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How economic behavior can hamper sustainable development

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Abstract

Purpose – The purpose of this paper is to highlight a fundamental issue that is preventing mankind to act rationally toward more environmentally benign technology. Moreover, the paper aims to provide a basis for further research into what might be labeled as behavioral environmental management whose purpose is to focus on what can be achieved by changing systems to induce the right behavior in people.
Design/methodology/approach – Using literature review and building up the case logically is the main avenue of research. There are still no case studies available.
Findings – The main findings are that there are indeed significant behavioral problems induced by herding and short-termism currently embedded in the economic system. Unfortunately, there are no easy ways to solve this problem. Ways need to be found for impacting the behavior of people.
Research limitations/implications – While the review on herding and short-termism is based on significant publications, there is always the risk of passing the wrong judgments concerning such complex issues that are so ingrained in the economic system. This said, given that the purpose of this paper is not so much to provide answers as it is to provide questions, and in that context it is safe to assume that any research limitation will have little impact so far.
Originality/value – The originality of the paper, and hence its value, is that it focusses on something that is very prevalent in today's economic system which unfortunately is largely forgotten when the paper discusses environmental management. It is as if environmental issues are intentionally separated from economic issues, which this paper ultimately proves to be an erroneous proposition. Environmental and economic issues are probably much more interlinked than most believe.

Keywords Behaviourism, Herding, Shipbuilding, Short-termism
Paper type Research paper

1. Introduction

> Life is short, the art long, opportunity fleeting, experiment treacherous, judgment difficult (Hippocrates).

Many believe that the Industrial Revolution was a technical revolution alone, but this is a common simplification that is important to shed light upon if our societies are to become sustainable. According to *The Economist* (1999), limited liability was a key to industrial capitalism as important for the Industrial Revolution as the contributions of Watt, Stephenson, and others pioneers. The first law of limited liability was passed in the State of New York in 1811, and in 1854 Great Britain followed suit. This meant that shareholders were no longer personally liable for what the company did; they only risked losing their capital as opposed to losing everything they owned and possibly being imprisoned, as before. This new system unlocked vast sums of money, and it ultimately financed the Industrial Revolution. Thus, while the technical marvels of the Industrial Revolution provided the basis for revolution, it was finance that fueled it into a true revolution.

The lesson for our discussion here is clear: if we are to achieve sustainable development, we must make sure that the economic system pulls in the desirable

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direction. If sustainability is to take place despite the economic system, chances are that there will be no, or very limited, sustainable development.

Before continuing, the term "sustainable development" must be defined. Over the years there have been many definitions (see Filho, 2000); up until 1987 when World Commission on Environment and Development (WCED) (1987) published its report – also known as the Brundtland Report. This report offered the following definition on sustainable development: "[…] development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This definition is now the one that is most commonly used, and is used in this paper as well.

A challenge that has been increasingly discussed in magazines such as *The Economist* over the last decades is two behavioral elements found in the financial markets; short-termism and herding. With the challenges as Hippocrates describes in the opening quote, it is not easy to find ways to overcome these two behaviors as we shall see. The purpose of this paper is to shed more light onto the behavioral challenges of short-termism and herding and perhaps identify some useful avenues for countering them.

In the next two sections short-termism and herding are discussed followed by a section of what to do. Illustrative examples are included as needed. In the final section, some closing remarks are provided.

2. Short-termism

For humanity to approach something that might rightfully be labeled as "sustainable development," we must make sure that short-term efforts do not jeopardize long-term efforts. In fact, Atherton *et al.*, (2007) point out that "Short-termism has been identified as a significant barrier to achieving corporate sustainability, both in Australia and globally". The CFA Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics co-sponsored a "Symposium Series on Short-Termism" from September 2005 where leaders from the corporate, issuer, analyst, asset and hedge fund manager, institutional investor, and individual investor communities met. One of the major insights of the symposia participants "[…] confirm what the academic research suggests: namely, that the obsession with short-term results by investors, asset management firms, and corporate managers collectively leads to the unintended consequences of destroying long-term value, decreasing market efficiency, reducing investment returns, and impeding efforts to strengthen corporate governance" (see CFA Centre for Financial Market Integrity/Business Roundtable Institute for Corporate Ethics, 2006).

