ROBECO
The Investment Engineers

Trends investing

Future of Food

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Consumers are seeking healthier and more sustainable food

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Executive summary

Shifts in consumer preferences to healthier and sustainably produced food offers investors attractive investment opportunities in segments such as plant-based food and beverages, meal kits, and food ingredients. Pure-play food companies in these segments are becoming more relevant to consumers, operate in a very large market, and have relatively low product penetration. This provides them excellent growth opportunities.

Challenges remain for food giants such as PepsiCo and Nestlé because they still derive most of their sales from relatively unhealthy food, they are improving, however. Smaller packaged-food companies with a better health and sustainability profile such as McCormick, Hain Celestial and Nomad Foods are better positioned for now.

Rising seafood consumption, income levels and premiumization in China benefits listed salmon producers who are experiencing growing export sales to the country. Cultured meat looks promising from an environmental perspective and production costs are decreasing. Its commercial viability is unclear.

Indirectly related to food, we believe companies supplying professional kitchen equipment are attractive because they benefit from growing demand for restaurant food, whether it's eaten in an actual restaurant or delivered to the home. In addition, companies such as Toast and Olo are digital enablers for the restaurant industry and have attractive subscription and transaction-fee-based business models. Both are growing rapidly and are likely to list soon.

Table 1 provides an overview of the various food segments investors can get exposure to and assesses the investment attractiveness of each segment.

Table 1 | Investment opportunities of the food industry

Investment attractiveness	Food segment	Positives +	Negatives -	Best-positioned companies
High	Plant-based food and beverages	High growth food category (~10-15% annually), low penetration in very large market, low environmental impact	Uncertain brand longevity, increasing competition	Beyond Meat, Impossible Foods (p), Oatly (p), Vitasoy
High	Meal kits	Scalable, superior margins, profitable, asset light, high growth (~40% annually), winner-takes-most, reduces food waste, consumer convenience, pull-model supply chain	Customer churn, competition from restaurant food delivery and e-grocery	HelloFresh
High	Restaurant software	Subscription and transaction-based business model, scalable, digitalization, asset light, rapid growth	Competition from aggregators (Uber Eats, Doordash, etc.)	Toast, Olo

Table 1 (continued) | Investment opportunities of the food industry

Investment attractiveness	Food segment	Positives +	Negatives -	Best-positioned companies
Medium	Food ingredients	Established business model, predictable revenues, high value-add product, high barriers to entry sector, enablers of healthy and sustainable food	Slower growth (~3-6% annually), exposure to unhealthy food	Kerry Group, Chr. Hansen
Medium	Smaller packaged food companies	Higher volume growth, better health and sustainability profile, established brands, everyday repeat consumer staples	Competition from food giants, smaller scale	McCormick, Hain Celestial, Nomad Foods, Bonduelle
Medium	Seafood	Growing seafood demand from China, limited supply, resource efficient food	Commodity-like pricing, biological risks (disease), threat from land-based farming	SalMar, Leroy Seafood, MOWI, Bakkafrost
Medium	Professional kitchen equipment	Rising restaurant food demand, upgrade cycle, high margin sticky service contracts, industry consolidation	Discretionary purchase that can be postponed	Rational AG, Middleby
Low	Food giants	Large portfolios of strong brands, efficient global supply chains, scale, high margins, good returns on capital	Slow volume growth, large investment needed to pivot to healthy food and sustainable production	Nestlé, Danone
Low	Cultured meat	Low environmental impact, real meat replacement vs. plant-based meat, decreasing production costs, first products approved	No commercial viability yet, high sales price, consumer acceptance unclear	No public companies yet

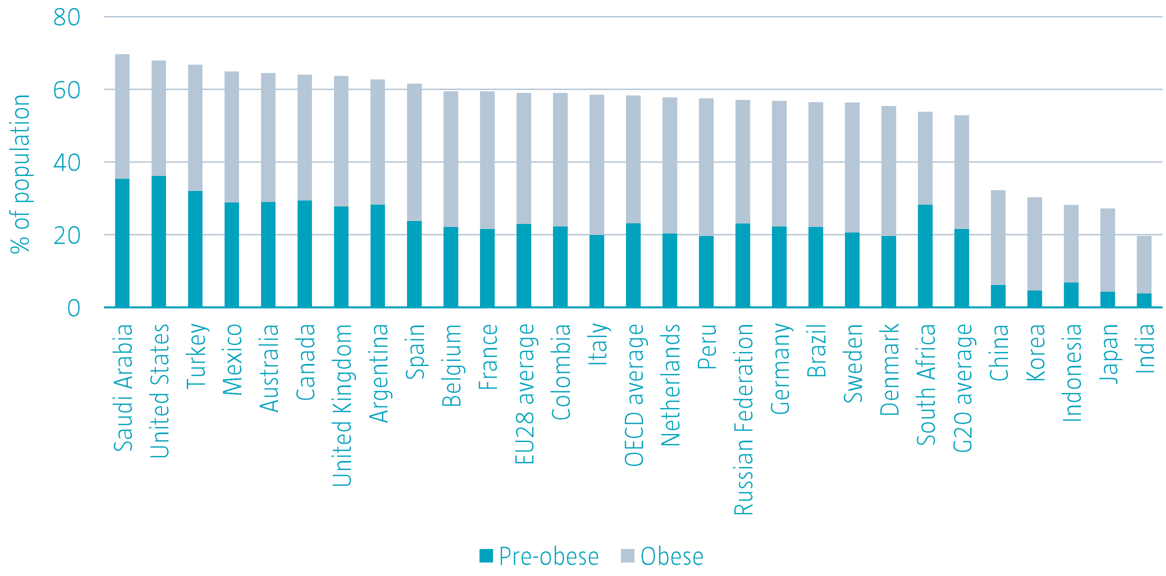
Healthy and sustainable food is a win-win-win

In the last 50 years, global food production and dietary patterns have changed substantially. Our focus on increasing crop yields and improving production have helped improve life expectancy and reduce hunger, infant and child mortality rates, and global poverty[1]. However, these benefits are offset by massive environmental degradation due to unsustainable farming practices, and health problems ranging from obesity to heart disease as diets become higher -calorie and heavily processed.[2].

The first win: improved eating habits benefit humans and healthy food companies

According to the World Health Organization, overweight and obesity have tripled since 1975[3],with 1.9 billion adults being overweight and 650 million of those being obese, equating to 39% and 13% of all adults respectively. At the same time, 462 million or 9.2% of adults are underweight. The coexistence of overweight and underweight has created a double burden of malnutrition in our world.

Large parts of the global population are overweight



Source: WHO Global Health Observatory. Date: 2018

Dietary risks are linked to 11 million, or 19%, of deaths globally per year. This is more than from any other risks including smoking, according to the UN's Global Burden of Disease Study[4]. Death is the worst ultimate outcome of poor health but does not tell the whole story. In public health, disability-adjusted life years (DALYs) is a measure of overall disease burden, expressed as the number of years lost due to ill health, disability or early death. In 2017, 255 million DALYs were attributable to dietary risk factors, a substantial loss of healthy living years.

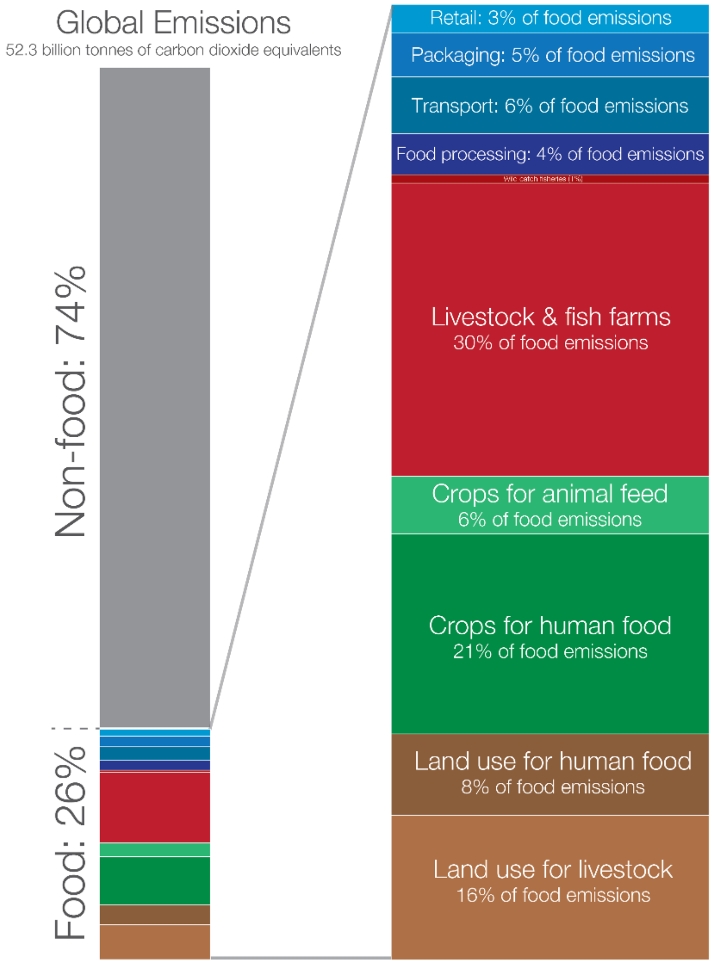
[1] Whitmee, S.... & Yach, D. Safeguarding human health in the Anthropocene epoch. The Lancet. Date: 2015.
[2] Springmann, M. Analysis and valuation of the health and climate change co-benefits of dietary change.' PNAS. Date: 2016.
[3] WHO. Double burden of malnutrition. Date: 2018.
[4] Murray, C. J. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study. The Lancet. Date: 2019.

Based on growing general awareness regarding healthy food and these alarming statistics, we expect consumers to increase their spending on a wholesome and nutritious diet. We also expect governments to push the food industry into a healthier direction, either through regulation or incentives. These two expectations lead us to believe that food companies selling healthy products will surpass the broader food industry. We also see a role for companies enabling the production and distribution of healthy food such as kitchen equipment manufacturers and meal kit companies.

The second win: sustainability is becoming more important in consumer purchasing decisions

In addition to healthy eating, we believe sustainability is becoming a more important factor for consumers when purchasing food. On a call with global food giant Nestlé, management pointed out that 20% of consumers are willing to pay more for products with a sustainable image, and 60% of consumers factor sustainability into their buying decisions. Therefore, we believe companies selling sustainable produced food are positioned well. Think of plant-based food, seafood from aquaculture, or reduced food waste concepts such as meal kits.

Consumers are becoming more conscious about the environmental impact of their food consumptions. That environmental impact is not be underestimated: about 26% of all greenhouse gas emissions are attributable to the food system[5]. Agriculture is responsible for 78% for of ocean and freshwater pollution, and half of the world's habitable land is used for agriculture[6]. Conversion of natural ecosystems and habitats to croplands and grazing pastures is the largest factor causing species to be threatened with extinction[7]. Global food production is damaging climate stability and ecosystem resilience. Transforming the current food system to a sustainable one is a win for our planet.



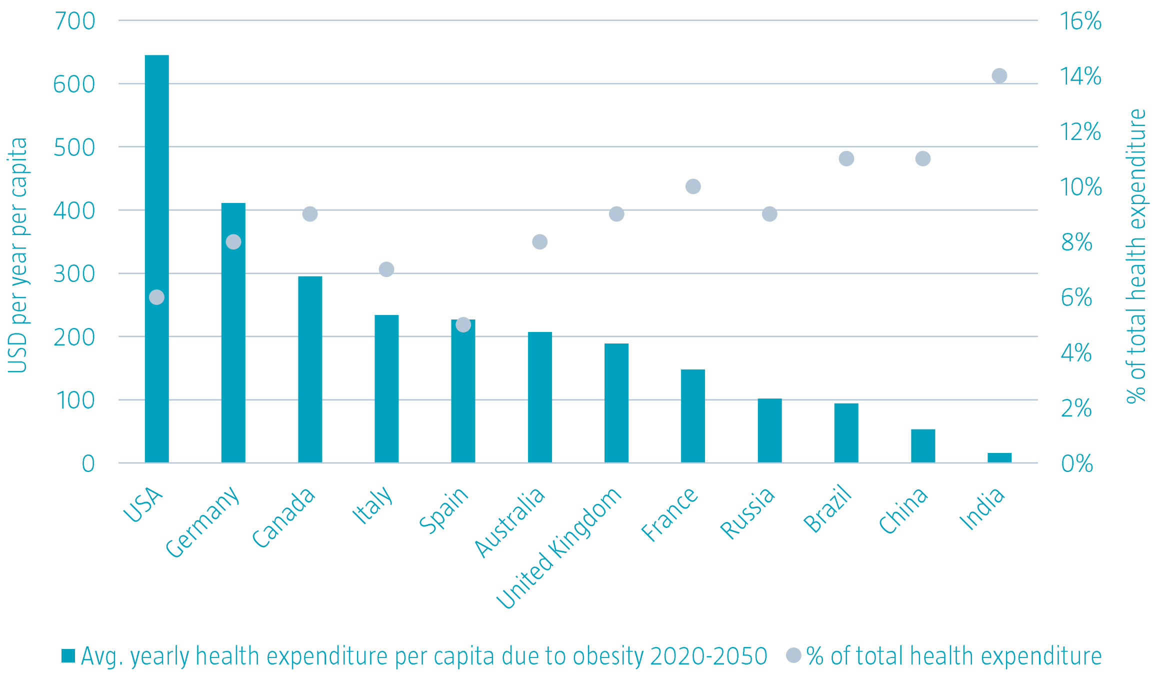
Source: "Reducing food's environmental impact through producers and consumers" by Poore and Nemecek. Date: 2018.

