The Ingredients Landscape

October 2024



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Our Perspectives on Ingredients

Harris Williams OC&C Strategy consultants

uncommon sense™

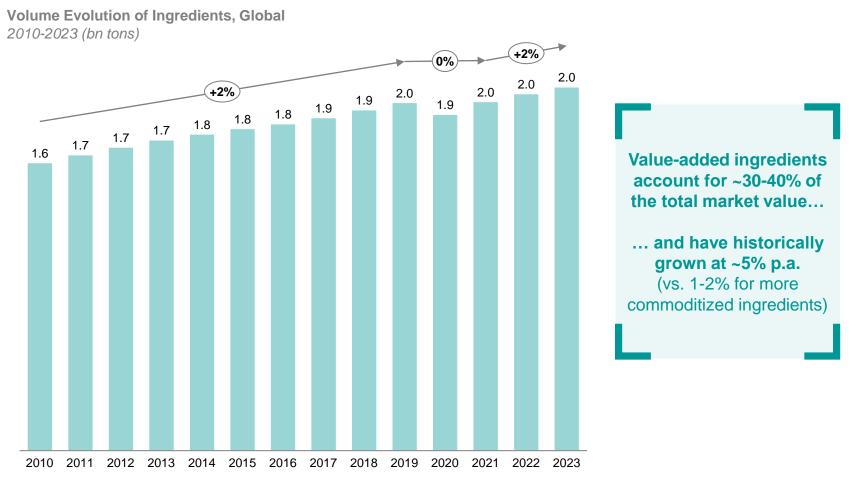


Key Themes of the Ingredients Landscape

1	A Large and Growing Market …	Robust aggregate market growth in the long term, with the higher-margin value-added subsegments (30-40% market value) growing ~5%; some supply normalization occurring after rapid growth during COVID
2	With Attractive Structural Dynamics	High technical or capital requirements to participate; sticky customer relationships, given low share of cost stack, but high criticality (as many ingredients are formulation specified), and economic resiliency result in attractive category fundamentals and high barriers to entry
3	Nuanced Subcategory Trends & Growth Hot Spots 	Subcategories align differently to evolving consumer trends (e.g., natural, clean label, etc.), resulting in hot spots of growth, while also seeing differing levels of participation from the major scaled players
4	Leading to Differing Archetype Business Models (and Value Creation Levers)	This landscape is served by a range of different archetype business models – winners in the market typically have specialist knowledge and experience of ingredient applications in specific end markets, with an operating model aligned to specific value creation levers
5	All Supporting an Active M&A Landscape	These factors have supported a fertile space for M&A, with many of the major players actively shaping their portfolios / capabilities; and private equity driving professionalization and consolidation across a still-fragmented landscape

The overall market has seen muted, but steady, volume growth – valueadded segments have grown well above commoditized ingredients

Ingredients Market Growth

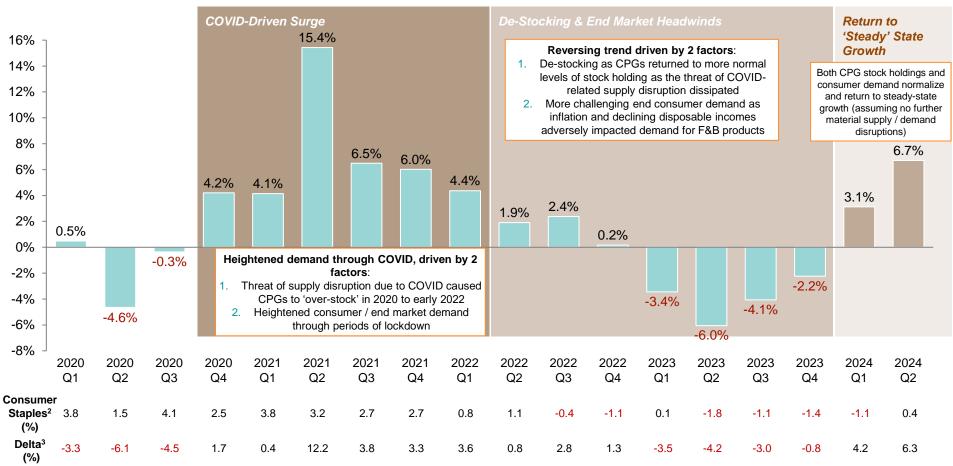


The market saw a significant volume increase through COVID, which led to a downswing in 2022/23 growth before returning to strong growth through '24

