CAZENOVE
CAPITAL MANAGEMENT

Is sugar turning Big Food into the next Big Tobacco?

An investor's view on metabolic syndrome

Executive summary

This note assesses the emerging trends that we think will create headwinds for the food and beverage sector. We believe that sugar consumption and its contribution to a wide range of health problems, such as diabetes, high blood pressure and obesity (which collectively are known as metabolic syndrome), are central to this risk. Our research suggests that there are a number of similarities between major food and beverage companies ("Big Food") and major tobacco companies ("Big Tobacco"). We believe there are three catalysts that could result in Big Food becoming the next Big Tobacco, potentially resulting in lower sales growth, higher costs and large scale litigation.

Elly Irving
Environmental, social and governance analyst

Introduction: Financial impact of metabolic syndrome could be material

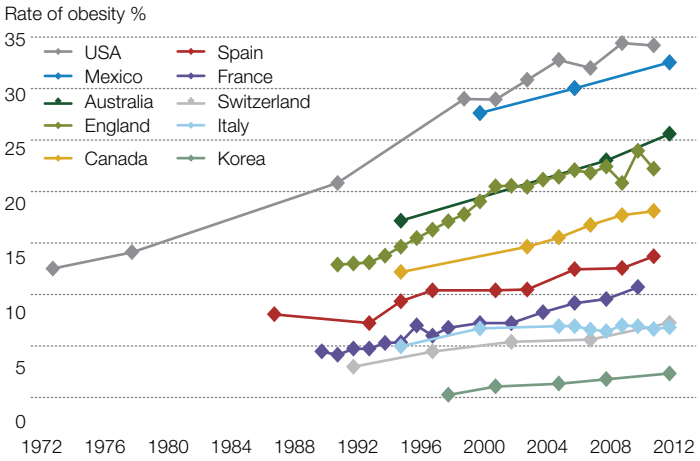
The prevalence of obesity and other diet-related diseases is at an all time high. Major food and beverage companies face potential risks linked to this health phenomenon including increasing regulation, public policy changes, lower workforce productivity, changing consumer trends and litigation that could transform the industry into the "new tobacco". Investors are increasingly looking for "healthier" investments in healthcare companies, leisure and fitness firms and "nutriceuticals" (specialist food products that provide additional health benefits). Forward-thinking food and beverage companies can adapt product portfolios and increase market share with healthier product offerings. While the risk to consumer companies of not adapting to these trends is accepted as a headwind by the market, we believe the risk is not fully understood. In our view, stock valuations fail to fully address not only the obesity epidemic, but the broader impact of metabolic syndrome too. When accounting for potential litigation costs, lower sales growth and increased research and development (R&D) investment, the impact on financials over the medium-term could be material. This note explores both the risks and opportunities as well as looking at the probability of Big Food becoming the new tobacco, and the subsequent impact on company valuations.

Contents

Metabolic syndrome: diet-related diseases

Metabolic syndrome is believed to be caused by excessive sugar intake. The diseases that can be classed under metabolic syndrome include type 2 diabetes, hypertension, coronary heart disease, lipid abnormalities, cardiovascular disease, non-alcoholic fatty liver disease, polycystic ovarian disease, cancer and dementia. Because the range of diseases is broader than just obesity, it affects a greater proportion of the world's population at a rapidly increasing rate. Figure 1 below demonstrates the growth rate of just one type of metabolic syndrome: obesity.

Figure 1: Obesity trends over time



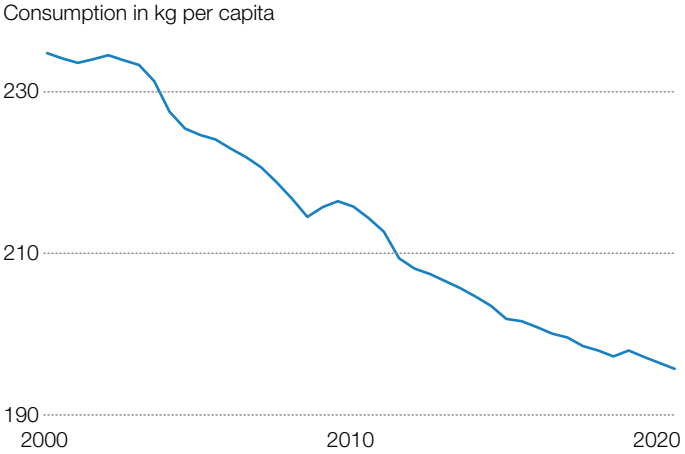
Source: OEDC Obesity Update, June 2014.

The impact of metabolic syndrome can also be seen at the macroeconomic level, with studies suggesting that more sick days, higher absenteeism and lower productivity will negatively impact the global economy. A study from Morgan Stanley[1], suggests obesity and sugar consumption-related diseases will reduce global GDP growth from 2.3% to 1.8%.

Health and wellness trend: increasing awareness

There are an increasing number of scientific studies attempting to prove the link between sugar and metabolic syndrome and the relationship is garnering increased awareness amongst governments and consumers. As a result, sales of processed food and sugary carbonated soft drinks (CSD) are in decline (see Figure 2). In response to this trend, companies are rebranding themselves under the banner of "nutrition" or "health and wellness", reviewing portfolios and starting to develop healthier products.

Figure 2: The decline of processed foods in the US



Source: Nestlé, 2015.

Many of the Big Food companies' product portfolios are dominated by sugary, processed food and drinks and have failed to invest in emerging trends for quality fresh, healthier food. We believe this poses a material risk to investors.

