INTEROFFICE MEMORANDUM

TO: ERIC LARSON, TILIA HOLDINGS
FROM: JOHN MCCARTHY
SUBJECT: TWENTY GOOD QUESTIONS
DATE: JUNE 30, 2025

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1. You have founded two firms in Chicago. Linden in 2000 and Tilia in 2017. What inspired you to leave a growing enterprise to "start over"?

During my business career, I have benefited from the support (and prodding) of several mentors. Centaur's own John Schreiber, who I met in 1991, is one of them. John, along with others, has encouraged my entrepreneurial instincts.

For about 15 years beginning in the 1990s, I also had the good fortune to meet a few times each year with Robert Galvin. Bob was, by then, Chairman and past CEO of Motorola Corporation, which his father and uncle started in the 1920s. He joined Motorola in 1944 and took over daily operations in 1956, growing the company over 30x by 1986, when he turned over the role of CEO. The Motorola culture combined, among other traits, creativity, risk-taking and learning from failures ("bounce, don't break"). Bob compiled his writings and speeches in a book called The Idea of Ideas, published in-house by Motorola University Press. One of the entries is a speech entitled "The Renewal of Leadership", which Bob gave at the dedication of Motorola's new training facility in Oracle, AZ in 1986. In it, he described the creative process of "Renewal" as "the blood brother of change." This speech still inspires me.

Bob envisioned Renewal as four sides of a square:

1. *"At the base: Keep the right things the same. Renewal means reconfirming our dedication to proven values and roots; returning to the original state when change is second best…*
2. *One one side: Do differently, of course, frequently, timely. Train, change for the better…*
3. *On the other side: Be willing and able to begin again. Be capable of being replaced…*
4. *At the top – the toughest of all renewals. Begin an original. Refound. Start up."*

For 35 years, I have been the founder/senior investment professional for three (not two) start-up investment firms, Tilia Holdings (founded in 2017), Linden Capital

Partners (2000), and First Chicago Equity Capital, aka FCEC (1991)[1]. Tilia's strategy is an outgrowth of my original strategy for Linden, as Linden's was a strategic derivative of FCEC's. Each addressed what I perceived at the time to be an unserved need in the market, the opportunity to "*do differently*". And each subsequent strategy built upon, as Bob Galvin advised, the "*proven values and roots*" of the predecessor(s).

Starting from the oldest:

- At **FCEC**, we benefitted from the relationships of our parent bank. Our strategy focused on acquiring divested units from large corporations, many of whom were customers of our parent company. In the 1990s, corporations were shedding their non-core assets. Our strategy to combine industry specialization + a network of operating partners + focus on corporate divestitures was relatively unique (or at least early) for that era. My largest investment success at FCEC was the life science tools company, Sorvall, a non-core unit of DuPont. The company made sample preparation equipment for research and was ideally suited for the mammoth life science research program – the Human Genome Project – underway in the 1990s[2]. Sorvall was a technically sophisticated equipment business with a strong brand in its market but struggling for attention and resources inside of the big chemical company, DuPont. We understood the company's potential at the leading edge of a huge scientific wave and believed it – like most divested units – would prosper outside of its parent. With a few add-on acquisitions, the holding company (Kendro) became a global leader in the so-called 'picks and shovels for the gold rush' in life science research.

- **Linden** grew out of the innovative healthcare/life science strategy I developed and led at FCEC. When my wife, who is a scientist, and I formed Linden (in our Linden Avenue living room), healthcare was already the largest sector of the U.S. economy, representing nearly 20% of annual GDP. But surprisingly, at that time there were almost no private equity firms specializing in this large and rapidly growing industry. And it does require specialization! Mergers in the healthcare industry (especially involving pharmaceutical companies) created a wave of outsourced business-to-business (B2B) services that provided extensive opportunities for private capital investment. Private equity healthcare specialization took off with Linden leading the pack. Twenty-five years later, healthcare remains one of the largest sectors for private equity investment and has attracted dozens of new specialists. In our original strategy for Linden, food safety and nutrition were two of the eight or so target sub-sectors. And indeed, the first Linden fund invested in two companies that operated at the

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[1] FCEC was a unit of the former Chicago based financial institution First Chicago Corporation. Through a series of mergers and relocations, FCEC became the large New York-based firm, One Equity Partners.

[2] On one of his visits to his home district, I had a long-ish meeting with Illinois Representative John Porter in his suburban office. At the time, Porter oversaw appropriations for the National Institutes of Health for the House of Representatives. He was interested that I was interested in the NIH and shared with me that the House had approved a doubling of the NIH budget over the next five years largely to support the Human Genome Project. That piece of due diligence – together with Sorvall's strong market position - solidified our confidence in the company's growth prospects.

intersection of Food + Health: Barrier Safe Solutions International, a personal protective equipment (PPE) company, with 50% of its revenues coming from the food industry, and Corpak/Medsystems, an enteral nutrition device company providing nutrition for patients after surgery.