Before we continue, the term "short-termism" should be defined. In the literature, the term is defined in several ways. One "technical" definition provided by the finance industry itself (see CFA Centre for Financial Market Integrity/Business Roundtable Institute for Corporate Ethics, 2006), is that short-termism refers to the "[…] excessive focus of some corporate leaders, investors and analysts on short-term, quarterly earnings and a lack of attention to strategy, fundamentals, and conventional approaches to long-term value creation". More, generically we could say that short-termism is "[…] the pursuit of immediate gratification at the expense of long-term thinking" (see Wellum, 2006). One of the worst cases of short-termism in recent years is Albert J. Dunlap – nicknamed "Chainsaw Al" – who destroyed Scott Paper (to the cheering of *Wall Street*) while netting $100 million for 18 month's work as CEO (see Useem, 2002). If thinking longer than the next quarter, not to mention the next year, proves to be difficult in the financial markets, we can only start contemplating the problems of funding major environmental project regardless of industry whose time-frame may stretch into decades!

One might argue that this is only a problem in the corporate world of profit seeking, but it is not. There are major societal trends that come into play as well. For example, we have the short cycles of re-election in the political sphere, and since corporate governance is closely related to political governance (Oman, 2001), the political short-termism will ultimately seep into the corporate world. On an even more fundamental level; each and every one of us feels more comfortable making decisions that have a short time-frame than a longer time-frame. There are also other decision effects that promote the short-term over the long-term (see March, 1994). We also prefer recent information over prior information, according to Kahneman and Tversky (1982) – a tendency that fuels short-termism in itself.

The short-termism of the financial markets and the societal trends of short-termism is most likely a concurrent interplay. In any case, the remedies must work along many axes. During the "Symposium Series on Short-Termism," an array of recommendations was put forward for financial markets only (see CFA Centre for Financial Market Integrity/Business Roundtable Institute for Corporate Ethics, 2006). However, many of them also seem pertinent for the industry, such as:

(1) End the practice of providing quarterly earnings guidance. If there are any companies with strategic needs for providing earnings guidance, they should adopt guidance practices that incorporate a consistent format, range estimates, and appropriate metrics that reflect overall long-term goals and strategy.

(2) Support corporate transitions to higher quality, long-term, fundamental guidance practices, which will also allow highly skilled analysts to differentiate themselves and the value they provide for their clients.

(3) Align corporate executive compensation with long-term goals and strategies and with long-term shareowner interests. Compensation should be structured to achieve long-term strategic and value-creation goals.

(4) Endorse corporate leadership in communicating long-term strategic objectives and related performance benchmarks rather than in providing quarterly earnings guidance.

(5) Encourage companies to provide more meaningful, and potentially more frequent, communications about strategy and long-term vision, including more transparent financial reporting that reflects a company's operations.

(6) Encourage greater use of plain language in communications instead of the current communications dominated by accounting and legal language.

(7) Endorse the use of corporate long-term investment statements to shareowners that will clearly explain – beyond the requirements that are now an accepted practice – the company's operating model.

These must also be addressed on the path toward sustainability, at least for publicly listed companies because they deal regularly with the financial markets. Most corporations, however, are small and medium-sized corporations. For these, as well as for many large corporations, a good place to start in their daily operations would be to avoid:

(1) choosing very high discounting factors or short pay-back times, which produced essentially the same effect in this respect; and/or

(2) focussing only on financial metrics. Both of these have been discussed previously.

There are also many other avenues of improvement that must be made including various societal factors such as laws and regulations, as mentioned earlier. These avenues are, however, beyond the scope of any single industry except that they must be supported.

What industries such as the real-estate industry should address, however, is building codes. The importance of building codes can hardly be overstated as "the operating costs of a school can consume the equivalent of its capital costs every 4 to 5 years and remain in service for a century" (see Government Asset Management Committee, 2001). Furthermore, concerning the environmental performance, we find that "In the United States, buildings use one-third of our total energy, two-thirds of our electricity, one-eighth of our water, and transform land that provides valuable ecological resources," according to US Green Building Council (2005). Thus, building codes should be revised to ensure lowest possible operating costs and environmental impact for a longest possible period. This is now a part of the scope of the LEED program.