1 Sustainable Economics – The Bitter Aftertaste of Sugar, Elga Bartsch & Carmen Nuzzo, Morgan Stanley, March 2015.

Risks and opportunities

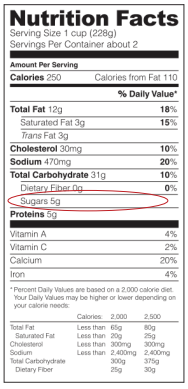
The trend towards healthier, more nutritious food is gaining momentum, but what does this mean for consumer sector companies in terms of both risks and opportunities?

Increasing pressure from policymakers: labelling requirements and advertising restrictions

For a long time, the global food and beverage industry has been largely self-regulated although there has been a notable shift towards greater government regulation in the last 18 months. The key areas of focus for policymakers have been labelling (to allow consumers to make more informed choices) and restrictions on marketing to children.

For example, the US Food and Drug Administration (FDA) has proposed changes to the nutritional facts label for all food and beverage products. These will include a mandatory requirement to declare the percentage daily value for sugars, as well as disclosing the value of added sugars. This is a material change as current labelling regulations in the US do not require any disclosure around added sugars or recommended daily intake. It has been reported that the introduction of these additional disclosure requirements have been delayed until 2016. Some speculate that this delay is to allow companies to accelerate their product reformulation efforts.

In addition, there are increasing restrictions on advertising, with some governments banning TV advertising of unhealthy products to children in Mexico and France. In the US, San Francisco city officials have unanimously approved an ordinance requiring billboards or other advertisements for sugary beverages to include the language:



Nutrition Facts
Serving Size 1 cup (228g)
Servings Per Container about 2

Amount Per Serving

Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	**18%**
Saturated Fat 3g	**15%**
Trans Fat 3g	
Cholesterol 30mg	**10%**
Sodium 470mg	**20%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Sugars 5g	
Proteins 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

> "WARNING: Drinking beverages with added sugar(s) contributes to obesity, diabetes, and tooth decay. This is a message from the City and County of San Francisco."[2]

This is reminiscent of the approach regulators took to warning people about the harmful effects of tobacco and this is something we discuss in greater detail later on.

Source: www.fda.gov.

Investment relevance: increased regulation and a call for improved labelling transparency may result in higher costs for companies. These could be in the form of a costly reformulation of products, the need to switch to costly alternative ingredients, lobbying costs and lower sales as a result of reputational damage. The latter is a material risk for products that have been marketed as "healthy" but have a high sugar content, such as breakfast cereals for example. We may well see increased R&D spend in the near term in response to this.

Sugar tax

The well-publicised sugar tax introduced in Mexico in 2014 has raised 18 billion pesos (approximately £700 million), which has been put towards helping combat rising healthcare costs. However, it is thought to have had only a temporary impact on consumption so will not properly address the underlying health problems. A sugar tax on sugary drinks has also been passed in Berkeley, California. However, Berkeley is in the minority, with 33 other cities in the US having tried and failed to implement a sugar tax[3], including Mayor Bloomberg's attempt to reduce drink portion sizes in New York.

There is an incentive for governments to introduce a tax to help with healthcare costs. The US Congressional Budget Office (CBO) estimates that a 3-cent-per-ounce tax would generate over $24 billion in government revenues over four years. In 2009, the Obama Administration explored levying an excise tax on sweetened beverages as part of healthcare reform efforts, but the proposal was abandoned after heavy lobbying by the beverage industry[4]. While there have been discussions of a sugar tax being introduced in other countries, including Ireland and France, we believe that governments are more likely to pursue the path of increased transparency and public policy changes. We believe that this is due to a combination of factors including:

- the strength of industry lobbies.
- the jobs created by the industry.
- the agricultural subsidies for commodities like corn to make high fructose corn syrup.
- the lack of consensus across scientific studies linking sugar with metabolic syndrome.
- the range of alternative tools governments have available through public policy.

Investment relevance: sell-side analysts estimate that the EBITDA[5] impact of the sugar tax on food and beverage companies selling products in Mexico in 2014 was between 1.5% and 3.5%6. However, due to the reasons outlined above, the probability of other countries implementing similar taxes is low. If they are introduced, we believe there is a higher risk for beverages than for sugary foods as soft drinks are seen as "empty calories" because they have no nutritional value while having high sugar content. Investors should be questioning companies in the beverage sector about how they plan to mitigate the risk of a potential tax through actions other than lobbying.

2 www.marketwatch.com July 2015.
3 Obesity – A growing challenge report, Citi Group, Elaine Prior, March 2015.
4 Soda tax, Wikipedia, https://en.wikipedia.org/wiki/Soda_tax, August 2015.
5 Earnings before interest, tax, depreciation and amortisation.
6 Obesity – A growing challenge report, Citi Group, Elaine Prior, March 2015.

Litigation

Litigation is the biggest unknown, the potential "black swan" for the consumer sector. Our view is that companies with sales exposure to the US face the greatest risk of litigation. This is due to a combination of national and sector specific factors:

National factors: a highly advanced litigation culture and poor labelling practices.

Sector specific factors: strong lobbying efforts to date, lack of consensus within the scientific community and higher sugar content than in the same branded products sold elsewhere.

We have engaged with several US legal experts who confirmed that litigation is already posing a risk for the food and beverage sector. The majority of class action lawsuits that have been filed so far have focused on false advertising and misleading marketing, rather than on product liability. Cases have been brought against individual products and brands, with causation relying on consumer surveys, rather than science or medical records.
There has not been a case that has reached a jury yet; all cases have been settled out of court for figures in the low millions. However, we believe that if a case does reach a jury it may increase the probability of large settlements.

