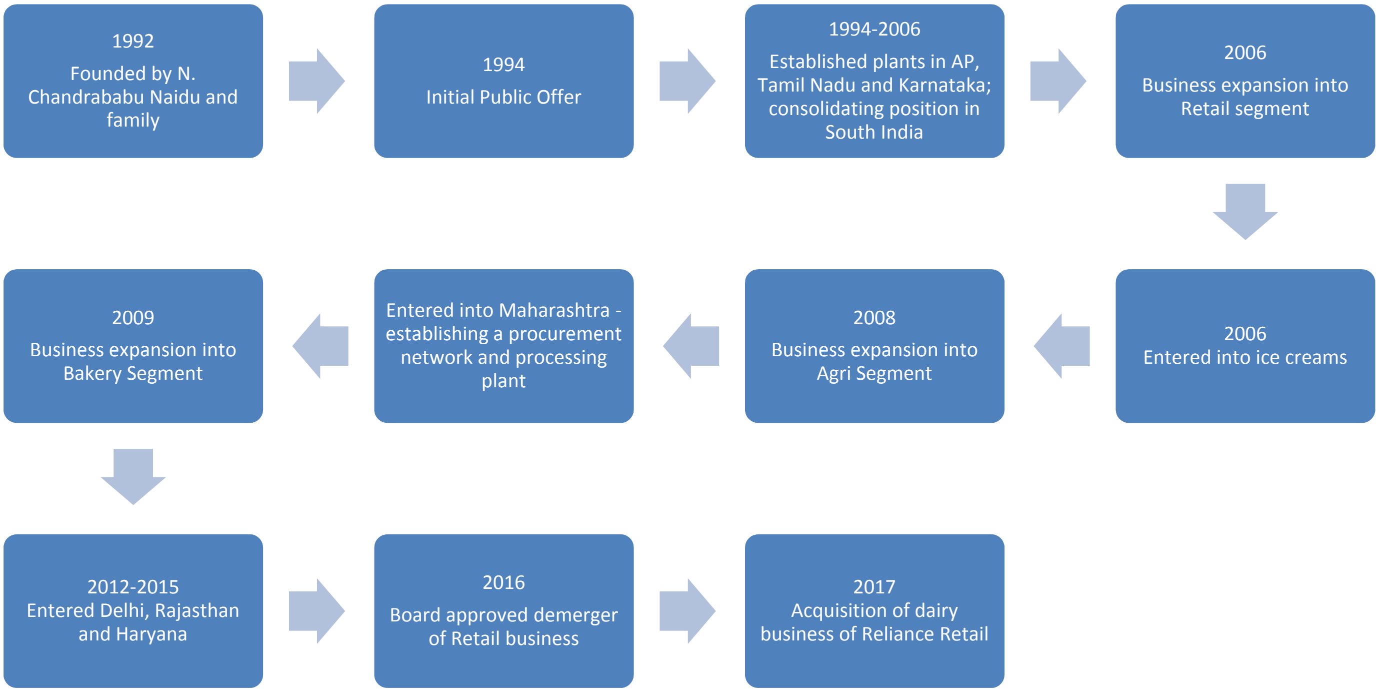
Heritage sells milk and milk products such as curd (largest share), ice cream, paneer, flavoured milk, ghee, butter and milk powders. Entire dairy sales are B2C and are sold under the *Heritage* brand. Of FY17 dairy revenues, milk constituted ~66%, VADP 24% and fat products 9% share. Curd's contribution within VADP is 77% and ~18% to Heritage's manufactured dairy sales.

Chart 17: Revenue mix (FY17)



Source: Company, Edelweiss research

Fig. 5: Evolution of Heritage



Source: Company, Edelweis research

Strong presence in South; expanding reach in other states

Heritage is a strong brand in South India, particularly its home state of Andhra Pradesh and surrounding states. Before the acquisition of Reliance Dairy, ~90% of milk procurement and milk sales were in southern states of Andhra Pradesh, Telangana, Tamil Nadu and Karnataka.

Post the acquisition, Heritage has the widest regional footprint in India among privately held dairy companies, spread across 15 states with procurement in 9 states. Further expansion will be driven by deeper penetration in existing markets by entering tier 2 and 3 towns, increasing milk procurement, entering & expanding in new markets via acquisitions and JVs, such as the one with Novandie SNC.

Fig. 6: Heritage range of products

Source: Company

Management Overview

Heritage was founded by Mr. Chandrababu Naidu and is now carried forward by his family.

Table 5: Management profile

Key Personnel	Profile
Mr. Seetharamaiah Devineni **Chairperson**	Commerce graduate from Andhra University and a fellow member of the Institute of Chartered Accountants of India. Senior partner of Brahmayya & Co., a leading Chartered Accountancy firm and has been practicing for the last five decades. Has held various coveted posts, which include Membership of the Southern Regional Board of Reserve Bank of India, and Federation of Andhra Pradesh Chamber of Commerce and Industry, Chairpersonship of the Tirumala Tirupati Devasthanams Trust Board and Trusteeship of the NTR Memorial Trust. Is also on the Board of several other companies.
Mrs. Bhuvaneswari Nara **Vice-Chairperson & Managing Director**	B.A Graduate, Is a Director in several other Companies. Is a dynamic leader who has extensive experience in business and has been successfully steering Heritage towards growth and better prospects.
Mrs. Brahmani Nara **Executive Director**	Master's Degree in Business Administration from Stanford University, Bachelor of Science degree in Electrical Engineering from Santa Clara University USA and Bachelor of Engineering with specialization of Electronics and Communications from Chaitanya Bharathi Institute of Technology. Investment Associate in Vertex Venture Management Pvt Ltd between 2009-2011 in Singapore and was associated with the Company as a Vice-President (Business Development).
Dr. M. Sambasiva Rao **President**	Post Graduate and Doctorate in Zoology. Served the state and central governments for about two decades as a member of the Indian Administrative Services(IAS). Dr Rao was the Joint Secretary in the Department of Commerce under the Ministry of Commerce and Industry, Government of India
Mr. CA A Prabhakara Naidu **Vice President - Finance & Accounts (CFO)**	Fellow Member of the Institute of Chartered Accountants of India and Graduated from Sri Venkateswara University with a University rank in Science. Has 23 years of experience in Finance and Accounts. Has been associated with the Heritage group since It's inception.
Mr. Umakanta Barik **Company Secretary**	Has Masters in Economics, LLB, FCS, LIII. Is a Fellow Member of the Institute of Company Secretaries of India, New Delhi and a Licentiate from Insurance Institute of India, Mumbai. Has over 14 years of experience in the domains of Secretarial, Legal, Insurance & Intellectual Property Rights.
Mr. J Samba Murthy **Head - Dairy Division**	Holds an MBA in Marketing and a Bachelors of Science degree. Is the Senior Vice President at Heritage and has been associated with the Company since 2007. Has worked previously in APDDCF Limited, Visakha Dairy NDDB, and Reliance in various positions in the field of Sales & Marketing.

Source: Company, Edelweiss research

We estimate dairy sales to clock 23% revenue CAGR over FY17-20

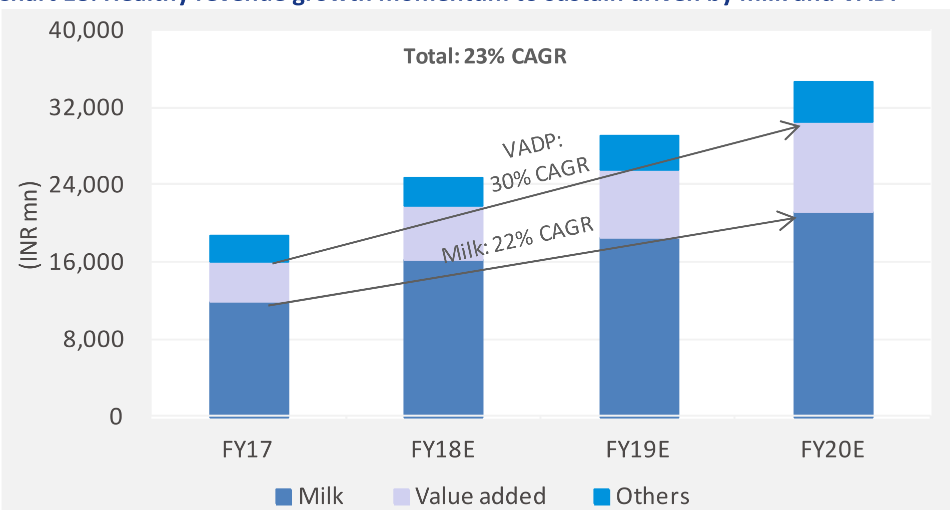
Financial Outlook

- **Sales momentum at strong 20% plus CAGR:** Sales estimated to grow at 23% CAGR led by healthy 30% CAGR in VADP and 22% sales CAGR in fresh milk business over FY17-20E.
- **Rising share of value-add products: Potent gross margin kickers:** We expect Heritage's EBIT margin to catapult 180bps to 6.3% in FY20 from 4.5% in FY18 driven by healthy growth in the high margin VADP.
- **Improving return ratios:** The company's dairy segment has generated average pre-tax RoCE of ~50% over FY12-17 versus average 23% for the overall company. As Heritage is now a pure-play dairy company, its margins will move closer to dairy RoCE. We forecast company's pre-tax RoCE to improve 230bps to 41.7% in FY20 over FY17 (ex of demerged segments and investment in Future Retail).

Strong revenue momentum in line with vision, leading to 23% sales CAGR

Heritage's dairy business reported 11% revenue CAGR over FY12-17 led by liquid milk sales clocking 8% CAGR and strong 24% CAGR in VADP. We estimate dairy sales to report 23% revenue CAGR over FY17-20 led by 22% CAGR in milk sales boosted by the Reliance Dairy acquisition and healthy 30% CAGR in VADP over FY17-20E. We expect VADP sales to contribute 28% to overall sales by FY20. Heritage's overall revenue CAGR is estimated at 9% over FY17-20 (without adjusting for divested retail and bakery in the base year).

Chart 18: Healthy revenue growth momentum to sustain driven by milk and VADP



Source: Company, Edelweiss research

Rising share of value-added products: Margin driver

EBIT of the dairy business clocked CAGR of 16% over FY12-17. With jump in VADP from 24% to 28% of sales over FY17-20E, we estimate EBIT CAGR of 21%. The margin expansion is lower since we expect a decline in FY18 due to acquisition of loss-making operations of Reliance Dairy, which are envisaged to break even by H2FY18.

Reliance Dairy to turnaround under Heritage

While Reliance Retail's dairy operations were loss making (~INR200mn EBITDA loss), Heritage is working on optimising costs and aligning the product mix in line with its own. While the spread of Reliance Dairy's operations is a key benefit for Heritage, it was not in a cost efficient manner at the time of acquisition.

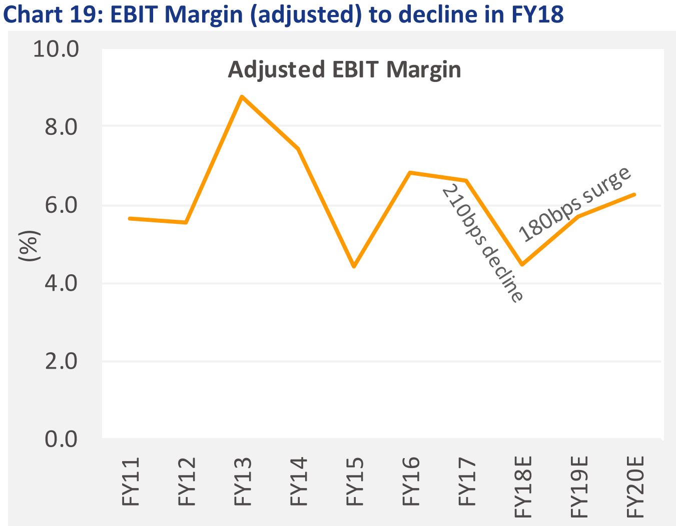
Heritage has started rationalising Reliance Dairy's operations—Uttar Pradesh and Madhya Pradesh operations have been shut down due to lack of viability, certain milk procurement routes have been closed (20 of 186) and cost optimization in chilling centers and logistics has been implemented.

Adjusted EBIT margin will decline 210bps in FY18, though is envisaged to jump 180bps over FY18-20, leading to 12% CAGR over FY17-20

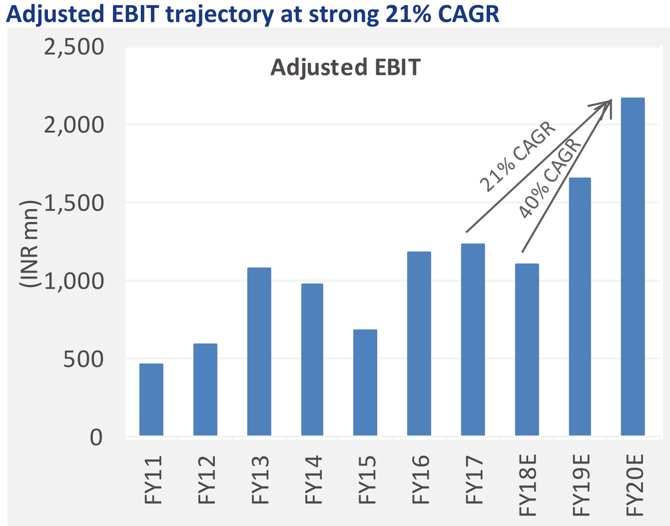
Further, Heritage has also planned rebalance of product mix. Reliance Dairy was procuring a much larger volume of milk than it was selling in the retail market. Hence, it was producing low margin milk powders. Heritage has now balanced procurement volumes and sales to restrict the share of these low margin products. Bulk quantities, which Reliance Dairy was selling, have also been curtailed.