Ingredients Weighted-Average Organic Volume YoY Growth¹ (%) as of October 2024

Lapping effect accentuates YoY fluctuation

Volume trends from public listed ingredients players – as such skew toward CPG vs Foodservice

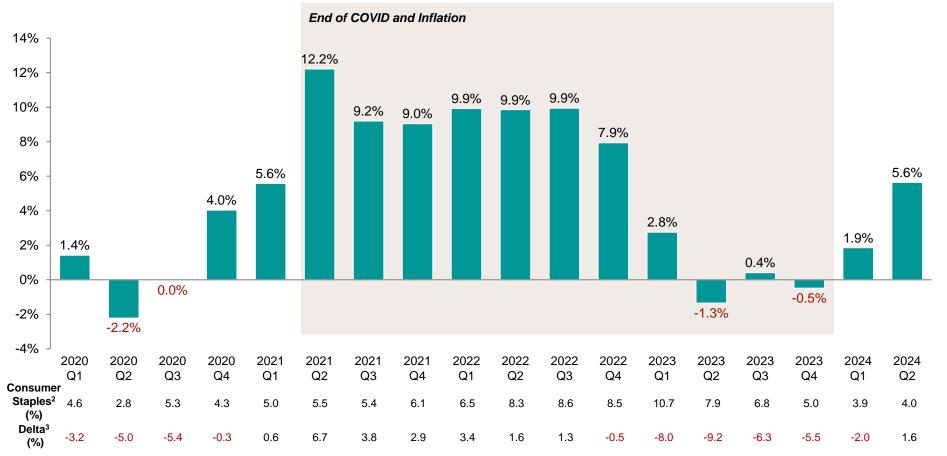


1. Novonesis, Croda, Givaudan, IFF, Symrise, (2022-24) Kerry, DSM-firmenich, Ingredion; (2020-24) 2) Unilever, Nestle, Danone, Kraft Heinz, Mondelez, P&G, Reckitt, Colgate; 3) Ingredients minus Consumer Staples The Ingredients Landscape_Harris Williams and OCC_2H 2024 | © OC&C Strategy Consultants 2024 Source: Capital IQ, Company websites, UBS, JP Morgan, Berenberg & Credit Suisse broker reports, OC&C analysis

Price increases mostly offset the slower volume growth over 2022/23 and appear to be normalising through 2024

Ingredients Weighted-Average Organic Value Growth¹ (%) as of October 2024

Volume trends from public listed ingredients players – as such skew toward CPG vs Foodservice



1. Novonesis, Croda, Givaudan, IFF, Kerry, Symrise, DSM-firmenich, Ingredion, Tate & Lyle, Sensient, Treatt; 2) Unilever, Nestle, Danone, Kraft Heinz, Mondelez, P&G, Reckitt, Colgate; 3) Value Growth Delta – Ingredients vs CPG

Source: Capital IQ, Company websites, UBS, JP Morgan, Berenberg & Credit Suisse broker reports, OC&C analysis

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Beyond volume growth, the ingredients market benefits from attractive market fundamentals – it is large, resilient, and sticky

Ingredients Market Fundamentals

Enduring Structural Growth Drivers

Value chain significance and the clean label/natural trends, which are increasing ingredient inclusion rates, generate strong volume growth—often 1-3% above end-market growth—for leading players. Much higher growth is possible in certain niches, with pricing typically in line with or above inflation

Sticky Customer Relationships

Ingredients are typically low proportion of cost stack, but key to end product differentiation and processing. Winners in the market typically have specialist knowledge and innovation capabilities catered toward certain end-market applications. Barriers to entry are high from both demand and supply side.



