“Organic Finance”

The Incentives in Our Investment Products

Ashby Monk* and *Rajiv Sharma

Global Projects Center
Stanford University

Abstract: The increasing complexity and indeed de-localization of finance has allowed for an obfuscation of fees and costs that asset managers, implicitly or explicitly, charge to asset owners. This obfuscation has, in turn, led to a distortion in the underlying incentives that asset owners set for our entire capitalist system. In this chapter, we argue that this distortion is driving an increasingly short-term and disconnected financial world. We also argue that a more professional and engaged community of asset owners that can truly understand the ingredients and incentives in financial products is needed. In making our case, we draw parallels to the food industry, which has also seen a revolt against the mass-produced food products. As people began to understand the ingredients in their food, and the consequences for their own health, they began to consume food products differently – often preferring organic foods. As investors begin to understand the fees and costs in their investment products, and the consequences for their and the world’s health, they are beginning to invest differently – preferring efficient and transparent products rooted in real assets in the real economy. This is a phenomenon we’ve taken to calling ‘organic finance’, and it serves as the key conceptual contribution of this chapter.

Contact: amonk@stanford.edu

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INTRODUCTION

Estimates suggest that earth's population may hit 10 billion by 2050, which, if true, would likely trigger a four-fold consumption of natural resources above current levels (Monk, et al. 2015). The stress this will place on our existing base of infrastructure will be profound. In order to avoid the effects of irreversible climate change, deepening inequality, and even military conflicts over resources, we will need to unlock large pools of long-term capital to fund resource and infrastructure innovation. As such, it is critically important for the health of our capitalist system and indeed the world that the global community of long-term investors, which includes pension funds, sovereign funds, endowments, foundations and family offices, begin investing in long-term projects that will prepare us for this future state (World Bank 2015).

The Organization for Economic Cooperation and Development has indicated that the community of long-term investors has more than $100 trillion of assets under management (World Bank 2015), which means there should be plenty of capital available for the costly economic transitions ahead. However, even with this much long-term capital, the mobilization of long-term investors (LTIs) towards long-term projects is not happening. We still have widening gaps in infrastructure and energy innovation financing (McKinsey 2012). The patient capital to support the capital-intense, long-development ventures and projects that could, for example, reduce greenhouse gas emissions at scale simply are not there.

We recognize that solving the climate crisis and fixing our national infrastructure is not an investor's job, per se. Rather, LTIs such as pensions or endowments are bound by fiduciary obligations to maximize financial returns. And yet, we can't help but believe that an investor that contributes to solving climate change and facilitates the transition to a new energy era could be very well rewarded financially for doing so. In fact, the impending market dislocations from these existential threats will likely affect mainstream portfolios of these long-term investors anyway. All this then raises an important question: Why can't we find mechanisms to unlock long-term capital for long-term projects and catalyze a more sustainable version of capitalism? The answer to this question is, on the surface at least, simple: Most long-term investors are not exercising their long time horizon effectively, preferring instead to work through short-term oriented intermediaries (Barton and Wiseman 2014). Consider that, according to historical NYSE data, the average holding period of assets has gone from over 8 years in 1960 to less than half a year today.

This dramatic drop in time horizon, we argue, stems from the increasing complexity and de-localization of finance, which has allowed for an obfuscation of the fees and costs that asset managers charge to asset owners, both implicitly and explicitly. This obfuscation has, in turn, led to a distortion in the underlying incentives – the fees and costs paid to managers are nothing more than economic incentives – which asset owners set for the capitalist system they support with their $100 trillion or more of assets. We argue that this complexity, de-localization and obfuscation has created a foundational distortion to capitalism and is driving an increasingly short-term and disconnected financial world. And it is this short-termism that creates a variety of market failures and contributes to an unhealthy form of capitalist development.

To understand how all of this has come to pass requires a brief history lesson in the evolving logics and theories of finance, starting with the development of modern portfolio theory in the 1950s (Elton and Gruber 1997). In the decades that followed, a plethora of academic financial theories, such as the efficient markets hypotheses and rational actor model, facilitated the mass production of finance. While this mass production democratized access to investment opportunities – often by deconstructing and repackaging assets and risks into "products", "tranches", "mandates" and "allocations" – these innovations were hard to properly understand. Worse, the LTIs that were targeted by the purveyors of such innovations did not generally have the capabilities to assess what they were consuming. Indeed, most LTIs could not – and today cannot – accurately describe all of the underlying fees, costs, or risks that they have accepted – or are accepting – in their portfolios. And not understanding the fees, costs and risks is tantamount to not understanding the incentives they are creating among their agents.

In short, a grand bargain was made between asset managers and asset owners that allowed for a mass-produced financial system available to all parties. While some gains were enjoyed in the short run thanks to this mass production, the version of finance that has emerged over the past few decades has hidden its true costs and, as it turns out, is harming modern capitalism and, thus, society. In this chapter, we thus consider how a more holistic version of finance led capitalism can emerge.

At the core of our argument is a more sophisticated and engaged set of LTIs that understand the ingredients in all the financial products they are consuming. We draw parallels between the finance and food industries, the latter of which has also seen a revolt against mass produced, and poorly understood, products. Indeed, as people have begun to understand the ingredients in their food, they have also started to consume food differently – often preferring organic foods. Similarly, we expect that as investors begin to understand the fees and costs hidden in their investment products, they too will begin to act differently – preferring to invest in financial products and services they understand and that are rooted in real assets in the real economy. This is a phenomenon we've taken to calling 'organic finance', and it serves as the key conceptual contribution of this chapter.

