FOOD INGREDIENT

Green vs Chemistry?

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Market Research	Industry	 General Background Market Performance Market Chain Market Sector Future Trend
	Company	Key PlayersValuation

Aquisition Target

- Targeted:APPLE
- Large Size Company:Angel/Chem Partner
- Medium Size Company:
- Small Size Comapny:

Food Ingredient is one distinctive industry with high barrier and wide influence all over the business life

Industry Analysis: General Background

Company Analysis

Targeted M&A

Introduction¹

- Food ingredients are additives for performing various functions in food, such as maintaining or improving freshness & safety, nutritional value, taste, texture and appearance.
- Various types of food ingredients include starches, vegetable oils & fats, natural sweeteners, enzymes & antioxidants, natural flavorings & colors, and functional ingredients.

70K

THE TOTAL NUMBER

of InternationI Exhibitions which promote the new food ingredient exposure

Characterisic

High Gross Margins

Low Net Margin

Pricing

account for less than 3% of the final product input cost which leads to a stable demand for products

Input Costs

rely heavily on algricultural procucts with little sensitivity to the input cost

High Industry Barriers

Fast turnover, non cyclical with stable growth demand Netrual concentration, high industry differentiation obvious differentiation of segmented products High attention Globally

Environment

International National Transaction

among Asian counties has experienced an unexpected activity

	Ex-Inport	Export to CN	Inport from CN
Transaction	\$72.5b	\$27.1b(15.1% total)	\$45.4b(24.1%total)
CAGR	23.7%	28.9%	26.8%



Domestic R&D policy guidance

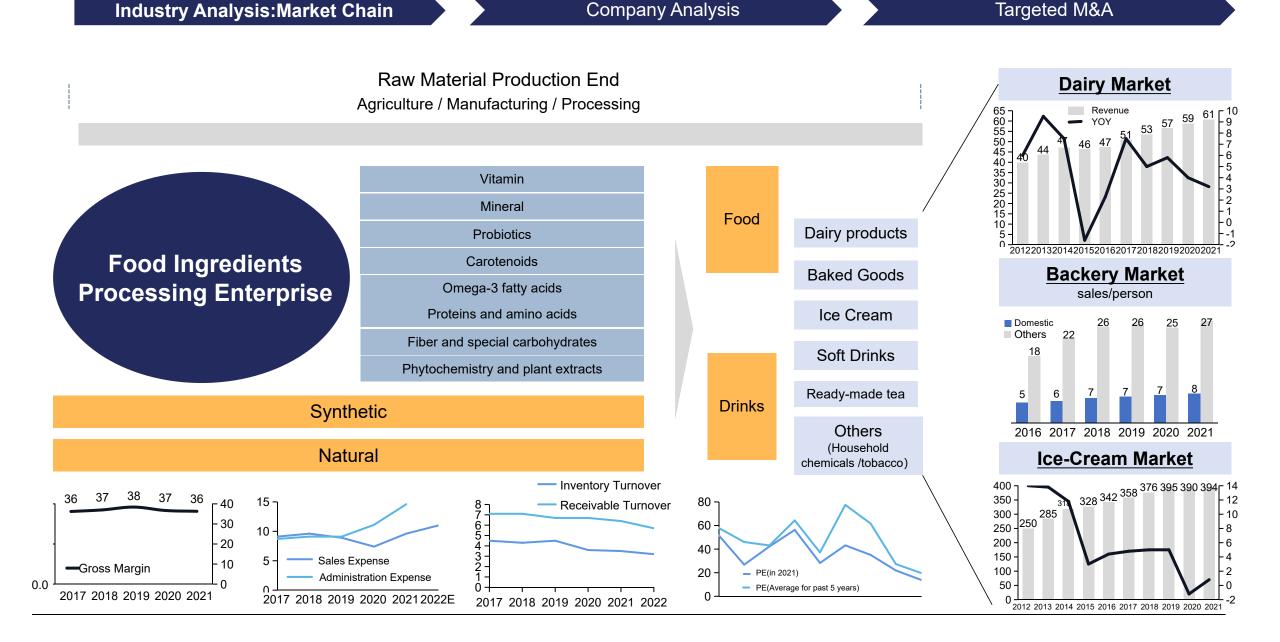
has won more support from the legal institution which endows more fleaxibility and add new food ingredients