Hence, we expect EBIT margin to drop 210bps in FY18 to 4.5%, post which it is estimated to jump 180bps to 6.3% over FY18-20E leading to 40% EBIT CAGR for the dairy business over FY18-20E. Overall, Heritage's EBIT margin is estimated to catapult 210bps to 6.3% in FY20 from 4.1% in FY17 (suppressed by loss-making retail business).

Chart 19: EBIT Margin (adjusted) to decline in FY18



Adjusted EBIT trajectory at strong 21% CAGR



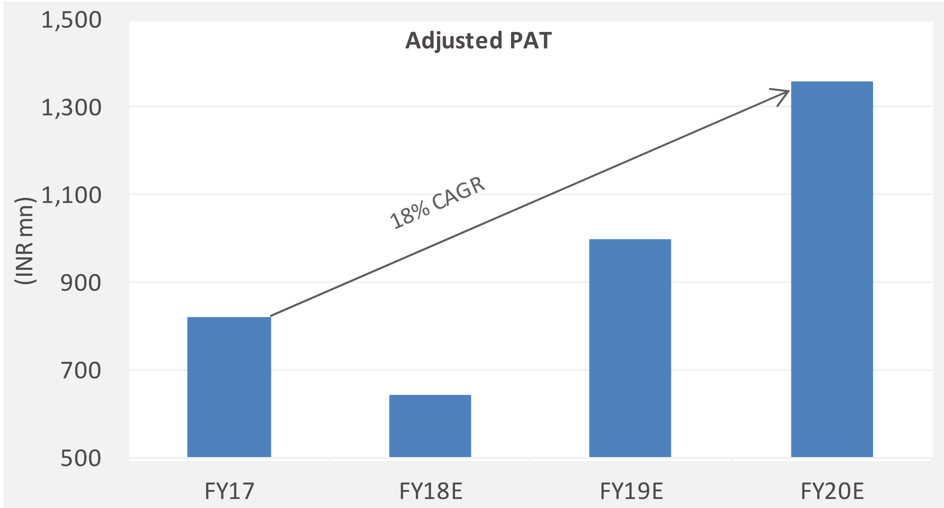
Note: EBIT adjusted to exclude demerged segments

Source: Company, Edelweiss research

<u>We estimate PAT CAGR of 18% over FY17-20E</u> led by improving margins.

We estimate PAT CAGR of 18% over FY17-20

Chart 20: Robust PAT spurt to sustain



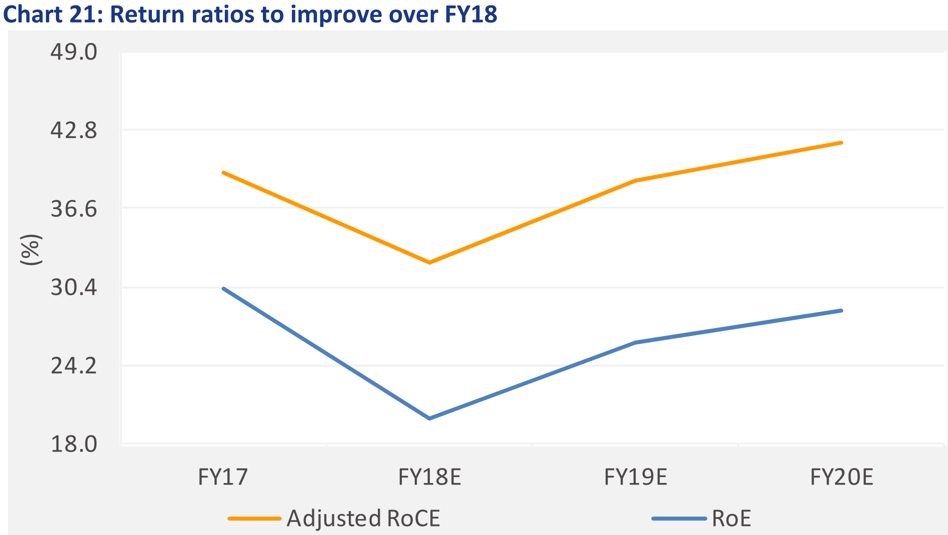
Note: PAT adjusted for discontinued operations
Source: Company, Edelweiss research

Improvement in already high return ratios

Heritage's dairy segment has generated average pre-tax RoCE of ~50% over FY12-17 versus average 23% for the overall company. As the company is now a pure-play dairy company, its RoCE will move closer to dairy industry's RoCE. We forecast pre-tax RoCE to improve 230bps over FY17-20E to 41.7% in FY20 (excluding retail and investment in Future Retail) due to improvement in EBIT margin on account of increase in VADP sales from 24% to 28% of sales.

Pre-tax RoCE to jump 230bps to 41.7% in FY20E over FY17.

Chart 21: Return ratios to improve over FY18



Note: RoCE adjusted for demerged segments and investment in Future Retail
Source: Company, Edelweiss research

Financial Statements

Key assumptions				
Year to March	FY17	FY18E	FY19E	FY20E
Macro				
GDP(Y-o-Y %)	6.6	6.8	7.4	7.4
Inflation (Avg)	4.5	4.0	4.5	4.5
Repo rate (exit rate)	6.3	5.8	5.8	5.8
USD/INR (Avg)	67.1	65.0	66.0	66.0
Company				
Procurement price (INR/litre)	32.5	33.1	33.8	35.1
Procurement price increase (%)	5.2	1.8	2.0	4.0
Procurement (mn litres/day)	1.0	1.4	1.6	1.9
Growth(%)	(8.2)	38.2	13.6	13.8
Sales growth (%)				
Manufactured				
Milk	7.4	37.2	14.3	15.4
Curd	14.0	33.5	28.8	30.0
Ice-cream	14.0	24.1	27.4	27.4
Paneer		28.0	30.0	30.0
Flavoured Milk		28.0	30.0	30.0
Butter milk		25.0	28.0	28.0
Sweets		20.0	20.0	20.0
Others	14.0	25.0	28.0	28.0
Vetca		10.0	10.0	10.0
Traded	29.9	(85.6)	23.4	18.9
Revenue Share (%)				
Milk	63.0	65.1	63.2	61.5
Curd	17.6	17.7	19.3	21.2
Ice-Cream	1.8	1.7	1.8	2.0
Other Value Added Products	3.4	3.2	3.5	3.8
Fat Products	8.7	7.2	6.7	6.2
SMP	0.5	0.5	0.5	0.5
Vet Ca	0.0	0.0	0.0	0.0
Traded	42.0	4.5	4.8	4.8
Financial Assumptions				
Depreciation (% of gross block)	8.5	6.5	6.5	6.5
Interest (% of total borrowings)	7.1	9.0	9.0	9.0
Tax Rate (%)	32.0	32.0	32.0	32.0
Capex (INR mn)	(592.8)	1,300.0	1,200.0	1,200.0

Income statement				(INR mn)
Year to March	FY17	FY18E	FY19E	FY20E
Net Revenues	26,429	24,665	29,021	34,457
Raw Material Costs	20,628	19,502	22,614	26,713
Employee costs	1,647	1,270	1,480	1,723
Other expenses	2,740	2,486	2,911	3,421
Total expenses	25,016	23,258	27,005	31,857
EBITDA	1,413	1,407	2,016	2,600
Depreciation & amortization	378	373	451	529
EBIT	1,035	1,034	1,565	2,071
Less: Interest Expense	112	161	179	161
Add: Other income	60	73	82	86
Profit Before Tax	983	946	1,469	1,997
Less: Provision for Tax	315	303	470	639
Reported Profit	668	643	999	1,358
Less: Profit from Discont. oper.	(149)	0	0	0
Adjusted Profit	817	643	999	1,358
No. of Shares outstanding (mn)	46	46	46	46
Adjusted Basic EPS	17.6	13.9	21.5	29.3
No. of dil. shares outstand. (mn)	46	46	46	46
Adjusted Diluted EPS	17.6	13.9	21.5	29.3
Adjusted Cash EPS	25.8	21.9	31.2	40.7
Dividend per share	4.0	4.0	6.0	8.0
Dividend Payout Ratio (%)	22.7	28.9	27.9	27.3

Common size metrics - as % of reve				
Year to March	FY17	FY18E	FY19E	FY20E
Gross margin	**21.9**	**20.9**	**22.1**	**22.5**
Staff costs	6.2	5.2	5.1	5.0
S G & A expenses	10.4	10.1	10.0	9.9
Depreciation	1.4	1.5	1.6	1.5
Interest Expense	0.4	0.7	0.6	0.5
EBITDA margins	**5.3**	**5.7**	**6.9**	**7.5**
Net Profit margins	3.1	2.6	3.4	3.9

Growth metrics (%)				
Year to March	FY17	FY18E	FY19E	FY20E
Revenues	11.0	(6.7)	17.7	18.7
EBITDA	8.0	(0.4)	43.3	29.0
PBT	14.3	(3.8)	55.3	36.0
Adjusted Profit	15.1	(21.3)	55.3	36.0
EPS	15.1	(21.3)	55.3	36.0

Adjusted Growth metrics (%)				
Year to March	FY17	FY18E	FY19E	FY20E
Revenues	6.4	32.9	17.7	18.7
EBIT	3.4	(9.8)	48.9	31.0
Adjusted PAT	15.1	(21.3)	55.3	36.0

**Adjusted for demerged segments*

Balance sheet (INR mn)

As on 31st March	FY17	FY18E	FY19E	FY20E
Share capital	232	232	232	232
Reserves & Surplus	2,775	3,213	4,007	5,058
Total shareholders funds	3,007	3,445	4,239	5,290
Minority interest	0	0	0	0
Long term Borrowings	745	1,145	1,345	1,145
Short term Borrowings	840	640	640	640
Total Borrowings	1,584	1,784	1,984	1,784
Long Term Liabilities & Prov.	164	147	155	162
Deferred Tax Liability (net)	198	198	198	198
Sources of funds	**4,952**	**5,574**	**6,576**	**7,435**
Gross Block	4,441	5,741	6,941	8,141
Net Block	2,966	3,928	4,677	5,347
Capital work in progress	79	79	79	79
Intangible Assets	5	5	5	5
Total Fixed Assets	3,049	4,011	4,760	5,431
Non current investments	1,488	1,488	1,488	1,488
Cash & bank balances	470	129	413	540
Inventories	1,227	1,069	1,239	1,464
Sundry Debtors	156	135	159	283
Loans & Advances	160	153	169	190
Other Current Assets	19	18	20	22
Total Current Assets (Ex Cash)	1,561	1,375	1,587	1,959
Trade payable	602	481	558	659
Other Current Liab. & ST Prov.	1,016	948	1,115	1,324
Total Current Liab. & Provisions	1,617	1,429	1,673	1,983
Net Current Assets (ex cash)	(56)	(54)	(86)	(24)
Uses of funds	**4,952**	**5,574**	**6,576**	**7,435**
Book value per share (BV) (INR)	65	74	91	114

Free cash flow (INR mn)

Year to March	FY17	FY18E	FY19E	FY20E
Reported Profit	668	643	999	1,358
Add: Depreciation	378	373	451	529
Interest (Net of Tax)	76	109	121	109
Others	104	16	57	51
Less:Changes in WC	107	18	(39)	54
Operating cash flow	1,119	1,124	1,667	1,994
Less: Capex	1,205	1,300	1,200	1,200
Free cash flow	**(86)**	**(176)**	**467**	**794**

Cash flow statement

Year to March	FY17	FY18E	FY19E	FY20E
Operating cash flow	1,119	1,124	1,667	1,994
Investments cashflow	(1,183)	(1,300)	(1,200)	(1,200)
Financing cash flow	139	(165)	(183)	(667)
Net cash Flow	76	(342)	284	127
Capex	(1,205)	(1,300)	(1,200)	(1,200)
Dividends Paid	(84)	(204)	(204)	(307)

Profitability & liquidity ratios

Year to March	FY17	FY18E	FY19E	FY20E
ROAE (%)	30.2	19.9	26.0	28.5
ROACE (%)	26.5	22.5	28.8	32.4
Adjusted RoCE (%)*	39.4	32.3	38.8	41.7
Inventory Days	24	21	19	18
Debtors Days	3	2	2	2
Payble Days	13	10	8	8
Cash conversion cycle (days)	14	14	12	12
Current Ratio	1.3	1.1	1.2	1.3
Gross Debt/EBITDA	1.1	1.3	1.0	0.7
Gross Debt/Equity	0.5	0.5	0.5	0.3
Adjusted Debt/Equity	0.5	0.5	0.5	0.3
Net Debt/Equity	0.4	0.5	0.4	0.2
Interest Coverage Ratio	9.2	6.4	8.8	12.9
Cash Conversion (%)	79	80	83	77

Operating ratios

Year to March	FY17	FY18	FY19	FY20E
Total asset turnover(x)	5.9	4.7	4.8	4.9
Fixed asset turnover(x)	8.7	7.1	6.7	6.9
Equity turnover(x)	9.8	7.6	7.6	7.2