Our paper is a 'call to arms' for asset owners, institutional investors and indeed economic geographers to pursue transparency and understanding in the inputs to financial returns. Our ambition is to help LTIs become organic investors, which means having strong internal capabilities and high levels of sophistication. It also demands a reduction in the layers of intermediaries, complexity and abstraction. Organic investors will be disciplined about understanding the incentives they are creating with every investment, which means they are committed to getting transparency around fees, costs and expenses. By uncovering the true cost of intermediation – and the alignment of interests that go with it – organic investors will find new ways to cultivate opportunities that are more aligned with their own long-term interests.

In the sections that follow, we use the organic finance metaphor to sustain our argument, conceptualizing the global financial capitalist system rather than reporting empirical results. The metaphor is not designed to 'adequately represent underlying economic and social processes' but instead be suggestive and work as an instrument of inspiration for change (Clark 2005). Building on Ang's (2014) work on risk factors as ingredients, we position organic finance as a means of understanding all the incentives and drivers of financial return that are within financial products and offerings. We also illustrate why the emergence of this new paradigm in finance will require the focus and attention of economic geographers.

FROM FOOD TO FINANCE

In the first half of the 20th Century, organic food was simply just called 'food'. At the time, people cultivated, harvested, cooked and ate locally; they had a clear sense of a food's 'place'. They consumed their food with an inherent understanding of where it came from and how it arrived on their plate. They did not require an advanced degree to understand the ingredients in their food, as most of it was fresh fruits, vegetables, grains and meats. All food was organic at that time. While seemingly a golden era of food, it came with challenges. Food was expensive to produce, difficult to grow at scale, resource intensive and hard to transport. As such, food insecurity – the threat that some people would not have access to sufficient, safe and nutritious food to meet their needs – was seen as a serious problem (Guthman 2003), requiring product innovation to feed the masses.

The conventional food industry thus transitioned away from an inherently local product into something that could be mass-produced and -consumed. In order to achieve this, researchers and scientists augmented and re-constituted "food" in ways that made it cheap to grow and durable for long journeys, while still palatable to everybody. The local and idiosyncratic features that one might expect and even hope to get from food were replaced with generalized quality and homogenized characteristics. Truth be told, most people thought this was a good thing, as these methods helped us feed the masses. What few realized, however, was that widely distributing non-local, mass produced food created an entirely new set of problems for human health than food insecurity.

The delocalization, homogenization and indeed 'productization' of food – in which you buy a packaged and reconstituted edible product in a warehouse and take off a wrapper before eating – created a market with countless cheap options but also with too much opacity and complexity. There was a lack of knowledge around the ingredients that were being introduced into these products and consumed, let alone how some of these ingredients affected people over the long run.[1] Increasingly, we were eating things we simply did not understand. In fact, the purveyors of these products seemed to proactively target individuals that lacked basic knowledge and ability to assess the costs and benefits of consumption.[2] And so, we went from not having enough good food for people to eat to having too much bad food that everybody was eating. The obesity epidemic in the United States, and indeed the world, is a function of this cheap food. Many people are even aware that these mass-produced foods are bad for us, and yet we still eat them. Why? Because even for those people that realize they are eating "junk food", the short-term ease and relative low-cost vis-à-vis healthy food seems to trump any potential long-term problems. Even if we now know this food is not cheap – it simply shifts the costs into the future in the form of illness and malaise – it remains popular.

In response to this, and the growing obesity epidemic globally, a new 'organic' food movement began to take hold, reinforced by the Food and Drug Administration's decision to demand food companies post on their products each and every ingredient along with their caloric content (Guthman 2003). Once the ingredients were being measured and displayed in an easy to understand manner, people began to behave differently, focusing their consumption on products that sustain their long-term health and indeed the food industry more broadly (Seyfang 2006). These organic products may have been more costly in the short run, but the long-term costs in terms of health and environmental sustainability were finally being integrated into decision-making. We should note that people are not moving back to the old agrarian models of farming and consumption. Rather, modern tools and technologies are being brought to bear to make organic foods commercially viable. The success of Whole Foods Markets is a case in point.

What does all of this organic food have to do with finance? It turns out the financial industry has evolved in a similar manner. Traditionally, finance was a highly personal industry based on mutual and local understanding. Bankers often put themselves at the center of local communities, providing a service that was well understood and important. Investors focused on a deep knowledge of specific assets and opportunities. While effective, this model of finance, as with the original model of food, was difficult to scale to the masses. It required a very high personal touch from local representatives that could understand in painstaking detail local circumstances. This was not only hard to do; it was hard to scale. As such, just as food security was a big policy challenge of the era, securing financing for capital stared industries and big developmental projects was also difficult. Accordingly, product innovation was needed in order to transform the financial services industry into something that could be more easily accessed by all. Greater financial market participation and diversification are positive, as is the lower cost of capital for corporations.

The mass-production or standardization of finance arguably started with the invention of securities; these included bonds in late medieval Europe (specifically in Italy) and shares in 17th c. Netherlands (Dutch East India Company). These inventions facilitated asset ownership at a distance, which catalyzed a new set of challenges associated with information asymmetry and principal-agent problems (see Wójcik 2011). The mass production of finance as we see it today, however, truly accelerated with the development of modern portfolio theory in the 1950s, which used a variety of assumptions and generalizations in order to reduce, homogenize, de-localize and ultimately productize finance. Financial theory told us that this de-localization, deconstruction, disambiguation and repackaging of risks into products facilitated investment diversification, which in turn allowed for the widespread distribution of financial capital.

The ultimate financiers of our capitalist system, the asset owners or LTIs, were encouraged by these developments. For reasons we will explain later, they were attracted by the ease of buying a product that purported to offer a "predictable return". It was easier to assess standardized products with return targets than to actually study the underlying real assets and their attendant risks, as the latter could be quite messy and idiosyncratic. But converting numerous investment risks into standardized return expectations is highly complex. It's also extremely

[1] Trans fats are still common in some areas despite the fact that we know they contribute to obesity; processed meats are also still popular despite the fact that they have been shown to cause cancer – see IARC 2015.