At present, consumers are faced with complex ingredients lists. In the cases that have already gone to court, some judges ruled that consumers should not be expected to read the nutritional information and ingredients list provided on the product. If the product is marketed as "healthy", there is an implied health claim or there is a printed claim on the front of the pack, then a consumer can rely on this claim. In response to this risk, as well as to consumer demand, there is an emerging trend known as "clean labelling" which provides clear, understandable labelling, favours natural ingredients and avoids the use of artificial colours and preservatives. This is a very new trend and there are no formal definitions or regulations, with only a few companies starting to trial this approach.

Figure 3: WhiteWave is the fastest growing US food and beverage company

AC Nielsen retail sales to 27 December 2014

	4 year
WhiteWave Foods	**9.6%**
The Hershey Co	5.4%
Danone Group	4.8%
Hormel Foods Corporation	4.2%
Private Label	3.8%
Post Holdings Inc.	3.5%
Tyson Foods Inc.	3.2%
J.M. Smucker Company, The	2.9%
Mondelez International Inc.	2.5%
Dole Food Company, Inc.	2.3%
Campbell Soup Co	1.5%
Krafts Food, Inc.	0.9%
Unilever Group	0.7%
Mars Incorporated	0.7%
Coca-Cola Company	0.5%
Pepsico Inc.	0.3%
Kellogg Company	-0.1%
Grupo Bimbo S.A. De C.V.	-0.2%
Dean Foods Inc.	-0.3%
General Mills	-0.5%
Nestlé Holdings Inc.	-0.5%
Dr Pepper Snapple Group Inc.	-0.8%
The Blackstone Group	-1.1%
Conagra Inc.	-1.3%
H.J. Heinz Company	-3.4%

Source: WhiteWave, AC Nielsen, Exane BNP Paribas estimates; Food: Not in Vogue: 3G or not 3G, Exane BNP Paribas, Jeff Stent and James Wyatt, September 2015. For illustrative purposes only and not to be considered a recommendation to buy or sell.

The reality now is that consumers are still faced with complex ingredient lists and labels. There are currently over 61 different names for sugar that appear on products labels, which can be confusing for consumers. In addition, sugar is often hidden in other foods, which may not be obvious to consumers. Examples include breakfast cereals marketed as “healthy”, pasta sauces, white bread and ready meals.

Investment relevance: The potential reputational risk and legal costs of settling out of court and legal fees: future litigation risk concerning product liability could be significant.

Investment opportunities

It’s not all downside risk though. Changing consumer trends also provide opportunities. Already, there is a polarisation of the industry, with emerging winners and losers. We believe certain firms (such as those who have already implemented nutritional profiling across their product portfolio, and those who have heavily invested in R&D), are better placed to increase market share and become market leaders. The opportunities are evident from the growth rates seen at “healthier” companies. For example, WhiteWave, the US-listed company producing healthier, plant-based food products is the fastest growing company in the US food and beverage sector over a four-year period.

Although Hershey, in second place, may not seem aligned with this healthier product trend, we believe its growth rate is a result of its strategic move to diversify its reliance on confectionery with its acquisition of Krave, the meat and high-protein snacks business. We think the Hershey example is relevant for the broader sector. As the food and beverage sector is characterised as being cash generative, there are opportunities to catch up on the innovation lag and create healthier product portfolios by acquiring smaller, private, health food companies.

Catalysts for Big Food becoming the next Big Tobacco

To date, it does not appear that litigation risk and lower sales are material to the investment case, but we believe there is a high probability that this may change with a medium-term investment horizon. In the context of sugar as the main cause of metabolic syndrome, our research has identified three catalysts that could transform Big Food into Big Tobacco:

Catalyst 1: Increased concern from medical and public health organisations, and awareness from consumers.

Catalyst 2: Demographics and rising healthcare costs.

Catalyst 3: New scientific evidence proving causation between sugar and metabolic syndrome.

We believe that two out of three catalysts are already starting to materialise.

Catalyst 1: Increased concern from medical and public health organisations, and awareness from consumers

In the past two years we have seen a shift in focus among medical and public health organisations from fat to sugar. In 2014, the World Health Organisation (WHO) halved its recommended proportion of daily calories via sugar intake to 5% of an individual's diet (approximately six teaspoons of sugar a day). This rising concern about excessive sugar consumption has also been echoed by the British Medical Association, who in 2015 published a report recommending that a sugar tax of 20% be applied to sugary soft drinks.

With regard to consumers, as the number of those suffering from metabolic syndrome continues to rise across countries globally, awareness is also increasing. There are several trends we have identified, including:

- Consumers are becoming better educated and starting to make more informed choices, which has been reflected in lower fast food and carbonated soft drink sales
- Research suggests that overweight consumers and those suffering from metabolic syndrome are seeking alternative solutions to a reliance on medication by actively choosing to change their diets and lifestyle
- Consumers are increasingly questioning ingredients and nutritional content, fuelling the clean label trend

Within the consumer sector, companies are also acknowledging the importance of the health and wellness of their own employees and the impact on productivity. The costs of implementing health and wellness programmes are offset through lower employee turnover, lower presenteeism (attending work while ill), and increased productivity. One leading fast food company has even encouraged its employees to eat healthier food (not its own menu options) and as a result has seen staff morale improve and productivity increase by nearly a third.