Valuation parameters

Year to March	FY17	FY18E	FY19E	FY20E
Adjusted Diluted EPS (INR)	17.6	13.9	21.5	29.3
Y-o-Y growth (%)	*15.1*	*(21.3)*	*55.3*	*36.0*
Adjusted Cash EPS (INR)	25.8	21.9	31.2	40.7
Diluted P/E (x)	43.1	54.7	35.2	25.9
Price/BV (x)	11.7	10.2	8.3	6.7
EV/Sales (x)	1.3	1.4	1.2	1.0
EV/EBITDA (x)	24.6	25.1	17.5	13.4
Dividend yield (%)	0.5	0.5	0.8	1.1

**Adjusted for demerged segments and investment in Future Retail*

Additional Data

Directors Data

Mrs. N Bhuvaneswari	Vice Chairperson and Managing Director	Mr. M Siva Rama Vara Prasad	Non Executive Independent Director (up to 12-may-16)
Mrs. N Brahmani	Executive Director	Mr. Rajesh Thakur Ahuja	Non Executive Independent Director
Mr. D. Seetharamaiah	Non Executive Independent Chairperson	Dr. V Nagaraja Naidu	Non Executive Director
Mr. N Sri Vishnu Raju	Non Executive Independent Director	Mr. N Lokesh	Non Executive Director (upto 31-Mar-17)

Auditors - Walker Chandiok & Co LLP

**as per last annual report*

Holding - Top 10

	Perc. Holding		Perc. Holding
NIRVANA HOLDINGS PVT LTD	11.09	MEGABID FINANCE INVESTMENT	5.28
SUNDARAM ASSET MANAGEMENT CO LTD	3.81	KEDIA SECURITIES PVT LTD	1.01
RELIGARE INDIA ASSET MANAGEMENT	0.90	TATA ASSET MANAGEMENT LTD	0.64
DIMENSIONAL FUND ADVISORS LP	0.31	HSBC ASSET MGMT INDIA PVT LTD	0.20
BOI AXA INVESTMENT MANAGERS PVT	0.20	UNION KBC MUTUAL FUND	0.13

**as per last available data*

Bulk Deals

Data	Acquired / Seller	B/S	Qty Traded	Price
21-Nov-17	Indgrowth Capital Fund I	Buy	358,709	740
21-Nov-17	Striver Capital Advisors Pvt Ltd	Sell	359,500	740

**in last one year*

Insider Trades

Reporting Data	Acquired / Seller	B/S	Qty Traded
No Insider Trades			

**in last one year*

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India Midcaps

COMPANY UPDATE

PRABHAT DAIRY

Metamorphosing into value-added B2C player

India Equity Research| Dairy

Edelweiss
Ideas create, values protect

Prabhat Dairy (Prabhat) is set to shift from a specialty ingredients B2B provider towards a value-added retailer. Management has set a target of INR20bn sales by 2020 driven by doubling of B2C sales to INR10bn (to 50% share) and envisages overall revenue growth to be spearheaded by milk (~25% CAGR), ghee (15% CAGR), cheese (125% CAGR) and UHT (8x) over FY17-20. Further, with brand building, Prabhat will be able to command brand premium and improve market share, thus boosting margin 110bps over FY17-20 to 10.1%. With the company's aggressively metamorphosing into a value-added B2C player, we forecast sales and earnings CAGR of 15% and 39%, respectively, over FY17-20. Maintain 'BUY', valuing the company at 22x FY20E, with TP of INR211.

B2C, value-added products to drive growth

Prabhat is eyeing doubling of B2C sales to INR10bn from INR5bn, propelling its revenue share to 50% from 30%, implying strong 37% CAGR over FY17-20. B2C revenue push will be driven by milk, cheese, ghee and UHT milk. Management is targeting robust INR1bn sales in B2C segment in 5 years from own ice-cream brand *Volup* (launched in 2017). We believe the ice-cream industry in Maharashtra entails huge potential (~INR8.5bn) as it is highly fragmented, particularly in smaller cities which Prabhat is targeting. Further, the company is targeting cheese plant utilisation to 85-90% by 2020 from 20-25% currently.

Rapid expansion of distribution network

Management has guided for consumer division, milk, cheese, ghee and UHT to propel sales to INR20bn by FY20 . Further, it expects B2B:B2C mix to improve to 50:50 from 70:30 currently. This, Prabhat aims to achieve, via doubling of outlets from current 100k in general trade by 2020 and enhancing presence in modern trade from mere 300 outlets currently to a pan-India presence with 3,000 outlets.

Outlook and valuations: Transition underway; maintain 'BUY'

With Prabhat shifting focus to value-added products and B2C segment, we estimate sales, EBIDTA and PAT CAGR of 15%, 19% and 39%, respectively, over FY17-20. We maintain **'BUY'** with TP of INR211, based on 22x FY20E EPS.

Financials

Year to March	FY17	FY18E	FY19E	FY20E
Revenues (INR mn)	14,099	16,370	18,846	21,335
EBITDA (INR mn)	1,268	1,426	1,758	2,153
Adjusted PAT (INR mn)	469	429	680	938
Adjusted Dil. EPS (INR)	3.6	4.4	7.0	9.6
Diluted P/E (x)	45.5	37.1	23.4	17.0
EV/EBITDA (x)	14.1	12.8	10.3	8.3
RoACE (%)*	9.9	9.5	11.7	14.4
RoAE (%)*	5.8	6.7	9.9	12.4

*Adjusted for revaluation reserves, not including sales tax incentives

EDELWEISS RATINGS

Absolute Rating	**BUY**
Investment Characteristics	Growth

MARKET DATA *(R: , B: PRABHAT IN)*

CMP	: INR 163
Target Price	: INR 211
52-week range (INR)	: 173 / 91
Share in issue (mn)	: 97.7
M cap (INR bn/USD mn)	: 16 / 246
Avg. Daily Vol. BSE/NSE ('000)	: 300.1

SHARE HOLDING PATTERN (%)

	Current	Q1FY18	Q4FY17
Promoters *	48.9	48.9	48.9
MF's, FI's & BKs	3.5	3.6	3.9
FII's	4.6	3.7	2.6
Others	42.9	43.7	44.6
** Promoters pledged shares (% of share in issue)*	:		*NIL*

PRICE PERFORMANCE (%)

	BSE Midcap Index	Stock	Stock over Index
1 month	4.7	7.5	2.8
3 months	11.0	17.8	6.8
12 months	40.8	52.3	11.5

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017

B2C to rise to 50% revenue share

Currently, the B2C channel contributes ~27% to Prabhat's revenue, which the company aims to expand to 50% by 2020. Management's strategy is to chase growth in the B2C segment and profitability in the B2B segment. It is eyeing B2C sales of INR10bn by FY20 (from ~INR5bn in FY18). In line with its strategy to focus on brand building, the company is targeting brand spends from ~INR200mn currently to INR400mn in FY20, 2% of sales, led by B2C push. It believes this will help command brand premium, negotiate better credit terms and improve market share & capacity utilisation.

Prabhat estimates B2C revenue surge to be driven by ~35% CAGR in milk, 150% CAGR in cheese and 9x sales in UHT milk.

Ramping up distribution

In general trade, Prabhat is present via ~100k outlets, which the company wants to double by FY20. Further, in modern trade, it has access to 300 outlets, which management wants to increase to 1,100 across India by year end, and further to 3,000 till FY20. Prabhat currently has 1,800-2,000 key accounts in the HORECA segment across India. It is targeting 10,000 clients by FY20 and expects exponential growth in the segment going forward.

Strong expansion of procurement network

Prabhat aims to double its dairy farmer base in 2 years, while also widening milk collection and chilling centre network by 80% in 3 years. Further, its target is to associate with 10 more registered milk vendors in 2 years. Prabhat aims to take milk procurement from less than 10 lakh litres per day (llpd) to 14llpd by FY20.

Well placed to capitalise on strong growth potential in ice cream

The domestic ice cream industry is pegged at INR100bn, of which 2/3rd is estimated to be organised.

Prabhat has soft launched its ice cream brand *Volup* in 10 cities—in Nashik and adjoining towns—which has received good response; a pan-Maharashtra launch is on the anvil. *Volup* ice cream is at a premium to Amul, with the former's premium range *Sinsane* contributing 20% to sales.

There is a strong opportunity in Maharashtra as the ~INR8.5bn market, growing at 20%, is fragmented, with no strong players in the segment except Kwality Walls and Amul, which have sales of INR1bn plus . Management has guided for INR1bn sales in Maharashtra over the next 5 years and pegs *Volup* sales in FY18 at ~INR30-40mn. Prabhat's strategy is to target smaller towns rather than big metros like Mumbai and Pune where competition is intense.

Prabhat already manufactures ice cream for Mother Dairy and the same plant is being utilised to manufacture *Volup,* precluding any additional capex.

Fig. 1: Prabhat range of ice creams

Source: Company

Cheese to continue rapid ramp up

Cheese production and sales have ramped up rapidly from ~INR240mn in FY17 to expected revenue of ~INR1bn in FY18, which are estimated to catapult further to ~INR2.8bn in FY20, ~12x over FY17-20. At full capacity utilisation, management estimates cheese revenue to grow to INR3.5bn. Prabhat has ramped up the cheese segment rapidly wherein breakeven was achieved in mere 1.5 years. Management expects plant utilisation to ramp up from 20-25% currently to 40-45% by FY18 end and further to 85-90% by FY20, boosting profitability through operating leverage.

In cheese, Prabhat's focus is on the HORECA segment, where realisation is ~12% higher than B2B. Sales in the HORECA segment command a premium of ~20%, but this premium is offset by 7-8% higher expenses. Prabhat caters to orders from major chains and QSRs such as Dominos, Pizza Hut and McDonalds. HORECA sales are currently in Maharashtra & Gujarat and expansion in North and South India is on the anvil.

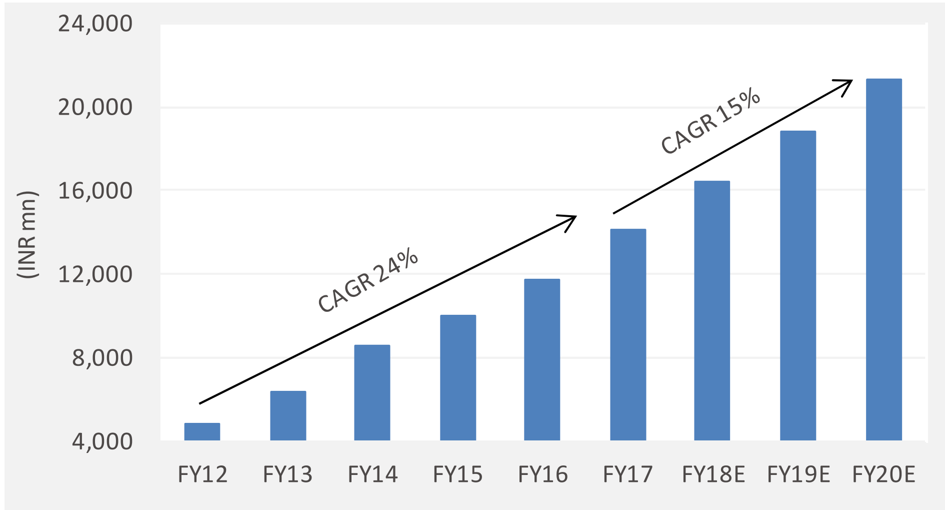
Strong revenue growth to sustain as margin improves

Prabhat's revenue has clocked a strong 24% CAGR over FY12-17 and this strong trajectory is envisaged to sustain (15% CAGR over FY17-20) led by robust volume growth, 2x jump in B2C business over FY17-20 and rapidly expanding distribution network.

Management has guided for INR20bn revenue by FY20. Major growth drivers will be fresh milk, ghee (B2C), cheese and UHT products. This will be supported by expanding direct procurement network by enhancing the number of procurement partners through increased engagement with farmers by providing additional services and cattle feed.

Gross margins are estimated to improve 366bps to 23.1%, however this gross margin expansion will be reinvested into development of B2C business. With higher B2C development expenses, we expect EBITDA margin to expand 110bps to 10.1% in FY20 from 9.0% in FY17. Further, management is targeting improved profitability in B2B as well with improved product mix. Improving margin and capacity utilisation will prop up RoCE to 14.4%.

Chart 1: Strong sales trajectory to sustain at 15% CAGR over FY17-20E



Source: Company, Edelweiss research

Company Description

Prabhat is an integrated milk and dairy products player with aggregate milk processing capacity of 1.5mn ltr per day. Over the years, the company has diversified into pasteurised milk, flavoured milk, sweetened condensed milk, ultra-pasteurised or ultra-high temperature (UHT) milk, yoghurt, dairy whitener, clarified butter (ghee), milk powder, ingredients for baby foods, lassi and chaas. It sells these products under retail consumer brands as well as ingredient products or as co-manufactured products to a number of institutional and multinational companies. Prabhat commenced commercial production of cheese, paneer and shrikhand in FY16. It caters to institutional (~73% revenue contribution in FY17) as well as retail customers (27% revenue contribution).