[5] Poore, J., & Nemecek. T. Reducing food's environmental impacts through producers and consumers. Science. Date: 2018.
[6] UN FAO. Land use indicators. Date: 2018.
[7] Tilman, D. Future threats to biodiversity and pathways to their prevention. Nature. Date: 2017.

The third win: healthy diets could save the world USD4.8 trillion a year

Unhealthy diets cost us dearly in economic terms. In 2014, McKinsey estimated the global economic impact from obesity to be USD2 trillion or 2.8% of global GDP, roughly equivalent to the global impact of smoking or armed violence, war, and terrorism[8]. On top of that, in 2013, the UN's Food and Agriculture Organization (FAO) estimated undernutrition and micronutrient deficiencies from poor diets cost USD1.8 trillion or 2.5% of global GDP[9]. Obesity, undernutrition and nutritional deficiencies increase health care expenditure and leads to lost productivity damaging our economies. The solution is straightforward: shifting to healthy diets would lead to an estimated 97% reduction in direct and indirect health costs, according to the FAO[10].

Where obesity places the biggest burden on healthcare



Source: OECD. Date: 2020.

Investors in healthy and sustainable food companies could benefit from the win-win-win scenario

Food could be the strongest lever to optimize human health and environmental stability on our planet, according to the 2020 EAT-Lancet Commission[11]. Transforming eating habits, improving food production, and reducing food waste creates a win-win-win scenario for human health, environmental sustainability, and our economy. Health benefits, increasing importance of sustainability, and a substantial economic impact could encourage consumers to adopt more healthy and sustainable diets. Investors in healthy and sustainable food companies stand to benefit.

[8] McKinsey. Overcoming obesity: an initial economic analysis. Date: 2014.
[9] FAO. The State of Food and Agriculture. Date: 2013.
[10] FAO. The State of Food Security and Nutrition in the World. Date: 2020.
[11] The EAT-Lancet Commission on Food, Planet, Health brought together 37 world-leading scientists from across the globe. The EAT-Lancet report is the first full scientific review of what constitutes a healthy diet from a sustainable food system.

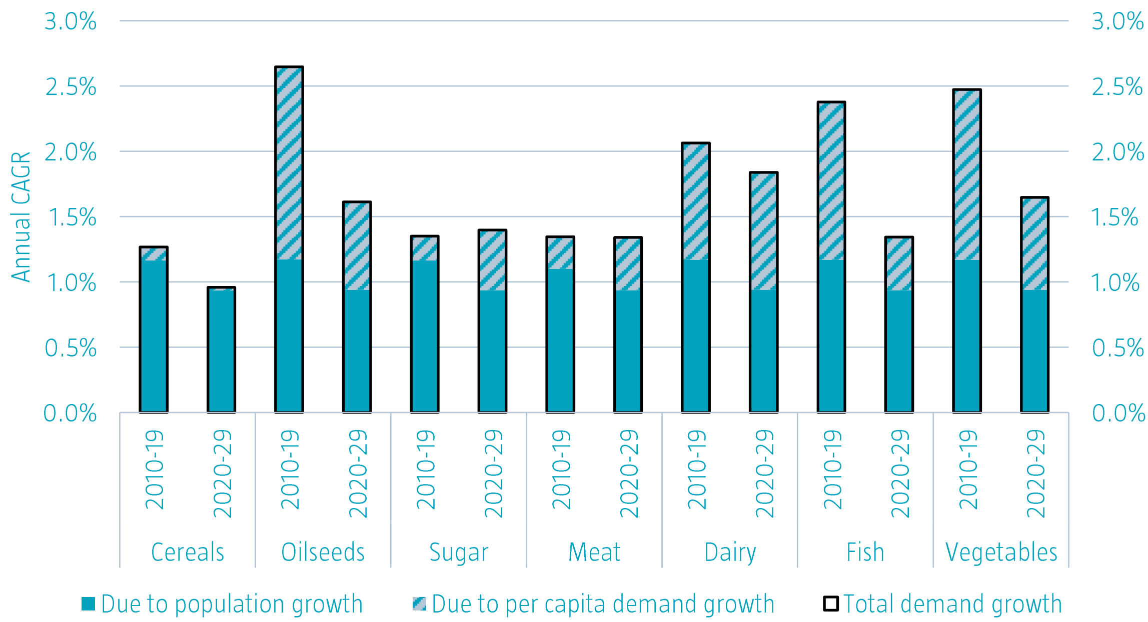
Global food consumption is changing

If we were perfectly rational human beings, we would stick to healthy sustainable diets for our own and the planets' benefit alone. At the same time, governments would invest heavily to prevent diet-related diseases: OECD analysis shows that every dollar spent on preventing obesity generates a six-fold economic return. But judging by the 2 billion overweight people, of whom 650 million are obese, by the environmental impact of agriculture, and by the reluctance of governments to encourage healthy eating through lower taxes, however, we might not be so rational after all. This begs the question: can people change their eating habits? The answer to that begins in examining current trends.

Global food consumption is growing at 1% to 2.5%

When taking a helicopter view of global food consumption, depicted in the graph below, not much seems to be changing because people are eating more, and populations are growing. Worldwide, humans will consume more food in the next decade just as they did in the last decade. Worldwide food consumption is growing in the range of 1% to 2.5%, modest to say the least. This leads us to believe that food company investors are better off looking for more high-growth niches. In the following sections, we will highlight which ones we find attractive.

World food consumption is increasing is growing steadily

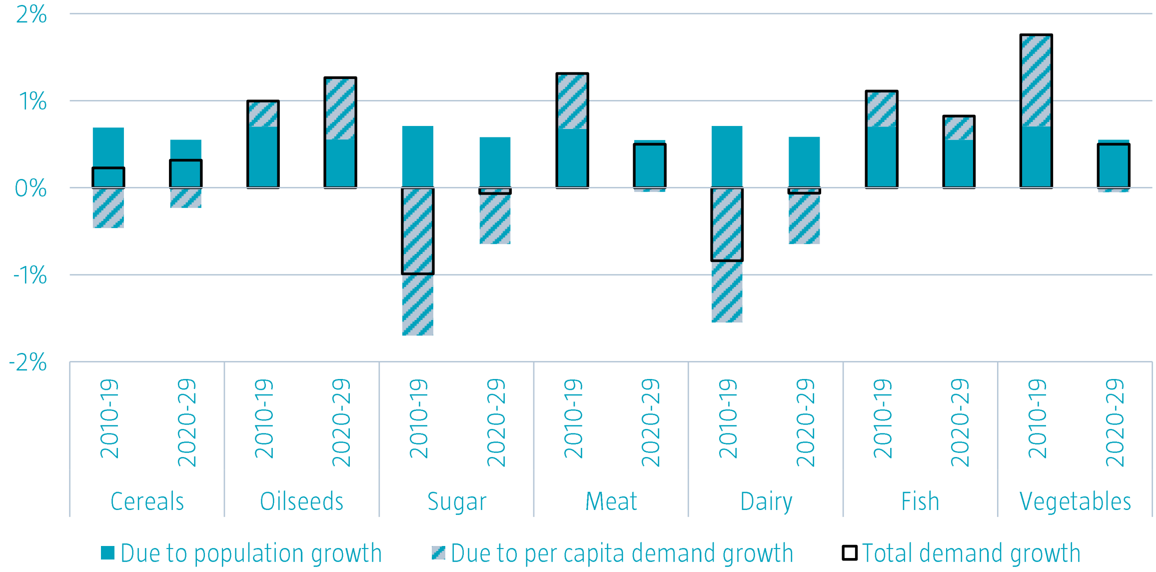


Source: FAO and OECD. Date: 2019.

US consumers deviate from global food consumption trends

Regional differences exist when looking at food consumption trends. Zooming in slightly on the US, we see that sugar and dairy consumption are decreasing. Although declines in demand seem small, they are felt by the business community. The US's biggest milk producers are going bankrupt[12]. To some extent we saw that coming though, because milk consumption has fallen 40% since 1975. The fall in cow's-milk consumption is partly replaced by increasing demand for plant-based dairy products. For example, US oat milk sales increased 351% for refrigerated varieties and 106% for shelf-stable products in 2020, albeit from a small base[13].

US consumers continue to eat less sugar and dairy



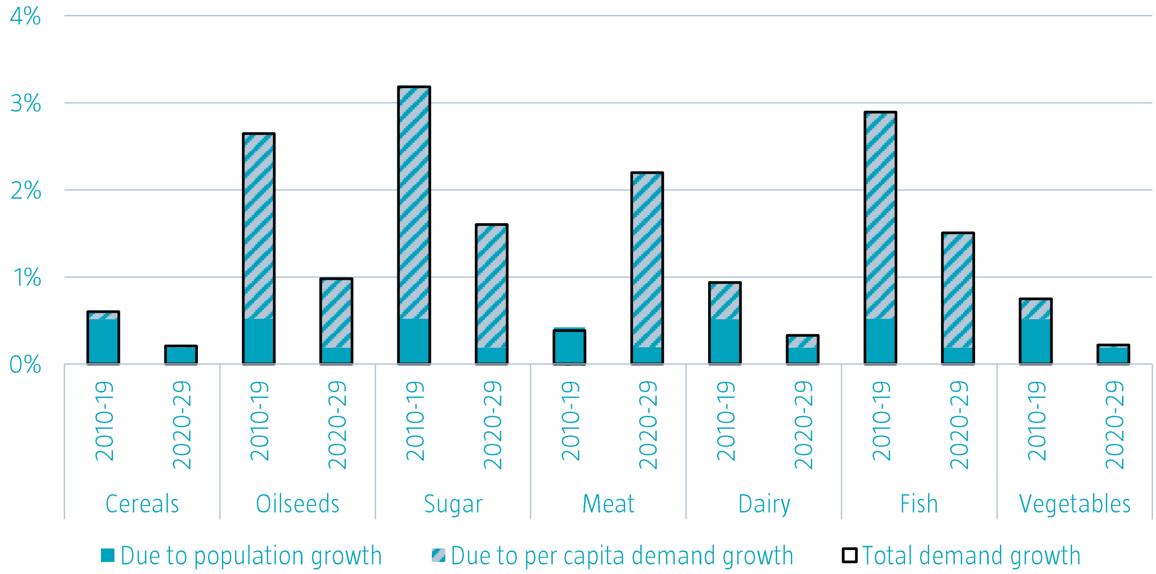
Source: FAO and OECD. Date: 2019.

Chinese are expected to eat more oilseeds, sugar, meat and fish per capita

Regional differences are also visible in China. The growth in food consumption is being driven by individual consumers eating more per person. In the coming decade, Chinese are expected to eat more oilseeds, sugar, meat and fish per capita. Dairy consumption growth is low at 0.3% annually. This also has a direct impact on companies such as Chr. Hansen from Denmark that produces ingredients for milk, yoghurt and cheese. The company has adjusted its revenue growth expectations downward, citing amongst other things slowing Chinese dairy consumption. By looking at these overall food growth trends, investors are unlikely to get very excited. Also, in the case of China, investors could focus on growth niches such as seafood, which we will touch on later.

[12] AP News. No. 1 milk company declares bankruptcy amid drop in demand. Date: 2019.
[13] Fooddive. Oat milk surges to second most popular in plant-based dairy. Date: 2020.

Chinese food consumption is driven by per capita consumption



Source: FAO and OECD. Date: 2019.