[2] Moreover, the lower and middle class families often have no other choice, as they are forced to live in "food deserts" in which only fast food is available.

difficult to assess "investment skill" in this complex environment.[3] So, while these new tools and techniques posited themselves as simple, they were anything but (Wainwright 2011). Finance thus transitioned from an inherently local product to a global product overseen by firms in global financial centers (Lee et al., 2009). The very notion of selling financial "products" (as opposed to investing in companies or assets) implies de-localization. As with the food industry, financial products became abstractions of 'real' assets. The products tranched and stripped assets of local or idiosyncratic characteristics in order that they could be sold to general consumers on exchanges with the help of rating agencies and a plethora of intermediaries. Just as in food, a financial product can, quite literally, be "packaged" and "wrapped" and sold to consumers looking to satisfy a specific return need with very little understanding of the ingredients that are meant to deliver those returns.

As with consumers of food, few among LTIs had the sophistication required to make smart decisions about where to consume the rapidly expanding array of financial products and services. Most did not understand the fees, costs, risks and thus incentives being accepted either explicitly or implicitly in the grand bargain to move towards mass-produced finance (see Box 1 below). And it was very hard to get ahead of the innovations in terms of knowledge. In fact, perversely, financial education and literacy has been linked to increasing levels of obfuscation and intended disorientation by financial service providers intent on maintaining their knowledge gap (Carlin and Manso, 2011). In addition, the LTIs were also, oftentimes, complicit, using the expected returns of these new products as a mechanism to increase the expected return of their overall, highly diversified portfolio, which, thanks to some actuarial math, served to reduce the future financial obligations of the sponsor.[4] This was particularly true of public pension funds, where aggressive return targets were often paired with under-resourced internal investment teams. The latter often found themselves pushed by their sponsors into a world of aggressive financial products they barely understand.

Box 1: Why Are Investment Fees and Costs Overlooked Ingredients in Financial Products

- Markets: There is an assumption that the market for financial services functions efficiently. It doesn't.
- Diversification: Opacity from over-diversification creates an environment ripe for hidden fees and costs.
- Priorities: Investors have believe that asset allocation is the priority and that fees are not important.
- Perspectives: Difficult for investors to talk to peers to know whether or not they are getting a "good deal".
- Unknown Unknowns: You don't know what you don't know. And the truth is you don't know a lot.
- Career Risk: What happens if I uncover some overlooked fee of significance. Won't I look bad? Yes.
- Misuse of Benchmarks: Inaccurate benchmarks are used where data is not available which distorts performance.
- Overconfidence Bias: MY portfolio can't be more efficient. I am good at what I do.
- Believing the Hype: Many investors feel lucky to have access to a 'brand name' manager.
- Traditions: Asset based fees ('AUM bps') treat dollars like dirt, but one is easier to move than the other.

Notwithstanding, in the same way the food industry has been pressured to deliver organic foods to increasingly sophisticated consumers, a growing community of sophisticated LTIs is moving away from overly processed and engineered products and mandates and instead is working to get access to real assets in the real economy. To be clear, these investors are not going back to the era of 'pioneer bankers' living in local communities funding rural projects. Rather, these organic investors are using innovative tools that empower long-term investors to take a long-term view in their investments. They move themselves closer to the underlying assets in the real economy. They are rethinking their access points; purchasing assets in local communities on a direct basis rather than from warehouses on Wall Street.

Similar to food, organic finance may seem more expensive in the short run. However, in the context of the long-term costs and misaligned incentives associated with mainstream finance, many LTIs now see organic finance as

[3] Part of getting transparency may require understanding attribution and coming to a view on the debate over luck versus skill in asset management. There is an enormous literature focused on luck vs skill that we only touch upon (see Cornell 2009 for a complete review). Asset owners should pay for skill, not luck

[4] Novy-Marx and Rauh (2009) highlight the internal conflicts of pension funds, showing that they are pushed to invest in high risk assets so they can justify a higher discount rate.

far cheaper and more competitive over the long run, and the academic research seems to confirm this emerging bias (see Harris et al 2014, Fang et al 2014, CEM 2015, Chuprinin et al 2015).

In both the case of organic food and organic finance, a cohort of sophisticated consumers / investors began to demand more transparency from their products. This was a means of assessing and validating the long-term costs and consequences of buying these products. In our view, it is the lack of transparency about the fee and cost ingredients, which represent quite simply the incentives underpinning our entire investment industry, that are crippling financial capitalism today (Jennings and Payne 2015). The models and products that purported to render finance cheaper, easier, better, and more efficient represent, in our view, some of the most costly products in our society. We would even challenge the Nobel Prize winning theory that portfolio diversification optimized by intermediaries; it does not, in our view, offer a "free lunch" (Ibragimov, et al., 2011). The cost of diversification is in the lack of understanding that comes with a portfolio so diversified that the underlying assets cannot be appreciated and evaluated.

Organic finance may appear more expensive, as it requires far greater sophistication and knowledge within the LTIs. However, in the long run, significant gains may be enjoyed and costs may be avoided. It is difficult to quantify these gains and the costs, but they undoubtedly exist. For example, research shows quite clearly that opaque assets cost more than transparent asset, even with the same payoffs (Sato, 2014). In addition, some might view the fact that organic finance accentuates home bias as a problem, but Graham et al. (2009) show that a home bias can be prudent. Indeed, local investing relative to non-local investing can add up to 3.2% per year in incremental, annual investment returns (Ivkovic and Weisbenner 2005). The authors of these studies show that the outsized returns stem from a better understanding of the value-relevant information about the assets (Coval and Moskowitz, 2001). Clearly, there are potential problems with local investing when it's done poorly (see Hochberg and Rauh, 2013). Good governance is the key to ensuring it is done well; and, thankfully we have plenty of frameworks to ensure this is the case (Clark and Monk, 2009; Clark and Monk, 2015). Finally, organic finance is ultimately about investing in companies and products that are sustainable. New research shows that an investment portfolio made up of companies that perform well on sustainability factors that are material to their business—materiality is the key here—generates 6 percent of alpha (Khan et al., 2015).