Catalyst 2: Demographics and rising healthcare costs

With a growing global population and increasing rates of metabolic syndrome, global healthcare costs are soaring. Global GDP growth is at risk of slowing as a result of these healthcare costs, but also from premature death and lower worker productivity. It is estimated that obesity alone accounts for 21% of US healthcare spending, and this only captures one aspect of metabolic syndrome.

British charity Diabetes UK reports that the number of people diagnosed with diabetes in the UK has soared by 60% in the past decade (90% of theses cases are type 2 diabetes[7] which is predominantly caused by excessive sugar consumption) and an increase to 135 amputations a week resulting from type 2 diabetes[8]. This is putting an increasing pressure on NHS resources, with diabetes now accounting for 10% of the NHS drugs bill, almost doubling from the amount spent a decade ago[9].

This trend is not limited to developed markets. Of the 24 countries categorised as "emerging" by index provider MSCI, 79% of them have seen an increase in healthcare spend as a percentage of GDP since 2000. The largest increases in healthcare spend were witnessed in Brazil, Poland, Korea, Philippines and Thailand[10]. Rising healthcare costs may be a catalyst for governments to sue food and beverage companies in an effort to recapture healthcare costs, as was the case with Big Tobacco.

Catalyst 3: New scientific evidence proving causation between sugar and metabolic syndrome

The final catalyst, which has not yet materialised, is the publication of independent scientific evidence that will move the litigation focus away from marketing and towards product liability, which is where the biggest settlements were made in the Big Tobacco cases. If this product liability is scientifically proven and can stand up in court, then the current false marketing claims will only be the tip of the iceberg. Not only are current product portfolios dominated by sugar, there is also significant legacy risk for Big Food. Sugar content dates back to the low-fat trends seen in the 1970s when a rise in calorie-counting prompted Big Food to develop "low fat" products in which sugar was added to maintain product taste.

We do not believe there is yet consensus among scientific communities but there are an increasing number of independent studies being conducted. These studies avoid any potential conflicts of interest as they are not funded by the food and beverage industry. The evidence proving sugar is the primary cause of metabolic syndrome is increasing, but has not yet reached the scale or magnitude to shift the balance against Big Food.

7 Diabetes cases soar by 60% in past decade, BBC, August 2015.
8 Record number of people undergoing amputations because of diabetes, The Guardian, July 2015.
9 Diabetes uses 10% of NHS Drugs Bill, BBC, 12th August 2015.
10 World Bank, http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS.

A review of the similarities between Big Food and Big Tobacco

We believe that should all three of the aforementioned catalysts be triggered, companies could face material litigation costs and reputational damage. These are trends that have been affecting Big Tobacco over the last 30 years. We have analysed the decline of the tobacco sector and the impact of litigation. A timeline summarising the litigation and health concerns that changed the sector is below:

Time	Litigation catalyst	Sector response	Financial impact
First wave litigation – 1950s	First link between cancer and smoking was established.	Industry response was that tobacco was not harmful. There was not enough scientific evidence proving that cancer was caused by smoking. Used personal responsibility as a defence.	Tobacco companies won most cases. Minor reputational risk.
Second wave litigation –1980s	In the landmark case Cipollone v. Liggett, the plaintiff and her family alleged that cigarette manufacturers knew, but did not warn consumers, that smoking caused lung cancer and that cigarettes were addictive.	Tobacco companies argued that smokers had knowingly assumed the risks of cancer and other health problems when they began smoking.	Most cases were not successful, and so the tobacco industry did not have to pay out large claims. The tobacco sector developed its own marketing guidelines in response to increasing public pressure and declining sales.
Third wave litigation – 1990s	Significant litigation was triggered by cigarette company documents being leaked which proved that companies were aware of the addictive nature of tobacco. The first big win for plaintiffs occurred in 2000, when a jury ordered Philip Morris to pay $51.5 million to a smoker with inoperable lung cancer.	The tobacco companies could no longer use the defence that the smoker was aware of the risks and decided to smoke anyway. Around this time, more than 40 states sued tobacco companies arguing that cigarettes contributed to health problems that triggered significant costs for public health systems.	In 1998, the attorneys general of 46 US states and four of the largest tobacco companies agreed to the Master Settlement Agreement. This resulted in a minimum payment of $206 billion over the next 25 years, banned certain advertising, and increased education around the risks of tobacco.

Source: adapted from NOLO, http://www.nolo.com/legal-encyclopedia/tobacco-litigation-history-and-development-32202.html.

The Master Settlement Agreement and the 2005 WHO Framework Convention on Tobacco Control have both had a significant impact on tobacco company costs, reputation and sales decline. However, strong pricing power and demand from emerging markets has offset the sales decline in developed markets and helped to stabilise valuation multiples.

Our research has highlighted clear similarities between Big Tobacco and Big Food. We will explore each of these points below:

Science and proof of causation: Big Tobacco in the 1950s argued that product consumption was down to personal, not corporate, responsibility and that there were multiple causes for illness. This is the same message that marketing campaigns of food and beverage companies are promoting today. The quote from a leading fast food chain below is a common response across the industry:

"We are really proud of all the food we offer. We believe that all of our food can be a part of a balanced lifestyle if eaten in moderation and balanced with exercise. We are also making great progress on our nutrition strategy focusing on three main pillars – offering more choice, more transparency and making more nutritional improvement to our ingredients" Chief Nutrition Officer, leading fast food chain.

However, we believe that this is not about a balanced lifestyle and calorie intake; it's about a misunderstanding of actual sugar content in products and misleading marketing.