Investment Theme

Leveraging its strong track record as a specialty ingredients supplier to large global dairy players, Prabhat catapulted its gross block in value-added products >40% in FY16, to be the third largest cheese player in India. On the anvil is a 2-pronged strategy to scale up its value-added sales in HORECA and B2C segments via tier II/III cities with targeted ad spends at ~2% of sales. The company is focusing on growing its higher margin B2C sales, taking its revenue share from ~30% currently to 50% in FY20. This shift in strategy will boost margin as well as the company is able to command brand premium, negotiate better terms and improve market share & utilisation. Prabhat's gross margin is likely to surge ~370bps over FY17-20E led by: a) rising share of B2C & value-added products; and b) increasing utilisation. Hence, we estimate adjusted pre-tax RoCE to catapult 450bps over the period to 14.4%.

Key Risks

Availability and price volatility of raw milk

Prabhat's business depends on its ability to procure sufficient good quality raw milk at commercially viable prices. Though the company has long-standing relationships with milk farmers and other suppliers, it has not entered into any formal supply agreements.

Overdependence on a few institutional customers

Prabhat's top 5 custormers contribute 35%+ to revenue, hence it faces the risk of concentration and overdependence on a few institutional customers. Any change in positioning with these customers could impact revenues.

Financial Statements

Key assumptions

Year to March	FY17	FY18E	FY19E	FY20E
Macro				
GVA(Y-o-Y %)	6.6	6.8	7.4	7.4
Inflation (Avg)	4.5	4.0	4.5	4.5
Repo rate (exit rate)	6.3	5.8	5.8	5.8
Milk purchase prices (INR/litre)	26.7	24.0	25.0	26.0
Sales growth				
Processed and Pouch Milk (%)	(24)	44	16	16
SMP / WMP/ DW (%)	81	12	(3)	(3)
Condensed milk added sugar (SCM) (%)	(41)	(34)	(9)	(10)
Ghee (%)	13	5	20	20
Flavoured Milk (%)	59	(1)	4	6
Butter (%)	NA	NA	NA	NA
Ice Cream (%)	(21)	69	50	48
Curd (%)	14	63	51	17
Long shelf Milk (UHT Milk) (%)	0	112	118	82
Cheese (%)	967	323	95	41
Paneer (%)	5,466	75	58	25
Shrikhand (%)	871	40	36	33
% of sales				
Processed and Pouch Milk (%)	14	17	17	17
SMP / WMP/ DW (%)	44	43	36	31
Condensed milk added sugar (SCM) (%)	12	7	5	4
Total commodity products (%)	**69**	**66**	**58**	**52**
Ghee (%)	20	18	19	20
Ice Cream (%)	1	1	1	2
Curd (%)	1	2	3	3
Long shelf Milk (UHT Milk) (%)	1	2	3	5
Cheese (%)	2	6	10	13
Paneer (%)	1	1	2	2
Total value added products (%)	**26**	**31**	**39**	**45**
Capacity utilisation (%)				
Cheese (%)	9	39	73	96
Channel mix				
B2B (%)	73	70	63	54
B2C (%)	27	30	37	46
Financial Assumptions				
Depreciation (% of gross block)	9.1	9.2	9.0	8.8
Interest rate (%)	8.2	8.5	6.5	6.5
Tax rate (%)	37	34	34	34
Capex (INR mn)	329	195	250	250

Income statement (INR mn)

Year to March	FY17	FY18E	FY19E	FY20E
Net revenue	14,099	16,370	18,846	21,335
Materials costs	11,358	12,789	14,642	16,408
Gross profit	2,740	3,581	4,205	4,928
Employee costs	347	458	563	651
Other Expenses	1,126	1,697	1,883	2,124
Operating expenses	1,472	2,155	2,446	2,775
Total operating expenses	12,831	14,944	17,088	19,182
EBITDA	1,268	1,426	1,758	2,153
Depreciation	432	465	475	487
EBIT	836	961	1,283	1,666
Add: Other income	12.65	28.22	32.14	33.36
Less: Interest Expense	294	339	285	278
Add: Exceptional items	189	-	-	-
Profit Before Tax	743	650	1,030	1,421
Less: Provision for Tax	274	221	350	483
Reported Profit	469	429	680	938
Exceptional Items	119	-	-	-
Adjusted Profit	350	429	680	938
Shares o /s (mn)	98	98	98	98
Adjusted Basic EPS	3.6	4.4	7.0	9.6
Diluted shares o/s (mn)	98	98	98	98
Adjusted Diluted EPS	3.6	4.4	7.0	9.6
Adjusted Cash EPS	7.0	9.2	11.8	14.6
Dividend per share (DPS)	0.4	0.6	0.9	1.2
Dividend Payout Ratio(%)	10.0	15.6	15.6	15.6

Common size metrics

Year to March	FY17	FY18E	FY19E	FY20E
Gross margin	19.4	21.9	22.3	23.1
Interest Expense	2.1	2.1	1.5	1.3
EBITDA margins	9.0	8.7	9.3	10.1
EBIT margins	5.9	5.9	6.8	7.8
Net Profit margins	2.5	2.6	3.6	4.4

Growth ratios (%)

Year to March	FY17	FY18E	FY19E	FY20E
Revenues	20.7	16.1	15.1	13.2
EBITDA	10.0	12.5	23.3	22.4
PBT	103.0	(12.5)	58.4	37.9
Adjusted Profit	51.2	22.6	58.4	37.9
EPS	51.2	22.6	58.4	37.9

Balance sheet (INR mn)

As on 31st March	FY17	FY18E	FY19E	FY20E
Share capital	977	977	977	977
Reserves & Surplus	5,905	6,267	6,841	7,632
Shareholders' funds	6,882	7,244	7,818	8,609
Short term borrowings	3,197	3,997	3,997	3,797
Long term borrowings	386	386	386	386
Total Borrowings	3,583	4,383	4,383	4,183
Long Term Liabilities	14	14	14	14
Def. Tax Liability (net)	159	159	159	159
Sources of funds	**10,638**	**11,800**	**12,374**	**12,965**
Gross Block	4,957	5,157	5,407	5,657
Net Block	4,143	3,878	3,652	3,415
Capital work in progress	265	260	260	260
Intangible Assets	7	7	7	7
Total net fixed assets	4,415	4,145	3,919	3,683
Non current investments	-	-	-	-
Cash and Equivalents	1,656	2,107	2,178	2,270
Inventories	1,333	1,654	2,029	2,467
Sundry Debtors	2,711	3,256	3,377	3,578
Loans & Advances	530	512	732	820
Other Current Assets	841	1,000	1,100	1,200
Current Assets (ex cash)	5,415	6,421	7,238	8,065
Trade payable	538	562	601	638
Other Current Liab	310	310	360	415
Total Current Liab	848	872	961	1,053
Net Curr Assets-ex cash	4,567	5,548	6,277	7,013
Uses of funds	**10,638**	**11,800**	**12,374**	**12,965**
BVPS (INR)	70.5	74.2	80.0	88.1

Free cash flow (INR mn)

Year to March	FY17	FY18E	FY19E	FY20E
Reported Profit	469	429	680	938
Add: Depreciation	432	465	475	487
Interest (Net of Tax)	197	227	191	187
Others	292	84	62	59
Less: Changes in WC	1,192	981	728	736
Operating cash flow	200	223	680	934
Less: Capex	329	195	250	250
Free Cash Flow	**(129)**	**29**	**430**	**684**

Cash flow metrics

Year to March	FY17	FY18E	FY19E	FY20E
Operating cash flow	200	223	680	934
Investing cash flow	(884)	(195)	(250)	(250)
Financing cash flow	1,659	423	(359)	(592)
Net cash Flow	975	451	71	92
Capex	(329)	(195)	(250)	(250)
Dividend paid	(47)	(67)	(106)	(147)

Profitability and efficiency ratios

Year to March	FY17	FY18E	FY19E	FY20E
ROAE (%)	5.8	6.7	9.9	12.4
ROACE (%)	9.9	9.5	11.7	14.4
ROA	3.7	3.8	5.6	7.4
Inventory Days	36	43	46	50
Debtors Days	64	67	64	59
Payable Days	17	16	15	14
Cash Conversion Cycle	83	93	96	96
Current Ratio	8.3	9.8	9.8	9.8
Debt/EBITDA (x)	2.8	3.1	2.5	1.9
Debt/Equity (x)	0.5	0.6	0.6	0.5
Adjusted Debt/Equity	0.5	0.6	0.6	0.5
Interest Coverage Ratio	2.8	2.8	4.5	6.0
LT debt /Cap empl. (%)	33.7	37.1	35.4	32.3
Debt / Cap employed (%)	43.1	45.9	44.5	41.6

Operating ratios

Year to March	FY17	FY18E	FY19E	FY20E
Total Asset Turnover	1.5	1.5	1.6	1.7
Fixed Asset Turnover	3.4	4.1	5.0	6.0
Equity Turnover	2.1	2.3	2.5	2.6

Valuation parameters

Year to March	FY17	FY18E	FY19E	FY20E
Adj. Diluted EPS (INR)	3.6	4.4	7.0	9.6
Y-o-Y growth (%)	*51.2*	*22.6*	*58.4*	*37.9*
Adjusted Cash EPS (INR)	7.0	9.2	11.8	14.6
Diluted P/E (x)	45.5	37.1	23.4	17.0
P/B (x)	2.3	2.2	2.0	1.8
EV / Sales (x)	1.3	1.1	1.0	0.8
EV / EBITDA (x)	14.1	12.8	10.3	8.3
Dividend Yield (%)	0.2	0.4	0.6	0.8

Additional Data

Directors Data

Mr. Sarangdhar R. Nirmal	Chairman & Managing Director	Mr. Vivek S. Nirmal	Joint Managing Director
Mr. Ashok Sinha	Independent Director	Mrs. Seemantinee Khot	Independent Director
Mr. Haresh Shah	Additional Independent Director	Mr. Soundararajan Bangarusamy	Independent Director
Mr. Rajesh Srivastava	Independent Director		

Auditors - B S R & Associates LLP

*as per last available data

Holding Top -10

	Perc. Holding		Perc. Holding
Indian Agribusiness Fund	14.37	Stryrax Commodities	1.88
Societe Prom & Part Econom	8.68	Payone Enterprises Pvt Ltd	1.07
Vistra Itcl India Limited	7.57	Ecap Equities Ltd	1.06
Wasatch Advisors Inc	5.06	Sundaram Asset Management Co Ltd	0.7
Dsp Blackrock Investment Manager	3.50	Alquity Investment Management	0.52

*as per last available data

Bulk Deals

Data	Acquired / Seller	B/S	Qty Traded	Price
28 Feb 2017	Nirmal Family Trust	Buy	4246912	128.75
07 Feb 2017	Dsp Blackrock Mutual Fund- Dsp Blackrock Micro Cap Fund	Buy	2854354	129.99
07 Feb 2017	Reliance Capital Ltd	Sell	2744000	130.00

*as per last available data

Insider Trades

Reporting Data	Acquired / Seller	B/S	Qty Traded
06 Mar 2017	Sarangdhar R.Nirmal - Trustee of Nirmal Family Trust	Buy	225000.00

*as per last available data

India Midcaps

COMPANY PROFILE

AMUL

The pioneer

India Equity Research| Dairy

EDELWEISS RATINGS	
Absolute Rating	NOT LISTED

Amul is India's largest dairy player with an annual turnover of INR270bn as on FY17. It is the 13th largest dairy organisation globally and commands 25-30% market share of the organised milk market. It has clocked 19% CAGR in dairy sales over FY10-17. The company has set a target of ~20% sales CAGR to INR500bn by FY21, for which it is planning to catapult its milk processing capacity from 30mn liters per day currently to 38mn liters over the next 3 years. Further, it is increasing aggression in cheese, having tripled capacity with the target of dominating the domestic market. Amul's biggest USP is that it is run by and for farmers.

Robust procurement network

Amul's procurement stands healthy at ~18mn liters per day from 18,549 village milk co-operative societies, 18 member unions covering 33 districts and 3.6mn milk producer members. As Gujarat Co-operatives Milk Marketing Federation (GCMMF) is a non-profit organisation, any benefit from increase in milk prices is passed on to milk producer members. Therefore, it has been able to increase milk procurement from 9.3mn kg/day in FY10 to 18.2mn kg/day in FY17, 10% CAGR.

Aggressive capacity addition to augment sales

The company has aggressively added milk processing capacity—16% CAGR over FY11-17 to 30mn litres/day. Amul's target is to expand it to 38mn litres/day over the next 3 years. Its new cheese factory has led to a 3x jump in cheese manufacturing capacity. With this massive expansion, Amul forecasts a quantum jump in sales of Amul Cheese in FY18. This will be augmented by huge investments in advertising and promotion to aggressively capture more market share and dominate India's cheese market. Amul is also adding capacity in milk powders, paneer and chocolates.

Future plans: 20% sales CAGR with >INR500bn sales in 2021

Amul anticipates at least 20% CAGR in sales over the next 5 years, with sales exceeding INR500bn by 2021, backed by strong capacity addition. The company aims to become the largest FMCG organisation in India by 2020-21 and the largest dairy organisation globally over the long term.