Investment implications

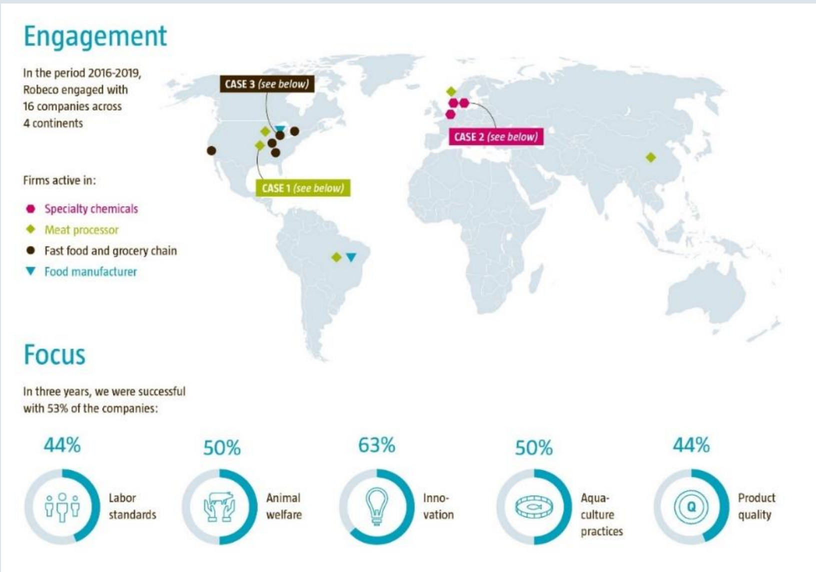
Investing in high-growth niches is likely to generate a higher return relative to investing in large general food categories. A helicopter view of food consumption as described in the previous paragraphs shows that large food categories are growing slowly. Having a large fast-growing economy like China does not guarantee consumption growth for food companies. We think investors should seek niches such as plant-based food that are experiencing higher growth, driven by changing consumer habits.

Engagement with companies improves meat supply chain

It's not only 'wet animal markets' that are causing health risks, as we have seen through the Covid-19 outbreak. The whole meat supply chain poses a threat to both global health and the environment. Marked by concerns surrounding deforestation and high carbon emissions, as well as issues of animal welfare, health and safety in factories and general working conditions, the meat industry has come under repeated scrutiny, even before Covid-19. The industry needs to undergo radical change if it is to meet the UN Sustainable Development Goals and the Paris Agreement by 2030. To help companies within the meat supply chain address these issues and to ensure their resilience in the future, Robeco has been engaging with companies in the meat supply chain for many years now.

Through the recent three-year engagement, we worked with companies from across the food supply chain, from bioscience companies, (meat) processors to retailers, trying to gauge if the respective companies took the appropriate steps to address issues within their meat supply chains. Our engagement objectives focused on animal welfare, labor standards, product quality and safety management, aquaculture practices and innovation management. The objectives set expectations for companies to establish policies concerning the highlighted issues, increase traceability and labelling practices around their products and take an active role in educating their customers around the health impacts of meat consumption. However, our dialogue also focused on the innovation opportunities in probiotics, seafood innovation, automation of processing facilities and product diversification to capture the opportunities of alternative protein.

After establishing an indicator framework, and conducting extensive dialogues with the companies, we found positive progress among most companies towards greater sustainability of the industry. Overall, 53% of our engagements were concluded successfully, with most progress achieved along our innovation objectives. Through our engagement we helped companies to become more transparent with regards to their R&D processes and internal innovation culture, to adhere to higher industry benchmarks and to rethink their product portfolios to better fit emerging consumer patterns surrounding local, organic or plant-based meats. For example, one company under engagement was able to boost the commercialization of their probiotics and animal health products by 12% over all the quarters. While we have observed significant improvements throughout our engagement program, there are still many challenges which require systematic innovation to future-proof the meat supply chain.



Source: Robeco. Date: 2019.

Plant-based food is a fraction of the total food market but is growing fast

Plant-based food appeals to sustainability-minded consumers

Consumers are increasingly considering sustainability when making buying decisions in grocery stores, restaurants, and meal delivery apps. Plant-based food is fulfilling the desire among consumers to eat more sustainably. But is it truly sustainable? A much-cited study in the American Journal for Clinical Nutrition finds that a plant-based diet has a lower environmental impact than a meat-based diet[14]. In a consumer survey among US and European consumers by UBS, 51% of respondents listed environmental friendliness as a reason why they would buy more plant-based meat[15]. Hence, plant-based food companies have a tailwind of growth driven by consumer desire to eat more sustainable food.

Figure 1 | Beyond Meat is the only listed pure-play plant-based protein company

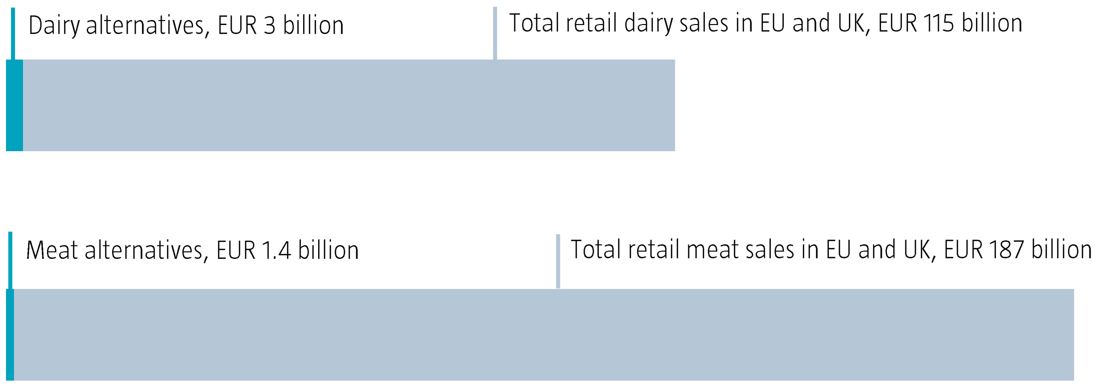
Plant-based food is not always good for our health

In the same UBS survey, 50% of respondents said they would buy more plant-based meat because they think it's healthier than animal-based meat. The scientific evidence for plant-based food's healthiness, though, depends on the extent to which the plant in question has been processed.

In fact, most plant-based meat and dairy substitutes are heavily processed. A Harvard study on the nutritional contents of well-known meatless burgers Beyond Burger and Impossible Burger says they are rich in protein, vitamins and minerals, but also contain high amounts of saturated fat and salt[16]. So, while the Global Burden of Disease Study – which involved 500 researchers from more than 300 institutions in 50 countries examined 100,000 data sources – concluded that the top four foods we need to consume more of to reduce our overall risk of death are fruits, nuts, seeds, vegetables, and whole grains[17], plant-based food might not always be the best option for our health, if it comes in a processed rather than whole-food form. However, the trend does reflect increasing awareness of animal-based diets on health, and plant-based food companies will benefit from it.

[14] Pimentel, D., & Pimentel, M. Sustainability of meat-based and plant-based diets and the environment. The American journal of clinical nutrition. Date: 2003.
[15] UBS Evidence Lab on Plant-Based Meat. Date: 2020.
[16] Emily Gelsomin. Harvard Medical School. Date: 2019.
[17] Das, P., & Samarasekera, U. The story of GBD 2010: a "super-human" effort. The Lancet. Date: 2012.

Dairy and meat alternatives are still only a fraction of EU and UK total market

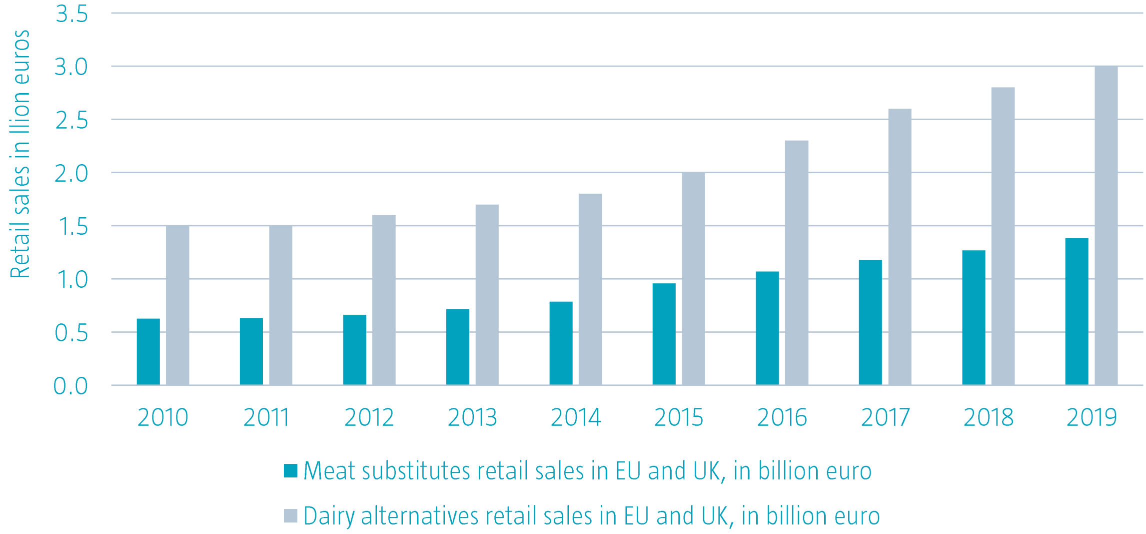


Source: Euromonitor. Date: 2020.

Companies with plant-based food products have a long runway of growth ahead

In their quest for more sustainable and healthy food, consumers are increasing what they spend on plant-based food. Sales of plant-based food are growing at steady 10-15% annually in the US, EU, and UK, and are just a fraction of total food sales[18]. In the EU and UK, just 2.5% of dairy sales and just 0.7% of meat sales is plant-based[19]. This compares to 0.6% of all US retail food sales being plant-based[20]. Plant-based food companies have a large opportunity in front of them, even if only a minority of spending shifts to plant-based products.

Sales of meat and dairy alternatives have doubled over the last decade

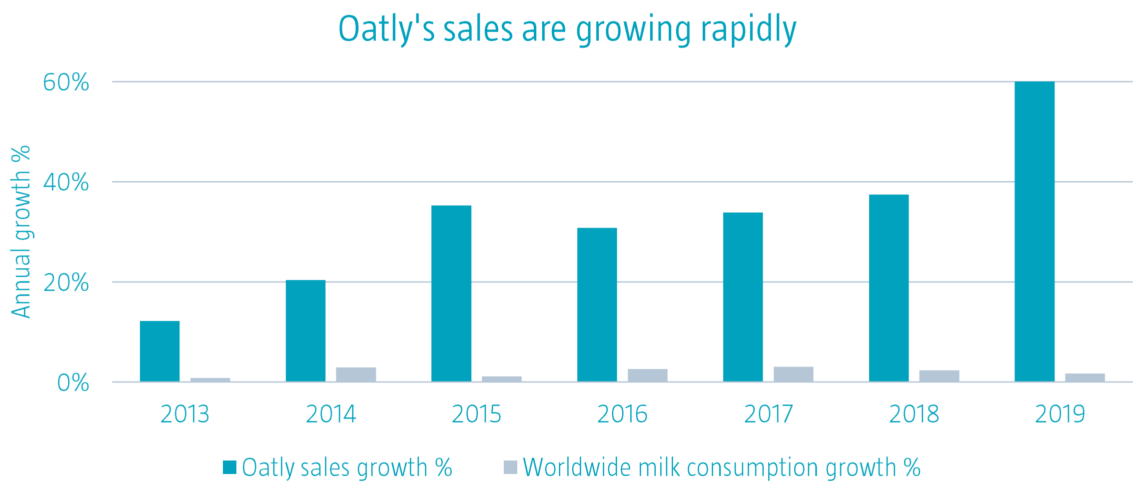


Source: Euromonitor. Date: 2020.

[18] ING, Good Food Institute, SPINS and IRI. Date: 2020
[19] Euromonitor. Date: 2019.
[20] United Status Census, The Good Food Institute, SPINS and IRI. Date: 2019.