Tilia began as a pilot project. Despite the success of both Barrier Safe and Corpak, Linden's strategy migrated toward traditional healthcare services. But the Food + Health strategy was still viable...and underserved. In November 2007, the Food and Drug Administration released an external review of its science and mission[3]. The independent subcommittee reviewed all aspects of the FDA's mission, which, in addition to our nation's food supply, includes human and veterinary drugs, biological products, medical devices, cosmetics, tobacco, and others. The top finding of the report was:

3.1.1. **Finding: FDA does not have the capacity to ensure the safety of food for the nation.[4]**

In other words, of all the aspects of the FDA's mission, the safety of the food supply was its biggest concern. Dr. Stephen Sundlof, then the Director of the FDA's Center for Food Safety and Applied Nutrition (CFSAN), told me in a private conversation that the government needed the help of the private sector.

To do my part, I formed a holding company - Safe Foods International Holdings (SFIH) - and in 2010, acquired a food safety/product innovation company - The National Food Laboratory. 'The NFL', as it was known throughout the food industry, provided outsourced, mission-critical services to the large Consumer Packaged Goods (CPG) companies. We added a couple acquisitions and sold the company in 2015 - coincidentally, to a healthcare company.

The success of SFIH created the foundation for Tilia. The merger-driven outsourcing trend that drove private investment growth in the healthcare industry 15 years earlier was also underway in the food industry. There was – and continues to be - a growing interest among both food companies and certain healthcare companies in innovation/development at the intersection of Food + Health.

Re: "*starting over*" (the top of Bob Galvin's square of renewal and creativity): I embrace the role of identifying emerging, unserved investment opportunities. This is important aspect of my career: for me, there is a through-line between the firms I have started: I have applied the fundamental investment principles I learned early in my career to each start-up. These are the *proven values and roots* at the foundation of each firm. In many respects, I view Tilia as an extension of the successful strategy and approach at both FCEC and Linden. I focused on the overlap of two large sectors – the strategist Roger Martin calls it "Where to Play"[5] – as Tilia discovered new, underserved market opportunities at the intersection of Food + Health. In addition to identifying new

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[3] FDA Science and Mission at Risk: Report of the Subcommittee on Science and Technology November 2007

[4] Ibid p. 21

[5] Play to Win, by Roger Martin. See Question #20.

markets to pursue, I enjoy the creative process of building the organization to go after each new opportunity. I also revel in the risks and uncertainty of "starting over." A couple of times in my career, I have left a successful, growing firm – one that I helped establish - to launch another one with a new, but similar, strategy. I liken myself to Tarzan, swinging through the jungle: to grab the next vine, I must let go of the one I am currently hanging onto…and believe that new vine will carry me forward. I also consider it part of my legacy that the firms I have left have continued to thrive and grow after I departed. Per Bob Galvin, *"be capable of being replaced."* This is a testament to the people who have joined to build upon the original purpose and strategy.

This has already gotten to be a long explanation, but I will add two other factors:

- I grew up on a farm in southern Minnesota, where generations of my family grew traditional row crops (an annual rotation of corn, soybeans, wheat + alfalfa for the animals, and occasional plantings of oats and flax) and raised livestock (cattle, hogs, and chickens). I have always been aware of how the food supply chain starts. Even before majoring in science in college, I was interested in how the biochemical influence of what we eat affects our health. To me, food has always been part of healthcare.

- Tilia's co-founder, Johannes Burlin, and I met in 2008, when he moved to Chicago to run the largest food safety testing business in the country (owned by one of the largest food safety testing companies in the world). Like me, Johannes had a background in healthcare; he had been an executive for three units of a large, global, privately owned parent company. We both believed that the food industry was poised to repeat the outsourcing trend that healthcare had experienced previously. We created Tilia based on the parity of operating expertise (Johannes) + financial expertise (Eric). That remains a core operating principle for our firm.

2. You have broad investing experience in healthcare services, such as dental practices, or surgical glove manufacturing as examples. You now invest in the "to" in Farm - to -Table. Why did you choose to focus here and what do you mean by MIDs?

Two reasons come to mind:

First, when we looked at the competitive landscape for lower middle market companies in the food industry, it was shaped like a barbell. There were existing, successful investors at the agriculture and processing (Farm) end of the barbell and even more investors on the consumer facing (Table) end of the barbell. But there were no firms focused on the large and fragmented middle of the supply chain (the "bar" of the barbell). We characterized this section as the "TO" in "Farm TO Table".[6] COVID raised the profile of the supply chain in every industry, and especially in the global food industry. "MIDS" riffs on the idea of the middle of the supply chain; we use it as an

[6] See the reference to Nicole Twilley's book Frostbite in Question #20.

acronym for our target sub-sectors within the supply chain: **M**anufacturing; **I**ngredients; **D**istribution; and **S**upplies/**S**ervices

Second, as noted above, in the early 2000s there were essentially no private equity firms focused exclusively on healthcare, the largest sector in the U.S. economy. Generalist firms invested in healthcare, but there were few (I would argue, no) firms focused exclusively on it. The outsourcing trend in corporate healthcare – and especially in the pharmaceutical sector – was gaining momentum, which enabled Linden and other new healthcare private equity specialists to prosper. During our ownership of SFIH and from our earlier experience in the healthcare industry, Johannes and I recognized a similar trend developing in the global food industry: consolidation of large food companies leading to technical, mission critical services that could be outsourced to reduce costs in post-merger income statements. As Mark Twain said, "History doesn't repeat itself, but it often rhymes." We are pursuing that rhyme.