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017

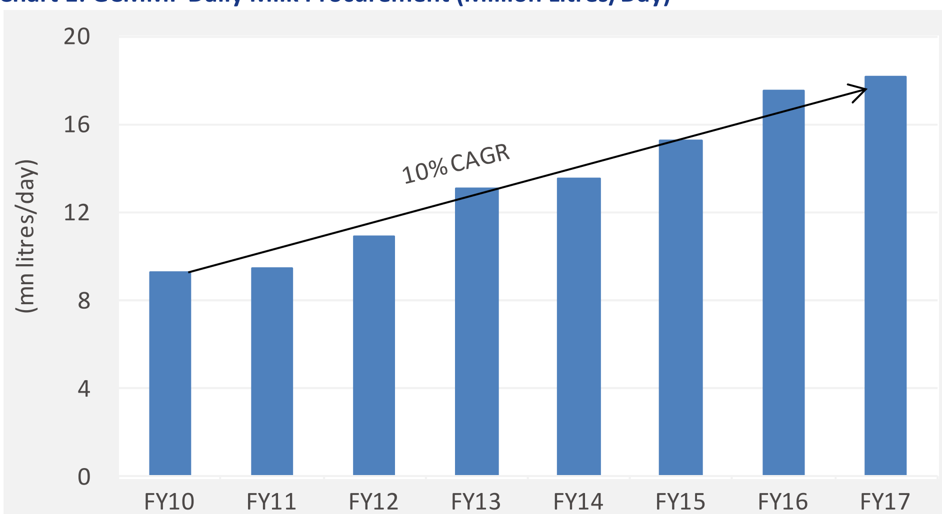
Pioneer of direct procurement

Amul sources milk from ~3.6mn farmers covering 18,549 villages, largely from Gujarat. Though currently ~15% of milk is procured from members outside Gujarat, going forward Amul is planning to enhance this source.

When the company procures milk, it makes provisional payment to farmers. Only once the milk is processed, fat concentration ascertained and quality determined, it makes the final payment. At every district level, quality control systems are in place. The key reason for farmers' sustained association with Amul is that the company buys all the milk brought by them. Any excess milk is either converted into milk powder or is used to manufacture value-added products.

As GCMMF is a non-profit organisation, any benefit from increase in milk prices is passed on to the milk producer member. Therefore, GCMMF has been able to increase its milk procurement from 9.3mn kg/day in FY10 to 18.2mn kg/day in FY17, at CAGR 10%.

Chart 1: GCMMF Daily Milk Procurement (Million Litres/Day)



Source: Company, Edelweiss research

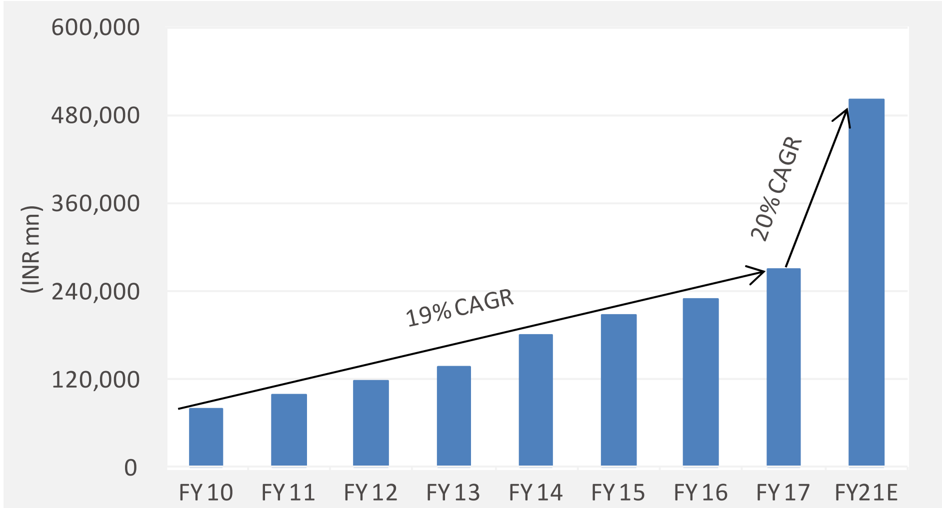
Aggressive capacity expansion to drive revenue

Amul has aggressively added milk processing capacity—16% CAGR over FY11-17 to 30mn litres/day. Further, its target is to expand it to 38mn litres/day to INR500bn in sales by FY21 to become the largest FMCG company in India.

The company's new cheese factory was inaugurated in Palanpur, Gujarat, in December, 2016, which has led to 3x increase in its cheese manufacturing capacity. With this massive expansion, Amul forecasts a quantum growth in sales of Amul Cheese in FY18. This will be augmented by huge investments in advertising and promotion to aggressively capture more market share and dominate India's cheese market.

Further, plants in Maharashtra, Kolkata and Gujarat are in various stages of construction and will further add to capacities when commissioned. It is also enhancing its milk powder manufacturing capacity with a new factory of 150MT per day production coming up at AmulFed Dairy, Gandhinagar, along with another new milk powder plant at Himmatnagar. They are also putting into effect significant capacity expansions for chocolates and paneer.

Chart 2: Revenue Growth (INR Million)



Source: Company, Edelweiss research

Strong distribution network

Over the years, GCMMF has sustained its expansion spree by expanding its distribution coverage across geographical areas, consumer segments and age groups to ensure product availability to consumers.

Amul has simultaneously enhanced its distribution footprint by adding 15 new branch offices in recent years and expanding the network of distributors, super-stockists and sub-stockists to reach millions of retail shops across the country. Using information technology, its common distributor management software application integrates all its distributors, enabling tracking & enhancing shop-wise sales, across India. Product innovation has always been part of Amul's DNA and has inspired it to launch more than 50 new products in the market during the past 3 years.

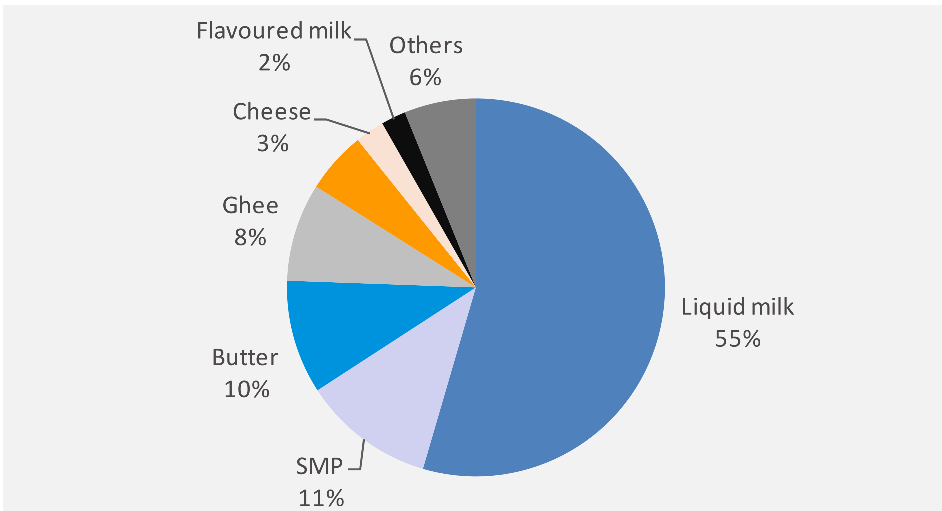
Company Description

GCMMF is India's largest food product marketing organization with turnover of INR270bn over FY16-17. Its daily milk procurement stands at 18.17mn litres from 18,549 village milk co-operative societies, 18 member unions covering 33 districts and 3.6mn milk producer members. It is the apex organisation of the Dairy Cooperatives of Gujarat, popularly known as AMUL, which aims to provide remunerative returns to farmers and also serve interests of consumers by providing quality value-for-money products .

GCMMF is the exclusive marketing organisation of *Amul* and *Sagar* branded products. It operates via 56 sales offices and has a network of 10,000 dealers and 10 lakh retailers, one of the largest in India. Its product range comprises milk, milk powder, health beverages, ghee, butter, cheese, pizza cheese, ice cream, paneer, chocolates and traditional Indian sweets.

GCMMF is the poster child for the white revolution, which took place in India and has played an indispensable role in making India the largest milk producer in the world.

Chart 3: Amul's Product Mix



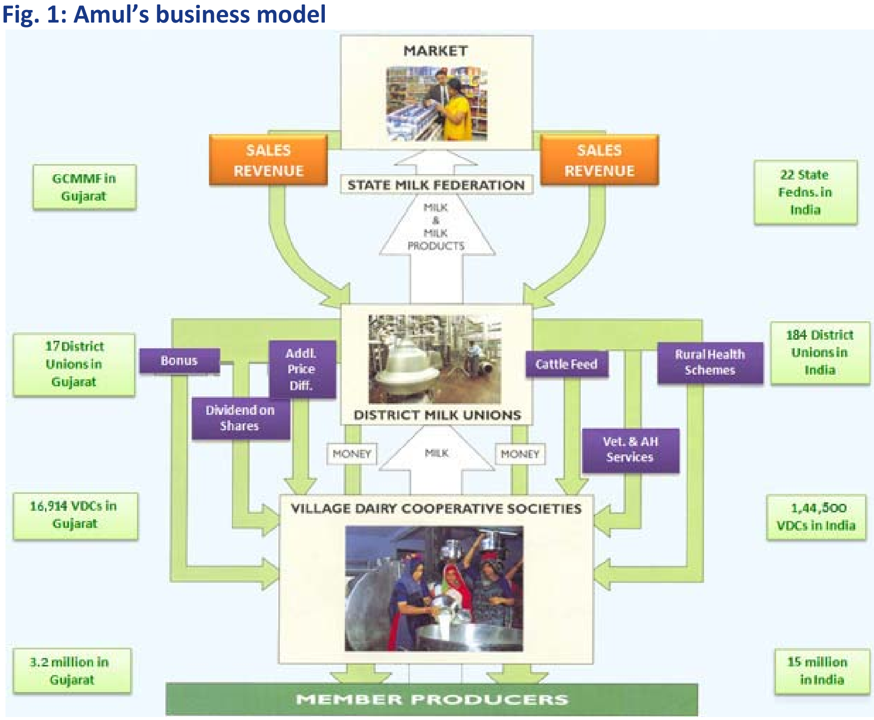
Source: Edelweiss Research

The Amul Model

The Amul Model of dairy development is a three-tiered structure with dairy cooperative societies at the village level federated under a milk union at the district level and a federation of member unions at the state level. Milk collection is done at the village dairy society, milk procurement & processing at the District Milk Union and milk products marketing at the state milk federation.

This establishes a direct linkage between milk producers and consumers by eliminating middlemen, gives farmers control over procurement, processsing & marketing and ensures professional managment.

Fig. 1: Amul's business model



Source: Company

Fig. 2: Flow of milk

Source: Company

India Midcaps

COMPANY PROFILE

HATSUN AGRO PRODUCT

Home state king

India Equity Research| Dairy

Hatsun Agro Product (Hatsun) is the dominant dairy player in its home state Tamil Nadu & surrounding southern states, underpinned by established brands *Arokya, Arun Ice-creams* and *Ibaco*. The company has aggressively expanded its procurement network in untapped regions over the past few decades and boasts of 10,000 milk banks covering 13,000 villages spearheaded by strong relationships with farmers. Hatsun's strength lies in its near 100% direct procurement as well as 100% exposure to the retail segment, commanding strong 9% EBITDA margin despite milk revenue share of nearly 70%. The company's focus on untapped regions, premium product offerings and high ad spends has reinforced its pole position. Further expansion of its procurement network outside of Tamil Nadu and deeper into untapped geographies will drive Hatsun going forward.

Strong procurement and distribution network

Hatsun procures milk directly from farmers, facilitated by 10,000 Hatsun Milk Banks covering over 13,000 villages. It has the largest procurement network of ~2.7mn litres per day amongst private dairy players, procuring from a strong base of 3.2 lakh plus farmers. The company has built its procurement network by focusing on complete transparency, timely bank payments and providing allied dairy services. It aims to triple its *Hatsun Daily* outlet count to 3,000 in a year.

Strong brands drive leadership

While the company supplies milk under *Arokya Milk and* ice-creams under *Arun* & *Ibaco* brands, all other branded dairy products are sold under the *Hatsun* brand. These brands are household names in South India, particularly in the company's home state of Tamil Nadu and are also gaining traction in North India. While *Hatsun* has garnered strong 14% market share in curd and milk in South India, *Arun* holds ~60% market share in Tamil Nadu and ~30% in South India.

Outlook and valuations: Not Rated

Hatsun's strong establishment in South India will continue to consolidate its position through its differentiated strategies and further strengthening its dominance. Entry in new states as well as deeper penetration into untapped regions will drive Hatsun.

Financials

Year to March	FY14	FY15	FY16	FY17
Net Revenues (INR mn)	24,935	29,331	34,447	41,997
EBITDA (INR mn)	1,778	1,983	3,047	3,795
Adjusted PAT (INR mn)	817	392	605	1,340
Adjusted Diluted EPS (INR)	7.6	3.6	5.6	8.8
Diluted P/E (x)	116.1	244.4	158.2	100.0
EV/EBITDA (x)	56.1	51.2	33.5	37.6
RoE (%)	52.9	19.5	26.8	46.4

EDELWEISS RATINGS

Absolute Rating	NOT RATED

MARKET DATA *(R: HAPL.BO, B: HTSMF IN)*

CMP	: INR 880
Target Price	: NA
52-week range (INR)	: 970 / 340
Share in issue (mn)	: 152.2
M cap (INR bn/USD mn)	: 133 / 2,049
Avg. Daily Vol.NSE ('000)	: 50.3

SHARE HOLDING PATTERN (%)

	Current	Q1FY18	Q4FY17
Promoters *	74.7	74.7	74.7
MF's, FI's & BK's	0.5	0.4	0.2
FII's	3.7	3.4	3.3
Others	21.1	21.7	22.0

** Promoters pledged shares (% of share in issue) : Nil*

PRICE PERFORMANCE (%)

	Sensex	Stock	Stock over Sensex
1 month	1.7	22.7	20.9
3 months	6.2	37.5	31.3
12 months	28.0	152.6	124.6

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017

Strong direct procurement network; focus on milk

Hatsun procures milk directly from farmers, facilitated by 10,000 Hatsun Milk Banks covering over 13,000 villages. The company the largest procurement network of ~2.7mn litres per day amongst private dairy players. It procures from a strong base of 3.2 lakh plus farmers. The milk is then tested for quality on parameters of fat and SNF content; thereafter, farmers are paid every 10 days into farmers' bank accounts, without exception.

