Journal of Management for Global Sustainability

Volume 5 | Issue 2 Article 4

12-31-2017

Transforming Finance and Business Education: Finance's Unique Opportunities

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Journal of Management for Global Sustainability Volume 5, Issue 2, 2017: 15–52

TRANSFORMING FINANCE AND BUSINESS EDUCATION

FINANCE'S UNIQUE OPPORTUNITIES

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Abstract. Mankind faces the challenge of transforming the existing global production, distribution, and consumption system into one that is more just and sustainable and which the Earth's resources can support (e.g., Francis, 2015). Unfortunately, current business education is "part of the problem" of global unsustainability as it supports, enables, justifies, and intensifies the unsustainable aspects of the existing business system. Thus, while all people have opportunities to contribute to this transformation and are "called" to do so, university administrators and professors in all disciplines have a special opportunity and obligation to heed that call.

This article is the second of three planned articles focusing on business education, and particularly on finance teaching within that education. It describes finance professors' exceptional opportunity to become "part of the solution" and how some are already doing so. It concludes by describing why finance professors in faith-enabled business schools, such as those of the world's Jesuit universities, have an especially great opportunity to contribute to this transformation.

Keywords: business education; finance teaching; sustainability

OVERVIEW

> The greatest temptation is to work on doing better and better what should not be done at all. —Peter Drucker (quoted in Stoner, 1982: 14)

Finance professors have an exceptional opportunity to contribute toward creating a more sustainable world by transforming teaching and research in their field. However, while this article focuses on the opportunities for change in finance education and research, similar opportunities exist in all the business disciplines. Each of them currently teaches concepts, behaviors, and methodologies that have contributed to the unsustainable world we presently inhabit, and so each can make significant contributions toward a more sustainable world by transforming its own teaching and research.

This article is the second of three that follow the “What’s so? So what? Now what?” theme of the *Journal*. The first article, “Transforming Finance and Business Education: Part of the Problem” (Werner & Stoner, 2015), described 1) the need to transform the dominant economic and business education paradigms that currently contribute to global unsustainability, 2) the ways current finance teaching and research are misaligned with the need for a sustainable world, and 3) how that teaching is contributing to growing national and global unsustainability problems (“What’s so?”).

This second article 1) describes why finance teaching and research are in a position to make special, perhaps uniquely powerful, contributions toward transforming these paradigms (“What’s so?”) and then 2) identifies ways finance professors and others can change, and to some extent are already changing, finance teaching and practice to become part of the solution to global unsustainability, along with examples of places where such changes are already starting to take place (“So what?”). Moreover, while all business schools can and should seek to be leaders in this transformation, this article will also note some special opportunities to contribute in this domain that are available to any faith-enabled business school and especially the schools that are members of the International Association of Jesuit Business Schools (“Now what?”).

Finally, this article calls for readers to contribute to a third, follow-on article (working title: “Transforming Finance and Business Education: Recent Examples of Transformation”). That article will provide ideas for as well as more examples of promising steps for aligning financial management teaching and research with the requirements of a sustainable world ("Now what?").

Business academics in all disciplines work long and hard to advance their respective fields' contribution to the world. These three articles are thus intended to heed Peter Drucker's warning cited above by alerting us to the dangers of continuing to make our contributions within the broken, "same-old, same-old" disciplinary paradigms that are misaligned with the realities of the 21st century, a century wherein we must find new ways to live, work, and prosper. These articles suggest that we are called to think and act imaginatively and boldly to create new approaches that will begin to solve the problems of global unsustainability.

WHAT'S SO? SAMURAI FINANCE

Like Nixon to China: Academic Finance's (Almost) Unique Opportunity

When one who is perceived as a true believer and defender of the faith openly embraces a contrary position, the impact can be dramatic and far reaching. A well-known example from recent United States history is that of Richard Nixon's trip to China in 1972 to improve American-Chinese relations. Nixon was seen as a staunch anti-Communist Cold War crusader who considered China one of the United States' greatest enemies. Had a more liberal president made the overture, the American public might have reacted negatively, assuming that he did not fully understand the ramifications of his actions. However, because of Nixon's prior beliefs, it was assumed that he had fully considered the implications of his actions and that this change to U.S. policy was wise, appropriate, and necessary.