In sum, organic finance may appear more costly, but we believe it offers a pathway to deliver sustainably higher risk adjusted returns. The organic finance movement is ultimately about taking the ingredients in our financial products more seriously.In the sections below, we describe how this can done in practice.

THE BUSINESS OF INSTITUTIONAL INVESTMENT

In order to understand how the financial services industry evolved over time, it helps to start by reviewing some information about the very base of our financial system: the savers. These savers, which come in the form of pension funds, endowments, sovereign funds, foundations and other LTIs, are the ultimate owners of assets in capitalism. The means that intermediaries, such as venture capitalists, hedge funds and pretty much all other asset managers, get the money they manage from these LTIs. Healthy capitalism thus demands that the asset owners (the ultimate sources of capital) set appropriate incentives for the entire system, ideally in a manner that aligns the interests of asset owners with the sponsors of projects and companies (the ultimate users of capital).

At the most basic level, LTIs exist because their sponsors decided to manage a set of future liabilities (explicit and contingent) by setting aside financial assets today and then investing those assets in financial markets (Clark and Monk 2012a, Dixon and Monk 2012). There are two key reasons why an asset owner would look to establish a long-term pool of financial assets: On the one hand, prefunding is a way to ensure that plan sponsors are making credible and legitimate financial promises; i.e., that they will actually meet their obligations in the future. On the other hand, it is often hoped that the pre-funded financial assets will grow, thanks to prudent investing, at a rate faster than that of the liability, the sponsor, and even the overall economy. This means simply that future liabilities could be met at a relative discount by investing in financial assets today (Clark and Monk 2012b). And, in both cases, there is an assumption that financial markets offer a reliable mechanism to manage financial assets to meet liabilities (Campbell and Viceira 2002).

The sponsors of LTIs have been, in general, comfortable with the idea that their funds would be overseeing and managing a long chain of principal-agent relationships to achieve their objectives (Dixon and Monk 2013). They are often just a conduit to the for-profit financial services industry, contracting for investment management services with external asset managers. The problem here, however, is that the contracting mechanism of most institutional investors is woefully underdeveloped and immature (see Clark and Monk, 2014). Additionally, most LTIs are not sufficiently resourced to recruit the people or build the systems necessary to become effective at this job (Bertram and Zvan 2009, Ambachtsheer 2011, Bachher and Monk 2012). And this fact – that many LTIs lack internal resources to properly oversee the long chain of intermediaries and products – is largely underappreciated and ignored in the marketplace (Neil and Warren 2015).

We find that when people see large pools of assets under management at LTIs, they assume that these pools can be tapped for internal resources. But that's not true, as there is often a strict firewall between the investment capital and the operating budgets of these organizations that leave the latter woefully inadequate for the management of the former. The traditional institutional investor is outsourced, rarely possessing the expertise and competencies to execute even the most basic financial transactions without the help of some external advisors or consultants. Most LTIs are seen to be government agencies, university divisions, or departments within foundations rather than what they truly are: the base of capitalism. As such, they operate according to logics that are often not very capitalist.

Over time, the extended chain of principal-agent relationships and complexity that separated LTIs from productive assets became problematic for LTIs. In particular, the injection of fees and costs (new incentives and motivations) at each link of the chain served to distort the original motivations of the asset owners (Macintosh and Scheibelhut 2012, Sharpe 2013). The ultimate investment decisions made by asset managers often maximized the utility of the asset managers (and not the asset owners); a phenomenon known as "broken agency" (see Sheffer and Levitt, 2010). Moreover, each layer of intermediation further obfuscated the risks and costs being incurred by LTIs to achieve their return objectives. As this information was lost, so too was oversight (Leiblein et al 2002).

The agents thus turned the tables on the principals, as the asset managers used complexity and layers of intermediation to take advantage of under-resourced LTIs. We'd go so far as to say the current model of financial capitalism often sees the agents disciplining the principals.[5] This has created a nefarious culture in financial services in which asset managers are 'masters of the universe', believing that greed is good in the pursuit of massive free market paydays (Lo 2014, Kinnel 2010). The problem with this approach, however, is that the market isn't free, nor is it efficient (Spence 2002). Research shows quite clearly that institutional investors are 'gamed' on fees by their managers (Phalippou, 2009; Foster and Young, 2010; Robinson and Berk, 2013; Starks 1987; Carpenter 2000; Bebchuck and Fried, 2004, Ellis 2012). And in cases where transparency is difficult to achieve, such as in private markets, these problems are exacerbated. Take private equity as an example of an asset class that thrives on opacity: Phalippou et al. (2005) shows that net of fee fund performance adjusted for risk underperforms the S&P 500 by 6%.

It's also worth noting that many LTIs pay managers to develop capabilities that do not focus on long-term value creation. There's a big difference between a manager using high fees to create value and that same manager using those fees to create and collect "foreknowledge", which refers to accurate predictions of short-term events. Foreknowledge, research tells us, offers no social value (Hirshleifer, 1971). In fact, the focus on foreknowledge is deemed to be a social cost, because including information into prices one week, one day or one millisecond earlier is unlikely to lead to more efficient allocation of resources in the real economy. But many LTIs will pursue these paths because they appear, at least on the surface, to offer products that can meet their aggressive return targets.