3. What do you mean when you say, "the food industry is upstream from healthcare" and tell us something about your "Three Ps"?

"Upstream" is **the** key positioning in Tilia's Food + Health strategy. According to the Centers for Disease Control (CDC), approximately 90% of annual healthcare dollars in the U.S. are spent on chronic physical and mental health conditions. In other words, after patients are already sick. Our 'healthcare' system could more properly be called a 'sick care' system. The same report indicates that less than 3% of healthcare spending is focused on prevention.

Tilia believes several factors related to the food industry position it *upstream* from traditional healthcare and that health – personal, public and planetary – is influenced by food. We describe it as 3Ps of preventative health:

- **P**ersonal Health – Nutrition/Wellbeing
- **P**ublic Health – Food Safety
- **P**lanetary Health - Sustainability

A few statistics underscore the need for more attention to upstream prevention:

- *Personal Health* - poor diet/poor nutrition is a contributing lifestyle factor to the 60% of U.S adults who suffer from at least one chronic condition.
- *Public Health* – foodborne illness is a significant public health issue. The CDC estimates that approximately 48 million people get sick from a foodborne illness each year (and maybe many more; this figure is likely underreported). By comparison, the mean number of influenza cases for the decade starting in 2010 was 28 million cases.
- *Planetary Health* - the global food and agriculture industry accounts for slightly more than one-third of greenhouse gas emissions.

4. You seek to "invest to make the food supply chain safer, more nutritious, and more sustainable". What are some of the most effective ways to do these things?

Tilia's portfolio companies provide technical, outsourced, mission critical services to Consumer Packaged Goods customers.

Safer: The most basic requirement for a company providing products or services to CPGs is to assure the food safety of their offerings. CPGs build their brand reputations with their consumers. A consumer food brand connotes, among other things, a safe food product, at least one that is free of microbial contamination that would make consumers sick. Good food safety practices are essential to long-term supply relationships with CPGs. Most CPGs require that their supply chain partners have food safety certifications – SQF (Safe Quality Foods), BRC (British Retail Consortium Global Standard for Food Safety), HACCP (Hazard Analysis Critical Control Points) to name a few. In reviewing a prospective investment, a target's food safety compliance is a key due diligence factor for Tilia. The companies we invest in usually have food safety certifications prior to our investment. Our governance program assures that this risk factor is addressed and kept current throughout our ownership. If a prospective investment does not already have food safety certification, we help them through a food safety compliance certification process…or we decline to invest.

More nutritious: Opportunities for Tilia companies to work effectively with their customers go beyond efficient procurement. Many CPGs seek help from their suppliers to achieve what the industry calls a 'clean label' – for instance, the removal/reduction of artificial ingredients, preservatives, and dyes and formulations that reduce sugar, salt, and other ingredients deemed harmful to personal health. Several Tilia companies – especially those that make ingredients that go into another company's finished products - have formulation and research/development professionals who work in partnership with their CPG customers to make their ingredients more nutritious. It offers an opportunity to work collaboratively on both process *and* product innovations. Examples of Tilia portfolio companies that do this with their customers include *Ellison* – specialty baked inclusions; *Wheat Holdings* – artisanal bakery products; *Ever Fresh Fruit Co.* - fresh fruit formulations; and *Caputo* – high quality cheese ingredients.

More sustainable: CPGs have established ambitious targets to reduce their greenhouse gas (GHG) emissions and are working with their supply chain partners to help them achieve their goals. In addition to environmental sustainability factors like reducing GHG emissions, water usage, and food waste, Tilia tracks a set of organizational sustainability factors at its portfolio companies, including internal promotion and employee turnover.

To discover additional ways to improve the safety, nutrition and sustainability of the global food system, Tilia created the Tilia Innovation Collaboratory (TIC) in 2023. TIC is a member-based organization comprised of senior CPG executives who address industry-wide issues that no individual company can solve on its own. Over the past two years, TIC has built a network that has focused on the issue of building trust as an industry-wide objective, which aligns with Tilia's 3 P's. The Collaborative is moving into a phase of action and impact for the industry.

5. Is the demand for food testing, inspection, compliance increasing?

Of the ten platform companies we have acquired at Tilia, three of them are in the food safety testing and inspection businesses – Certified Laboratories, Universal Pure, and FlexXray. The other seven are all compliance focused in service to their CPG customers. The revenue growth of the testing & inspection businesses has been strong, which is an indication that demand for these services is increasing. The companies we own that provide ingredients, contract packaging and manufacturing and other outsourced services to the Consumer-Packaged Goods companies must have safety certifications (see #4 above). That is a proxy for the strength of the demand for food testing, inspection and compliance.

Despite the somewhat unsettling statistics about the annual cases of foodborne illness, the U.S. industrial food supply is relatively safe. (There's a higher risk of cross-contamination at home, at restaurants and supermarket deli counters, at summer picnics, etc.) Thus, the demand for these services may not be growing rapidly, but the required vigilance is constant...and then it escalates suddenly when a foodborne pathogen outbreak occurs.