In a similar way, finance, long the true believer in shareholder wealth maximization and a strong proponent of the neoliberal economic-political-consumerist paradigm (Boas & Gans-Morse, 2009; Mirowski & Plehwe, 2009), is in a unique position to take a leadership role in the transformation of business education. Finance and finance professors have established a high degree of credibility with business. Financial models form the basis of decision-making in many aspects of modern business activity, and those models are seen by many, with some notable exceptions, as contributing to the creation of profitable products and services, providing employment, and generating wealth. It is therefore likely that business executives would pay attention if finance professors and financial analysts began to include environmental and social effects in their research, writing, and model building. And, if faculty were to teach this new finance, they might help produce a new generation of business leaders eager and able to transform their companies to be greater contributors to global sustainability.

Finance, however, is not the only academic discipline positioned to advocate these changes in business education. For many years, marketing professors and their textbooks have taught that consumer demand should be created and then met without probing deeply into the implications for global sustainability and human well-being. Accounting, with its origins in the Middle Ages, has measured financial activity, but professors and texts have said little about how to measure the environmental and social impacts of those operations. Teachers of business economics and their texts have done little to suggest that they are alerting their students to the limits of unending growth, leading to the wry comment by Kenneth Boulding, former president of the American Economic Association and the American Association for the Advancement of Science, that "anyone who believes exponential growth can go on forever in a finite world, is either a madman or an economist" (Boulding, 1966: 3). Although to do actual justice to economics professors, it might be fairer to say: "The only people who believe exponential growth can go on forever in a finite world are lunatics, economists, and business professors."

All these disciplines in the end have the standing to provide leadership in transforming business education. However, since the current finance paradigm is the dominant one in business education and influences what is taught throughout business curricula, a change advocated by finance faculty will likely carry far more weight than one advocated by their marketing, accounting, or business economics peers. And, as has been the case with dominant paradigms in the past, breaking with this one and challenging its powerful guardians—the gatekeepers for the prestigious "top-tier" journals and the influential players in academic appointments and promotions—will require a high level of courage (or perhaps naivety). It is therefore because of the courage that finance professionals will need to pursue this journey to its conclusion that we use the term "Samurai Finance" to denote the challenge faced by the pioneers who must be bold, whole-hearted, and unyielding in pursuit of a higher goal whose accomplishment will be fraught with difficulties and may oftentimes even seem to be impossible.

SO WHAT? MAKING SAMURAI FINANCE HAPPEN: WAYS TO ALIGN FINANCE TEACHING WITH THE REALITIES OF TODAY'S AND TOMORROW'S WORLDS

An early step in exploring how finance teaching (and research) could be aligned with the need for a sustainable world might be to develop a concept of what such a world, and perhaps organizations in it, might look like. Some recent attempts to do so have been made and more are sure to follow. All these speculative efforts suggest positive actions that can be taken, although some paint a pretty pessimistic picture of our situation and likely future (Hawken, 1993; Greer, 2008; Collins, 2011; Hertsgaard, 2011; Oreskes & Conway, 2014) while others are more optimistic (Hawken, Lovins, & Lovins, 1999; Hawken, 2007; Kahn, 2010; Lovins & Cohen, 2011; Laszlo & Brown, 2014). Some imply or advocate deep levels of true transformation (McKibben, 2010; Klein, 2014) while others suggest a fairly modest level of institutional and societal change, at least initially (Hawken, 2007; Senge, Smith, Kruschwitz, Laur, & Schley, 2008; Hart, 2010).

The best framework for choosing among these models as a starting point for exploring ways finance teaching and research can support a more sustainable world is not immediately obvious, at least not to us. In lieu, then, of an approach based on an over-arching concept of the emerging organizational and societal future, this article will take four bites out of this very juicy but perhaps bitter-sweet apple by: 1) examining one of finance's basic assumptions, 2) exploring finance's roles in business and other organizations as they currently exist and as they may be changing, 3) noting the emerging finance leadership in business and other institutions, and 4) reviewing the ways finance teaching is evolving in some business schools, including new global-sustainability-focused ones.