- Sodium Hyaluronate (Announcement No. 9 in 2020)
- Lactobacillus Equine Subsp (Announcement No. 9 of 2020)
- Lactobacillus suis r0052(Announcement No.4 in 2020)

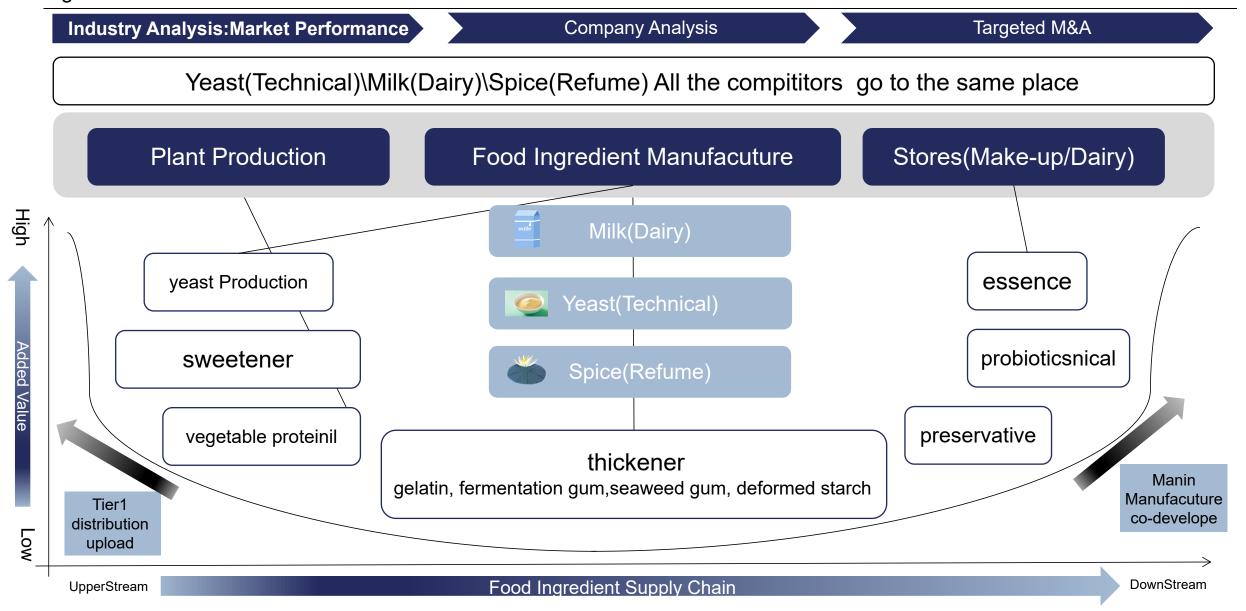
With specific sectors like *Bakery,Industrial Chocolate,Plant-based Product and Essence*,there is the stable demand in Food Ingredient Market