Strong processes enable scalable model

The company has built its procurement network by focusing on complete transparency, timely bank payments and providing allied dairy services. This has enabled a scalable model, which can be used to expand in other regions as well for milk procurement. Further, Hatsun has established new process of procuring and chilling milk at the village level using active bulk coolers, which helps retain freshness and improves quality.

Focus on milk procurement

Hatsun focuses on increasing milk procurement in a region, which in turn optimizes logistics and other procurement costs due to higher volumes. These savings are used to further strengthen the framework by offering higher prices and support services for farmers and building procurement infrastructure by adding bulk coolers. Hatsun uses this process in all regions it enters, giving it a leading presence in Tamil Nadu and growing presence in Karnataka, Andhra Pradesh and Telangana.

Established relationships with farmers

Strong payment track record maintained over the past 2 decades has led to healthy relationships with farmers. Hatsun has an animal husbandry team which is used to provide support services to farmers, such as veterinary doctors, artificial insemination, cattle feed and management advices for large farms.

Established brands facilitate market leadership

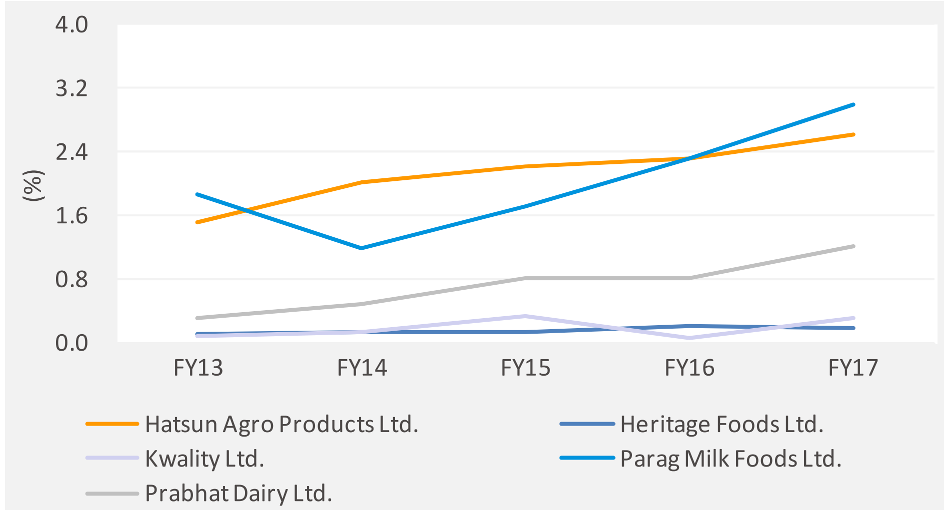
Hatsun supplies milk under the brand name *Arokya Milk,* ice-creams under *Arun* and *Ibaco* brands, while all other branded dairy products are sold under the *Hatsun* brand. These brands are household names in South India, particularly in Tamil Nadu, and are also gaining traction in North India. Further, products under these brands are also exported to America, Middle East and South Asian markets.

While Hatsun has garnered strong 14% market share in milk and curd in South India, *Arun* holds ~60% market share in Tamil Nadu and ~30% in South India.

High advertisement and sales promotion expenses

Hatsun maintains strong focus on ad & sales promotions and has historically spent the highest on it amongst private dairy players. The company has on an average spent 2.1% of revenue on advertisement & sales promotion, up from 1.5% in FY13 to 2.6% in FY17. Parag has been the second strongest in this regard and has ramped up ad spends aggressively.

Chart 1: Hatsun has spent the highest on ad spends on average



Source: Edelweiss research

Differentiated strategies boost distribution network

Hatsun has a formidable presence across Tamil Nadu, Karnataka, Andhra Pradesh, Telangana and Maharashtra. It aims to triple its *Hatsun Daily* outlet count to 3,000 in a year.

Focus on untapped regions

Hatsun built its pouch milk business by focusing on smaller towns in southern states, where penetration was low, gaining first mover advantage and establishing its presence. While distributing milk in smaller regions was unprofitable initially, increasing volumes turned them profitable.

Premium product and operational efficiencies

The company largely sells full cream/standardized milk (~80% of milk revenue), whereas competitors offer toned milk. <u>This enables Hatsun charge around 10% premium for its milk</u>. Further, the company transports milk in a concentrated form, saving on logistics cost.

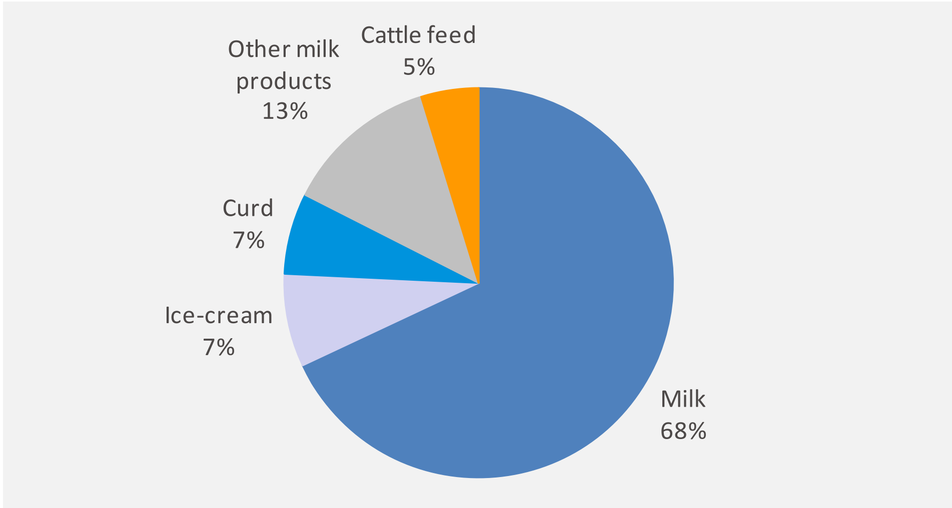
Setting up franchise outlets to create an exclusive distribution network

Hatsun has set up a franchise based distribution network called Hatsun Distribution Centre (HDC). Any franchisee who wishes to be part of this network is provided premises by Hatsun. This creates a significant barrier for any encroachment by competitors on Hatsun's distribution network, ensuring exclusivity. The company distributes its milk products through the aforementioned franchisee outlets only. It currently has a network of 2,289 HDCs spread across 6 states.

Company Description

Hatsun, incorporated in 1986, is a leading dairy company based in Tamil Nadu. The company commenced operations as an ice-cream player, transforming into a full fledged dairy company over the years. It sells fresh milk under the *Arokya* brand, ice-cream & premium ice-cream under *Arun* & *Ibaco* brands and other value-added products like paneer, ghee and milk powders under the *Hatsun* brand. Further, it sells cattle feed under the Santosa brand. Milk constitutes 68% of total revenue.

Chart 2: Hatsun's revenue mix



Source: Edelweiss research

Hatsun's brands

Arokya: Launched in 1995, it is one of the most popular milk brands in South India and is also expanding in North. Under this brand it sells standardized, full cream & toned milk and curd. *Goodness of Arokya* is a parlour set up under this brand for milk-based refreshments. Due to its strong brand reputation, it commands ~10% price premium over co-operatives in Tamil Nadu.

Arun ice creams: This was Hatsun's first product and is now a widely recognized brand.

Ibaco: *Ibaco ice creams* have grown rapidly, sold in parlours across India. Ice creams under this brand are in the more premium range.

Hatsun: Dairy products like curd, paneer, ghee, butter, milk powders, buttermilk and lassi are sold under this brand.

Santosa: **C**attle feed is sold under *Santosa* brand. Its plant at Palani manufactures 12,000MT/month of cattle feed, with another 10,000MT to be added, and is sold to farmers.

Strong progression into a global player

On back of rising skimmed milk powder prices globally, Hatsun entered into the export business in FY05. Since then, the company has not only been able been to garner healthy global presence with dairy ingredients being exported to 40 countries around the world, but has also increased its direct milk procurement from 1.3mn litres per day in FY05 to 2.7mn litres per day in FY17.

Regional concentration for direct milk procurement

Hatsun has identified economies of scale in its direct milk procurement strategy. The company focuses on constantly increasing milk procurement from an identified region, enabling it to employ large tankers. This not only prunes freight cost, but also enhances utilisation of processing facilities. Savings from this has enabled the company to not only make further investments in its own facilities, but also to increase milk procurement prices paid to farmers.

Financial Statements

Income statement (INR mn)

Year to March	FY14	FY15	FY16	FY17
Net Revenues	24,935	29,331	34,447	41,997
Raw Material Costs	18,496	21,842	24,889	30,490
Employee costs	760	931	1,102	1,269
Other expenses	3,902	4,574	5,409	6,444
Total expenses	23,158	27,348	31,400	38,202
EBITDA	1,778	1,983	3,047	3,795
Depreciation & amortization	650	940	1,071	1,456
EBIT	1,128	1,043	1,976	2,339
Less: Interest Expense	417	634	683	702
Add: Other income	104	65	46	56
Profit Before Tax	814	474	1,340	1,693
Less: Provision for Tax	(2.4)	82	735	353
Reported Profit	817	392	605	1,340
Adjusted Profit	817	392	605	1,340
No. of Shares outstanding (mn)	108	109	109	152
Adjusted Basic EPS	7.6	3.6	5.6	8.8
No. of dil. shares outstand. (mn)	107.7	108.7	108.7	152.2
Adjusted Diluted EPS	7.6	3.6	5.6	8.8
Adjusted Cash EPS	13.6	12.3	15.4	18.4
Dividend per share	2.5	1.8	4.0	4.0
Dividend Payout Ratio (%)	33.0	50.0	71.9	45.4

Common size metrics - as % of revenues

Year to March	FY14	FY15	FY16	FY17
Gross margin	**25.8**	**25.5**	**27.7**	**27.4**
Staff costs	3.0	3.2	3.2	3.0
S G & A expenses	15.6	15.6	15.7	15.3
Depreciation	2.6	3.2	3.1	3.5
Interest Expense	1.7	2.2	2.0	1.7
EBITDA margins	**7.1**	**6.8**	**8.8**	**9.0**
Net Profit margins	3.3	1.3	1.8	3.2

Growth metrics (%)

Year to March	FY14	FY15	FY16	FY17
Revenues	15.2	17.6	17.4	21.9
EBITDA	20.3	11.6	53.6	24.5
PBT	43.4	(41.9)	182.9	26.3
Adjusted Profit	82.9	(52.1)	54.5	121.4
EPS	82.9	(52.5)	54.5	58.2

Balance sheet (INR mn)

As on 31st March	FY14	FY15	FY16	FY17
Share capital	108	109	109	152
Reserves & Surplus	1,686	2,106	2,198	3,319
Total shareholders funds	**1,794**	**2,215**	**2,307**	**3,471**
Minority interest	0	0	0	0
Long term Borrowings	2,453	2,816	2,304	3,699
Short term Borrowings	2,482	3,321	4,411	5,503
Total Borrowings	**4,935**	**6,137**	**6,715**	**9,202**
Long Term Liabilities & Prov.	5	5	4	8
Deferred Tax Liability (net)	278	285	261	629
Sources of funds	**7,013**	**8,641**	**9,287**	**13,311**
Gross Block	7,722	9,930	11,076	15,358
Net Block	4,856	6,184	6,372	9,799
Capital work in progress	1,063	234	325	903
Intangible Assets	181	138	100	87
Total Fixed Assets	**6,100**	**6,556**	**6,798**	**10,789**
Non current investments	8	1	3	3
Cash & bank balances	107	242	294	553
Inventories	886	2,585	3,468	2,965
Sundry Debtors	219	126	149	410
Loans & Advances	1,083	1,025	820	1,474
Other Current Assets	34	20	43	32
Total Current Assets (Ex Cash)	**2,222**	**3,757**	**4,480**	**4,881**
Trade payable	906	1,092	1,368	1,700
Other Current Liab. & ST Prov.	519	823	920	1,215
Total Current Liab. & Provisions	**1,424**	**1,915**	**2,287**	**2,915**
Net Current Assets (ex cash)	798	1,841	2,193	1,966
Uses of funds	**7,013**	**8,641**	**9,287**	**13,311**
Book value per share (BV) (INR)	17	20	21	23

Free cash flow

Year to March	FY14	FY15	FY16	FY17
Reported Profit	817	392	605	1,340
Add: Depreciation	650	940	1,071	1,456
Interest (Net of Tax)	419	524	308	556
Others	(274)	40	739	94
Less:Changes in WC	(394)	1,281	537	(940)
Operating cash flow	2,006	615	2,186	4,386
Less: Capex	2,432	1,287	1,403	5,789
Free cash flow	**(427)**	**(672)**	**783**	**(1,403)**