6. Consumer Packaged Goods companies can be very large, global businesses with deep resources. Why do they seek technical help, or outsourced help, or mission-critical help?

This seems puzzling. The CPGs have significant resources to devote to product development and ascertaining consumer tastes, yet they still seek the input from the outside, including from much smaller companies. They are looking for new ideas and problem-solving creativity and often find it in small, nimble companies. Emerging consumer brands are attractive acquisition targets for the bigger CPGs, who can use their extensive marketing resources to support growth.

These emerging consumer brands are *not*, however, where Tilia invests. The CPGs also seek technical help from their supply chain. The small, focused R&D teams at our portfolio companies can help the CPGs with product reformulation to reduce sugar and salt and to remove dyes and other additives, thereby helping products achieve what the industry calls a "clean label": free of processed ingredients that are deemed to be unhealthy.

CPGs also rely on outsourcing manufacturing of shorter production runs, specialty packaging, transportation, storage and other logistical support.

At Tilia, we think of the entire food system as "naturally collaborative". Moving food along the supply chain *from* where it is grown and processed *to* where it is consumed requires the input of many companies working in collaboration. While the *farm* and *table* ends of the supply chain have large, global competitors, the middle – or *"TO",* where Tilia invests – is comprised of many smaller companies providing ingredients, products and service to downstream customers. Some of the biggest CPGs have significant vertical integration, but almost all rely on some outsourced services. For CPGs, it can be cost effective to treat some services as variable costs – available on an outsourced basis when needed – rather than an internal fixed cost. As mentioned above, this is consistent with the outsourcing trend that has driven healthcare private equity for the past 25 years.

7. What is an area of food/nutrition /health care public policy that is going in the right direction?

The Food Safety Modernization Act of 2010 was the first major piece of food safety legislation since the late 1930s(!!). This long overdue legislation had bi-partisan support in both houses of Congress. It was launched during the George W. Bush Administration (in response to the FDA Science and Mission at Risk Report described above) and completed during the Obama Administration.

Some of the aspects of the current administration's Make America Healthy Again (MAHA) program are policies "in the right direction." Notably, the emphasis for removing harmful additives from processed foods. Increasingly, consumers want healthier, "clean label" foods; policies that regulate these requirements will require the CPGs to make changes to produce healthier foods. In addition, per Health and Human Services Secretary Robert F. Kennedy, Jr., attacking America's "chronic disease epidemic" aligns with Tilia's mission that poor nutrition/diet is an upstream contributor to poor health. Conversely, the reduction in FDA administrative and field staff as well as reductions in staff and budget for the Centers for Disease Control reduces the response preparedness for foodborne illness outbreaks. It pushes more of the burden to the private sector.

8. What is an area of food industry innovation that is going in the right direction?

Innovation in the food industry is often thought of as new product development or improvements to existing products. There are, however, many other dimensions of innovation underway throughout the food industry. To name a few:

- Automation to reduce labor costs and improve workplace safety
- The use of natural ingredients to replace artificial ingredients
- Improvements in the "cold chain" to support growing use/demand for fresh products and ingredients.
- Increased focus on reducing greenhouse gas emissions, water usage, reducing waste and recycling waste that would otherwise go to a landfill.
- Improved seed varieties for changing climate conditions.

There is A LOT going on at every stage of the industry, from Farm TO Table. I would add that a great deal of this research starts in university laboratories and private agriculture, plant, and food laboratories. A special call out to America's amazing network of Land Grant Colleges, created by the passage of the Morrill Act in 1862, providing at least one grant per state.

9. What is the link between food production and the environment?

As noted above, the global food system accounts more than one-third of the global greenhouse gas emissions. There are opportunities throughout the food system to reduce these emissions. The global food system also is a major consumer of natural resources, including water (60-70% of the freshwater supply) and land (30% of the inhabitable land).

The U.S. Department of Agriculture estimates that approximately 30 – 40% of our food supply is wasted, with food waste being the largest component of municipal solid waste in landfills.

In an ongoing effort to bolster their brand reputations, the CPGs have made bold sustainability claims, especially about reducing their GHG emissions, improving the efficiency of their energy and water usage, reducing food waste and other factors that affect the environment. From our experience, the CPGs are coming to their suppliers for help with achieving these sustainability goals.

10. There is a popular narrative that if food is fresher, in commercial settings, Chipotle for example, it can be more dangerous due to potential pathogens. Is this a false narrative or false choice?

I would say **false narrative**. What follows may be a longer answer than you expected, but this is an important public health concern for all consumers. *It is also the foundation of Tilia's mission.*

Foodborne illnesses – especially those that are associated with fresh food - are almost always the result of poor food safety practices. According to the USDA, there are four guidelines to keep food safe:

- **Clean** – wash hands and surfaces often
- **Separate** – separate raw meat from other foods
- **Cook** – cook to the right temperature[7]
- **Chill** – Refrigerate food promptly

These guidelines apply to both commercial settings and in home kitchens.