Diverse Channels and End Markets

Leading players have the ability to service CPG and foodservice customers, as well as multiple end-market applications (beverage, ice cream, bakery, etc.) – giving flexibility to pursue growth hot spots, while offering insulation from end-market-specific disruption

At the Forefront of Innovation

Ingredients players are typically at the forefront of innovation for CPG / Foodservice trends as these customers look to align product offerings to specific claims / features (e.g., ongoing conversion to clean label driving accelerated growth across categories with natural colors / flavors, clean label preservatives, etc.)



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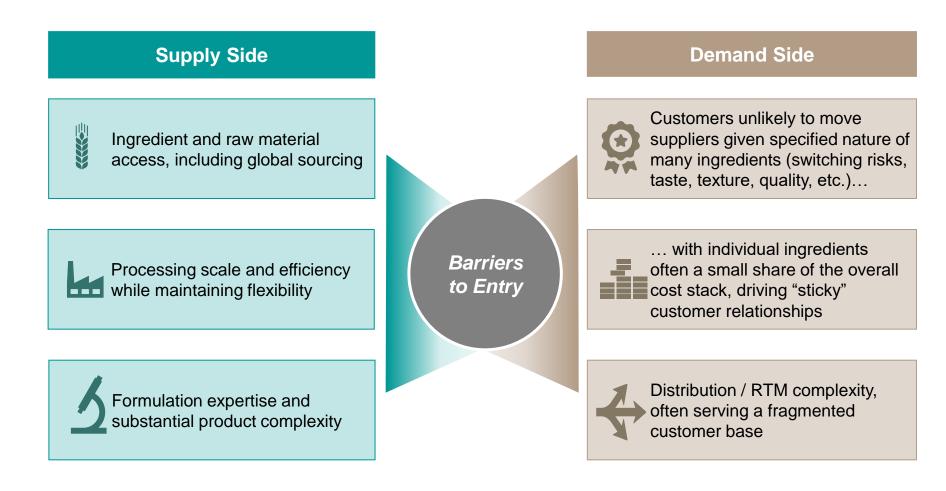
Resilience Through Economic Challenge & Inflation

Broadly resilient through these periods, but subject to end-market trends and exposure

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Sticky customer purchasing behavior and specialist capabilities on the supply side mean incumbents benefit from high barriers to entry

Stickiness & Barriers To Entry



However, the space is not homogenous, and there are specific hot spots of growth across ingredient types

Ingredient Hot Spots

Flavors and attached value chain

Momentum in core end markets; new end usages (alternative proteins) and new applications

Key ingredient types:

- Flavors
- Base Notes
- Flavor Masking



Natural ingredients

Consumers demanding natural alternatives out of health and sustainability concerns

Key ingredient types:

- Flavors & Colors
- Preservatives
- Texturants & Stabilizers
- Plant-Based Ingredients



Value-added inclusions

Consumer demand for innovative and novelty snacking products

Key ingredient types:

- Ice Cream & Yoghurt
 Inclusions
- Mix-ins
- Snack Inclusions



Nutritionals

Strong dynamics in core end markets; new applications emerging from food functionality

Key ingredient types:

- Probiotics, Specialty Carbs & Fibers
- Enzymes
- Proteins



Processing aids & bio-solutions

Demand driven by input cost increase and sustainability concerns

Key ingredient types:

- Enzymes
- Cultures



Cosmetics & VMS active ingredients

Positive consumer trends, offer- and innovationdriven categories with opportunities for branding

Key ingredient types:

- Plant extracts
- Probiotics, Specialty Carbs. & Fibers
- Enzymes



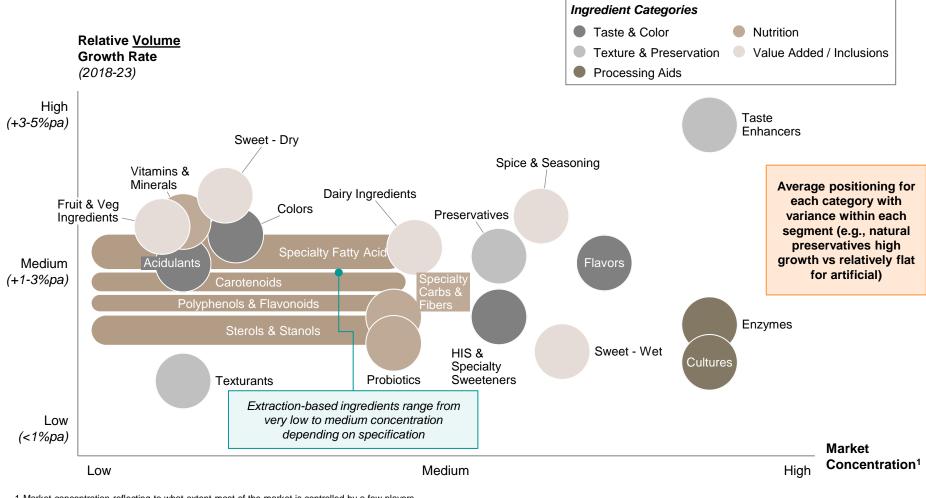
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Difference in performance can be seen at the product level, with divergent performance across product types

Size, Growth & Competitiveness by Ingredient Category Global, 2018-2023



1. Market concentration reflecting to what extent most of the market is controlled by a few players Source: The Grocer, Euromonitor, Previous OC&C Market Modelling, OC&C analysis

There are 3 primary player archetypes in ingredients, with different sources of competitive advantage for each group

Player Archetypes & Sources of Differentiation

Ingredient Player Archetypes		Sources of competitive advantage	Indicators of advantage	Examples
说: 文字文 Processors	Processors of commodity / raw ingredients – typically large scale	 Advantaged access to raw materials Focused on a raw material & monetizing that across applications Built on differentiated or preferential upstream access to raw material(s) and primary processing scale efficiency / capability, and a superior ability to valorize products enabling downstream expansion to serve different end products / value-added applications to generate a superior return on inputs (further enhancing advantaged raw material access) 	Return on raw materials (\$/tonne)	volac ^{&} Nordzucker Cargill
کی کی Added Ingredients	Enhance basic / input ingredients through processing & innovation to offer specialized products (e.g., bakery mixes, frozen novelties)	 Solution breadth – a 'one-stop shop' Superior breadth of product offering & service proposition result in an advantaged solution for customer segments (e.g., typically industry vertical-led) Expansion focused on growth in these customer segments (new subsegments / channels, new markets, increasing share of wallet) or customer groups with a similar need for the business' core products 	Relative customer share of wallet	
Highly Technical	Specialty ingredients providers offering highly technical product ranges (e.g., flavor, color, texturant, etc.)	 Superior manufacturing / technical capability or cost position Superior R&D capability, manufacturing capability, or cost position provides a differentiated product proposition (either via quality, bespoke-ness, or cost positioning) Opportunity to leverage core capability / product offering into emerging high-growth product categories, and to target the latest cross-category trends (e.g., specific functional benefits) 	 Advantaged cost position Product quality advantage Product or process-led IP 	Givaudan NOVONESIS dsm-firmenich NACTAROME TOCOMENTA COLORITO FlavorSum



Assessing asset attractiveness and growth opportunities varies by the different archetypes