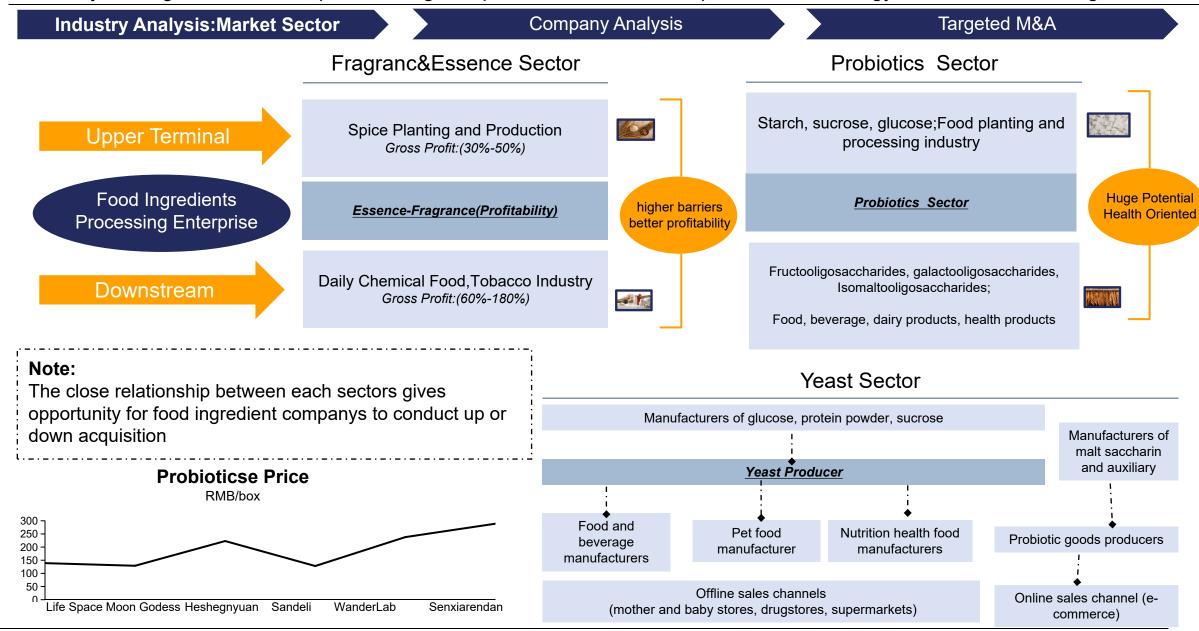
With large market scale in downstream, diversity in inner ingredients' types and strong support from Upperstream (Basic Industry like Agriculture), Food Ingredient's financial performance is always more potential than yesterday



With specific sectors like *Bakery,Industrial Chocolate,Plant-based Product and Essence*,there is the stable demand in Food Ingredient Market



Among all sectors, Fragrance & Essence containes more application channels, higher ROE and more efficient Scale Economy, leading to a relative expensive targeted price which means the plant-based strategy is suitable in the long run



Profitability of direct sales is growing rapidly with distinctive performance in compound products' segments High requirements for low sugar&salt will led to innovation in market with more convenient consumption ways

Industry Analysis:Future Trend

Company Analysis

Targeted M&A

Trend 1:Oral Beauty Products

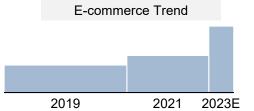
Trend 2: Quality Strictness

Trend3: Health (reducing sugar and salt)

O20 Business Expansion

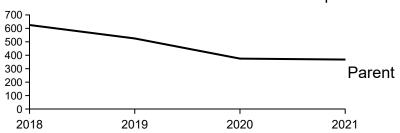
In 2021, the online sales has reached 67.8% of

all sales for food ingredients which is the obvious trend in the next 5 years



Fine harder and New Parent Passing harder

eg"Jimeizi" sweet potato starch was fined 10000 yuan because the total number of colonies was unqualified



Customers Favorite Drinks Ranking¹



Food Ingredient Directed Sales

- Total annual growth rate of Chinese food ingredients sales in the next five years will be about 2.5~4%.
- Natural antioxidants will develop rapidly exceeding traditional synthetic preservatives in 5 years.

Beopel Live



Huorun Probiotic Ball Yoghurt



Chobani Probiotics Plant Dinks



Chacha Probiotics **Daily Nuts**

Compound Product Sales Sectors

(probiotics)

Note:

- Market's preference to no sugar/salt drinks will gruadually revoluntionze the market.
 - eq.Raise price of high-quality sugar in upstream