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[7] USDA recommended Safe Internal Temperatures for various types of meat: steaks/chops/roasts + fish: 145°; ground meats: 160°; poultry: 165°; leftovers: 165°

Food is a natural host for microbes, some of which – like strains of *E. coli, Hepatitis A, Listeria, Salmonella, Norovirus, Clostridium pertiringens* and others – can be harmful or deadly pathogens. One of the advantages of industrially processed food is that it generally entails a 'kill step' which, through heat or pressure, destroys the pathogens.[8]

Fresh foods like raw produce and salads are not processed and therefore have a higher risk of retaining natural pathogens than processed foods. This is also true for meats, though most are not consumed raw (see Footnote #4). In a commercial setting like a restaurant, poor food safety/food handling/cooking practices increase the risk of pathogen contamination.

Large commercial pathogen outbreaks like the one at Chipotle are infrequent, but not rare. Most incidents like this are preventable, requiring training, disciplined implementation, and vigilance.

Chipotle Mexican Grill's ("Chipotle") problems were not from the fact that it uses fresh ingredients, which are a feature of the restaurant chain's competitive differentiation. According to the 2024 issue of Food Poisoning News[9], Chipotle's problems were the result of its systemwide lack of food safety disciplines, from its *Hepatitis A* case in March 2008 to the *Clostirdium* outbreak in July 2018. During that period, Chipotle emphasized speed over safety. The complexity of its food safety problems was reflected in the diversity of outbreaks and pathogen types over more than a decade in its:

- decentralized supply chain, which was poorly monitored for pathogen containment;
- food handling by employees, lacking disciplines for proper handwashing and/or wearing gloves;
- employee sickness policies, which would have prevented employees working while sick;
- lack of or non-compliance with standard operating procedures (SOPs) for cooked meats, to temperatures that kill the harmful microbes; and
- sanitation practices, as evidence by the diversity and widespread prevalence of pathogens throughout its restaurant system.

An implicit expectation that consumers have of any food brand is that it is safe for consumers. Chipotle was a pioneer in serving foods that were made from fresh ingredients. They created their brand around freshness. They failed in food safety practices.

In the aftermath of their massive outbreaks of foodborne illness from their restaurants all around the country, Chipotle focused its efforts on improved food

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[8] An early Tilia Holdings investment, Universal Pure, is the leading provider of High Pressure Processing (HPP), a *pasteurization* process that uses very high pressure rather than heat as its 'kill step'.
[9] "Food Poisoning at Chipotle | A History of Food Safety Issues" Food Poisoning News September 24, 2024

safety practices to train/remind its employees and, as a result, to restore trust with its customers. Each of its restaurants displays a 3' x 2' poster in the kitchen with the "Top 7 Food Safety Things to Remember" that describe "a healthy work environment, hygiene, and cooking at the correct temperatures."[10] In addition, the company has introduced several other system-wide programs to insure food safety practices throughout its supply chain and restaurants.

After more than a decade of issues, Chipotle focused on its food safety programs. It sought to position itself as an industry leader in food safety. Within four years, it regained the trust of its consumers, with increased same store sales and earnings gained momentum that beat analysts' expectations.

Conclusion: Fresh food is not dangerous **if** it is properly washed, handled, refrigerated, and for meats, cooked to the recommended temperature,.

11. Many products one can find at Whole Foods are fairly small businesses offering a "premium product / premium price". Is scale the enemy of quality in food, or is that a false choice?

It depends on how you define '*quality*'. In food, as in any other field, quality is the degree to which a product or service meets or exceeds customer or service expectations. Quality does not *only* mean premium. For instance, a highly processed food – like a can of branded soup – that meets its product specifications is a 'quality product'.

The higher priced foods at Whole Foods and similar chains may reflect sourcing from smaller scale suppliers or the lack of subsidies that benefit larger scale producers of standard ingredients like corn, soybeans, wheat, sugar, etc. The premium price retail outlets are often test markets for emerging brands. Products made with premium ingredients and at small scale are likely to be more expensive than long-run productions that can achieve larger scale. However, emerging brands are important to both CPGs (as potential acquisitions) and retailers (to satisfy shoppers' demands). In the food industry, emerging brands companies are often innovation leaders, who are more nimble than their big CPG counterparts. There are, of course, cost efficiencies to scale.

12. Any consumer trends in food you would bet on for the next five years?

Since Tilia's strategy is to invest in business-to-business (B2B) services in the middle of the supply chain, our 'bet' on consumer trends is somewhat indirect. Our strategy **IS** a bet on the transition in the food industry through the Consumer Packaged

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[10] Ibid.

Goods companies that serve consumers. Some of those trends that affect the supply chain include consumers'

- growing tastes for flavors and ingredients from around the world;
- snacking throughout the day;
- divided preference between eating out (the province of foodservice distributors) vs. meals made at home (the province of retail food stores). This latter has benefitted from the growing interest of home chefs;
- quest for transparency about brands, both established and emerging, about 'healthy' products, about comparative product attributes. The growing power of apps (like Yuka) and social media influencers and apps have become enablers;
- focus on Better for You (BFY) foods that support personal health & wellness; and
- desire to 'track and trace' the movement of their food through the supply chain and the sustainability practices of the companies that grow and process foods.

13. Do you ask your portfolio companies to report on environmental impact?

Yes, where companies are able and the metrics are relevant to their operations, they track energy consumption, emissions, water usage, and waste.