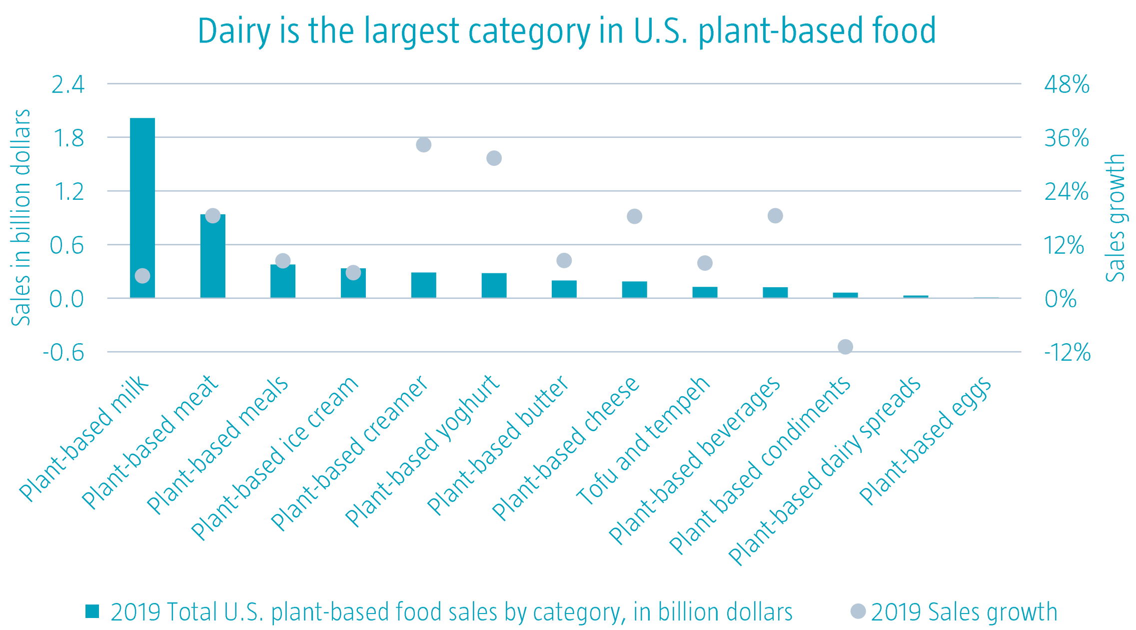
Plant-based dairy is the largest category but growing more slowly than other categories

After Beyond Meat's spectacular IPO in 2019 public equity investors have shown a tendency to pay the most attention to the meat-substitute category of plant-based food. However, with the imminent IPO of Oatly, a popular Swedish oat milk producer, attention could shift to plant-based food's largest product category: dairy. Oatly's sales growth has accelerated over recent years and is outstripping the plant-based milk category by ~30-50% annually over the past eight years[21].



Source: Oatly, FAO and OECD. Date: 2020.

In the US, EU and UK, sales of dairy alternatives are more than double those of meat alternatives. Drinks are the most established category within dairy alternatives. Historically, milk based on soy, oats, nuts and rice has been the largest category within plant-based dairy thanks to the relative simplicity of making the product. Alternatives for ice cream, creamer, yoghurt and cheese are harder to produce and are less common, but these categories are gaining traction as the market matures. In 2019, plant-based milk sales grew 5% in the US compared to 6% for ice cream, 34% for cream, 31% for yoghurt, 8% for butter and 18% for cheese[22].

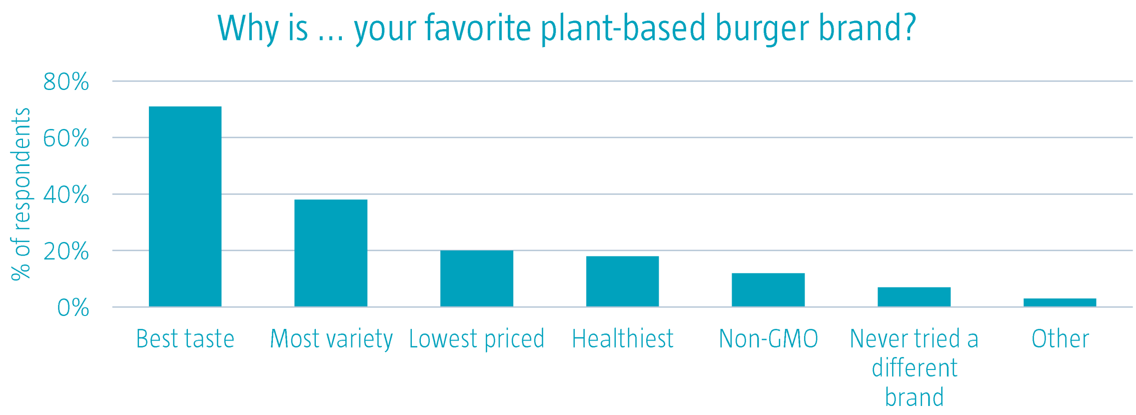


Source: The Good Food Institute, SPINS and IRI. Date: 2020.

[21] Oatly, ING, The Good Food Institute, SPINS and IRI. Date: 2020.
[22] The Good Food Institute, SPINS and IRI. Date: 2020.

Taste is the number one reason consumers cite a brand as their favorite

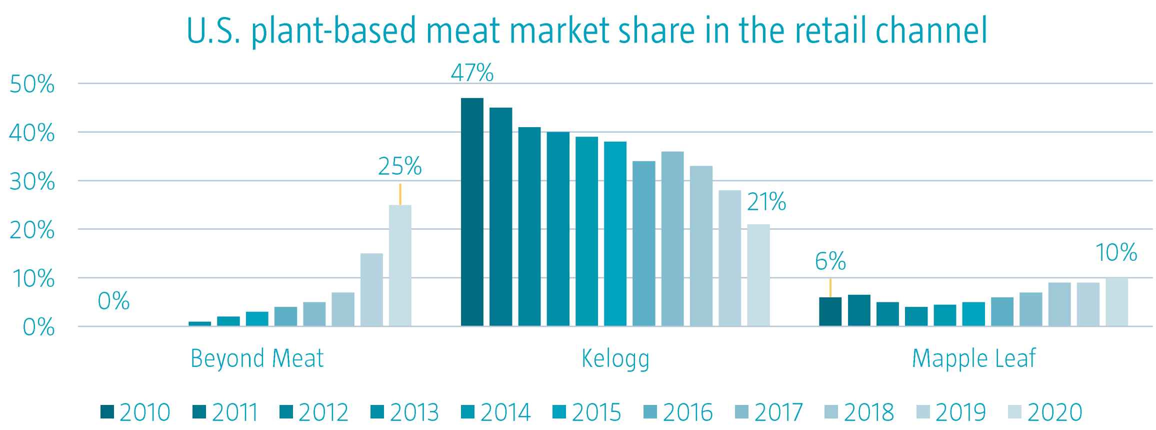
Offering something that tastes good is crucial for plant-based food companies to succeed. In the plant-based burger category taste is the number one reason why consumers consider a specific brand their favorite, according to a consumer survey conducted by the UBS Evidence Lab. Although plant-based alternatives have improved over time, an unsatisfying taste remains an issue for consumers who are used to meat or dairy. Data from ~10,000 Dutch consumers indicate that a mere 24% of consumers are happy with how plant-based meat or dairy alternatives taste[23]. Fortunately, new production technologies, improved formulation and a wider range of ingredients are leading to better tasting products.



Source: UBS Evidence Lab. Date: 2020.

New plant-based food brands are overtaking legacy brands

Second generation plant-based food brand like Beyond Meat are overtaking legacy brands such as Kelogg's MorningStar Farms according to Euromonitor data from the last ten years. In the United States, Beyond Meat, founded in 2009, had 0% market share until 2013 when the companies' sales started to increase. Since 2010, Kelogg's has steadily lost market share as Beyond Meat's product were getting better and the brand become more well-known among consumers who could buy it's products in more retail outlets. In the meantime, Beyond Meat has also expanded into foodservice channels such as McDonalds, for whom it makes the McPlant. Although not displayed in the graph below, Impossible Foods has recently entered the retail channel with its plant-based burgers and is taking market share. We expect competition to heat up in the next three years, investors should closely monitor the brand strength of the plant-based food companies they invest in.

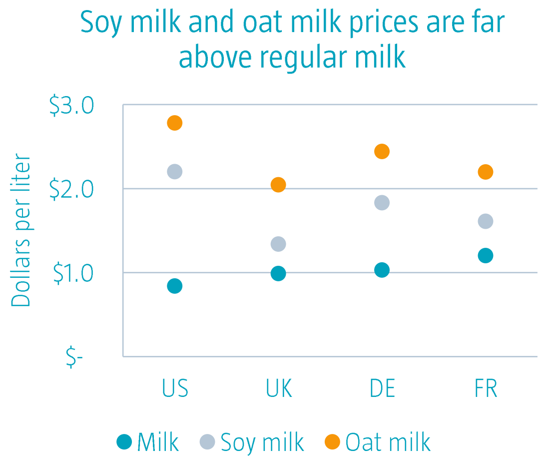


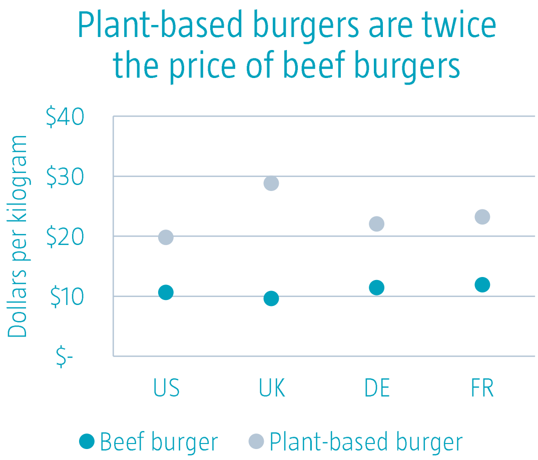
Source: Bernstein and Euromonitor. Date: 2020.

[23] ING Question of the Day. Date: 2020

The trade-off between price, growth, and profitability

A quarter of consumers are willing to pay more for plant-based burgers relative to beef burgers[24]. That means three quarters of potential consumers are unlikely to regularly buy plant-based food because prices lie far above animal-based products now. Therefore, it is no surprise that Beyond Meat's goal is to reach price parity in some product categories such as burgers. For investors, significant price drops could result in lower profitability if costs do not come down proportionally. We expect economies of scale to partially alleviate pressure on profitability for plant-based food producers. Currently, Beyond Meat is selling products at 30-35% gross margins and is EBITDA break-even. We assign a high probability to a scenario where Beyond Meat's gross margin will remain flat and where EBITDA margin creeps up to 10% in line with other food processors.





Source: Walmart, Tesco, Rewe, Carrefour, Amazon, USDA and Lidl. Date: 2021.

Concerns around brand longevity

Plant-based food brands such as Beyond Meat, Impossible Foods and Oatly have relevance for consumers. But from an investment perspective, they have yet to convince us of their brand longevity. If these brands choose an imitation strategy, the endpoint is a product that tastes and feels exactly like the original. Most successful food and beverage brands have a distinct taste such as Coca-Cola, Mars bars, Oreo's and Reese's. If imitation is the goal, brand differentiation on taste is eliminated because everyone is working towards a similar taste.

Plant-based meat companies Beyond Meat and Impossible Food pride their innovation skills to produce products with similar taste and texture as animal meat, which they try to copy as closely as possible. Oatly uses canola oil to get milk-like consistency as it wants to imitate cow milk. Oatly, Beyond Meat and Impossible Foods have a head start and their products might be better than others now, but if imitation is the goal, innovation is not a competitive advantage. Others will catch up.

Pure-play plant-based food product companies are facing increased competition from deep-pocketed food giants and grocery stores. Nestlé is catching up with its Garden Gourmet range, and Unilever with the Vegetarian Butcher. In the next phase, food retailers will step up their game with private label products. In many countries grocery store chains already sell private label plant-based food.

[24] UBS Evidence Lab. Date: 2020.

In order for pure-play plant-based food companies to have brand longevity and not get eaten alive by food giants or private labels, they could focus their brand on something other than imitating animal-based food. One differentiation opportunity is to excel in positive environmental impact or in health benefits. When we asked Beyond Meat about this, management said that indeed, the next step is to make their product exceptionally healthy.

In the coming years the plant-based food and beverage category is expected to grow massively. We probably do not have to worry about the strength of brand like Beyond Meat, Impossible Foods and Oatly yet. A rising tide lifts all ships, but for the long-term we do think brand longevity is a challenge plant-based brands face.

Investment implications

Currently, Beyond Meat is the only pure-play listed plant-based meat company. The company has a long runway of growth ahead driven by low market penetration (~1-2%) and changing consumer habits. In the long term we have concerns about brand longevity especially if plant-based food companies apply and stick to an imitation strategy. Beyond Meat recently partnered with PepsiCo, giving the former access to a massive global distribution network. Impossible Food is going toe-to-toe with Beyond Meat in the plant-based meat market and is expected to IPO in the coming year.