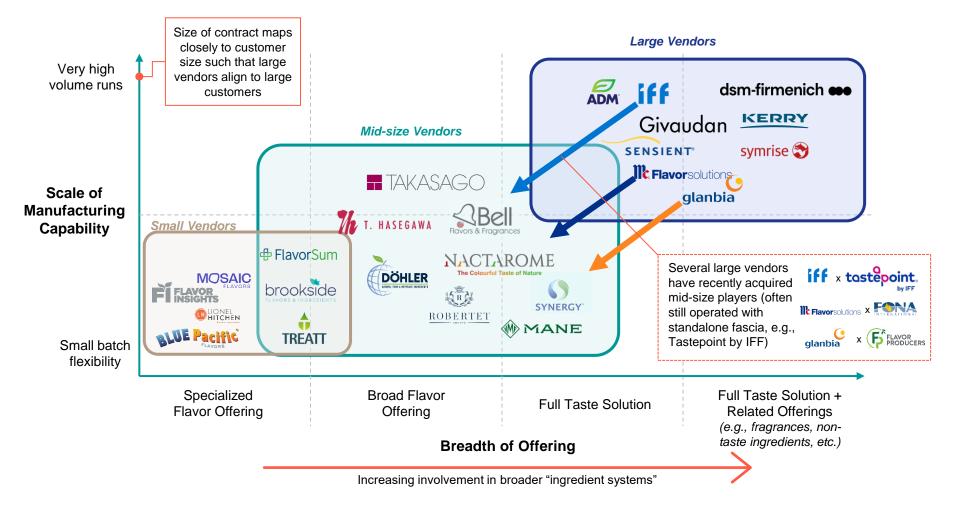
Belief Conditions To Test To Have Confidence in Asset Attractiveness

	Belief Conditions To Build Confidence In Attractiveness				
	Characteristics of attractive businesses	Achievable opportunities to drive future growth			
Input Processors	 The business has advantaged access to raw materials from a cost or quality perspective The business is better able to valorize inputs, through a combination of differentiated processing and commercial relationships The advantage in access or knowledge is defensible and not easily replicable by others 	 The breadth of potential applications is wide, with many applications already proven There is a substantial scale of opportunity in new applications / end industries New product development Continued ability to drive up valorization per input 			
Value-Added Ingredients	 The brand or proposition is strong among target industries and customers Customer relationships are sticky, with significant barriers to switching The business captures a significant share of the customer's wallet 	 There is substantial headroom for growth with existing customers through new products or services There is potential for international growth Other customers with similar needs are attractive for expansion, with high growth and profit potential 			
Highly Technical	 The business differentiates itself through scale, cost position, technical expertise, or a protected niche The business's offering is highly advantageous today, with positive perceptions from customers Current products are competitive compared to known or upcoming alternatives 	 The business can extend its reach to new end markets and customers with its current product offering There is significant opportunity for growth in new markets and customers The business's offer in new markets is differentiated compared to competitors 			

The complex landscape creates a broad competitive field, but there is potential to create clear moats vs the largest players, as seen in flavors

Flavor Provider Landscape Deep Dive

Conceptual Flavor Capability Example; Not Exhaustive



There are clear value creation levers – but these will vary, depending on the business model and category participation

Value Creation Levers

Act as a 'one-stop shop' to Customers	 Brands are increasingly outsourcing R&D, and looking for comprehensive solutions Establishing strong customer intimacy allows for better value extraction and premium pricing 	Bakery and Ice Cream Ingredients in Europe, Savory Solutions
Consolidate and Optimize subscale Businesses	 Operate within a fragmented market with often unsophisticated businesses, presenting opportunities for top-line growth through cross-selling and R&D scale Pricing, industrial optimization, and enhanced commercial potential are achievable 	Natural Value-added Ingredients in F&B, VMS, and Cosmetics
Take advantage of Niches	 Diverse customer needs and product technicalities have resulted in multiple niches, often dominated by a single player These niches frequently hold untapped pricing power 	Specialty Base Aromas, VMS & Cosmetics Active Ingredients, Processing aids,
Look for Divestments of Big Players	 Resulting from redeployment toward flavors / nutrition Value creation rationale coming from increasing commercial impact and taking advantage of superior scale & reach of business 	Sweeteners, Excipients, Natural Extracts,
Push Adjacencies	 Several ingredient families (biotics, flavors, active cosmetics ingredients) spreading out of their traditional end market / applications as traditional frontiers between categories are blurring 	Flavors, Nutritionals, Specialized Dairy Derivatives, Bio Solutions
Capture Margin along the Value Chain	 Downstream opportunities (e.g., formulation, distribution) with benefits on pricing and ROCE Opportunities in upstream integration as clients want shorter supply chains 	Bakery Ingredients in Europe