14. You have funded research in the "gut-brain axis". Any new directions in this research?

This is a fascinating, still young field, which accelerated as an outgrowth of the research and technology development from the Human Genome Project (HGP).

A very brief historical summary of the HGP: in June 2000, President Bill Clinton hosted a meeting at the White House with two prominent scientists, Francis Collins and Craig Venter, to announce the "working draft" of the Human Genome Project[11]. Teams under the leadership of these two scientists competed for ten years to be the first to map the genome, the culmination of a project that had started with support from the President George H.W. Bush administration. It was a big moment in science – the human genome was mapped...partially.

After the announcement, the next edition of the New York Times 'Science Times' was devoted entirely to the HGP. I remember a prescient comment by a scientist – probably a microbiologist - who noted that this mapping of human DNA was all

[11] At the time of the announcement, only a portion of the human genome had actually been mapped. It has since been filled in and genomes of many other organisms have been mapped. In the HGP, Craig Venter used samples of his own DNA for his team's innovative mapping strategy.

well and good, BUT over 90% of the genomic material in the human body is not our own (e.g. human). It comes from the ~10,000 species of microbes that inhabit our bodies, which act as their host. These are mostly various types of bacteria (along with some other classes of microorganisms); some are harmful and can make us sick (*E. coli*, for instance), but many, many others play crucial roles in digestion, immunity, hormonal, and other activities of the body. There is a lot of work still to be done to learn how these microbes interact with our bodies, but the understanding has advanced dramatically.

The science of gastrointestinal function is essential to the Food + Health strategy. A couple years after the HGP was mapped, my wife and I funded an early microbiome research project led by Walter Willett (Harvard School of Public Health) and Andrew Chan (Massachusetts General Hospital) on the gut + intestine microbiome.

In the intervening years, the broader field of microbiome research discovered bi-directional communication between the gut and the brain, the "gut-brain axis". Signals travel along various pathways, including the hormonal, immunological, and nervous systems of the body, regulating digestive and metabolic functions, mood/stress response, immune response and many other activities. Although microbes are all over the body – skin, mouth, nose, lungs, the genitourinary system…well, almost everywhere in the body – the largest density and diversity of microbes is in the gastrointestinal tract where they help process the food we eat and make nutrients essential to our health.

Attempting to explain any more of this science is beyond my knowledge. My wife, the molecular biologist/genetic scientist in our family, keeps us current. I do know this though: research on the human microbiome will encourage and enhance further development of the Food + Health strategy.

15. If you are looking at a business founder as a potential partner, via an investment from you, any common traits you seek?

Ideally, a founder who has focused the business on:

- customers;
- employees; and
- safety (food safety and workplace safety)

I follow the advice of Peter Drucker, the 20th century sage of business advice, who said *"the purpose of business is to create and keep a customer."* According to Drucker, the customer is the foundation of a business. A company's employees are directly related to this foundational idea: they are the ones who serve the customers. Lastly, a safe workplace (broadly defined) is what every employee should expect. And a safe food product or service is what every customer expects from its suppliers.

There are a few other traits that are important in a founder, provided they translate to the entire company: a differentiated strategy (built upon a sense of purpose); understanding how to be profitable; willingness to take risks and invest capital as needed to pursue new opportunities; developing a succession plan for employees (especially the high-potential employees) that creates future growth for them in the company.

In the lower middle market where Tilia invests, few companies - and their founders – have all these traits. Thus, the last trait of an organization, ideally reflected in its founder, is the willingness and ability to change. See Bob Galvin's box in #1 above.

It is in these gaps that Tilia and other private equity investors have the ability to add value during our holding period. Tilia's governance model is based on a annual calendar of specific themes for the board to address in detail at each quarterly meeting. All portfolio companies are on the same calendar cadence. Each quarterly board meeting emphasizes one theme, as follows:

- *Spring* – Organizational Assessment and Development – is focused on employees;
- *Summer* – Risk Assessment and Mitigation – is focused on all aspects of risks, including workplace safety, competitive threats, potential customer losses, etc. and the programs to address them;
- *Fall* – Strategy and Value Creation Review – an annual update of the company's competitive differentiation and adjustments, if needed, to the Value Creation Plan and the initiatives to support it;
- *Winter* – Year in Review and Next Year's Budget. This board meeting focuses on the lessons learned, positive and negative, over the past twelve months and is the foundation for the next year's operating plan.

Over thirty-five years of applying and continuously improving this governance program, we have found the board interactions help managers focus their growth strategies, build organizations that are capable of executing those strategies, and be vigilant about the risks their companies will invariably encounter.

One final point, for every portfolio company board meeting, the first main topic on the agenda – after the minutes have been approved and other administrative matters – is a report on the workplace safety. We want the employees to know that the board puts a high priority on a safe workplace.

16. When looking at new investments, what few areas do you spend the most time on, and is there a standard flow, such as first focus on X area, then move to Y area, then move to Z area?