Cash flow statement

Year to March	FY14	FY15	FY16	FY17
Operating cash flow	2,006	615	2,186	4,386
Investments cashflow	(2,124)	(1,243)	(1,342)	(5,757)
Financing cash flow	131	756	(786)	1,630
Net cash Flow	13	128	59	259
Capex	(2,432)	(1,287)	(1,403)	(5,789)
Dividends Paid	(365)	(78)	(675)	(185)

Profitability & liquidity ratios

Year to March	FY14	FY15	FY16	FY17
ROAE (%)	52.9	19.5	26.8	46.4
ROACE (%)	20.4	14.7	23.3	22.1
Inventory Days	20	29	44	39
Debtors Days	5	2	1	2
Payble Days	17	17	18	18
Cash conversion cycle (days)	7	14	28	23
Current Ratio	1.6	2.1	2.1	1.9
Gross Debt/EBITDA	2.8	3.1	2.2	2.4
Gross Debt/Equity	2.8	2.8	2.9	2.7
Adjusted Debt/Equity	3.8	2.9	3.1	2.7
Net Debt/Equity	2.7	2.7	2.8	2.5
Interest Coverage Ratio	2.7	1.6	2.9	3.3
Cash Connversion (%)	113	31	72	116

Operating ratios

Year to March	FY14	FY15	FY16	FY17
Total asset turnover(x)	4.0	3.7	3.8	3.7
Fixed asset turnover(x)	5.6	5.2	5.4	5.1
Equity turnover(x)	16.1	14.6	15.2	14.5

Valuation parameters

Year to March	FY14	FY15	FY16	FY17
Adjusted Diluted EPS (INR)	7.6	3.6	5.6	8.8
Y-o-Y growth (%)	*82.9*	*(52.5)*	*54.5*	*58.2*
Adjusted Cash EPS (INR)	13.6	12.3	15.4	18.4
Diluted P/E (x)	116.1	244.4	158.2	100.0
Price/BV (x)	52.9	43.2	41.5	38.6
EV/Sales (x)	4.0	3.5	3.0	3.4
EV/EBITDA (x)	56.1	51.2	33.5	37.6
Dividend yield (%)	0.3	0.2	0.5	0.5

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India Midcaps

COMPANY PROFILE

KWALITY

Leveraging scale to shift to B2C

India Equity Research| Dairy

Kwality is one of India's fastest growing (23% revenue CAGR over FY12-17) and largest private dairy company with revenue of INR68.7bn and milk processing capacity of 4.3mn litres per day. The company enjoys a large presence in high milk producing states of North India such as UP, Rajasthan and Haryana. While, historically, Kwality concentrated on the institutional segment, it is now strategically looking to change the current business mix from 60:40 B2B:B2C to 30:70 in favour of retail by 2020. This it plans to achieve via addition of a range of value-added products, increasing ad spends, tie ups with multiple agencies and signing of Akshay Kumar as brand ambassador. Further, it is aiming to increase direct procurement from merely 26% to 50%. These strategic moves are envisaged to boost margin, establish *Kwality* brand and propel its evolution from a commoditised to a branded value-added player.

Strong presence in lucrative markets

Kwality operates largely in UP, Rajasthan and Haryana, which are ranked first, second and eighth highest milk producing states, respectively, accounting for 34% of national milk production. Due to its presence in milk abundant states, Kwality has strong procurement supply. This places the company in a sweet spot to expand its direct procurement reach from states of abundant supply.

Expanding direct procurement outreach

The company lags in direct procurement, with merely 26% procurement from direct channels; peers procure 80-100% milk directly. Kwality intends to increase this procurement mix from current 26% to 50% directly from farmers in 3-4 years. This will be achieved by expanding its current network of MCCs in UP, Rajasthan and Haryana.

Outlook and valuations: NOT RATED

Kwality is transitioning from a commoditised B2B player to a value-added branded B2C player. With introduction of new products and incorporation of retail margins, margin is envisaged to expand going forward, commanding a brand premium and improvement in working capital.

Financials

Year to March	FY14	FY15	FY16	FY17
Net Revenues (INR mn)	50,110	58,783	63,481	68,718
EBITDA (INR mn)	2,932	3,499	3,865	4,536
Adjusted PAT (INR mn)	1,449	1,665	1,640	1,941
Adjusted Diluted EPS (INR)	7.1	7.6	7.3	8.2
Diluted P/E (x)	14.1	13.2	13.7	12.3
EV/EBITDA (x)	10.6	9.7	9.5	8.7
RoE (%)	40.7	30.5	21.6	19.7

EDELWEISS RATINGS

Absolute Rating	NOT RATED

MARKET DATA *(R: KDAI.BO, B: KWALITY IN)*

CMP	: INR 101
Target Price	: NA
52-week range (INR)	: 169 / 95
Share in issue (mn)	: 238.0
M cap (INR bn/USD mn)	: 26 / 399
Avg. Daily Vol.NSE ('000)	: 1,616.5

SHARE HOLDING PATTERN (%)

	Current	Q1FY18	Q4FY17
Promoters *	63.9	64.0	64.1
MF's, FI's & BK's	0.7	0.2	0.4
FII's	5.7	8.0	6.3
Others	29.6	27.8	29.2

** Promoters pledged shares (% of share in issue) : Nil*

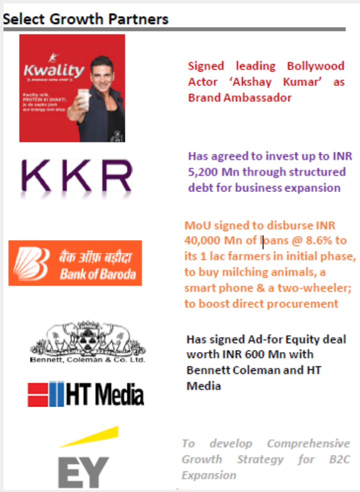
PRICE PERFORMANCE (%)

	Sensex	Stock	Stock over Sensex
1 month	1.7	11.0	9.3
3 months	6.2	(28.9)	(35.1)
12 months	28.0	(16.1)	(44.1)

Shradha Sheth
+91 22 6623 3308
shradha.sheth@edelweissfin.com

Sanyam Jain
+91 22 4040 7412
sanyam.jain@edelweissfin.com

December 1, 2017



Shifting strategy to B2C

Kwality is now focusing on transforming from a traditional B2B to B2C company, strategically looking to change the current business mix from 60:40 B2B:B2C to 30:70 in favour of retail by 2020. To achieve this, it will expand product portfolio with the addition of value-added products like flavoured milk, cheese, UHT milk, butter, cream, paneer, yoghurts and other value-added dairy products.

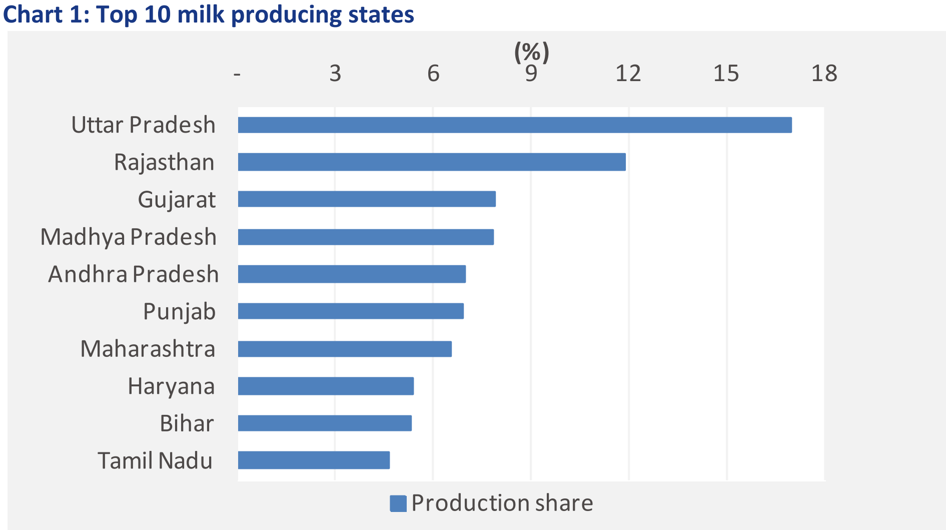
Push to increase brand outreach

Kwality has roped in Bollywood actor Akshay Kumar as Brand Ambassador as part of its strategy of brand building and transformation to a B2C player. Further, the company is looking to increase ad spends, both ATL and BTL, while also strengthening its retail distribution network. To achieve this, it has tied up with different agencies like McCANN & Cheil India for Creative, Adfactors for PR, Digital Quotient for Social Media, Zenith Optimedia for Media Planning and Ernst & Young for IT. The company has also signed an ad-for-equity deal worth INR600mn with Bennett Coleman and HT media. Kwality has also engaged EY to develop comprehensive growth strategy for its B2C expansion.

Largest private sector player operating in lucrative markets

Kwality is the largest private player in terms of processing capacity, with a capacity of 4.3mn litres per day. It is behind only Amul (30mn litres/day) and Nandini (6mn litres/day). Further, the company operates largely in UP, Rajasthan and Haryana which rank has the first, second and eighth highest milk producing states, respectively, accounting for 34% of national milk production. Due to its presence in milk-abundant states, Kwality has strong procurement supply.

Chart 1: Top 10 milk producing states



Source: NDDB

Increasing direct procurement

Currently, Kwality procures around 26% of milk requirement directly from more than 350,000 farmers spread across 4,700 villages through 29 MCCs. This is the lowest by a great margin amongst listed dairy players. While Heritage and Hatsun source close to 100% directly, Prabhat and Parag source 70-80% directly. To improve this, the company intends to increase the procurement mix from the current 26% to 50% directly from farmers in 3-4 years. This will be achieved through expanding its current network of MCCs in UP, Rajasthan and Haryana.

Tie up with Bank of Baroda

To develop strong relationships with farmers, an MoU has been signed with Bank of Baroda to disburse INR40bn loans at 8.6% to its 1 lakh farmers to buy milching animals, a smart phone and a two wheeler. This will boost its direct procurement without straining financials as Kwality is merely the facilitator in this deal and assumes no liabilities.

KKR investment deal

Kohlberg Kravis Roberts & Co. has agreed to invest up to INR5.2bn in Kwality through structured debt over 6 years. This will be used for debt consolidation, investment in direct procurement infrastructure, processing capacity expansion by 0.9mn litres/day for value-added product categories like cheese, paneer, UHT milk, flavoured milk, table butter and others. The investment will further be used in brand building, sales promotion and marketing activities and developing IT infrastructure.

Company Description

Kwality is one of the largest manufacturers and processors of dairy products in the private sector in India. It was established in 1992 as a backward integration unit of Kwality Ice Creams and was acquired by the current promoters in 2002. Currently, it has processing capacity of more than 4.3mn litres of milk per day (lower than only Amul and Nandini) with 6 milk processing units in Palwal (Haryana), Saharanpur (UP), Bulandshaher (UP), Jarar (UP), Sitapur (UP) & Ajmer (Rajasthan).

Kwality is a strong player in North India with a procurement network of 350,000 farmers across 4,700 villages across UP, Haryana and Rajasthan, which are amongst the top milk producing states in the country. However, merely 26% procurement is done directly through farmers, which is significantly lower than peers.

Table 1: Kwality's portfolio of products

Milk	Pouch milk, Butter milk, Skimmed milk
Milk Powders	Skimmed milk powder, whole milk powder, dairy whiteners
Curd & Buttermilk	Set curd, pouch curd, pouch buttermilk
Ghee & Fat	Pure ghee, cow ghee, low cholesterol ghee, bulk butter
Value added products	UHT Milk, flavoured milk, cream in tetra packs

Source: Company

Fig.1: Kwality's product portfolio

Source: Company

Commencement of new plant

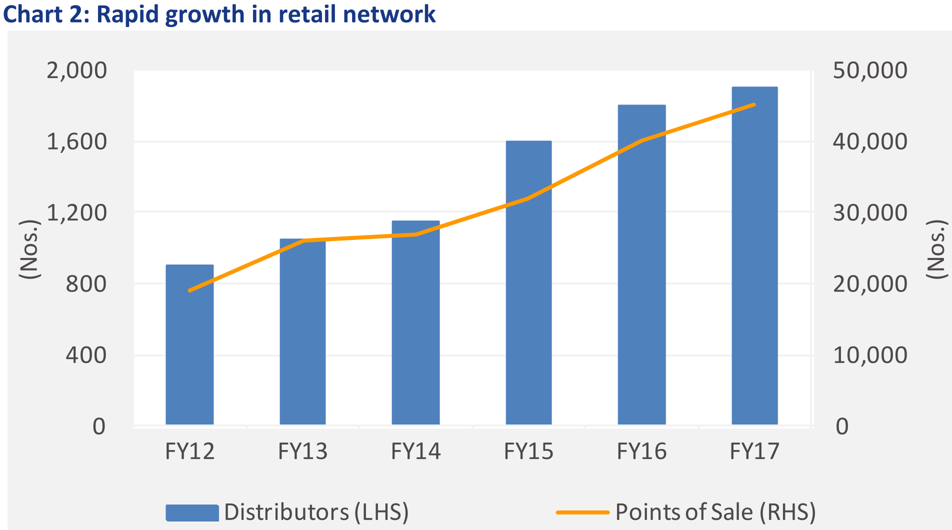
Commercial production began in February 2017 at the new unit at Softa plant, Haryana, dedicated primarily to value-added products. The unit is fully automated, equipped with ultra-modern machinery, world-class quality control systems and state-of-the-art R&D lab for which it has applied for National Accreditation Board for Testing and Calibration Laboratories (NABL) certification. The unit has milk handling capacity of 0.9mn litres/day primarily for value-added products such as flavoured milk, paneer, cheese, UHT milk, cream in tetra packs, table butter, yoghurt, amongst others. With this unit, Kwality's cumulative milk processing capacity will be 4.3mn litres/day across its 6 plants.