Momordica grosvenorii Stevia rebaudiana

Obuli plant

eg. Food Ingredient Co starts to purchase upstream in order to cut off cost

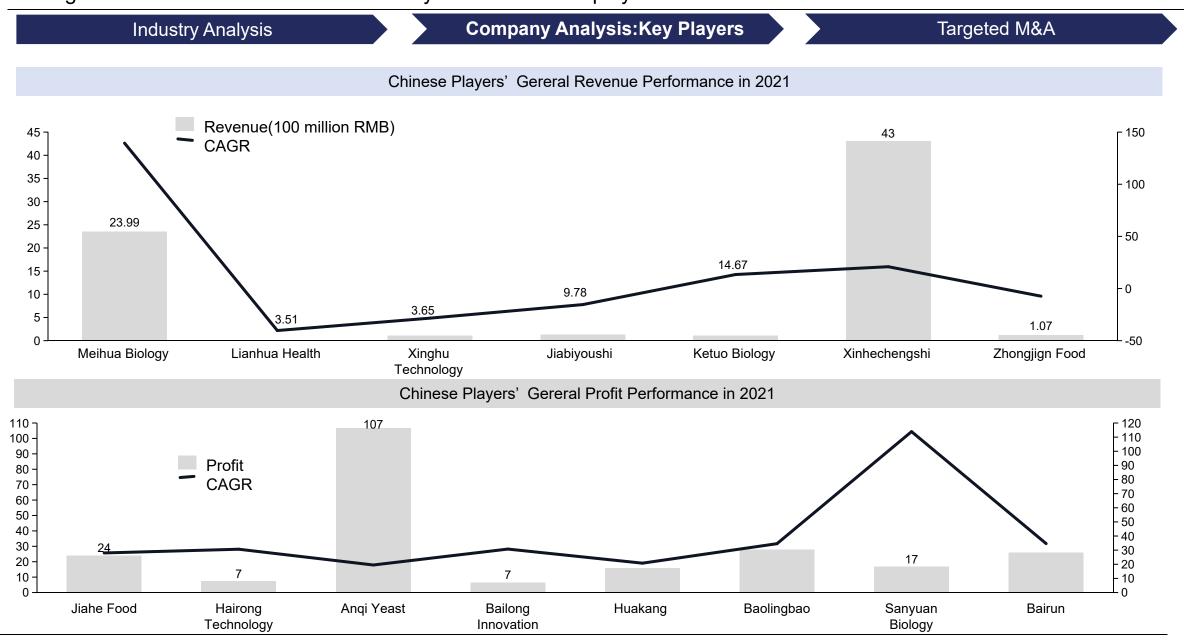
Yiruian has acquired 75% equity of Stevia producer Prosecco.

Xanthan Gum Preservatives Benzoic Acid Average thickener

Directed Product Sales(Revenue:million RMB)

Company Analysis

Key Players(Top 15) in Domestic Food Ingredients vary in revenue and profit; the directed reason come from Product Line Design and Vertical Sector Choice that may differentiate the players in Asia



Compared with European Valuation, Asian (especially Chese Food Ingredient) Manufacture's talent has been proven in seacondary market with ralative high position

Industry Analysis:Market Performance

Company Analysis:Valuation

Targeted M&A



























Company's Name	Market Cap(US\$m)	EV/Sales(US\$m)	EV/EBITDA(US\$m)	Large/small	Country	
Robertet SA	1410	2.4x	15.1x	large		
MeiHua Holdings Group Co.Ltd	3097	3.7x	16.5x	large	*	
Angel Yeast Cp.,Ltd	2160	1.5x	7.6x	large		
Takasage International Corporation	1401	1.9x	6.0x	large		
Qianjiang Yongan Pharmaceutical Co.,Ltd	632	0.8x	8.6x	large		
Anhui Jinhe Industrial Co.Ltd	608	1.0x	5.8x	large		
T.Hasegawa Co.,Ltd	451	2.9x	11.1x	large		
ChenGuang Biotech Group Co.,Ltd	446	1.3x	17.1x	medium	*3	
Gualin Layn Natural Ingredients Corp	411	4.3x	5.1x	medium	^	
Nantong Acetic Acid Chemical Co.Ltd	401	1.3x	7x	medium		
Apple Fiavor&Fragrance Group Co.Ltd	345	0.7x	13.5x	medium		

Compared with CSM Ingredient, Chinese enterprises own better fame in domestic market but probably less matured research and development productivity from CSM's relatively longer history

Industry Analysis:Market Performance

Company Analysis: Comparasion

Targeted M&A

Turnover:€500 million Number of employees:1400 Private Equity-Backed

- CSM Ingredients is mainly to the artisanal traditional trade (pastry and bakery shops) and industrial channels,
- Portfolio focused primarily on bread ingredients, pastry mixes, bakery fats, fillings, glazes, toppings and icings.
- Key brands include Agivega, Arkady, Artisal, Braims, Craigmillar, Marguerite, Masterline, MeisterMarken, Ulmer Spatz and Waldkorn.