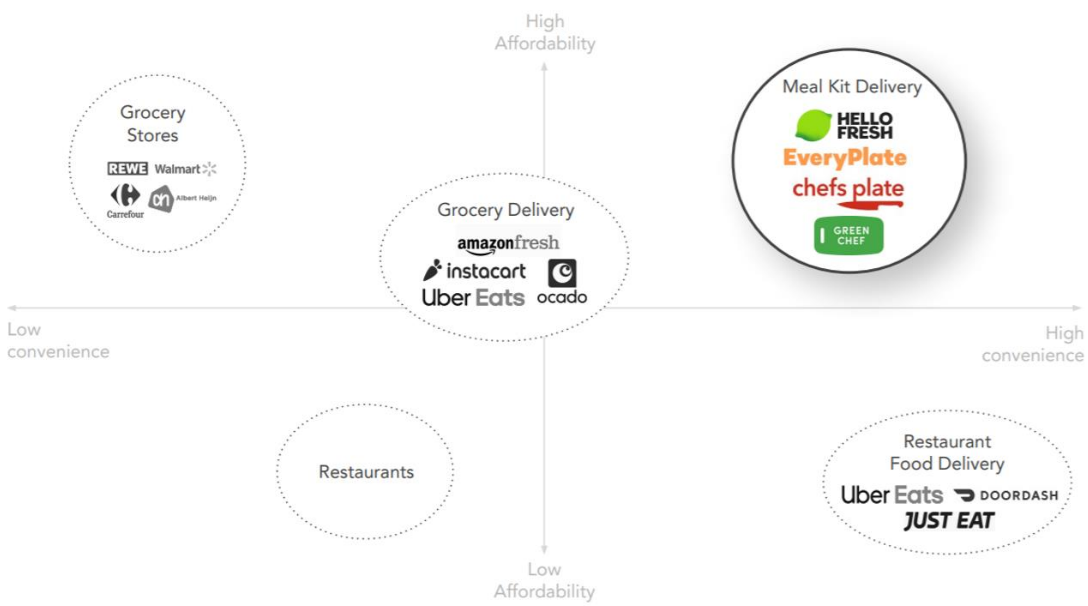
We are excited about the upcoming Oatly IPO as it operates in the dairy segment, the largest category in plant-based food. Oatly's growth has recently accelerated and it is outperforming the plant-based dairy category by 30-50% in sales growth annually, meaning its market share is growing.

Meal kit companies are reinventing the grocery supply chain

We believe meal kit companies have an appealing value proposition for consumers: they provide convenience, allow for meal customization, and come at a relatively attractive price point. Meal kit companies play into the increasing desire for convenience by delivering boxes with mostly fresh, specific ingredients on a weekly basis to customers' homes. Customer pick a plan depending on their dietary preferences, schedule, and household size. Most meal kit companies let customers customize by choosing from between 20 to 30 recipes that change on a weekly basis. Although many meal kit companies claim they undercut grocery store prices by 20-75%, we find that prices per meal are similar to grocery stores. Value for money does not come from undercutting the grocery store price but from receiving more value in terms of convenience – less time spent in stores and on meal planning.

Meal kit companies are positioned for convenience and affordability

The position of meal kits within the dinner-at-home segment is unique. Restaurant food delivery is more convenient because no meal preparation is necessary but comes at a substantially higher price. Grocery delivery and grocery stores provide less convenience because customers must search for and decide on a recipe, portion the ingredients and in the case of a physical store, spend time travelling and gathering ingredients. There is a place for all five of these models, but we believe meal kit companies will benefit from their unique position of high convenience and affordability.

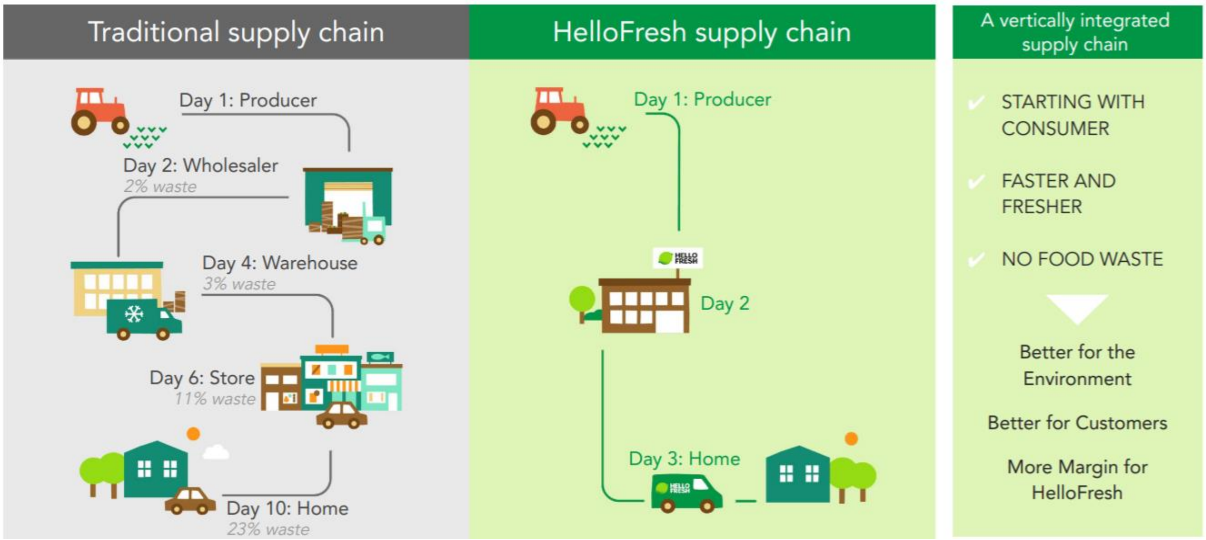


Source: HelloFresh. Date: 2020.

"Pull model" supply chain is efficient and reduces food waste

The meal kit supply chain is efficient and eliminates almost all food waste by being short and simple. Ingredients for meal kits are delivered to refrigerated fulfilment centers by food producers such as farmers. At the fulfilment centers, ingredients are processed and packaged into meal kits. From there, meal kits are delivered using insulated packaging or in refrigerated vehicles to customers, which allows meal kit companies to deliver ingredients with a high level of freshness.

Purchasing and supply chain managers at retail and grocery stores can only dream of the day they know what meal kit companies know: what, how much and when are customers buying? A meal kit company's business model differs from a food retailer or grocery store because it rethinks the traditional food supply chain model. By starting with the customer and working upstream with a "pull-model", meal kit companies largely eliminate the need for intermediaries such as distributors or wholesalers. Companies like HelloFresh have a close relationship with their supplier network, enabling them to purchase ingredients for meal kits on a just-in-time basis and in the quantities required. Meal kit companies operate on a very low inventory basis for all perishable products, as they only order from suppliers what they have confirmed they will sell to customers. This approach greatly increases efficiency and reduces food waste.

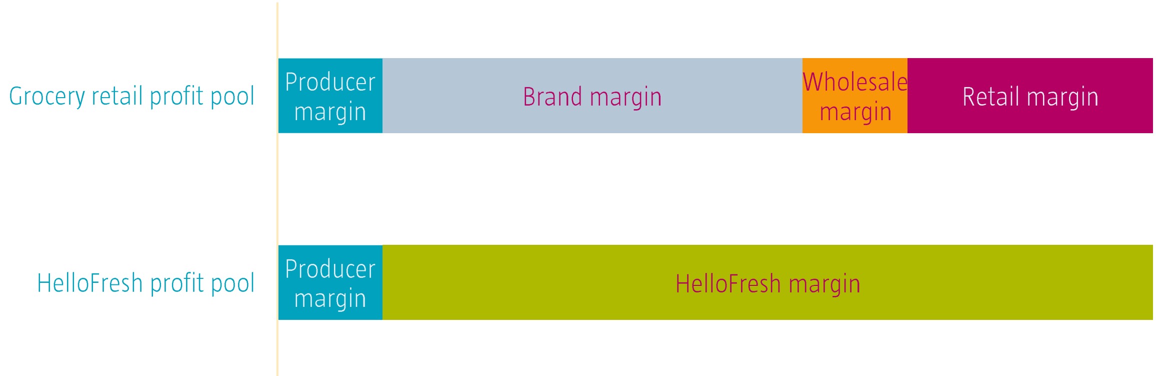


Source: HelloFresh. Date: 2020.

Meal kit companies capture large part of value chain leading to superior margins

Vertical integration combined with a high share of own brand allows companies like HelloFresh to capture a substantial profit pool. In fact, more than 90% of HelloFresh products are own brand, largely capturing the brand margin that traditional retailers miss out on. In addition to brand margin, HelloFresh is also able to capture the wholesale and retail margin by fulfilling those functions in the value chain itself. This leads to superior margins compared to traditional grocery retail companies. In the last five years HelloFresh has expanded its operating margin from -38% in 2016 to 11% in 2020. That's at least twice the operating margin grocery retailers achieve. The superior profitability of meal kit companies over other food and grocery delivery could make it an attractive area for investment.

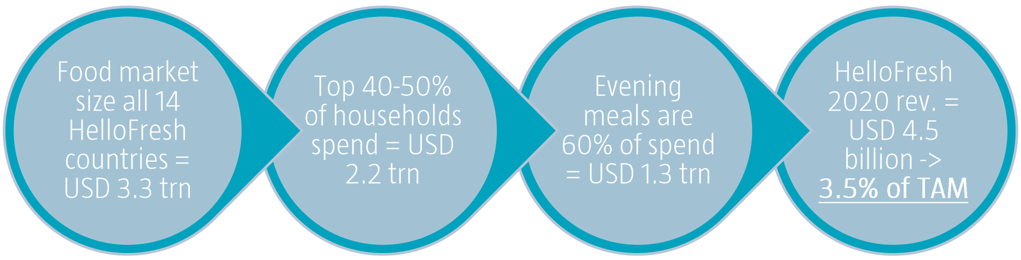
Vertically integrated supply chain and high share of own brand allows HelloFresh to capture majority of profit pool



Source: HelloFresh. Date: 2020.

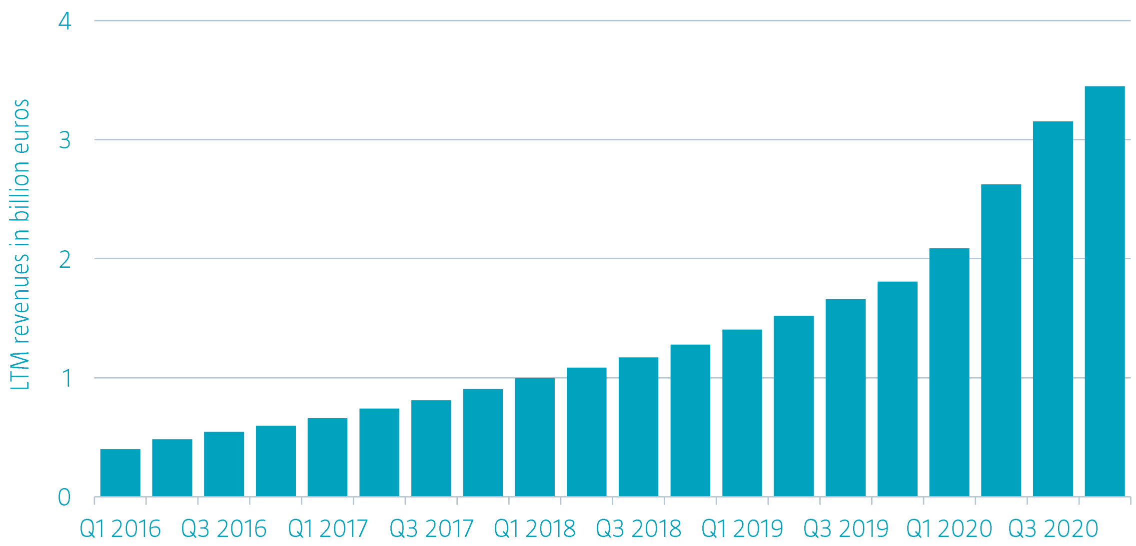
Growth continues in a massive food market

Meal kit companies operate in a huge market, and address both in-the-home and parts of the out-of-home food markets because customers can cook high-quality fresh meals at home with relatively low effort. Not all meal kit companies are created equal, however: Blue Apron for instance has been facing stiff competition from HelloFresh and others in the US and has in fact suffered from decreasing revenues in the past two years. Meanwhile, HelloFresh has grown ~40-50% year on year in the last five years, with a significant acceleration in the Covid-19 pandemic to ~107% year on year. At last year revenues, Citi estimates HelloFresh captures ~3.5% of its total addressable market, which implies there is a long runway of growth if HelloFresh executes well.



Source: Morgan Stanley, HelloFresh. Date: 2020.

Meal kit company HelloFresh's revenues are growing rapidly



Source: HelloFresh. Date: 2020.

Investment implications

HelloFresh is substantially ahead of its competitors in terms of revenue and market share. HelloFresh took USD 4.3 billion in sales in 2020 whereas Blue Apron took USD 0.5 billion, Marley Spoon USD 0.3 billion and Goodfood USD 0.3 billion. In addition, HelloFresh has a ~50-60% market share in the US, UK, Canada, the Netherlands and Australia and is dominant in all other markets except for Denmark where it just started operations. We believe HelloFresh has basically won the meal kit space in these markets. The company covers the mainstream segment with HelloFresh, the value segment with EveryPlate (meals kit from USD 4.99 p.p.) and the premium segment with Factor75. HelloFresh is introducing these brands to new markets such as Australia to capture more growth. The company also has growth opportunities in expanding to breakfast, lunch, and add-ons such as wine and snacks.

Customer retention rates are increasing and marketing costs as a percentage of revenue are decreasing. HelloFresh's business is profitable and is already generating substantial free cash flow with good returns on capital. We believe the company is a good fit in addition to other companies with new food delivery business models such as DoorDash, Just Eat Takeaway and DeliveryHero.