The Opportunity to Examine a Basic Assumption of Finance

"Examining or not examining our basic assumptions" is one of the perennial themes of economics (Friedman, 1953; Nagel, 1963; Crotty, 2011) and is surely appropriate for a discipline like finance which has so many of its foundational roots in economics. Many of its conclusions are influenced—if not fully determined—by the assumptions on which its analyses are based, and with such a large impact on how other business disciplines conceptualize and go about their endeavors. The assumption made in finance theory and teaching that *the* purpose of the firm is to maximize shareholder wealth (as discussed in the first paper in this series) has, of course, been heavily criticized by many commentators outside finance (e.g., Freeman, 1984; Stout, 2012; Jones & Felps, 2013). Others ask for clarity of thought; Dembinski, for example, approaches the issue from a business ethics perspective, pointing out that all business and economic theories are based on moral judgments, and urges us to make those judgments explicit so they can be critically evaluated (Dembinski, 2011). Criticism has even been voiced by such business leaders as Jack Welch (Guerrera, 2009) and in the sacrosanct precincts of *Forbes Magazine*, a mainstream business publication that has long labeled itself a "capitalist tool" (Denning, 2013). The title of Denning's essay, "The Origin of 'The World's Dumbest Idea': Milton Friedman," suggests how strongly some of these criticisms are being voiced.

One premise of these first two articles of the *Journal*, and of the third proposed article, is that many and perhaps most finance professors would agree that the goal of all organizations—business and non-business, for-profit and not-for-profit—should be to contribute to society in some manner or other. Each should exist to provide some benefit, even though different organizations can do so in different ways.

A second premise of these three articles is that finance professors have many rich and exciting opportunities to contribute toward creating a more sustainable world. Among these is the chance to explore the value, implications, and appropriateness of finance education's basic assumptions about how to create and sustain organizations that contribute to society 1) in the world that produced those assumptions, 2) in the changing world of today, and 3) in the possible worlds of tomorrow.

Contributions to society can be made in many ways, but it is convenient and useful to group them into three broad categories:

1. Contributions that create economic, social, and financial value: production of goods and services at the lowest possible cost for as many people as possible, provision of meaningful employment for as many people as possible, creation of the greatest amount of financial wealth, etc.

2. Contributions that preserve and enhance the physical environment: improvements in air quality, increases in the supply of fresh water, amelioration of climate change and associated severe weather events, eradication of diseases, prevention of species extinctions, etc.

3. Contributions that increase social justice and inclusion: reduction of hunger and poverty, elimination of the exploitation of people including child labor and human trafficking, increased access to education and health care, decline in discrimination and prejudice, etc.

Since the time of Adam Smith, it has been assumed that the contributions of for-profit business lay only in the economic realm, an assumption that remained most likely a reasonable one many years thereafter. The early businesses of the Industrial Revolution that Smith studied were tiny, and each on its own was unable to make significant contributions or do much harm to the environment or to social justice. In such a world, a business goal focused only on economic performance made sense. As Smith so eloquently and memorably put it:

> every individual … generally … neither intends to promote the public interest, nor knows how much he is promoting it.… He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.… By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it. (Smith, 1776: Book IV, Chapter II, paragraph 9)[1]

The current finance paradigm, that the goal of for-profit businesses should be to maximize the wealth of its owners, is the modern evolution of Smith's argument, and those who staunchly support it do so from the point of view that maximizing economic value is still *the way* for these organizations to make their maximum contribution to society. Those who accept this perspective as the definitive answer to the question of "what is the purpose of business?" rarely if ever explore the implications of the word "frequently" in Smith's observation.

However, we now live in a very different world, a world of big corporations many of which have a significant impact on the environment and on society. The largest of these companies rival governments in their power and scope: the world's five largest corporations reported revenues

[1]This passage from the *Wealth of Nations* appears within a chapter devoted to domestic versus foreign investment, and not (as many assume) within a chapter devoted to the functioning of markets. It is in Book I, Chapter VII, rather, that Smith discusses supply and demand and how what he refers to as commodities markets tend toward an equilibrium that aligns individual self-interest with the maximum welfare for society. Nevertheless, subsequent economists have found the passage so powerful that they have applied it in the way it is most commonly used today (see, for example, Basu, 2010; Friedman & Friedman, 1979; Klein, 2009).

for their fiscal year ending in 2015 greater than the 2015 GDP of all but 41 countries (Forbes Global 2000, 2015; International Monetary Fund, 2016). Unfortunately, these organizations' sole pursuit of economic value is often accompanied by damage to the environment; to the lives and well-being of their employees, customers, and communities; and to the fabric of society. Even today's smaller businesses, like their large brethren, often ignore the damage they cause in their pursuit only of profits.

