



Dear Ruud,

The company Beyond Meat has featured in the news quite often recently because of its very successful initial public offering (IPO). At its peak, since the IPO last May, your potential profit was over 800%, although you'll certainly have forfeited a reasonable proportion of that by now. Quite exceptional, certainly given that the company hasn't yet

recorded a profit. Beyond Meat is known for its Beyond Burger, a meat alternative that apparently tastes just as good as real meat; reason enough to delve a bit further into this new sector.

The market for meat alternatives is expanding. In a recent report, Kepler Chevreux (Meat your maker, 2019)

indicates that sales doubled in the period 2009-2015 and that the market is growing by an average of 8% a year (2 to 3 times faster than the market for 'real' meat products).

But should we all be investing in the "Beyond Meats" of this world? They're start-ups with one or two good products, but they've never proved they can make profits or that they can battle toe-to-toe with the industry's big boys. Of course, it's always a balancing act between these two propositions. Beyond Burgers' proposition, of course, is that they have a unique product with its own sales market and that scale will come in due course, so that profits will also start climbing gradually. On the other side of the scales, we have the big companies with their established propositions. As an example, Unilever or Danone have the (financial) clout, the benefits of scale, production facilities and distribution network to start marketing a product that could compete with the Beyond Burger. But they could roll this out faster, on a bigger scale, and glean profits earlier from the alternative meat trend. The question is whether they could then catch up on Beyond Meat's "first mover advantage" and marketing? Wouldn't it be too costly for the established order to start singing the praises of meat substitutes, thereby reducing their margins?

The game hasn't really kicked off yet between these food companies. But what is clear is that investors are placing a great deal of faith in meat substitutes, and we can anticipate a lot more innovation in the area of meat alternatives over the next few years.

Ruud, what I'm wondering just now is this: is this alternative meat actually as healthy for people and the environment as they say? Or are we suffering from collective tunnel vision?

Best regards,

Caspar Snijders

Portfolio Manager Equities - ACTIAM

"Should we all be investing in start-ups that have one or two good products, but haven't yet proved they can turn a profit?"

Dear Caspar,

The general consensus is that eating less meat is good for your health and the environment. That doesn't mean that meat substitutes are automatically healthier and better for the environment than meat.

The expression 'meat substitutes' causes some confusion. The Dutch Consumers' Association (Consumentenbond) actually called it misleading. Nutritional elements that are abundant in meat, like iron and vitamin D, just aren't as easily absorbed by the human body in vegetable form. Also, a lot of meat substitutes don't contain enough of these healthy substances and do have too much salt. If you eat a vegetarian burger, you'll be taking in a third of the maximum recommended daily amount of salt. So these meat replacements aren't by definition healthier than meat.

Another reason for leaving meat out of your diet is the environmental impact. The United Nations says that consumers of animal products like meat and milk are responsible for 15%

"Traditional livestock farmers and makers of meat alternatives are in hot competition for seaweed"

of all greenhouse gas emissions. But the positive impact of not consuming animal products depends a lot on the vegetable variants used as substitutes. Almond milk (an alternative to dairy milk), for instance, has just a tenth of the CO<sub>2</sub> emissions but its water

footprint is seventeen times that of dairy milk. American researchers from the University of Virginia Tech have worked out the effect on health and climate if there were no more livestock farming in the USA. According to the researchers, production entirely based on vegetable sources would only reduce total greenhouse gas emissions by 2.6 percentage points. The research also confirms that a person would actually have to consume more food to get his or her minimum nutritional requirements. Without livestock farming, more artificial fertiliser would have to be produced, which in turn depends on fossil fuels.

That said, I'm not arguing for a continuation of the current global levels of meat consumption. Instead, we need to keep on developing more sustainable forms of livestock farming and agriculture. As an example, some Australian laboratory research shows that if you add 2% of dried seaweed to cattle fodder, you can reduce the methane emission of ruminants by 99%! At the moment, harvesting seaweed is still small-scale and relatively expensive. The funny thing is that the demand for seaweed is on the rise, because we're eating more and more seaweed burgers. This means that traditional livestock farms are competing with the makers of meat alternatives for the same product. It's an excellent trend, provided of course that we can cultivate seaweed sustainably!

Best regards,

Ruud Hadders

Responsible Investment Officer - ACTIAM