X: At Tilia, our first step is a Scoring Matrix we use to screen investment opportunities. Based on preliminary information we receive, we rate four dimensions:

- Fit with Purpose & Principles
- Valuation and Process
- Strength of Platform
- Value Creation Potential

We have a mental model of a "Tilia deal". The Scoring Matrix helps us eliminate the opportunities that do not fit the model of a Tilia deal. (Pre **X**, see below).

Y: If an opportunity passes this preliminary screen, our next step is to do research on the company and its industry segment. We have a network of industry experts who assist our research. Our goal is to figure out whether there is a growth opportunity that will justify the valuation we will need to pay. If we deem it so, we will submit an indication of interest (IOI) for the company. In addition to a range of values, the IOI includes the information/conditions we will focus on if we are selected to proceed.

Z: The next step, if we are selected, is a Management Presentation (MP), in which we meet the management team and tour the company's facilities. In this series of live conversations, we test the assumptions we have made from the Scoring Matrix onward. To test the assumptions, we use one of Roger Martin's 'What Would Have to Be True'[12] framework which forces us to use data – rather than beliefs – to support our assumptions. This is an intensive phase of research and due diligence followed by a Letter of Intent (LOI) with a single point (or narrow range) of valuation. (Post **Z**, follows in the next paragraph).

In Tilia's process, prior to **X**, we have identified 8 – 10 subsectors of interest that are attractive to Tilia. We apply this 'search image' against new opportunities. Following **Z**, if we are selected as the next buyer, we work in collaboration with the management team to complete the risk assessment in our due diligence *and* develop together a Value Creation Plan (VCP) that can be executed during the 4 – 7 year holding period.

17. When looking at new prospective investments, if you are "on the fence" what type of activities do you pursue to get off the fence positively or negatively?

The *integrity* of the management team is important to us. It takes time to develop a mutual understanding. The lack of it puts us 'off the fence'.

Our sense of a company's willingness/tolerance for *change* is an important aspect of our risk assessment. Every company Tilia invests in needs to grow. Growth requires change, which almost always means changes to the organization. Our position 'on the fence' depends on our assessment of the organization's willingness and ability to change and our ability to provide the resources it needs. Importantly, that program of change needs to be developed as a collaborative process – jointly, between the management team and Tilia. Tilia's ideas imposed from the outside without concurrence/buy-in by the organization are unlikely to succeed. It is not the changes themselves, but the willingness to change that is important to us.

[12] Martin

Data flow is also important, especially the ability to develop "activity metrics". Operating expenses are, for the most part, within a company's control. Good cost accounting and production scheduling are essential to any successful operation. Revenues are generally not within the control of the company; therefore, sales forecasts are often fraught with imprecision. Activity metrics can provide managers with insight into the near-term future prospects. Customer-related activity metrics (meetings & calls, pipeline development, samples sent, etc.) are especially important tools.

18. Is this business an "apprentice business", and if so, how does one grow as an apprentice?

When I was beginning my investment career, one of the senior partners at Madison Dearborn Partners (which was then called First Chicago Venture Capital) described the leveraged buyout (LBO) apprenticeship in three stages, lasting about 7 – 10 years:

Stage I. Financial analysis: 2 – 3 years, becoming adept at financial modeling.

Stage II. Sourcing, documenting, and closing: 3 – 5 years, with a focus on finding new investment opportunities and leading the transaction process through closing.

Stage III. Monitoring: 3 – 10 years, which he described as "adding value".

As an inexperienced professional, I had not heard the term "adding value" before he mentioned it. I asked him what it meant; he described it as "sitting on boards". To me, that seemed like too passive a description for the longest phase of an investment. So, I set out on what is now a 40-year quest to understand how to add value to privately-owned investments within a five-year holding period. The nature of adding value has changed over time and it has continuously reshaped the private equity industry throughout my tenure. I continue to learn and adapt.

To complete the apprenticeship, one needs to experience the full cycle of a couple investments. Depending on a firm's investment activity, this can take as few as 5 – 7 years. But, I would add that Stage III is open-ended/never ending. There is always more to learn in adding value and, in that respect, the apprenticeship continues.

In the deal business, the visible aspects are in the buying and selling processes, with deal 'tombstones' that commemorate the transactions. Those experiences represent the proverbial tip of the iceberg. The real experience of owning and adding value to the company is like the mass of an iceberg: the 90% that is "below the waterline" and therefore less visible to onlookers. In the competitive world that private equity has become, the holding period – monitoring an investment – is where the value is created.

For me, Stage III is one of continuous learning and continuous improvement. It is what keeps this field interesting!

19. Do you look at growth and value separately or are they connected?

They are connected…or at least used to be more so.

All the companies we invest in today are – or need to be – growth companies. Earlier in my career, my investment objective was to 'buy value, create growth.' But the explosion of private capital, the sophistication of sellers/owners of assets, and the efficiency of intermediated processes (e.g. represented by a seller's representative/investment bank) has made the 'buy value' portion of that mantra more challenging, or perhaps impossible. The legendary investor, Benjamin Graham, wrote the book(s)[13] on value investing. Warren Buffett, who considered Graham his mentor, interpreted Graham's value principle to mean buying an asset worth $1 for 80¢.