Executive Team		Bakery	Bread	Fillings	Egg paste	Pouring	Pastry	Pastry	
Name	Titile	Fat	Ingredient			Materials	Powder		
Aldo Uva	Chief Executive Officer	CSM Born							
Alex Dekker	Chief Operating Officer	<u>— 1919</u>	Kick off - 1950	Fruit Filling Busin	ess Goes				
Maarten Bok	Chief Strategy Officer	CSM	2	First r	nixes are born				
Enrica Satta	Chief Human Resources& Sustainability Officer	1070							
Eduardo Silva	Chief Information Officer								
					MESTEMANICEN - 2000	A China plant esta 10 C	ablished CSM Bakery Solution - Sales of Europeangredients Busines - 2020	ons n and Internatio	

Targeted MA

Company Analysis

Targeted M&A:APPLE

603020 share price(10.23) PE=22,PB=1.2

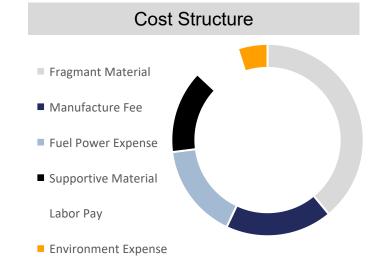
Share:383 million RMB

Gross Profit Increasing Rate:-22.74% Net Profit Increasing Rate:-22.24%

In addition to the traditional essence market

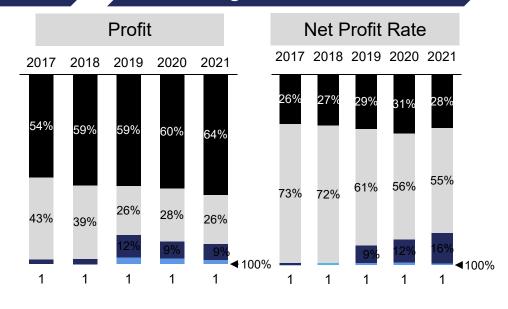
- Apple has successfully joined the field of food additives through solutions
 - like beverages&cheese
 - has also made great achievements in the probiotic Market

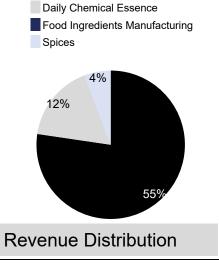




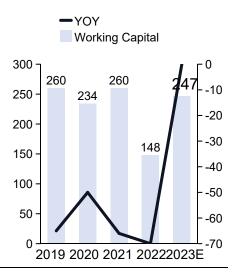








Essence(Food:Tobacco=3:1)



APPLE, with experts in law, environment, manufacture and stable finance and expansion in history has established the subsidiary system which can be partly purchased

Industry Analysis

Company Analysis:Key Players

Targeted M&A:APPLE

Development History

Start up period

Since its establishment, it mainly relies on the R & D, manufacturing and sales of essence to open up market

Investment in Tianshun

Apple invests in Hangzhou Tianshun, holding 45.56% of the shares, forming a synergistic effect

Shanghai plant Building:

Implementation of new food ingredients R&D and manufacture, which is expected to produce 50000 tons of chocolate annuall

Growth

In 2011, company invested in China Light Industry spices In 2015, company shares were successfully listed

Invest in Bio and Mengze

Company and Shanghai MengZe Trading Co., Ltd. hold 51% of the shares of the two companies respectively,

Note:

- the related credit risk of APPLE is < 3% which demonstrares the flexibility in its cash flow
- the southeast subsidiaries are ready to expand more stores and factory in China

Executive background

- Zhonghao Wei:Senior Economist, office director of Shanghai daily use essence factory and the chairman of Shenzhen Burton flavor Co., Ltd
- · Cicc: The first Sino foreign joint venture investment bank in China

Partner background

· Lupeng, Ph.D., teacher of Tongji University Law School and independent director of haixianhui Automation Technology Co., Ltd

Yigun Xiao Jianjun Liu Shanghai Xinxing Archetecture Investment Co. Shanghai Fushan Invesmtne Co. Jun Xiao **Oriental Secutiries** CICC 3% Shanghai Xinyu Investment Management Co. 3% Co. Shanghai Yile Co. Zhonghao Wei