Distribution network

Kwality has established a strong position in key consumption markets of North India where its products are available in general and modern trade channels and select online platforms. It has set up SBUs headed by respective profit managers for increased penetration and roped in learning facilitators with rich experience for developing sales & distribution design and training modules (classroom and e-learning based) aimed to improve efficiency, effective channel management, query/complaint handling, customer care.

Further, it is in the process of implementing cloud-based solution 'Field-Assist' to facilitate real-time decision making based on comprehensive data analytics. Kwality aims to enhance its presence to 100,000 plus points of sale over the medium term including modern trade channels, exclusive brand stores and select online modes.

Chart 2: Rapid growth in retail network



Source: Company, Edelweiss research

Financial Statements

Income statement (INR mn)

Year to March	FY14	FY15	FY16	FY17
Net Revenues	50,110	58,783	63,481	68,718
Raw Material Costs	45,869	53,658	58,100	62,046
Employee costs	163	220	374	401
Other expenses	1,145	1,406	1,143	1,735
Total expenses	47,178	55,284	59,616	64,182
EBITDA	2,932	3,499	3,865	4,536
Depreciation & amortization	130	253	234	223
EBIT	2,802	3,246	3,631	4,313
Less: Interest Expense	1,156	1,403	1,585	1,814
Add: Other income	42	117	298	137
Profit Before Tax	1,688	1,961	2,344	2,636
Less: Provision for Tax	239	295	704	694
Reported Profit	1,449	1,665	1,640	1,941
Adjusted Profit	1,449	1,665	1,640	1,941
No. of Shares outstanding (mn)	203	219	224	237
Adjusted Basic EPS	7.1	7.6	7.3	8.2
No. of dil. shares outstand. (mn)	203	219	224	237
Adjusted Diluted EPS	7.1	7.6	7.3	8.2
Adjusted Cash EPS	7.8	8.8	8.4	9.1
Dividend per share	0.1	0.1	0.1	0.1
Dividend Payout Ratio (%)	1.4	1.3	1.4	1.2

Common size metrics - as % of revenues

Year to March	FY14	FY15	FY16	FY17
Gross margin	**8.5**	**8.7**	**8.5**	**9.7**
Staff costs	0.3	0.4	0.6	0.6
S G & A expenses	2.3	2.4	1.8	2.5
Depreciation	0.3	0.4	0.4	0.3
Interest Expense	2.3	2.4	2.5	2.6
EBITDA margins	**5.9**	**6.0**	**6.1**	**6.6**
Net Profit margins	2.9	2.8	2.6	2.8

Growth metrics (%)

Year to March	FY14	FY15	FY16	FY17
Revenues	27.5	17.3	8.0	8.2
EBITDA	31.0	19.4	10.4	17.4
PBT	43.6	16.1	19.5	12.4
Adjusted Profit	33.4	14.9	(1.5)	18.4
EPS	33.4	6.7	(3.8)	11.7

Balance sheet (INR mn)

As on 31st March	FY14	FY15	FY16	FY17
Share capital	203	219	224	237
Reserves & Surplus	4,081	6,430	8,312	10,936
Total shareholders funds	**4,284**	**6,649**	**8,536**	**11,173**
Minority interest	0	0	0	0
Long term Borrowings	1,092	1,481	2,546	5,031
Short term Borrowings	9,868	11,011	12,650	11,586
Total Borrowings	**10,960**	**12,491**	**15,196**	**16,617**
Long Term Liabilities & Prov.	7	14	18	130
Deferred Tax Liability (net)	(8)	(15)	(257)	(82)
Sources of funds	**15,243**	**19,140**	**23,493**	**27,838**
Gross Block	1,526	1,262	1,458	5,326
Net Block	1,044	673	649	4,314
Capital work in progress	220	1,184	1,941	66
Intangible Assets	14	0	14	13
Total Fixed Assets	**1,278**	**1,857**	**2,604**	**4,393**
Non current investments	0	0	61	62
Cash & bank balances	315	517	864	1,133
Inventories	1,874	2,910	1,706	3,514
Sundry Debtors	13,312	13,246	16,554	15,792
Loans & Advances	23	17	22	45
Other Current Assets	727	2,098	3,426	5,261
Total Current Assets (Ex Cash)	**15,935**	**18,271**	**21,707**	**24,612**
Trade payable	1,663	520	521	969
Other Current Liab. & ST Prov.	621	985	1,222	1,394
Total Current Liab. & Provisions	**2,284**	**1,505**	**1,743**	**2,363**
Net Current Assets (ex cash)	13,651	16,766	19,964	22,249
Uses of funds	**15,243**	**19,140**	**23,493**	**27,838**
Book value per share (BV) (INR)	21	30	38	47

Free cash flow

Year to March	FY14	FY15	FY16	FY17
Reported Profit	1,449	1,665	1,640	1,941
Add: Depreciation	130	253	234	223
Interest (Net of Tax)	992	1,192	1,109	1,336
Others	134	537	878	853
Less:Changes in WC	2,842	3,056	3,975	2,427
Operating cash flow	(136)	591	(114)	1,927
Less: Capex	591	1,518	1,044	1,982
Free cash flow	**(727)**	**(927)**	**(1,159)**	**(54)**

Cash flow statement

Year to March	FY14	FY15	FY16	FY17
Operating cash flow	(136)	591	(114)	1,927
Investments cashflow	(586)	(1,509)	(1,009)	(1,974)
Financing cash flow	161	1,044	1,338	383
Net cash Flow	(561)	126	215	336
Capex	(591)	(1,518)	(1,044)	(1,982)
Dividends Paid	(24)	(24)	(26)	(28)

Profitability & liquidity ratios

Year to March	FY14	FY15	FY16	FY17
ROAE (%)	40.7	30.5	21.6	19.7
ROACE (%)	20.5	19.6	18.3	17.3
Inventory Days	12	16	14	15
Debtors Days	85	82	86	86
Payble Days	10	7	3	4
Cash conversion cycle (days)	87	91	97	97
Current Ratio	7.1	12.5	12.9	10.9
Gross Debt/EBITDA	3.7	3.6	3.9	3.7
Gross Debt/Equity	2.6	1.9	1.8	1.5
Adjusted Debt/Equity	3.0	1.9	1.8	1.5
Net Debt/Equity	2.5	1.8	1.7	1.4
Interest Coverage Ratio	2.4	2.3	2.3	2.4
Cash Connversion (%)	(5)	17	(3)	42

Operating ratios

Year to March	FY16	FY16	FY16	FY17
Total asset turnover(x)	3.6	3.4	3.0	2.7
Fixed asset turnover(x)	56.0	67.9	95.0	27.5
Equity turnover(x)	14.1	10.8	8.4	7.0

Valuation parameters

Year to March	FY14	FY15	FY16	FY17
Adjusted Diluted EPS (INR)	7.1	7.6	7.3	8.2
Y-o-Y growth (%)	*33.4*	*6.7*	*(3.8)*	*11.7*
Adjusted Cash EPS (INR)	7.8	8.8	8.4	9.1
Diluted P/E (x)	14.1	13.2	13.7	12.3
Price/BV (x)	4.8	3.3	2.6	2.1
EV/Sales (x)	0.6	0.6	0.6	0.6
EV/EBITDA (x)	10.6	9.7	9.5	8.7

Edelweiss Securities Limited, Edelweiss House, off C.S.T. Road, Kalina, Mumbai – 400 098.
Board: (91-22) 4009 4400, Email: *research@edelweissfin.com*

Aditya Narain
Head of Research
aditya.narain@edelweissfin.com

ADITYA NARAIN

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Coverage group(s) of stocks by primary analyst(s): Dairy

Heritage Foods, Parag Milk Foods, Prabhat Dairy

Recent Research

Date	Company	Title	Price (INR)	Recos
14-Nov-17	**Prabhat Dairy**	Scaling up in value added products and B2C ; *Result Update*	144	Buy
17-Aug-17	**Prabhat Dairy**	Value-added products drive strong revenue trajectory; *Result Update*	131	Buy
15-Nov-16	**Prabhat Dairy**	Story intact but procurement hurts; *Result Update*	103	Buy

Distribution of Ratings / Market Cap

Edelweiss Research Coverage Universe

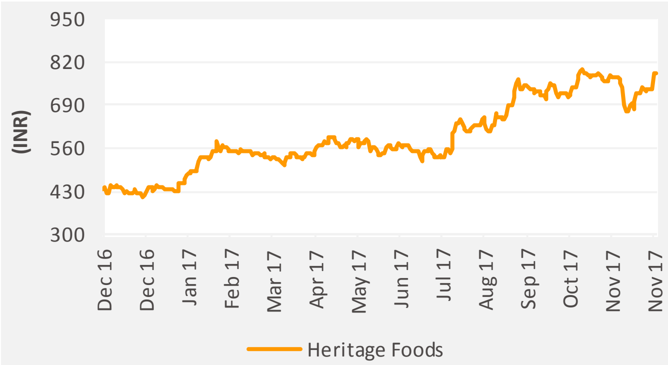
	Buy	Hold	Reduce	Total
Rating Distribution* * 1stocks under review	161	67	11	240

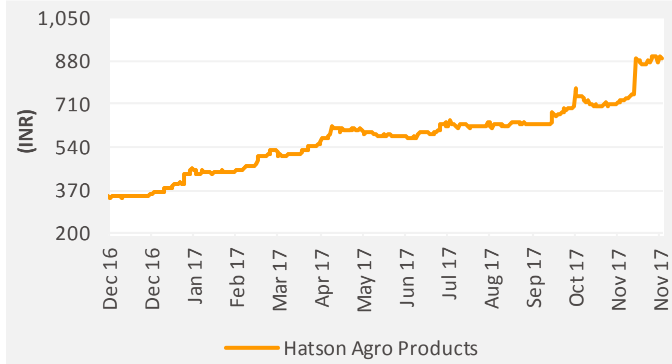
	> 50bn	Between 10bn and 50 bn	< 10bn
Market Cap (INR)	156	62	11

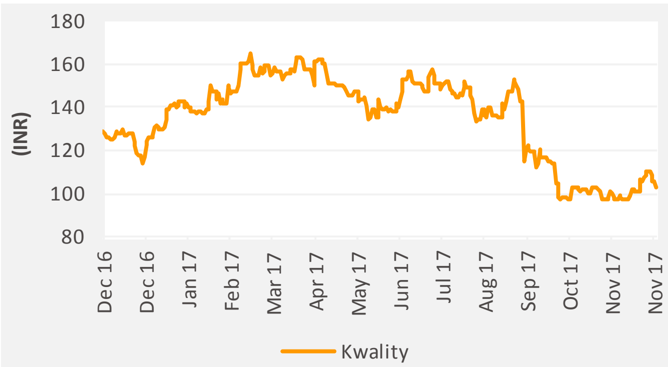
Rating Interpretation

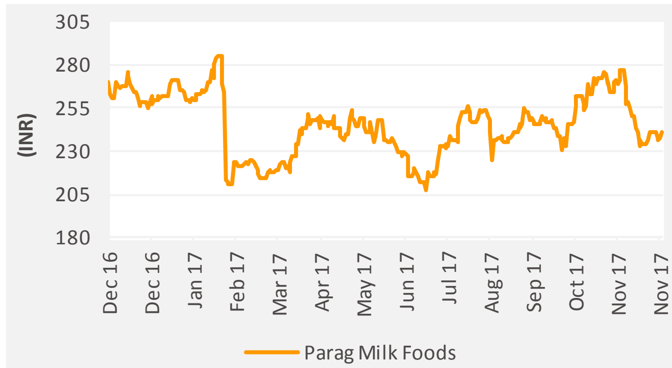
Rating	Expected to
Buy	appreciate more than 15% over a 12-month period
Hold	appreciate up to 15% over a 12-month period
Reduce	depreciate more than 5% over a 12-month period

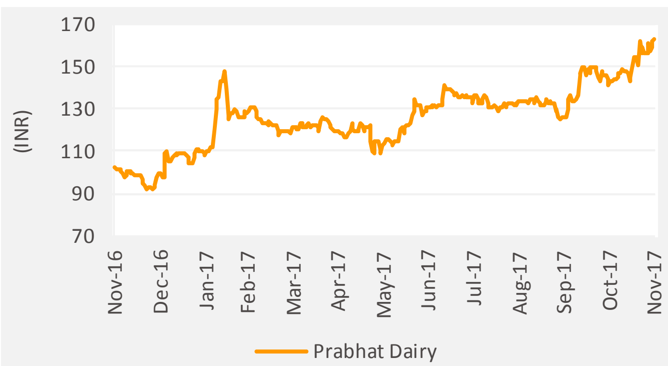
One year price chart











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Edelweiss Securities Limited, Edelweiss House, off C.S.T. Road, Kalina, Mumbai 400 098
Tel: +91 22 4009 4400. Email: research@edelweissfin.com