The LEED program represents the efforts of a coalition including the US Green Building Council (GBC) to establish a nationwide standard for constructing so-called green buildings. So far, LEED has been voluntary, but the federal government is adopting it as a standard, according to Northbridge Environmental Management Consultants (2003). More specifically; "An analysis by NRDC and the US Green Building Council estimated that 18.5 percent of public sector construction had applied for certification; another NRDC study cited in the *New York Times* put the percentage at 16.5 percent. By contrast, the percentage of non-public projects applying was only about one percent". Too often, unfortunately, the investment costs of buildings are overemphasized at the expense of life-span performance, and from the data on the penetration of LEED in the real-estate industry it may appear that LEED must be made mandatory to truly become effective.

In Norway, for example, it is quite common to choose materials and solutions that are only slightly cheaper in order to end up with a sales price within certain market segment despite the fact that the durability and quality of these materials and solutions are far inferior. In other words, the importance of a certain market segment (final sales price) is more important than durability, quality, and ultimately value. Take, for example, the fact that a ceramic roof that cost about 25 percent more than the most commonly sold roofing may have an expected life-span that is more than twice as long – 20 years for the cheaper roof compared to at least 50 years for the more expensive roof. However, most real-estate companies consistently chose the cheaper roof to keep the construction cost of the building as low as possible.

It is obvious that when lowest construction cost is the criteria in industry, sustainability will never be attainable. The building codes must be revised to focus on lowest life-cycle cost for a defined quality level. Subsequently, the design of the buildings must be changes so that the lowest possible life-cycle cost is attainable. An approach for how this can be achieved is presented in Emblemsvåg (2003).

There is further exacerbated by the high demand for return, but there is also another element to it. Some believe that higher return on investment is a natural consequence of the steadily stricter environmental rules and legislation that are coming into place, but this is not based on fact. In reality, the law is very conservative (see Bradbrook, 1994), in the sense that old technology is often given much more leeway that new technology by being exempted from certain requirements or by being given generous transition arrangements. Take all the old coal fired power plants, for example. Despite much more environmentally friendly technology is available, very few have actually been closed due to poor environmental performance – and those that

have been closed or are scheduled for closure have been under intense scrutiny for many years. Therefore, the fact that the environmental legislation is moving rapidly forward in many countries, can hardly provide an excuse for short-termism and high discounting factors. Those that really run a risk in today's legislative environment are those companies that have underinvested for years so that their assets are severely outdated. Ironically, such lack of investments may be the direct consequence of short-termism and high discounting factors.

A final element in the work against short-termism is education – and education in a wide sense. Such education must not only concern the financial aspects, which is the focus here, but virtually every aspect of the corporate system in which short-termism is prevalent or dangerous. The education must encompass the causes, problems, and remedies of short-termism. It should ideally be integrated into existing courses taught in our educational system because it is important to realize that just as the causes of short-termism cannot be identified in isolation, the solutions cannot be found in isolation.

3. Herding

First of all, "herding" as a term is borrowed from the animal kingdom signifying the apparent mindless, yet loosely coordinated, movement of a herd – sometimes under the pressure of predators – think of a large flock of birds or a shoal of fish. In its most general term it can therefore be defined as "[…] behavior patterns that are correlated across individuals" (see Devenow and Welch, 1996). A more specific definition for the financial industry, in which this kind of behavior is studied extensively, is that herding arise when "[…] a group of investors *following* each other into (or out of) the same securities *over some period of time* [original italics]" (see Sias, 2004). In the literature, the mechanism behind herding is described in two polar views as either "rational" or "non-rational". In real life, the herding is probably somewhere in between, that is, partly rational or non-rational – or "near-rational" as it is labeled. According to Devenow and Welch (1996):

> The non-rational views centers on investor psychology and holds that agents behave like lemmings, following one another blindly and foregoing rational analysis. Less crazy investors are assumed to be able to profit handsomely therefrom. The rational view centers on externalities, optimal decision-making being distorted by information difficulties or incentive issues. The intermediate view holds that decision-makers are near-rational, economizing on information processing or information acquisition costs by using "heuristics", and that rational activities by third-parties cannot eliminate this influence.