Apple Flavor Fragrance

SH APPLE Ingredient SH Kaixin Bitechnology SH Shenyu Food SH Lehao Food SH APPLE Food Jiangxi APPLE Biotechnology APPLE Essence(Jiangxi)...... Henan Hualong Essence SH Aoluo Technology

Applying DCF and Comparative Ratios(PE/PB), the prabability to support increasement in productivity can be predicted which means a great opportunity to aim at M&A

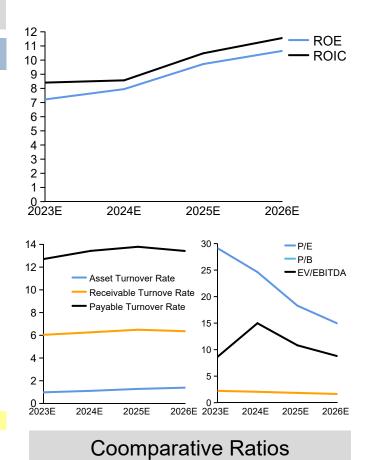
Industry Analysis

Company Analysis

Targeted M&A:APPLE

DCF Valuation

		Historical Rec	ord	CAGR			Ехр	ected		
	2020	2021	2022	('20- '22)	2023	2024	2025	2018	2019	2020
Revenue	2668	3232	4114	0.815	5039	6046.8	7256.16	8707.392	10448.87	12538.64
Inceasing Rate%	0.21	0.25	0.27							
COGS	2218	2598	3308	0.789	4006	4807.2	5768.64	6922.368	8306.84	9968.21
Gross Profit	450	634	806	0.925	1033	1239.6	1487.52	1785.02	2142.03	2570.43
Gross Profit Rate%	0.169	0.196	0.196		0.205	0.205	0.205	0.205	0.205	0.205
Operational Expense	201	342	411		525	630	756	907.2	1088.64	1306.368
EBITDA	249	292	395	-	508	609.6	731.52	877.824	1053.39	1264.067
EBITDA rate%	0.093	0.090	0.096		0.10	0.10	0.10	0.10	0.10	0.100
Depreciation and Amortisation	47	26	30		32	35.2	38.72	42.59	46.85	51.54
EBIT	202	266	365		476	574.4	692.8	835.232	1006.54	1212.530
EBIT rate%	0.076	0.082	0.089		0.095	0.095	0.095	0.096	0.096	0.097
Tax	47	50	69		85	93.5	102.85	113.135	124.45	136.89
EBIAT	155	216	296		391	480.9	589.95	722.097	882.089	1075.64
Add:Depreciation Amortisation	47	26	30		32	35.2	38.72	42.592	46.85	51.54
minus:capital expenditure	-6	-5	-5		-5	-5	0	-5	-5	0
minus:change in working capital	-36	-99	-106		-147	-176.4	-211.68	-254.016	-304.82	-365.78
FCF(Unleveraged)	160	138	215		271	334.7	416.99	505.67	619.12	761.39
WACC	10.00%	10.00%	10.00%		10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Discount Period	10 years	10 years	10 years	10 years	10 years	10 years	10 years	10 years	10 years	10 years
DCF	160	138	215		246.36	276.61	313.29	345.38	384.42	429.78





The advice for possible M&A is to focus on the 2C business partment in order to increase foreign brand's (CSM Ingredient) local reputation

Industry Analysis

Company Analysis: Key Players

Targeted M&A:APPLE+ANGEL

Targeted Products&Customers

Edible essence

- 2B:Ice Cream Manufacture; Super Market; Caker Office
- 2C:Individual purchasers