When you put all of this together, it becomes clear that the sponsors of LTIs – often government policymakers – created an environment in which the for-profit asset managers could extract a disproportionate share of value in the course of their business. This happened, in large part, because the sponsors could not stomach what was actually needed to build an effective and professional LTI organization (Dixon and Monk 2013). Specifically, the sponsors of LTIs often preferred to pay low (highly transparent) salaries to the employees working direct at their

[5] This is particularly true in the context of the Endowment Model of institutional investment, in which asset owners often see their most important job as getting access to top managers no matter the cost.

LTIs and extremely high (but non-transparent) fees to the people working at external, for-profit providers. This was often the politically palatable choice, at least while the external fees remained opaque and under-appreciated by stakeholders.

Asset managers are thus benefitting disproportionately from the politics of pension funds (Clark 2007, 2008), as the industry receives the equivalent of a subsidy when LTI sponsors choose to under-resource their LTIs. In this regard, today's intermediaries are not all that different from the food industry's corn farmers in that they are benefiting enormously from governments' spending choices and priorities. Consider this: The financial industry is so reliant on the so-called government handouts that when a government does take the step of building a professional investment function, popular press presents it as "bad news for money managers and consultants hoping to grab a share of those assets."[6] In short, a system has been created whereby what is unarguably good for a government and its citizens – professional management of assets – is bad for financial intermediaries. This is a reminder that the financial industry does very well by extracting rents from unsophisticated clients.

Today, we are seeing signs that the pendulum may have reached its extreme position. The Securities and Exchange Commission have been investigating 400 private equity general partners (GPs) and found that "a majority of private equity firms inflate fees and expenses charged to companies in which they hold stakes".[7] Similarly, on the asset owner side, major public pension funds in the United States have recently admitted that they don't even track the billions in fees they pay to asset managers.[8] Many LTIs present incomplete fee pictures in their annual reports: Some LTIs focus only on base fees and bury performance fees in net return numbers, while others make no attempt to quantify the implicit fees associated with holding, moving or trading assets (despite the fact that the implicit numbers, such as spreads and transaction costs, can be very high). Is it any wonder that the financial services industry in the United States captures a third of all corporate profits and creates more billionaires than any other industry by a factor of two?

The present value of the average fees paid by asset owners to asset managers over a 30 year period amounts to approximately one-third of the assets invested, which is a lot of money to pay a manager that is not, on average, going to beat passive benchmarks (Greenwood and Scharfstein, 2013). And therein is one of the big problems: most of these highly paid individuals do not even outperform the broad market indices over the long term. Fama and French (2010) highlight that mutual funds underperform passive benchmarks even more when you layer in fees. And even where returns are delivered above benchmarks, risk adjusting those returns for tail risk removes the alpha (Jurek and Stafford, 2011). All of this wealth flowing into a single industry that is not, in aggregate, adding much value is having a variety of negative externalities. It's obviously luring our best and brightest minds away from socially productive uses and putting them in the business of cultivating foreknowledge (Murphy, Shleifer, and Vishny 1991). It's also driving increasing short-termism and changing the allocation of resources in our economy.

We are thus convinced that the only way to fix the base of our capitalist system is to show the boards and indeed sponsors of these organizations the true cost of financial intermediation. Why do we care about pension fund fees? It's a path to the professionalization of LTIs. And we believe professional and capable LTIs can improve their operations and, ultimately, help save capitalism from endemic short termism and rent seeking and unlock the capital we require to finance critical and existentially important projects, such as financing solutions to climate change. Organic finance therefore focuses on understanding the 'hidden' costs of finance and investment, as this will not only help us understand the incentives being created but also demonstrate to the world the real cost of investing and trigger a massive round of LTI innovation and improvement.

ORGANIC FINANCE

We use the term "organic" to reference a relationship in which the elements that fit together do so harmoniously and as a necessary part of a broader system of complexity. In other words, organic refers to something sustainable,

[6] http://www.pionline.com/article/20150601/PRINT/306019976/ontario-hopes-to-create-investment-management-firm
[7] http://www.bloomberg.com/news/articles/2014-04-07/bogus-private-equity-fees-said-found-at-200-firms-by-sec
[8] http://fortune.com/2015/09/04/calpers-still-cant-get-out-of-its-own-way-on-private-equity/

healthy and long-term. In our view, organic finance refers to a form of investment that re-focuses investors' attention on *all* the ingredients in investment products and considers both the short and long-term costs and consequences of those ingredients on value creation and performance. In essence, organic finance re-emphasizes the importance of LTIs in the investment world and de-emphasizes the often over-glorified for-profit financial services industry.

The term organic has been used in a business or corporate context. For example, organic production generally refers to a production process devoid of artificial catalysts or stimulants that are rooted in more "natural" and thus sustainable inputs and outputs (Davidsson et al 2006). Also, organic growth refers to a business growing on its own and without the need for mergers and acquisitions (the latter is inorganic growth) (Davidsson et al 2006). In our context, organic (finance) is about generating high investment returns without relying on artificial catalysts or opaque inputs with debatable outcomes for long-term investors and commercial health and performance. Similar to how the organic farming industry does not use pesticides or fertilizers to produce high quality food, organic finance seeks to, at minimum, understand the effects of the artificial catalysts the finance industry often uses and, at the extreme, remove them via new investment methods. Organic finance is about bringing back into capitalism the notion of long-term value creation and sustainable growth. Figures A-1 and A-2 illustrate the shift from an opaque, overly packaged form of finance towards a more transparent, professionalized version of long-term investing - Organic Finance.