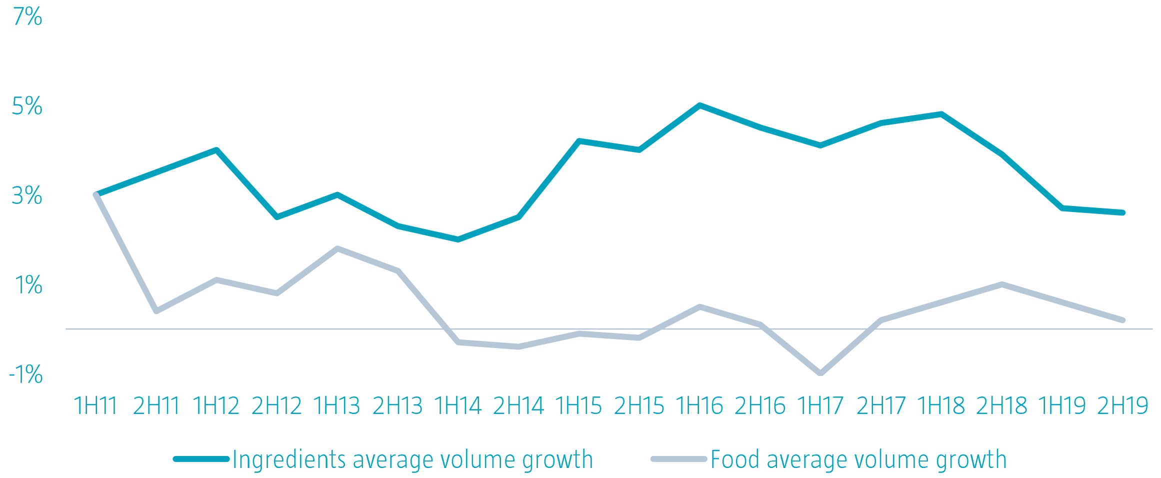
Pure-play healthy food companies have a tailwind of growth

Ingredients: enablers of healthy and sustainable food

When consumers buy their food or beverages, they might not realize the foods' taste, texture, scent, and color is partly and sometimes entirely developed by ingredient companies. Ingredient companies also develop parts of our food we cannot see, such as cultures and microorganisms, that give our food a longer shelf life or better nutritional value. For example, Symrise produces flavors and nutritional ingredients for snacks and sweets but also for fish and meat. Another example is Chr. Hansen, the number one player for cultures in dairy products. More than two billion people consume Chr. Hansen ingredients daily.

Ingredient companies could be an interesting area for investment because they experience structurally higher volume growth relative to general food companies. Over the past decade, ingredient companies' volume growth has averaged 3.5% compared to 0.5% for food companies. Ingredients companies find themselves in a sweet spot of the food supply chain. They have a highly fragmented customer base with big global brands, smaller global brands, regional and local players as their customers. No single customer represents a high proportion of revenue. At the same time, competitive pressures are lower relative to other food businesses because ingredient companies often compete in an oligopoly market. Barriers to entry such as scale, increasing product complexity and regulations further lower competitive pressures.

Volume growth in ingredients is structurally higher than food



Source: Jefferies. Date: 2020.

Ingredient companies are at the forefront of innovation in the food industry. Their research and development is of high added value because it improves consumers' user experience and influences purchase decisions. Ingredients are a high value product but have a low share of cost in the end-product. This means ingredients companies can charge decent prices for their products. Chr. Hansen boasts a 70% gross margin and DSM, International Flavours and Fragrances (IFF), Symrise, Givaudan and Novozymes sell their products at 40-50% gross margins. This compares to 30-40% gross margins for most food processing companies. Food giants such as Nestlé, PepsiCo and Unilever sell their products at 50-55% gross margins because they have brand pricing power.

Solving environmental and health challenges through ingredients

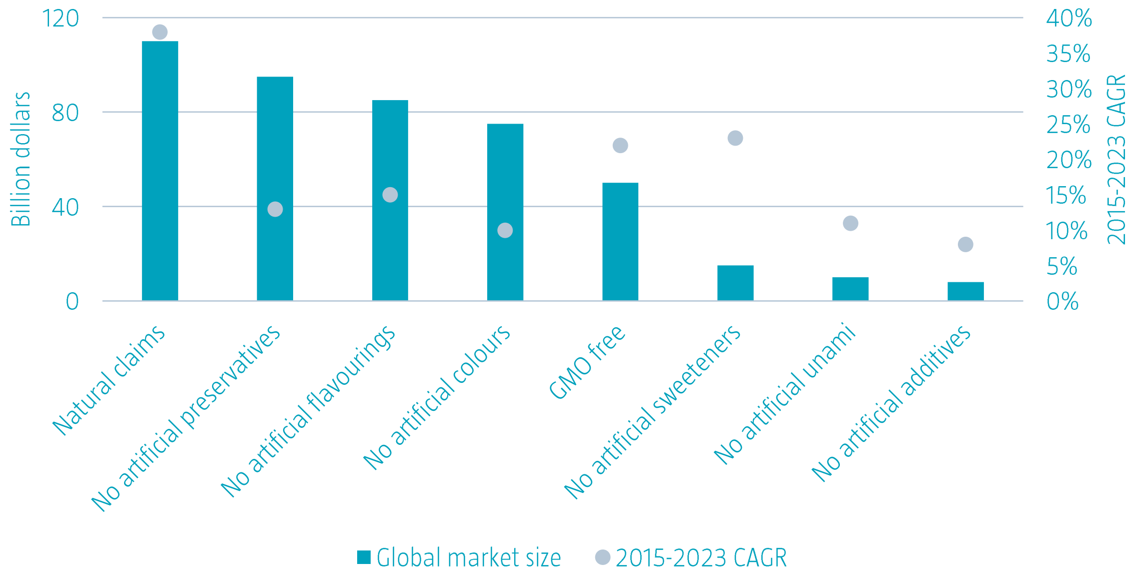
Ingredient companies offer solutions to numerous environment and health challenges. DSM produces feed supplements that increase the feed conversion ratio and another that reduces greenhouse gas emissions in beef farming. AAK, Kerry Group, Chr. Hansen and IFF produce fragrances, fats, flavors and cultures for plant-based food. Although not a pure-play food ingredients company, Corbion produces Omega-3 rich algae for fish feed.

Another key process that lowers environmental impact is the transfer from synthetic ingredients to natural-based ingredients. The word "natural" is an evolving term. Recently, ingredient companies such as Givaudan, IFF, Chr. Hansen and Symrise have invested in bioscience as part of their strategy to offer natural ingredients.

Growing awareness of and demand for natural ingredients and flavors

Consumer surveys continue to show that consumers are increasingly paying attention to product labels, with a study cited by Frost & Sullivan in the US claiming that 75% of consumers read the labels, with >60% who say they are willing to pay a premium for 'clean-label' products. Industry research by Jefferies estimates the average prices for natural flavors are roughly 20%-30% higher than for artificial flavors. We favor companies that offer natural flavors such as Chr. Hansen and Kerry Group because clean-label food is growing much faster than the wider overall food market.

Clean label claims in food and beverage are growing globally



Source: Euromonitor. Date: 2020.

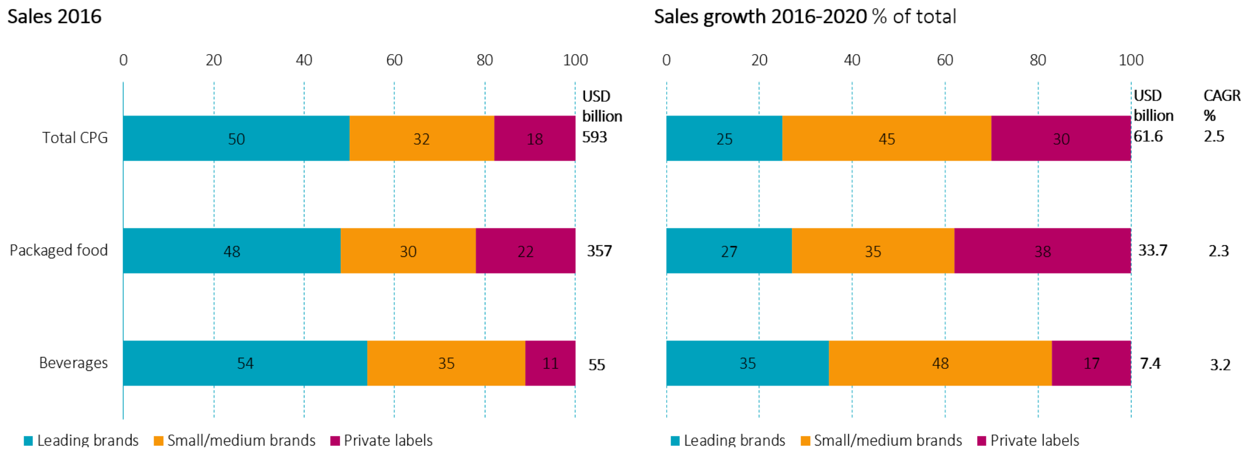
Investment implications

Ingredients companies have a proven business model with strong competitive positions, good returns on capital and an attractive margin profile. Companies with natural ingredients product lines such as Chr. Hansen and Kerry Group have a profitable avenue of growth. We favor companies that predominantly sell specialized and complex ingredients over companies with large bulk ingredient divisions such as DSM and IFF. Chr. Hansen is well positioned in natural ingredients but suffers from its sizeable exposure to dairy markets, where volumes are static or declining. At the same time, Kerry Group has exposure to both meat and dairy. Even though these companies are not focused 100% on healthy and sustainable food, we think they are attractive as enablers that are instrumental for change in the food industry.

Food giants vs. smaller brands

Food giants are being overtaken by smaller brands and private label. Consumer packaged goods (CPG) companies like Nestlé, Unilever, Pepsico and Mondelez have built powerful brand empires over the last century giving them a strong competitive moat. But they are struggling to find growth because end-markets are slowing down. They also face increasing competition from smaller emerging brands. In recent years, leading brands in each CPG category have generated only 25 % of growth, despite being 50 % of sales. From 2000 to 2009, economic profit in the CPG industry grew 10.4 % per year; from 2010 to 2019 it dropped to 3.2 % per year, according to McKinsey.

Figure 2 | Emerging brands and private label are outgrowing leading brand in the United States



Source: McKinsey, Nielsen. Date: 2020.

McKinsey identified five trends disrupting the large CPG companies, one of which is conscious eating. About half of Western consumers are prioritizing conscious eating and living, preferring purpose-driven brands that help them meet personal goals like reducing meat consumption, according to McKinsey research. Even in relatively unhealthy food categories consumer preferences are changing. For example, in the US, snacks with health and wellness claims are overtaking the total snack market threefold. Snacks are small, but the snacking market is not: it is a USD 605 billion food category and represents 26% of global packaged food sales.

Table 2 | Sales of snacks with health and wellness claims overtaking traditional snacks in the US

Health and wellness claim	Snacks absolute sales growth 2014-2018	Snacks sales CAGR 2014-2018
No artificial sweeteners	58.5%	12.2%
GMO free	49.7%	10.6%
Organic	49.2%	10.5%
Gluten free	43.8%	9.5%
Natural	27.8%	6.3%
No artificial colors/flavors	24.1%	5.5%
High fructose corn syrup free	22.7%	5.2%
No artificial preservatives	10.4%	2.5%
Total of all claims above	30.4%	6.9%
Total snacks	8.2%	2.0%

Source: Citi and Nielsen. Date: 2020.

PepsiCo, the largest global snack company, selling approximately USD 37 billion in snacks yearly[25], has also noticed that "better-for-you" and "better-for-the-planet" snacks are growing quickly. In January 2021, Beyond Meat, the plant-based burger company, and PepsiCo formed a joint-venture to make plant-based snacks and beverages together. In addition to this partnership, PepsiCo has acquired Bare Snacks and BFY Brands (Better-For-You) to increase its presence in these faster growing snack categories.

Figure 3 | PepsiCo is acquiring or partnering with healthy and sustainable brands to capture consumer trends

Source: PepsiCo and Beyond Meat news releases. Date: 2021.

[25] This number is calculated from PepsiCo company fillings and Citi estimates. Date: 2020.

Investment implications

The large incumbents such as Nestlé, Unilever, PepsiCo and Mondelez are investing in healthier and more sustainable foods, because these categories are growing faster than their core categories. Unilever acquired the Vegetarian Butcher, Nestlé launched Garden Gourmet, Mondelez bought Perfect Snacks and PepsiCo partnered with Beyond Meat.