Some may argue that it was easier to sue Big Tobacco because the consumption of a single product could be linked to certain types of cancer, whereas consumers suffering from metabolic syndrome consumed multiple products from a range of different food and beverages companies. As more scientific evidence emerges, it may be simpler to prove causation by ingredient type. For example, there are multiple studies linking High Fructose Corn Syrup (HFCS) with fatty liver disease. Products containing significant amounts of HFCS, such as carbonated soft drinks, may be more exposed to litigation.

Ability to self-regulate: additional characteristics that Big Food shares with Big Tobacco are the power of the industry lobby and the ability to self-regulate, which have already been discussed earlier in the report. The decision made by San Francisco City concerning health warnings on advertising for sugary drinks is the first tangible example of Big Food losing its power to self-regulate in a way that is comparable with Big Tobacco.

Incentive to re-coup soaring healthcare costs: governments are incentivised to recoup soaring healthcare costs resulting from the sale of harmful products. This was the case with Big Tobacco and may be the same with Big Food. Governments may action this through sugar tax or litigation.

Addictive ingredient: one area where the comparison between Big Food and Big Tobacco is less clear is the addictive nature of the product and deceptive practices. While the term “sugar craving” is often used within society, the addictive nature of sugar has not yet been tested within a courtroom. Again, this relates to catalyst three – the need for more robust science proving causation before litigation risk materialises.

In summary, we believe that Big Food is nearing the stage that Big Tobacco was in the early 1980s, just before the major litigation cases started and product liability was proven. We believe that two of the three catalysts highlighted above are already materialising. The third catalyst concerning scientific evidence is the only element protecting Big Food from being exposed to material litigation risk, similar to that experienced by the tobacco sector in the 1990s.

The Big Tobacco timeline overleaf shows that the process took several decades. However, we believe that the process for Big Food will be accelerated. There are three key reasons for this:

1) Globalisation means that similar products and brands are being widely sold across global markets.

2) Demographics and the scale of metabolic syndrome: while there are regional differences, the global trend shows rising health problems and healthcare spend.

3) Technology and the power of social media means awareness can spread quickly.

4) Whilst some may state that sugar is addictive, it is not as addictive as nicotine is so consumer tastes could change more rapidly.

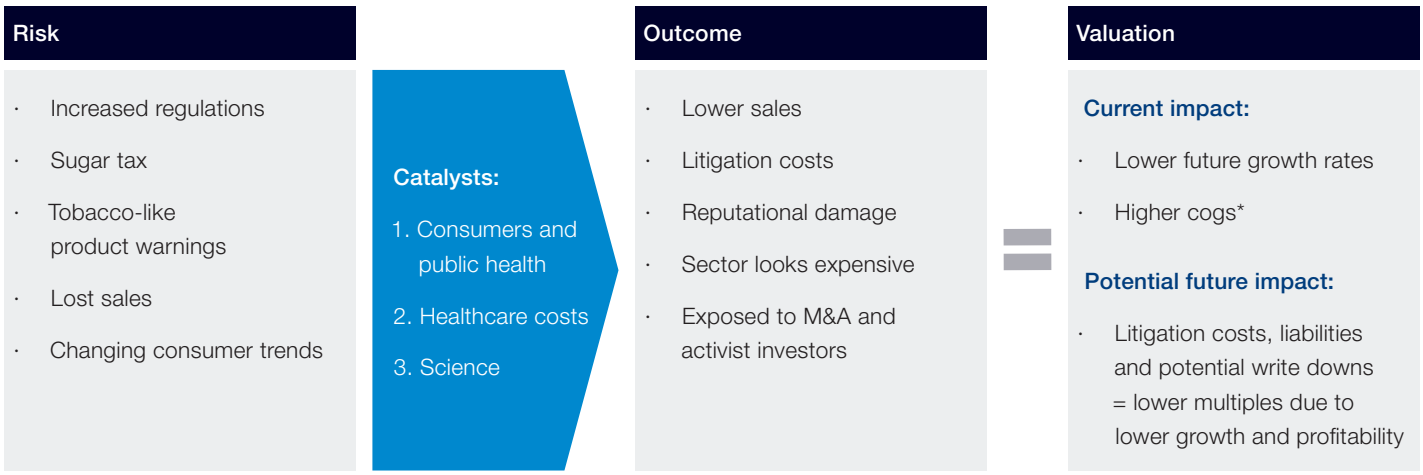
Company valuations: what are the potential outcomes if these risks materialise?

In the next few years we believe there are two scenarios that will impact Big Food's financials, and subsequently its share price:

1) Lower growth rates and pressure on profit margins through increased R&D spend across the sector. These effects have a high probability of occurring due to the two catalysts that we believe have already been triggered (consumer and public health awareness, and rising healthcare costs).

2) If the third catalyst materialises, there is an additional variable to factor in: the cost of litigation and further brand damage leading to possible write downs (or a reduction in the value of an asset).

The potential impact on share value, looking at downside risk for both scenarios is summarised by the diagram below:



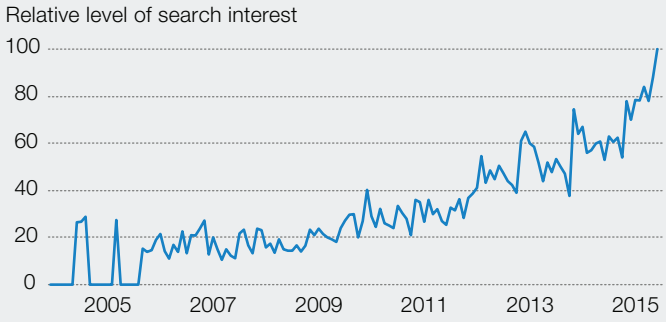
Source: Schroders.
*Cost of goods sold. M&A: mergers and acquisitions.