We build on the work of Ang (2014) and his focus on risk factors as ingredients in financial products. We expand it to consider the fees and costs, and their associated incentives, as additional key ingredients (and alignment factors) for long-term performance. If factor investing requires looking beneath the asset class or financial product labels to the underlying risk exposures (Ang 2014), organic investing requires looking beneath the products and mandates to the underlying incentives that are being created at all levels of the chain of intermediation to ensure sustainable, long-term investment performances are maximized. A sophisticated or professionalized LTI, an organic investor, will determine not only what the underlying risk factors of desirable investments might be but also truly understand the most efficient and aligned access points to those investments given the fees and costs (incentives) that might be associated.

At its core, organic finance is a recognition of the short- and long-term costs of an investment with a view to encouraging more long-term investing. Research has shown that investing in long-term assets can provide significant benefits to society in different ways (see Clark and Monk 2015). Long-term investments in infrastructure and green technologies are needed to help overcome some of the looming global challenges of population growth, urbanization and climate change. Infrastructure assets in particular are the physical facilities that provide the building blocks of a functioning society. Institutional investment into these assets can directly support the well being of households as well as production activities of enterprises at various points of the value chain, and it is thus directly relevant to the competitiveness of firms and to economic development (Sharma 2012). The IMF's World Economic Outlook report (2014) reveals that an increase of 1 percentage point of GDP in public investment (used as a proxy for infrastructure investment) spending raises the level of output by about 0.4 percent in the same year and by 1.5 percent four years after the increase.

Investments in other long-term, private market asset classes can also be seen to have wider economic impacts. Venture capital investments that back entrepreneurs and new businesses for example have been proven to contribute to economic development (Timmons and Bygrave 1986). The venture capital backed businesses create new employment opportunities and stimulate the economy (Lerner and Kortum 2000). Through unique offerings of new goods and services, and production processes, entrepreneurs can improve efficiency, and the innovation leads to economic growth (Samilla and Sorenson 2011). Similarly, certain real estate development investments have provided economic benefit, particularly those in underdeveloped areas that could be classed as targeted investments (Hagerman et al. 2007). In fact, institutional investors that have had a specific development focus, investing in real estate, private businesses and infrastructure have been able to post attractive investment returns.[9] The challenge, however, is that many LTIs do not participate in these markets because they are either convinced that some other short-term investment strategy better meets long-term needs or they simply don't

[9] Temasek Holdings (Singapore): 18% IRR over 40 years; Khazanah Nasional (Malaysia): 13% IFF since 2004; Public Investment Corporation (South Africa): 16% IRR since 2004.

understand how to access these assets. In our view, organic finance can help investors find aligned access points to these assets.

So how do we begin to usher in this new era of organic finance? We see two keys to this phenomenon:

> First, a key driver that must underpin the organic finance movement is a desire among LTIs to better understand the potential inputs and outputs associated with a given strategy or product. Being an organic investor requires a deep understanding of the services and products and specifically the underlying assets, risks, fees and costs. Just as the food product ingredients placed on packaging (which helps consumers make more intelligent food choices) drove the rapid rise of the organic food industry, so too will a close scrutiny on financial product ingredients serve to drive the organic finance industry.
>
> Second, while the initial focus of organic investors will be on the risks, fees and costs of their financial products, this is just the first step of the organic finance movement. For example, the people that consume organic food, we know from the research, pay very close attention to how the food is made (Guthman 2003). So, the organic food movement doesn't stop at the purchasing of the food. The knowledge of an organic consumer shapes his or her 'tastes' and drives consumption behaviors towards more healthy products. Similarly, additional steps taken by LTIs to understand their products could usher in a new era of investment in which LTIs change the way they construct portfolios. It is perhaps for this reason that some have even called for an equivalent of an FDA for finance (Posner and Weyl 2012). Indeed, the knowledge that will come from a close understanding of the fees and costs of financial products will provide a deeper understanding of the financial industry, which in turn will likely catalyze greater professionalization of LTIs and new (and ideally more aligned) pathways to financial markets.

Through an emphasis on transparency, driven by more professional LTIs, the understanding that comes with organic finance will spur a variety of positive externalities for the investment industry and generally speaking, the world we live in, including:

<u>- Better Understanding:</u> Fee structures have the potential to dampen the volatility (risk) of certain asset classes, which means that asset owners often misunderstand or simply don't know their risk exposure. Is a university endowment with 80 percent allocated to alternative asset managers doing a good job if it generates 10 percent returns? We would argue that many endowments do not factor the returns generated per unit of risk and per unit of cost. The reason is that they do not know how much risk their external managers are actually taking or how much they are really paying those managers. Understanding the risks will help avoid preventable crises. But getting to the core of the risks means understanding the incentives and thus the fees being paid to the managers.

<u>- Free Money:</u> For large institutional investors, even the smallest savings in costs can have a significant impact over time. This is exacerbated in a low interest rate environment, and saving basis points really does matter (especially when compounded over years to come). Being careful with resources is thus important, but most LTIs have overly focused on being frugal with internal teams and systems and not paid attention to external teams. A more holistic frugality will offer unique benefits. We can't think of anything else an investor can do to generate risk-free returns than get a cheaper access point to the same risk exposure. Intelligent frugality can therefore offer risk free returns.

<u>- More Efficient Labor Market:</u> By overpaying certain asset managers (e.g., hedge funds), we as a society are telling people that you can make real money through the adroit playing of short-term, zero sum games. We compensate people extremely well for this even though this behavior is not creating real value in the economy (beyond a slight improvement in the pricing mechanism of markets). This is evidenced by the lack of top business school graduates going on to work for asset owner organizations such as a public pension fund in the United States. Conversely, this can be contrasted by the number of top PhD graduates in the pure sciences (maths, physics, chemistry) being lured into hedge fund jobs. By digging into the fees and costs of finance, we can provide appropriate incentives that do not distort labor markets. While this may seem challenging, there are methods of achieving the right outcomes (see Bachher and Monk 2012)

<u>- Economies of Scale:</u> When people look at insourcing or outsourcing decisions, they often look only at the cost and benefits at a single point in time. They rarely consider future periods where the costs paid to external parties allow

economies of scale to accrue to those parties. By ceding capabilities to the private sector at a single point of time, an LTI may be relegating its organization to a disadvantageous negotiating position at times in the future (Burton 2013). Moving to an organic finance industry in which the asset owners are fully professional will allow the economies of scale to accrue more evenly among asset owners and asset managers.