Statistics on what percentage of their sales come from healthy products differ. According to the Global Access to Nutrition Index from 2018 nearly all food giants derive most of their sales from unhealthy food. However, experts and analysts have not reached consensus what is healthy and unhealthy. They do recognize food giants have an opportunity to improve the healthiness of their products, and in fact, they are improving. Food giants with the right strategy to become more sustainable sell healthier food could in fact benefit from shifting consumer preferences if they use their large capital resources and distribution networks.

In terms of positioning, smaller companies with a good health and sustainability profile can be attractive for investors and include condiments and spices company McCormick, natural food company Hain Celestial, frozen food company Nomad Foods and vegetable company Bonduelle. Impact investors could argue food giants are not best-in-class yet, but while undergoing change they do impact the diets of more people than smaller-sized companies. The jury is still out.

Innovative software and kitchen equipment improves restaurants efficiency and profitability

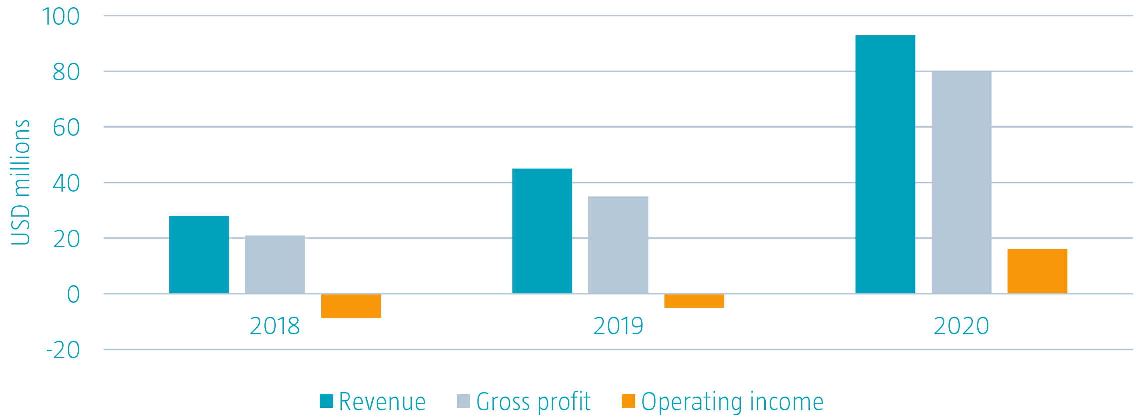
Restaurant technology

Software and automation increase restaurant efficiency and lower friction

Digitalization is coming to all sectors and restaurants are no exception. Restaurant software companies Toast and Olo have a sizeable number of restaurants as their customers, and are growing rapidly. Toast initially provided point-of-sale hardware and software enabling restaurants to offer a smooth customer experience, and carry out data analytics and menu management. Their solution is cloud-based and allows for integration with an array of third-party applications. Toast's product allows restaurants to increase their revenue substantially and run their operations more efficiently, resulting in greater profitability in a traditionally low margin industry. Toast is currently broadening its offering to payroll, e-mail marketing, online ordering, delivery services and loyalty programs. Toast's business model is monthly subscription revenues from restaurants and Toast charges processing fees per transactions, i.e. predictable revenue streams. Investors have seen Toast's potential as it is currently valued at USD 20 billion.

Olo provides a cloud-based, on-demand commerce platform for restaurant brands. They enable digital ordering and delivery for restaurant brands by providing a dedicated app. This allows consumers to order directly through the restaurants app and circumvents food platforms such as UBER Eats, Doordash and Grubhub. Like Toast, Olo also allows for integration with third-party solutions. The revenue over 2020 was USD 98 million, an increase of 94%. Olo's revenue model is like Toast's as it charges both subscription and transaction-based fees. This charging structure has the advantage for customers in that it aligns their interests: if customer sales volumes go up, Olo's revenues go up.

Olo's revenues and profits are growing rapidly



Source: Olo company fillings. Date: 2021.

Investment implications

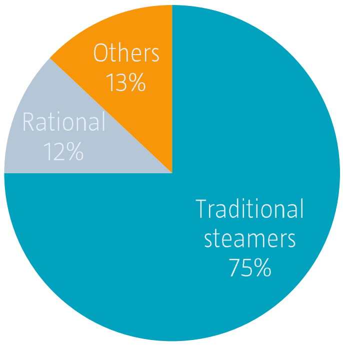
The key value proposition of both Toast and Olo is that they allow restaurants to increase revenues by decreasing friction and simultaneously increase profitability by making operations more efficient or through better capacity utilization. Therefore, we expect more and more restaurants to sign up and for Toast and Olo to continue their growth. Both companies have predictable revenue streams and operate an asset-light business model that can be replicated across many customers. Both can be regarded as software-as-a-service companies, adding to their attractiveness.

10 million professional kitchens worldwide

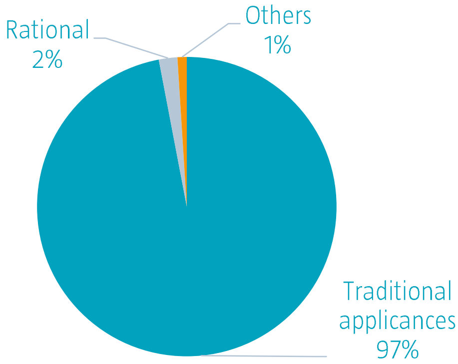
The world has approximately 10 million professional kitchens[26] ranging from restaurant and hotels to large-scale catering operations such as company canteens, hospitals, schools, universities, military facilities, retirement homes, quick service restaurants, caterers, supermarkets, bakeries, snack outlets, butchers' shops and service stations. Equipment for those kitchens is supplied and often serviced by companies like Rational, Middleby, Welbilt and Electrolux Professional.

Major opportunities for professional kitchen equipment suppliers are growth of expenditure on eating out, replacement of traditional equipment, and emergence of ghost kitchens[27] servicing food delivery. In recent years, expenditure on eating out has risen 4-5% annually[28]. Although recently interrupted by the pandemic we believe consumers will continue to increase spending on eating out in the future. Rational AG, the front-runner in innovative kitchen equipment, estimates 75% of kitchens still use traditional appliances instead of state-of-the art steamers and 97% of kitchens do not use multifunctional cooking appliances. With the rise of food delivery, ghost kitchens or delivery-only, restaurants can be built in three to four weeks and can be located in lower-cost real estate, boosting the traditionally thin margins of restaurants. Euromonitor estimates there are in excess of 700 ghost kitchens in the UK, but this is dwarfed by the estimated 7,500+ units in China. Cooks in these ghost kitchens can't churn out hundreds of meals with simple pots and pans: they need professional cooking equipment presenting an opportunity for companies like Rational and Middleby.

Just 25% of profesional kitchens use modern steamers...



and only 3% use modern multifunctional cooking appliances



Source: Rational AG. Date: 2020.

Innovation in kitchen equipment: bundling and connectivity

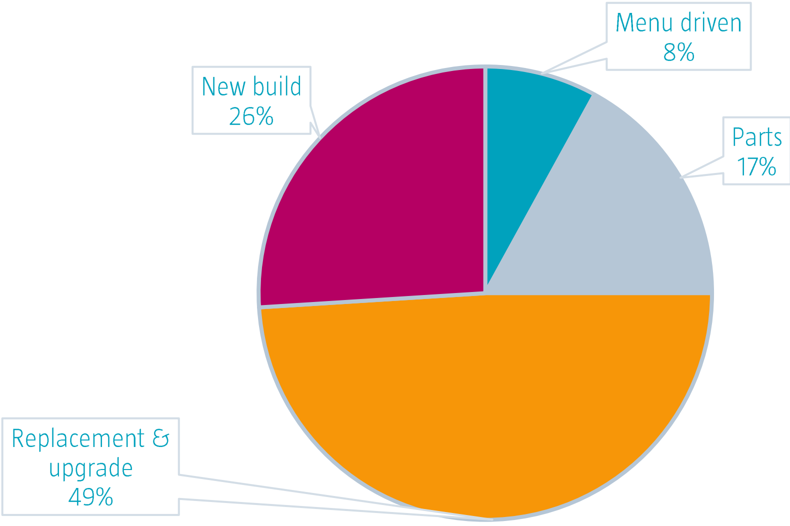
Modern-day kitchen equipment is experiencing evolutionary innovations: new technologies are being applied to existing equipment. For example, Rational is a pioneer in building equipment that can perform multiple cooking processes such as grilling, steaming, baking, roasting, poaching and much more. This leads to savings in labor, space and energy. Because it combines many cooking processes, Rational builds just two machines that cover 90% of cooking functions. Some companies like Middleby and Rational are also investing in connectivity. In fact, Rational provides cloud-based connectivity for professional kitchens to manage their assets, hygiene and recipes; 120,000 professional chefs already use it. Middleby mainly invests in innovations by acquiring smaller companies specialized in fields such as the Internet of Things and kitchen automation. Electrolux Professional enables customers to control appliances from any device to monitor downtime and operational performance.

[26] Rational AG. Date: 2020.
[27] Ghost kitchens are a professional food preparation and cooking facility set up for the preparation of delivery-only meals. However, a ghost kitchen differs from a virtual restaurant in that a ghost kitchen is not necessarily a restaurant brand in itself and may contain kitchen space and facilities for more than one restaurant brand.
[28] McKinsey. Date: 2020.

The attractive part of the business: service contracts

Selling kitchen appliances is a niche in the appliances space with a particularly attractive feature: service contracts. Much like elevators and escalators, some kitchen appliances need servicing such as maintenance, periodic check-ups, and upgrades. In particular, appliances that are mission-critical to professional chefs such as stoves, ovens and steamers come with a service contract. Downtime of such equipment is unacceptable for professionals because it leads to hungry and unhappy customers. Service contracts are generally high margin and very sticky, leading to greater profitability and revenue predictability. Professional kitchen equipment companies such as Rational and Middleby have ~15-25% operating margins which is much higher than consumer appliance companies such as Electrolux (~5%) and Haier (~4%).

Middleby mainly sells parts, replacements and upgrades to its large installed base



Source: Middleby Corporation. Date: 2020.

Investment implications

Rational is a company that stands out among other professional kitchen equipment companies because it is laser-focused on just two appliances that can perform 90% of cooking functions. It is miles ahead of the competition and has exceptionally good customer reviews, more than 90% of existing customers would buy another Rational appliance. Rational equipment can be found in the White House, Buckingham Palace, Antarctica and high up in the Alps. Whereas Rational rarely acquires companies, Middleby acts as a consolidator by continuously acquiring smaller companies. Both have been successful in their approach over the last ten years, but we favor organic growth over inorganic growth, i.e. Rational.

Seafood is efficient and the Chinese love it

Seafood is one of the most efficient animal meat products

In terms of environmental impact, fish is one of the most efficient animal meat products[29]. As can be seen in the table below, every 100 kilograms of feed yields 56 kilograms of edible fish meat, compared to 7 kilograms of beef meat. In addition, only 7.9 kilograms of CO_2 are produced for every kilogram of edible fish meat, compared to 39 kilograms of CO_2 for a kilogram of beef meat. Consumers reducing their environmental footprint could switch from pork and beef to fish and poultry as the latter two have higher resource efficiency resulting in lower environmental impact.

				
Resource efficiency				
Protein retention	28%	37%	21%	13%
Calorie retention	25%	27%	16%	7%
Edible yield	73%	74%	73%	57%
Feed conversion ratio	1.3	1.9	3.9	8.0
Edible meat per 100 kg fed	56kg	39kg	19kg	7kg
Carbon footprint				
Kg CO2 / Kg edible meat	7.9 kg	6.2 kg	12.2 kg	39.0 kg
Water consumption				
Liter / Kg edible meat	2,000	4,300	6,000	15,400

Source: MOWI. Date: 2020.