While the mechanisms behind herding are interesting reading in itself, the focus here is on the consequences for the industry in general. Because what is clear is that herding is more than an academic phenomenon or something for special interests, it is very real and common (see e.g. Hwang and Salmon, 2004). Combined with a tendency of investors to overreact (see De Bondt and Thaler, 1985), we have a recipe for bubbles and busts under given, unfavorable circumstances.

The current financial crisis is a testimony to this although its underlying causes are much deeper than mere herding of investors and the like (see *The Economist*, 2009). What is clear, however, is that the industry played a major role both as victim but also as villain, as it were. It should also be made clear that this is not just the works of practitioners, but also of teaching and research institutions. Particularly business schools have failed in their education of practitioners and researchers (see Podolny, 2009).

Such "intellectual herding," or groupthink, is not any better than the herding of sales and purchase found in the financial markets and real-estate markets, for example. For example, if a business partner uses a discounting rate of 15 percent, it does not

necessarily translate into 15 percent for your company even though the rationale behind the 15 percent is some external benchmark like average return in the stock market. The lack of critical thinking concerning economic evaluations is a very common problem particularly when statistical analyses are involved. For example, two economists, Deirdre McCloskey and Stephen Ziliak studied to what degree papers in the highly respected journal *American Economic Review* failed to separate statistical significance from plausible explanations of economic reality (see *The Economist*, 2004). Their findings are depressing: first, in the 1980s 70 percent of the papers failed to distinguish between economic and statistical significance, and second, in the 1990s more than 80 percent failed! This is particularly a finding that researchers must address because the number among practitioners is probably even worse, and if researchers (and teachers) cannot do it correctly we can hardly expect practitioners to show the way.

The lesson from this is that herding can lead to outright wrong economic decisions. Nowhere can this be more important than in the realm of sustainable development because the very long-term nature of sustainable development is facing the rampant short-termism in our society and to counter this development decisions must be based on facts. In the light of the current crisis, industry and its researchers should be at the hub of the problems and therefore possibly the closest to start finding remedies.

4. Closure

W. Edwards Deming once stated that:

> As we shall see, apparent differences between people arise almost entirely from the action of the system they work in, not from people themselves.

This insight is of great importance as to what we can do about short-termism and herding. Attacking individuals for their personal choices does not work in a democratic society – we must find ways to devise incentives, rules, and legislation that will create an overall systemic effect in the right direction – away from short-termism and herding.

An obvious solution is to start thinking in terms of life-cycle performance, but the problem is that a dollar today is better than a dollar tomorrow. The time element of money creates a problem so to speak […]. For example, in shipbuilding, we see that depending on whether the ship-owner has a strategy of owning the vessel for a long time or just want to have it for a few years, greatly impacts what solutions are chosen. The longer the time-frame – the more focus on quality and other long-term issues. The only way to prevent this is to impose transaction fees depending on ownership years so that the longer you own the asset, the less the transaction fee. But is this feasible? Probably not as it would presuppose a unified world; at least among the greater nations and those involved in the maritime sector. Otherwise these ship-owners with very short-term focus will register their vessels in countries that care less about short-termism as phenomenon. This illustrates that perhaps one of the greatest obstacles to combat short-termism – lack of unified frameworks internationally – has to be solved before we can expect that any ideas as outlined above can help without imposing trade barriers or at least distorting trade in one way or the other.

Herding is even more difficult to do anything about because it is a part of our human psyche, but if we got the overall framework more correct and avoided much of today's short-termism, the negative consequences of herding would be less problematic. Thus, one thing we can deduct from the discussion in this paper is that more research on countering the destructive forces of short-termism and herding is needed and more international cooperation if we are to get economic behavior more alignment with

sustainable development. Also, environmental management has so far often revolved around technology, legislation, standards, taxation, and so on, but it is probably well overdue to start investigating more systematically the behavioral aspects of environmental management to pave way for something we may label behavioral environmental management whose purpose is to focus on what can be achieved by changing systems to induce the right behavior in people.

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