In sum, more professional LTIs will take a longer-term view and bring a more harmonious version of finance led capitalism than the one we have today (see Hawley and Williams 2000). That is the benefit the organic finance movement seeks.

ENLISTING ECONOMIC GEOGRAPHERS

The world of finance has become so far removed from actual economic activity that the financial economy is now often referred to as being separate from the real economy (O'Neill 2009, Maurer 2008). As Clark and Monk (2014) note, financial products evolved away from real assets and risks and instead transitioned towards segments or slices of assets. As such, while these products ultimately rely on the performance of some underlying asset or property, they were fundamentally de-localized. Due to finance's close link with theoretical economics, the removal of local or idiosyncratic risk was perceived to be a feature rather than a flaw. However, as we have argued above, the layers of complexity and abstraction resulted in too much opacity and complexity. And it is in this grey area, the shadows, that financial intermediaries have consolidated their power.

We believe organic finance represents a counter-project that could generate a series of benefits for companies, project sponsors, LTIs and even capitalism. In order to bring finance back into alignment with the long-term needs of our capitalist system, a new research program that explains the value of the 'local' and shines light on the shadows is warranted. We believe that there is a significant role to be played by economic geographers. It is early days for this project, as the prior sections have only begun to conceptualize why organic finance is needed and how we might go about implementing it. A considerable amount of additional research is required. More to the point, this project could benefit greatly from the addition of social scientists that are not pure economists.

The economics discipline operates at an abstract level and seeks generalizations and broad theories; it is a world of models driven by mathematics (Lazear, 2000). To an extent, these models arguably allowed the financial services industry to operate with little accountability as to the fees and costs being charged. As such, a bottom up approach that sought to understand the 'ingredients' in painstaking and rigorous detail – qualitative details - may add significantly to our understanding of financial incentives and alignment (Clark 1998). This is where economic geographers can serve a useful purpose, as they state their mission as being a focus on the rich texture of contemporary economic circumstances (Clark et al., 2000; Arnott and Wrigley, 2001).

Economic geographers tend to use bottom-up methodologies, such as case studies and fieldwork in order to conceptualize and, eventually, theorize (Clark 1998). Geographers' training involves a deep appreciation for outliers as well as contingencies and idiosyncrasies of all kinds of economic actions and actors. To a certain degree, this focus on local differences has pushed the discipline towards less quantitative approaches or abstractions. In fact, economic geographers specifically seek to reconcile the unevenness of economic activity with some broader understanding of economic landscapes (Clark and Wójcik 2007, Graham and Marvin 2001). For example, the financialization conceptualization within economic geography tries to provide a better understanding of the machinations of financial actors and intermediaries that are reshaping the landscapes of contemporary capitalism (French et al 2011, Pike and Pollard 2010, Faulconbridge and Muzio 2009).

Financial intermediaries, metrics, and practices are ever-more engrained in the economic geographies of our personal, working, and public lives through our access to and use of bank accounts, mortgages, pensions, and savings; employers' ownership; access to capital and financing; and public infrastructure and services (O'Neill 2009). This includes a deeper understanding of the packaging and securitization of private assets, such as urban infrastructure into financial products (Knight and Sharma 2015, Torrance 2009, Faulconbridge et al 2007, Clark and O'Connor 1998). For an institutional investor looking to maximize their rate of return over the long run, alpha is usually generated in places where information does not freely travel; where data and information is hard to come by and generalizable theories are unknown. This is a domain where economic geography can shine.

We believe the community of economic geographers can thus play an important role in mapping the fees and costs of financial intermediation and institutional investment, even offering investors 'recipes' and 'blueprints' for how they might invest with better ingredients or more sturdy organizations (Wojcik 2011, 2012). As geographers, we can be pro-active in pushing for granular and face-to-face conversations about the implicit costs of investing, which often require a tacit understanding of how these costs are levied (see Gertler 2003; Storper and Venables 2004;). The data on fees and costs are often hidden, which means public data does not exist and, as such, economists are not going to have the key input (i.e., quantitative data) in their methodological approach.

It would not be the first time geographers turned their research focus to some fundamental problems in finance. Nearly 30 years ago, Botts and Patterson (1987) first argued that the economic impact of pension plans on regions was an area of inquiry necessitating further investigation and understanding. It was then Gordon Clark's body of research on the design and governance of pension fund boards that is today guiding the manner in which these institutional investors govern their operations, from Australia and America to Europe and Asia (Clark 2000). In short, the geographic research endeavor is truly an emphasis on what sits between theory and practice and how to reconcile and indeed solve any issues that may arise in that hard to define 'place' or 'space' (see Bathelt and Glückler 2011). Organic finance will require the services of economic geographers.

CONCLUSIONS

How do we transition the finance industry towards a more "organic" approach to investment? For the most part we know what we need to do to fix the problems of finance: We need the base of our capitalist system to professionalize. As we've argued, we genuinely believe that sophisticated asset owners are needed to save capitalism from endemic short termism and rent seeking and unlock the capital we require to finance critical projects. In order to professionalize, we need to improve the governance of public investment organizations, but changing governance regimes can be a difficult undertaking. Many institutional investors have proven incapable of managing change within their organizations, allowing inertia to be a key factor influencing decision-making. So the more important question today is how to catalyze the sorts of changes we need.