Chemical essence

- Make-up(washing,perfume,family care,personal care
- Candles and fabrics

Flavor

Biological fermentation flavor, synthetic flavor, natural extraction





Downstream Essence Product Distribution



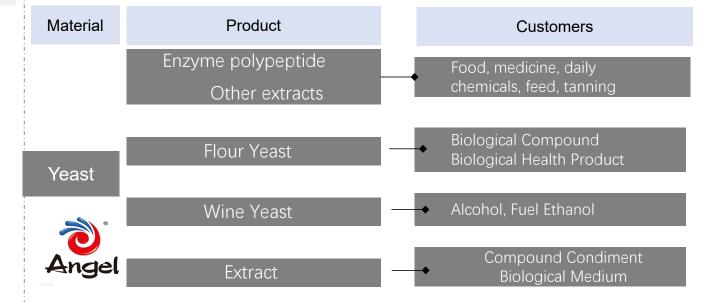


Compititors in Probiotic Market



Manager

Shareholde	r Gender	Diploma	Honor	Position
Juan Yao	Female	Master	Advanced Engineer	Director of R&D
Haijin Mei	Male	Master	Accountant	Vice CEO(CFO)
Tao Xiong	Male	Master	Senior Engineer	Executive
Xishan Wang	Male	Master	Advanced Economist	Vice CEO
Yingfei Liu	Female	Doctor	Professor from Wuhan University	Honored Executive
Xinguang Liu	Male	Master	Financial Expert	IAgency President



Company Analysis: Key Players

Targeted M&A: Large Categories

Introduction

Domestic leading Yeast Biotechnology Company with the 3rd largest production level globally

- Founded in 1986Headquartered in Yichang, Hubei,Beijing and Shanghai
- with 7 holding subsidiaries in Hubei, Xinjiang, Guangxi, Inner Mongolia, Shandong and Henan

Product

Baking and Chinese pasta

Bread yeast, bread improver, cake / bread premix powder, leavening agent, baking sugar, mold release oil

Food seasoning

- Enhanced freshness ye, strong flavor ye, characteristic flavor ye, basic freshness ye, moisture resistance Ye
- Biotechnology, nutrition and health, industrial chain extensio

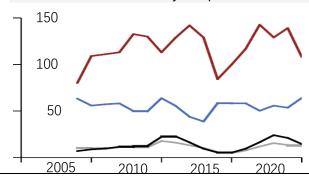
Character

High industrial concentration

Leading position and oligopoly pattern

- monopolizes 55% of the domestic yeast market
- have distinctive difference with international competitors(dry yeast vs wet yeast)
 - Foreign giants Lesaffre and Marley account for 18% in China
 - · Small yeast plant accelerates its exit from the market

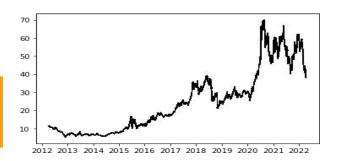




Fixed Asset/Total Asset(%)
Net Profit(%)
Fixed Asset/Revenue(%)
ROE(%)

Note:

 The targeted price in 2022 will be 61.95RMB



Company Analysis: Key Players

Targeted M&A: Large Categories



Proprietorship:

- Sole proprietorship by Shem Partner
- Representive:Weixian Zeng

Cutomers:

Other Food Ingredients and food Chemistry

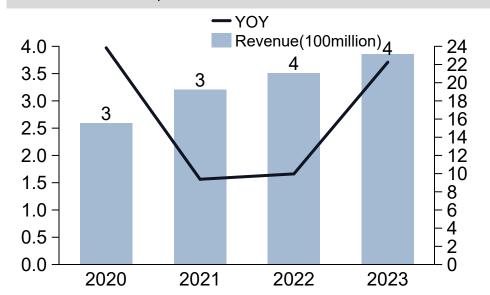
Risks:

Inventory large and currently under R&D stage

Financial Performance:

- The share price (latest on June 7, 2022) was 10.8, unchanged from the previous day
- with a turnover of 0.36%, a turnover of 16900 shares and a turnover of 18.2652 million yuan
- Pe=142.48, circulation market value: RMB 4.876 billion

- A group company driven by <u>biotechnology innovation</u>, integrating pharmaceutical R & D and production services, micro ecological nutrition and medical business
- The parent company of the group was established on january26,2000 and listed on Shenzhen Stock Exchange in 2010
 - (stock abbreviation: smart medicine, stock code: 300149)



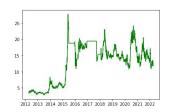
Company Analysis

Targeted M&A:Medium Size

Pine Agritech.

Character:

- Strong scientific research ability
- large number of patents
- medium scale of the company(employee 599)



- Products: A major producer of soybean protein isolate in China.
 - · Linyi factory produces soybean oil, defatted soybean meal, soybean protein isolate and soybean oligosaccharide oral liquid
 - Fujin plant produces soybean oil and defatted soybean meal, while Daqing plant produces soybean protein isolate.
- Public: It was listed on the main board of the Singapore Stock Exchange on may12,2005.
- Location and System:
 - Shansong biotechnology has three plants in China, respectively in Linyi City, Shandong Province, Daqing city and Fujin City, Heilongjiang Province.