Case study: carbonated soft drinks: declining sales and increasing costs

We believe the soft drinks sector, when compared to the rest of the consumer staples sector, is at high risk. If we just take one example from the beverages sector, Coca Cola (NYSE KO), the increasing pressure from consumers and public health bodies, is already evident in the decline in sales rates.

The brand value and customer loyalty drives valuations but the graph below highlights that the consumer is starting to question the ingredients and sugar content, rather than taking marketing claims at face value.

Figure 4: Search term: 'sugar in Coke'



Source: Google Trends, July 2015.

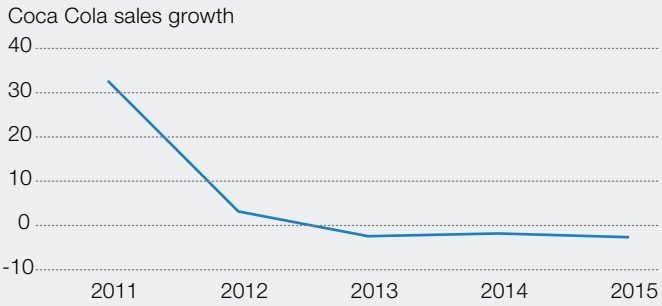
Non-governmental organisations (NGOs) and public health bodies are also raising concerns. As we have discussed above, in the UK, a call for sugar tax on soft drinks is being put forward from a range of interested parties from the British Medical Council to celebrity chef Jamie Oliver. In other markets, we have already seen governments responding to this pressure by introducing sugar taxes or restricting advertising to children. Although global soft drinks companies like Coca Cola have diverse geographical exposure and can diversify away some of the country-level risk, this is an additional headwind for the sector.

There is also potential reputational risk that may damage brand value. The brand is viewed differently by different demographics, with fewer millennials drinking Coca Cola. This is despite targeted marketing campaigns such as Coke bottles personalised with individual customer names.

Valuation impact

These changing consumer trends are reflected in declining company sales. This trend has been witnessed across the broader soft drinks sector, showing a more challenging trading environment, with averages growth rates across the global sector at 0.2% in 2015 (see figure 5).

Figure 5: Coca Cola sales growth

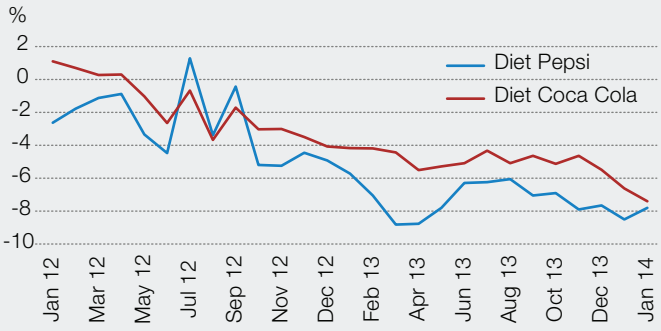


Source: Quest

Given these trends, we question whether analysts are right to assume positive year-on-year growth rates for such firms. We fail to see any evidence of a catalyst that may reverse this trend of declining sales. This note suggests that Big Food can adapt to consumer trends by investing in R&D but there has been little product innovation in the soft drinks sector. On average, the soft drinks sector only spends 0.4% of sales on R&D. We believe that R&D spend will need to increase if companies in the sector are to be able to respond to changing consumer tastes.

The cost of product reformulation is also a potential headwind with changing consumer demands. For example, there is no scientific consensus on the carcinogenic risk of artificial sweeteners such as aspartame, but if consumers believe it is dangerous, then they will adapt their buying habits accordingly. PepsiCo removing aspartame from its Diet Pepsi products is a clear example of this. Across the soft drinks sector we have seen a rapid decline in the sale of diet drinks, triggering product reformulation.

Figure 6: Diet 12-week sales growth



Source: Diet CSDs remain negative, CLSA, Caroline Levy, June 2015.

To conclude, we do not believe there is sufficient evidence to suggest that declining sales rates are due to begin reversing. Analysts should therefore adjust their future expected growth rates accordingly to account for lower sales and higher costs through R&D and product reformulation.

1. Valuation impact under current trends, with no litigation

From our research we conclude that there may be several financial impacts including lower growth rates, higher R&D spend and increased costs due to product reformulation. The resulting decline in profitability and growth rates should be factored into valuation multiples and discounted cashflows.

Growth rates: As demonstrated in the Coca Cola case study, increased consumer awareness of sugar and its associated health risks pose a threat to current sales and future growth rates, which drive current share prices. While some analysts acknowledge this headwind, share prices in the food and beverage space remain high and analysts consistently assume that the market will continue to grow at a positive rate.