Description of Value Creation Potential

Previous Examples

All of these factors make Ingredients a fertile space for M&A, especially when the value creation levers and synergy potential are considered

Reasons Why Ingredients Is An Attractive Investment Space

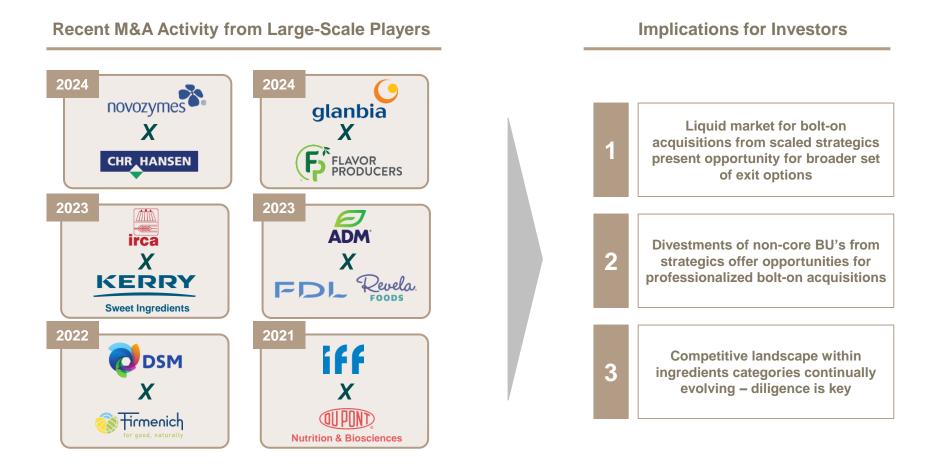


M&A Opportunity

Large players are actively shaping their portfolios through divestments and acquisitions – which has implications for potential investors

Large-Scale Ingredients Players' M&A Examples

Select Examples Shown



Source: MergerMarket, OC&C analysis

And there is also significant private equity investment, capitalizing on the scope for professionalization

Recent Ingredient M&A involving Private Equity, 2017-24

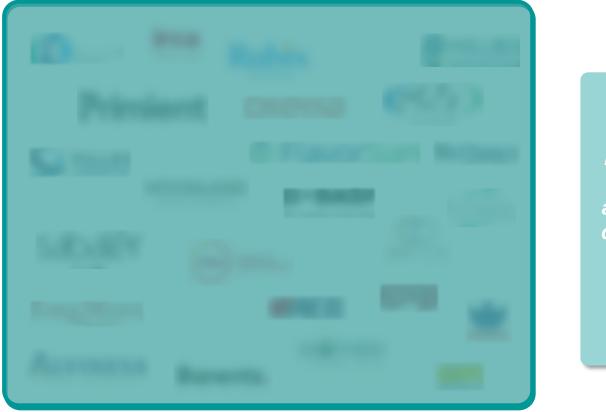
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Ingredients continues to be an active space for M&A, with a number of assets expected to come to market in the near future

Western Europe and USA Near-Term Potential Targets



Please reach out to the Harris Williams and OC&C teams to discuss more about potential future transactions

Introduction to OC&C & Harris Williams Teams

 H_{W} HarrisWilliams



Strategy consultants

OC&C

Credentials



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