R&D Capability:

- T16 modern soybean protein isolate production lines, 4 soybean oligosaccharide production lines,
- 3 one-time soybean extraction production lines, and the annual production capacity of 90000 tons of soybean protein isolate,
- 20000 tons of soybean peptide powder, 10400 tons of soybean oligosaccharide and 300000 tons of soybean meal
- It is the enterprise with the longest deep processing chain in most of the world

Managers:

- Chief executive officer (Gilbert ghostine, gaoshiting); Paul Andersson, President of fenmeiyi China; Chairman of Ansai (Wang Ying)
- Fiancial Performance in 2021:
 - Operating income: 13494.821 million yuan; Total assets: 11482.916 million yuan
 - Operating profit: 1158.11 million yuan; Total liabilities: 8902.941 million yuan

Company Analysis

Targeted M&A:Medium Size

Guangzhou Baihua flavor Co., Ltd

Product:

• Flower flavor, auxiliary materials, food flower flavor additives

Customers:

Flower Shops,individual buyers,laborotary or manufacures

Manager:

· Chairman: lizehong; Director and general manager: zhankecheng; Director: songxiujie

Shareholder:

- Guangzhou Light Industry & Trade Group Co., Ltd(92.7%)
- Maoyuan Zhang(0.22%)
- Shenmin Liu(0.17%)

Financial Performance:

- 2018, 2019 and the first half of 2020 was 309million yuan, 528million yuan and 379million yuan respectively,
- maintained a net profit income of 10 million yuan
- which is a leading position among the national flavor manufacturers.

Public Company:

· Listing the new third board



Company Analysis

Targeted M&A:Small Size

Artsci Biotech



- **Products:**Ice Cream.Dairy,Fragrance
- Current Events:
 - · The total investment is 250million yuan
 - · Acquired by fenmeiyi (obtained the majority equity by increasing the equity holding,
- Location:
 - Hangzhou, CN
- R&D Capability:
 - Natural extraction technology (nutrient concentration), biological enzymatic hydrolysis technology (essence)
 - Maillard reaction technology (reaction system of reducing sugar and amino acid under different temperature, pH value and water activity)
- Managers:
 - Chief executive officer (Gilbert ghostine, gaoshiting); Paul Andersson, President of fenmeiyi China; Chairman of Ansai (Wang Ying)
- Fiancial Performance in 2021:
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 - Operating profit: 1158.11 million yuan; Total liabilities: 8902.941 million yuan

Company Analysis

Targeted M&A:Small Size

Hangzhou Xihu essence Co., Ltd

- Products:
 - · Edible essence, daily essence, natural flavor
- Location:
 - Hangzhou, CN
- Shareholders:
 - Zhangjiacheng 70%;Liyuaner18.624%;Hangshi Investment Management9.7%
- Fiancial Performance in 2021:

Industry Analysis

unexposed







Weikang probiotics (Suzhou) Co., Ltd

Product:

- It is a national high-tech enterprise specializing in probiotic bacteria, intestinal flora, human health and fermented food bacteria.
- It provides probiotic powder, fermented food bacteria, probiotic products and application solutions for food, dairy products, health food, precision medicine, daily chemical products, agricultural microecology

Technology:

- Probiotics powder, probiotics preparation (including pressed candy), health food, fermented food bacteria (including yogurt fermentation powder),
- probiotics fermentation broth (including concentrated lactobacillus beverage), probiotics derivatives (lactic acid bacteria fermentation lysate),

Customers:

 Milk&Dairy Manufacture, Drinks Manufacure, individual buyers, laborotary or manufacures

Shareholder:

- Fang Shuguang 22.9;
- Luohe Yukang Investment (limited)17.11;
- Yangzhou Xinping Investment(14.92);
- Shanghai Yuankang(9.12%);Suzhou Longyu(6,84%)

Financial Performance:

2018, 2019 and the first half of 2020 was 36million yuan, 48million yuan and 46million yuan respectively,

FOOD INGREDIENT

Take off in the next 10 years