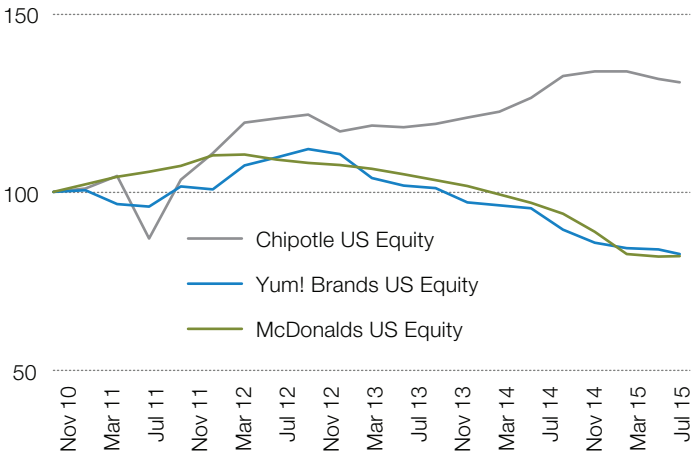
Concerning current growth rate assumptions, investors should consider what will happen to earnings if companies fail to respond to changing consumer trends. How sustainable are earnings? With increasing pressure from consumers, public health bodies and governments, will fast food still be served in schools and hospitals? Will super-size portions still be in demand when the consumer realises that they significantly exceed the WHO's daily recommended sugar allowance? When labelling requirements change, how quickly will consumer tastes change? We believe that lower-than-consensus forecast sales and slower growth rates are required to account for lower demand for high-sugar food and drinks.

Lower margins through higher R&D spend and investment in product reformulation: we are concerned about a lack of innovation and the increased R&D spend that would be required to reverse this. While there is evidence of efforts to re-brand products and company mission statements supporting health and wellness trends, new product innovations are overly focused on cost and convenience rather than improving nutritional content and sugar reduction. Big Food is losing market share to newer companies offering healthier products such as Sprouts Farmers Market, WholeFoods and WhiteWave or local, independent companies.

Regional exposure is relevant to both growth rates and required R&D spend. As a global investor we have seen regional differences. While metabolic syndrome is global, the severity and prevalence does vary by market. And consumer trends are even more divergent.

We believe that consumer trends towards healthier, unprocessed foods are most significant in developed markets such as North America, Australia and Europe. This trend is demonstrated by the sales figures in the restaurant and fast food sector, with declining sales at established brands such as McDonalds and Yum! Brands, and increasing demand at healthier competitors such as Chipotle.

Figure 7: Quarterly sales for McDonalds, Yum! Brands and Chipotle[11]



Source: Bloomberg.

In summary, under current market conditions where two of the three catalysts have been activated, the valuation impact is:

- Lower long-term growth rates for food producers, soft drinks manufacturers, fast food outlets and restaurants.
- Lower food sales for leisure companies.

However, there is potential opportunity for forward-thinking companies to gain in the current environment. Retailers in particular have scope to improve margins by increasing the proportion of own brand goods offered as it is easier to adapt these to this trend.

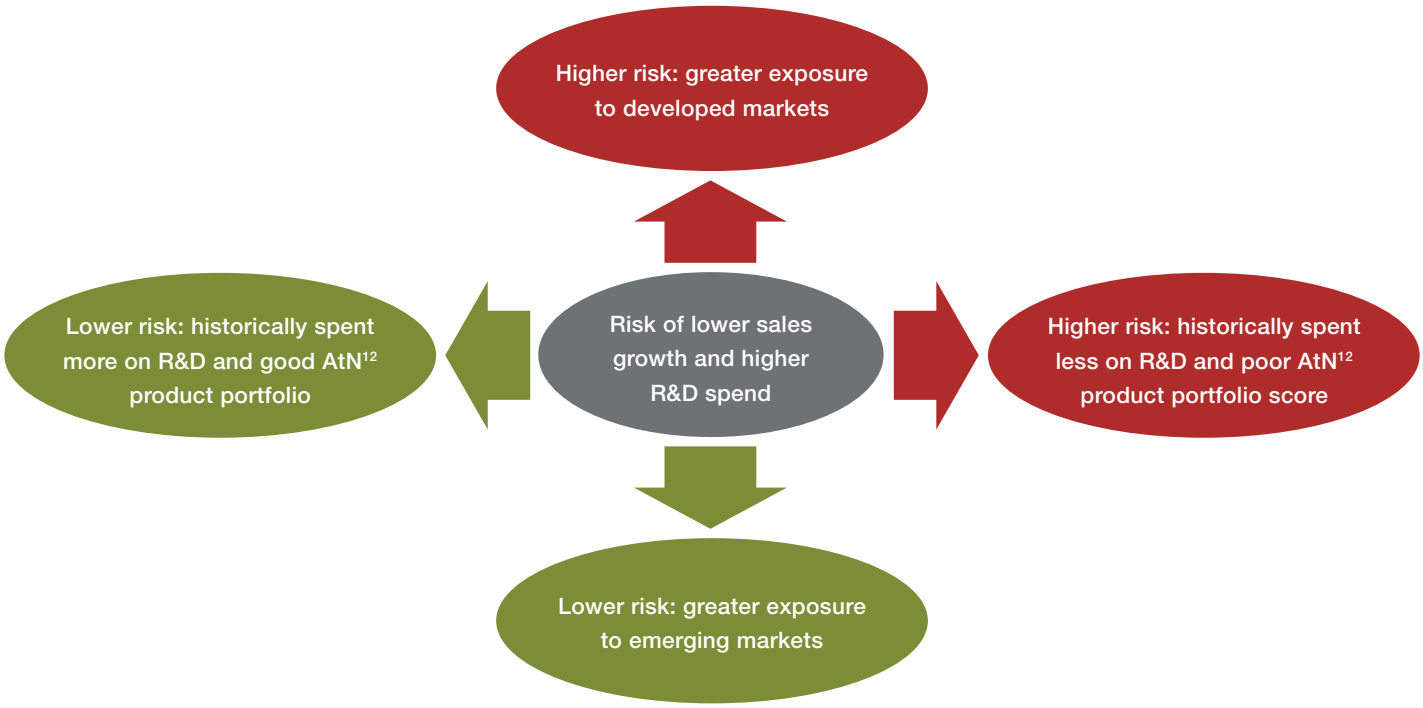
2. Valuation impact if all three catalysts have been triggered leading to large scale litigation