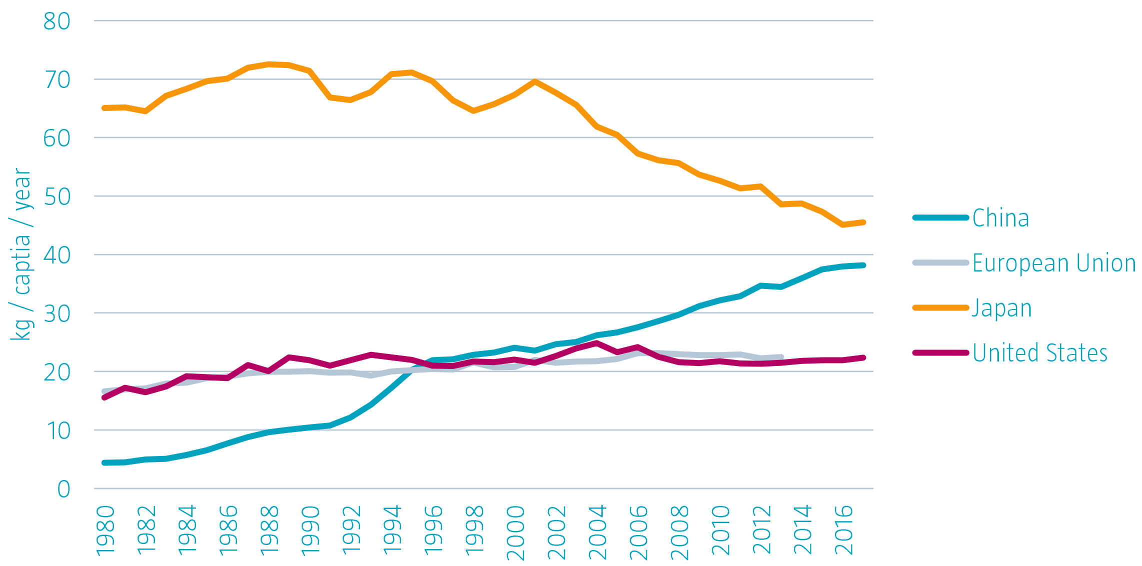
Chinese are set to eat more seafood than sushi country Japan

All over the world, Japanese cuisine is known for its fish-rich sushi dishes. Tokyo also hosts the largest fish market in the world, the size of 57 football fields and costing USD5 billion to construct[30]. As depicted in the graph below, Japanese eat a lot of fish, around 45 kilograms per capita per year, but they have decreased their fish consumption by 35% in recent decades. In the meantime, Chinese seafood consumption has grown massively, eating almost twice the amount of seafood compared to Europeans and Americans.

The proliferation of seafood in China is driven by enormous growth in aquaculture, i.e. fish farming. In China, seafood production from aquaculture has risen from 8 million tons in 1990 to 64 million in 2016, an eight-fold increase[31]. China is responsible for 58% of all seafood produced through aquaculture. Aquaculture continues to be the fastest growing food production sector worldwide driven by developing Asian countries.

[29] Barclays Research and MOWI. Date: 2020.
[30] Reuters. As historic Tsukiji market closes, fishmongers mourn. Date: 2018.
[31] UN Food and Agriculture Organization. Date: 2020.

China is a large and growing market for seafood



Source: FAO. Date: 2020

Investment implication

Increasing seafood consumption in China presents an opportunity for listed Atlantic salmon companies such as SalMar, Leroy Seafood, MOWI and Bakkafrost. China's per capita consumption of salmon is currently only 60 grams per year, while Europe's is about 2 kg, which means that the market for salmon in China is far from saturation and still has great development potential. Increasingly wealthy consumers, such as the Chinese middle-class, tend to switch to more premium products. This could bode well for salmon producers as Chinese consumers might switch from locally produced seafood to premium products like Atlantic salmon.

Industry estimates for salmon demand in China differ, but they all show an upward trend. The FAO estimates China imported salmon worth USD1,143 million in 2019[32]. MOWI, the largest listed Atlantic salmon producer estimates Atlantic salmon demand in China to be 646 million in 2019, up 9.7% year on year from 2018[33]. Industry experts estimate China will import USD 1,841 million[34] by 2024, an absolute increase of 61% or 10% yearly growth. To put these import numbers into perspective, MOWI, Salmar, Leroy and Bakkafrost combined trailing revenue is USD 8,881 million.

[32] UN FAO. (2020). Globefish Trade Statistics. Date: 2020.
[33] MOWI. Annual Report. Date: 2019.
[34] China Research & Intelligence. Research report of the Imported Salmon Industry in China 2020-2024. Date: 2020.

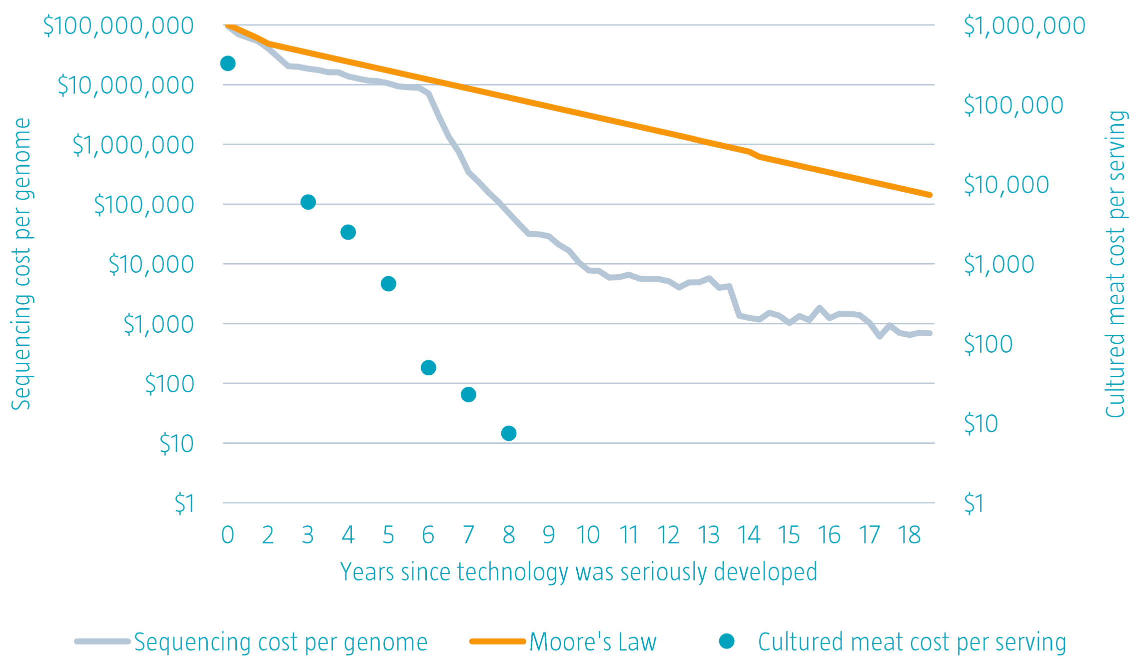
Cultured meat is not commercially viable yet

Continuing innovation could make cultured meat commercially viable in five years' time

In the early 2010s, the Dutch government sponsored a USD 2 million project to cultivate pork meat from stem cells. Helped with an extra USD 250,000 from Google co-founder Sergey Brin, this research eventually led to cultured meat's highest-profile moment so far, when vascular biologist Mark Post from Maastricht University unveiled the world's first cultured burger in 2013. Cultured meat, also known as lab-grown meat, is made of tissue which is biologically the same as meat tissue but is produced by in-vitro cell culture of animal cells instead of from slaughtered animals.

Singapore has recently given the world's first approval for cultured chicken nuggets. US-based Just, valued at USD 1.2 billion, developed the chicken nuggets and sells three of them for USD 23, probably highly subsidized[35]. According to Bloomberg it costs USD 400 to USD 2,000 a kilogram to make cultured meat this compares to USD 1.03 a kilogram for poultry produced in the European Union. The original burger from Mosa Meat cost USD 280,000 a piece to make, but more recently has found a way to bring costs down. By 2021, Mosa Meat says it hopes to sell its lab-grown burger at around USD 10. High production costs are one of the biggest barriers' lab-grown meat companies face.

Cultured meat costs behave like technology



Source: Robeco, National Human Genome Research Institute, Memphis Meat, Just, Future Meat Technologies, Ron Shigeta, Mosa Meat. Date: 2021.

[35] CNBC. This restaurant will be the first ever to serve lab-grown chicken (for $23). Date 2020.

According to analysis by the Good Food Institute, growth media currently make up the bulk of total production costs for cultivated meat, and proteins know as growth factors are the most expensive ingredient. Assuming researchers can optimize the growth medium, they still face several scientific challenges around tissue engineering to make cultured meat with a different texture than burgers, such as fillets and hams. With many scientific issues to resolve, cultured meat remains at the experimental stage. For commercial viability, the industry will need to find ways to produce tissue on a much larger scale. If cultured meat innovation continues at the current pace, it is not unthinkable that it will become part of our diet in about five years' time.

Extremely low environmental impact of cultured meat is promising

One estimate by consulting firm Kearney from Chicago suggests that 35% of all meat consumed globally by 2040 will be cultured – a change that is projected to reduce greenhouse-gas emissions, water use and land usage. Mosa Meat, Mark Post's company, estimates cultured meat uses up to 99% less land, 96% less water and 96% lower GHG emissions. His company could be biased or looking at environmental impact in a rather limited fashion, however, because Mattick estimates cultured meat production to be 1.4x more energy intensive than beef, 4x more than poultry and 7x more than pork[36]. Whoever is right, energy efficiency in the production process determines cultured meat's environmental impact. As energy efficiency is closely related to cost, we expect cultured meat companies to innovate in this area. As investors, we eagerly await the technological progress.

Investment implications

At this point in time, all pure-play cultured meat companies are private. Just and Memphis Meat are in the lead and have both raised USD 200-250 million from investors such as Collaborative Fund, Bill Gates, Threshold Ventures and Softbank. They could be IPO candidates when they have a commercially viable product. Coming in third is Mosa Meat, the inventor of the first lab-grown burger, which has raised a total of USD 95 million. With a cost of USD 7.50 per serving, Future Meat Technologies claims to be in the lead when it comes to cost-efficient production. The Israeli company has raised USD 43 million. Investors can track these companies over the coming years to see whether cultured meat is a commercially viable food category.

[36] Mattick, C. S., Landis, A. E., & Allenby, B. R. A case for systemic environmental analysis of cultured meat. Journal of Integrative Agriculture. Date: 2015.

Companies can stay ahead of competition by continuously improving their product through innovation

Company overview

Table 3 gives an overview of companies from food industry segments we consider highly or medium attractive: plant-based food and beverages, meal kits, restaurant software, food ingredients, smaller healthy and sustainable food companies, seafood and professional kitchen equipment.

Table 3 | Pure-play food companies from highly and medium attractive segments

Company	Business segment	Pure-play exposure to food	Sales location	Market cap (USD billion)
Kerry Group	Ingredients	Yes	Global	22.60
McCormick	Spices and condiments	Yes	Global	22.20
MOWI	Seafood	Yes	Global	12.90
HelloFresh	Meal kits	Yes	Europe, NA, ANZ	11.90
Chr. Hansen	Ingredients	Yes	Global	11.00
Rational AG	Kitchen equipment	Yes	Global	10.00
Middleby	Kitchen equipment	Yes	Global	9.10
Beyond Meat	Plant-based food	Yes	Global	8.70
Salmar	Seafood	Yes	Global	7.60
Leroy Seafood	Seafood	Yes	Global	5.00
Nomad Foods	Frozen food	Yes	Europe	4.70
Vitasoy	Plant-based beverages	Yes	East Asia	4.50
Bakkafrost	Seafood	Yes	Global	4.40
Hain Celestial	Natural and organic food	Yes	Global	4.20
Ebro Foods	Rice and pasta	Yes	Europe, NA	3.20
Welbilt	Kitchen equipment	Yes	Global	2.20
Bonduelle	Fresh, frozen and canned vegetables	Yes	Europe, NA	0.78
Goodfood Market	Meal kits	Yes	Canada	0.59
Marley Spoon	Meal kits	Yes	Europe, NA, Australia	0.42
Blue Apron	Meal kits	Yes	North America	0.15
Toast	Restaurant software	Yes	North America	Private
Olo	Restaurant software	Yes	North America	Private

Source: HOLT, Robeco and company fillings. Date: March 2021.

Table 4 gives an overview of large food companies that we believe are improving or not improving their positioning, especially in terms of healthiness and sustainability. Some are investible because of their strategy, investments they are making and or their strong competitive position.

Table 4 | Additional food companies overview

Company	Business segment	Pure-play exposure to food	Improved positioning	Sales location	Market cap (USD billion)
Nestlé	Food and beverages	Yes	Yes	Global	300.20
PepsiCo	Food and beverages	Yes	Yes	Global	178.20
Mondelez	Snacks	Yes	No	Global	75.70
Kraft Heinz	Diversified food	Yes	No	Global	46.40
Danone	Dairy and water	Yes	Yes	Global	43.30
General Mills	Diversified food	Yes	No	Global	33.60
Hershey	Confectionary	Yes	No	Global	30.30
Associated British Food	Diversified food	Yes	No	Global	26.30
Kellogg's	Convenience food and cereal	Yes	No	Global	19.70
Conagra Brands	Frozen food, groceries and snacks	Yes	Yes	NA	17.00
Barry Callebaut	Cocao and chocolate processing	Yes	?	Global	12.30
Britannia Industries	Snacks	Yes	No	India	11.40
AAK AB	Oils and fats	Yes	?	Global	5.60
Tate & Lyle	Bulk ingredients	Yes	?	Global	4.90
Glanbia	Performance nutrition	Yes	?		4.20
Suedzucker	Agricultural processing	Yes	?	Global	3.30
Greencore	Convenience food	Yes	?	UK, Ireland	0.95

Source: HOLT, Robeco and company fillings. Date: March 2021.

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