Today, almost every company that transacts – particularly businesses that have attractive fundamentals – has several suitors. A 'market clearing price' is often more than any investor would really like to pay; a Buffett-esque value purchase is a rarity. However, investors – including Tilia – are an optimistic breed, who believe we can add value to companies and help them grow. We may still consider an investment a 'value', but not in the sense that Graham/Buffett meant. Another well-known adage is: *Price is what you pay. Value is what you get.* Thus, 'what we get' is a platform for potential growth.

Financial metrics are fairly standard for lower middle market leveraged buyout investments: a 3x return in 5 years, which translates to a 25% internal rate of return. To achieve that, Tilia's companies need to grow revenues at 8 – 10% per year during our holding period and operating profit (EBITDA) by 10 – 12%+ per year. That compares with an average Gross Domestic Product (GDP) growth rate of 2 – 3%. Every investment Tilia makes is a growth investment…and, I would submit it is the same for everyone else in the lower middle market LBO world.

This is a challenge for most companies. Often, the prior owners have held back on these expenses to boost the operating profit for the sale process. But, for a company to achieve its growth plans, it often needs to make "investments' in its organization, especially in key areas that support growth like sales & marketing and infrastructure (financial reporting, IT systems, capacity expansion, etc.). As a result, the growth trajectory is rarely linear; profit often dips in the 12 – 18 months after closing as expenses occur ahead of the revenue and efficiency gains.

20. Given the previous 19 questions, do you have any book recommendations on these topics?

Here are some I would recommend.

Business Management related:

- Start with Why – Simon Sinek. Identifying the purpose for a company.
- Play to Win – Roger Martin. Tilia uses Martin's 'Strategic Choice Cascade' to help our portfolio companies develop their strategies.

[13] For example, The Intelligent Investor and with co-author, David Dodd, Security Analysis

- My Years with General Motors – Alfred Sloan. Former General Motors CEO, who transformed them from a chaotic early 20th century 'roll-up' of a new industry (automobiles) into the largest company in the world. Brilliant! Bill Gates once called it the best business book he has read. Sloan's advice is timeless.
- Thinking Fast and Slow – Daniel Kahneman. On decision-making. Read anything by/about Daniel Kahneman! It will improve your understanding of risk.
- Moneyball – Michael Lewis. Because, like baseball, business is about incentives, compensation, having a differentiated strategy, and fielding a team that can WIN. BTW, Lewis also wrote a book about the partnership between Daniel Kahneman and Amos Tversky: The Undoing Project. Similar to my note above: read anything by Michael Lewis, especially a book about Daniel Kahneman. It's a two-fer.

Food industry and personalities related (in roughly chronological order of the key figures):

- The Food Explorer – Daniel Stone. The story of the late 19th century globe-trotting botanist, David Fairchild, pursuing President McKinley's goal to search the world to find products that would expand the crop-growing potential for American farmers. Fairchild brought home for cultivation soybeans, avocados, hops, quinoa, kale, nectarines, dates, red seedless grapes, watermelon, cotton, mangoes, papaya and on and on. His adventures changed American agriculture and diets. He also brought home a gift from Japan of flowering cherry trees, which line the Tidal Basin in Washington, D.C.
- The Poison Squad – Deborah Blum. The story of Harvey Washington Wiley, the late 19th/early 20th century scientist whose research underpinned the development of the Food and Drug Administration (aka Wiley's Law).
- The Jungle – Upton Sinclair. A novel based on actual conditions of the Chicago meatpacking industry around the turn of the 20th century. The public relations debacle from Sinclair's descriptions of horrific working conditions and unhealthy food processing practices was the tipping point for President Theodore Roosevelt to support the 1906 legislation that created the Food and Drug Administration (FDA).
- Birdseye – Mark Kurlansky. Biography of Clarence Birdseye, who developed the frozen food industry. His advocacy updated FDA regulations in the late 1930s. Kurlansky is another author whose many books related to the food industry are worth reading: Salt – about salt! Cod - about cod. Salmon – just guess. The Big Oyster – "a history of New York City through the lens of the oyster". Plus a book on Motown and the Civil Rights Movement: Ready for a Brand New Beat…but that is an entirely different topic.
- The Omnivore's Dilemma – Michael Pollan. Exploring the complexity of food choices for the modern palette and the health, environmental, and ethical implications.
- Frostbite – by Nicola Twilley. The subtitle is "How Refrigeration Changed Our Food, Our Planet, and Ourselves". On page 7, Twilley writes: "My fascination with the cold chain began about fifteen years ago (~2010), when the farm-to-table movement was picking up steam in the media. While my fellow food journalists were writing about feedlots and fast food, locavores and edible

schoolyards, I got stuck on the conjunction. **What about the *to*?** (my highlights) What happened between the farms and the tables?" Twilley asked the same question about the "TO" that interested Tilia.

- Another two-fer: The New Lunar Society – David Mindell. A recent companion to an earlier book, Jenny Uglow's history of the founders of the Industrial Revolution, called The Lunar Men. Uglow describes the group of five British friends – business owners, scientists, inventors - who met regularly on the monthly full moon (hence "Lunar Men') to discuss the confluence of ideas and innovations that led to the Industrial Revolution. Mindell's much shorter book connects the experiences of those founders to the information/Artificial Intelligence revolution now underway.