So far we have explored the financial implications of the first two catalysts materialising but what will the consequence of material litigation risk be on current valuations? We have less visibility on the size of compensation claims or the probability of a Master Settlement-like agreement for Big Food. There is yet to be a court case that has found a Big Food or beverage company guilty of product liability in relation to metabolic syndrome. However, we think this risk is material to the medium-term investment case for the sector. Even taking into account those companies that are already adapting product portfolios and investing more in innovation and product reformulation, all companies in the sector are exposed to legacy risk from decades of selling sugary processed food and beverages. Therefore, we conclude, that to account for this potential risk, analysts should apply a discount to the value of the company's shares. We propose increasing the cost of equity (i.e. the return shareholders demand from a company to compensate them for the risk of holding this equity) for companies that are exposed to potential litigation.

11 Data from Bloomberg as at 10th August 2015.

Guidelines for investors: how to assess the valuation impact

Investors will need to consider both regional exposure and the product portfolio when assessing the potential financial impacts within valuation models. Our research has highlighted that companies with significant exposure to developed markets and a weak nutritional product profile face the greatest risk in terms of lower growth rates and higher R&D requirements. The following diagram provides a framework for investors to assess this risk. Companies that fall into the red circles face a greater probability of sales decline, and will see increased pressure on margins through higher R&D as product portfolios require a greater rate of reformulation and/or new innovation.

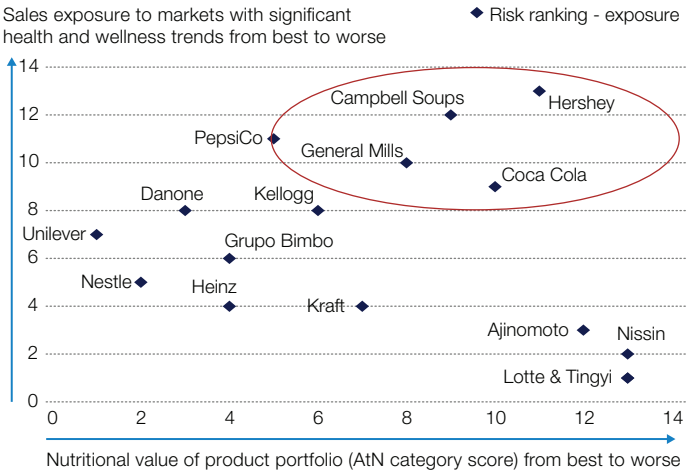


Source: Schroders. For illustrative purposes only.

Assessing the nutritional profile of product portfolios is challenging, with weak transparency around labelling and poor disclosure at product portfolio level across Big Food. The Access to Nutrition Index (AtN)[12] does provide some insight into product portfolios. The index provides an independent review of a company's product portfolio, nutrition strategy and access to nutritious and affordable products, globally.

We applied the framework above to select consumer companies, which have also been included in the Access to Nutrition Index so that we could use the product portfolio score. The results show the companies highlighted are exposed to the greatest risk through their combined exposure to developed markets (where changing consumer trends are affecting sales) and low product portfolio score in terms of nutrition.

Figure 8: Risk ranking – exposure



For illustrative purposes only and not to be considered a recommendation to buy or sell.

[12] www.accesstonutrition.org/global-index-2013.

Conclusion: valuations should reflect rising risks

The demand for processed food and fizzy drinks is not going to disappear overnight. However, we do believe that consumer behaviour is changing and that tastes are evolving, with a better understanding of the health implications of high sugar, carbohydrate-heavy diets backed by poor labelling. Big Food has been slow to adapt, focusing more on cost than innovation. It has been reliant on strong lobbying efforts meaning that the sector has been self-regulated for a long time. The similarities with Big Tobacco are now becoming clearer and the increasing pressure from consumers, public health bodies and governments are changing the way investors need to think about the sector. We believe that future growth rates for the sector should reflect these headwinds.

In addition, there is the risk of potential litigation, which is reliant on three catalysts. These are: increased awareness of the health implications of sugar for consumers and public health bodies, the rapidly increasing rates of people suffering from metabolic syndrome and subsequent rise in healthcare costs and, finally, the publication of independent scientific research that can provide evidence that excessive sugar is the primary cause of metabolic syndrome. Our research suggests that the first two catalysts have already been triggered. We believe that investors need to better understand this headwind for Big Food. Investors need to address these risks, which affect financial forecasts reflected within company valuations and protect shareholder value by identifying sector winners and losers in the response to metabolic syndrome.

Investor toolkit

Questions that investors may want to ask companies:

What is your policy on nutrition?

What role can the sector play in response to the increasing metabolic syndrome challenge?

How do you assess the nutritional profile of your product portfolio and how is this evolving over time?

How are you monitoring emerging scientific trends? Are you familiar with the concept of metabolic syndrome?

What are your marketing policies with regard to advertising to children?

How are you responding to increasing regulation around labelling and the trend of clean labelling?

How do you engage with public health bodies?

How do you factor in changing consumer trends and expectations around nutrition into your M&A strategy?

Identify lobbying groups and which groups individual companies support.