In our view, cost and fee transparency is the most viable catalyst for innovation and change, as it demonstrates unequivocally that the status quo in finance is not sustainable. In our view, Boards and Sponsors of LTIs have not invested in professionalization of their investment teams because they have not yet seen the true cost of the outsourced investment model. Paying an internal investment team $20 million dollars may seem costly on its own. But it seems cheap when you consider the same service and performance costs $200 million per year when it's paid to a team outside a pension fund (CEM Insights 2010). As such, we believe that if a pension fund or endowment board — let alone their sponsor or general public — saw how much LTIs were paying Wall Street for their products, asset owners would be inclined or even forced to undergo a form of change towards professionalization (Ellis 2012). Once the true cost of financial intermediation is uncovered (Fang et al 2015), there is a growing body of research conducted within economic geography and other disciplines that can help asset owners reorganize (Dixon and Monk 2014, Bachher and Monk 2013,14, Clark and Monk 2012c, Clark et al 2012). For example, the work by Clark and Urwin (2008, 2010) on pension funds demonstrates that good governance is crucial to be an effective investor, as it is the primary mechanism to mobilize the resources of the institution. The authors go on to provide examples of best practices of governance.

Some view LTIs as if they are post-office boxes; a place where sponsors send money before it is forwarded on to other "professional" managers to deal with. But LTIs can no longer be a pass-through from the plan sponsor to external money managers. They have to professionalize themselves. This seems self-evident given they are the foundation of our very capitalist system, but many have been comfortable operating in non-capitalist ways for decades. But the financial innovations of the last decades have substantially increased the complexity of instruments and services. With all of this new complexity, the costs of financial intermediation are increasingly difficult to identify, rationalize, and minimize. Worse, these costs create new and hard to appreciate incentives that are driving short-termism and unsustainable practices. In the same way that food now comes standard with details on calories and ingredients, so too should finance come with easy to understand labels that describe the true cost of financial intermediation. The reason, then, to push fee transparency stems from the observation that we need to fundamentally change the business of asset management if we are going to have any chance of solving some of the intractable problems of our generation.

In sum, this paper makes two main arguments: 1) Capitalism needs greater professionalism and sophistication among asset owners. 2) The only way to develop this is to demonstrate the true cost of external professionals and the distortions these costs are creating for capitalism. It is only in recognizing the true ingredients, and their incentives that LTIs will finally organize themselves to consume "healthier" products. In our view, a research program that scrutinizes not only the actors and agents of interest in the investment process, but the evolution of financial product 'packaging' will be required. The methods and holistic approach of economic geography will be valuable in this regard, especially compared to the traditional forms of finance and economics research (which arguably have contributed to the current situation). In the world of organic finance, the work of economic geographers will be critical.

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APPENDIX

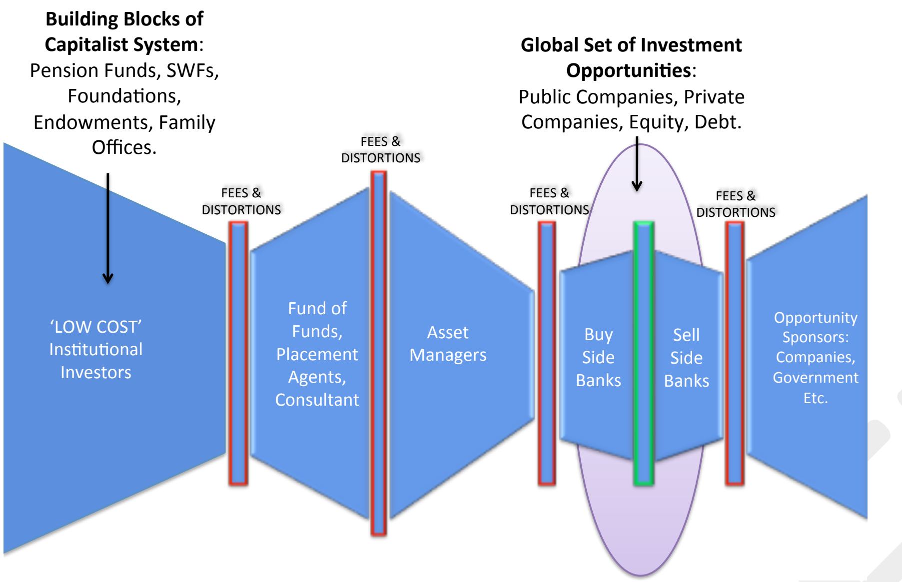

Figure A-1: Existing Opaque, Overly Packaged Form of Investment Management

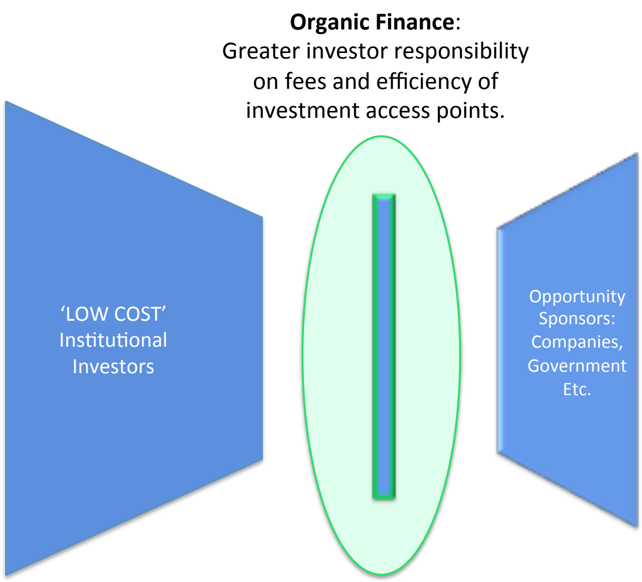

Figure A-2: New Transparent, Professionalised form of Organic Finance