If the damage to the environment and society caused by businesses pursuing the current finance paradigm were insignificant, it might be argued that the immense economic success of these companies makes such damages tolerable, that they are unfortunate but acceptable side-effects that might be addressed by governments or charities. However, this is no longer the case, making it vital that finance professors, based on the inappropriateness of just this one assumption, take a fresh and creative look at the long accepted finance paradigm and determine to what extent it needs to be modified or perhaps even replaced. One very simple starting point might be to focus on Smith's exact wording and ask when "frequently" is or is not an appropriate descriptor of the impact of business actions on the interests "of society."

In the course of re-examining the paradigmatic implications of this one assumption, finance scholars are likely to be called to reconsider the appropriateness and implications of other assumptions that create the foundation stones of the finance paradigm. Some other promising candidates for re-examination might be found among the assumptions noted in the first article in this series (Werner & Stoner, 2015). Indeed, such re-examinations have already begun and are likely to increase in volume and impact. Examples are Lynn Stout's argument that shareholders are only that and not legal owners of the corporation (Stout, 2012), John Fullerton's white paper drawing the connection between finance theory and how natural systems regenerate and strengthen themselves (Fullerton, 2015), and our own work on how the assumptions underlying the Shareholder Wealth Maximization finance paradigm are either far too simplistic, hence unrealistic, or inappropriate for the present time (Werner & Stoner, 2017).

A Framework for Exploring Finance's Contribution Opportunities

Many frameworks for exploring ways finance teaching and research can support a more sustainable world are possible, and the theme of many of them might use words that are consistent with John Ehrenfeld's writings on sustainability: a socially just world in which "all species can flourish forever" (Ehrenfeld, 2008; Ehrenfeld & Hoffman, 2013).

Along the same lines, the goal of achieving a sustainable world could be pursued using a definition of global sustainability like the one in this journal's first issue: "a process that meets the needs of the present generation while enhancing the ability of future generations to meet their own needs. Global sustainability envisions a world that works for everyone with no one left out" (Stoner, 2013).[2] However, while it may be possible to achieve a reasonable level of agreement on a very broad statement about the new, sustainable world to be sought after, agreeing on the details of that world and how the transformation of finance teaching and research can help us get there is likely to be a much more challenging task.

For business schools, a particularly challenging framing and action issue occurs in the domain of time horizons. Are we to educate our students to work in the world as it currently is? Or to work in the world as we think it needs to become? Or to be active agents in moving the world from what it now is toward what it needs to become? It is obvious that the ambiguity, perhaps inherent unknowability, of the details of what the world needs to become does not make this time horizon issue any simpler.

One possible approach to this exploration might be to build upon the Business as Usual (BAU), Amended Business as Usual (ABAU), and Not Business as Usual (NBAU) frameworks described in the first article in this series and used in various versions by many other authors (e.g., Adler, 2008; Stubbs, 2010; Institute B, 2014). Business as Usual is the current dominant business paradigm built upon the assumption that Shareholder Wealth Maximization should be the goal of the for-profit business firm. Amended Business as Usual also seeks to maximize shareholder wealth, but it emphasizes ways to increase profits and do less harm to the environment and society by identifying and acting on profitable opportunities to respond to environmental and social ills. Not Business as Usual refers to a transformation of the business paradigm into one that will contribute toward, and ultimately create, a sustainable world. Such framings might suggest that finance and other professors need to explore,

[2]The first part of this "definition" is a modified version of the definition of sustainable development from "Our Common Future," the 1987 report of the United Nations World Commission on Environment and Development, commonly known as the Brundtland Commission after its chairperson, Gro Haarlem Brundtland (United Nations, 1987). It goes further than the Brundtland definition in that while the latter calls for not "compromising the ability of future generations to meet their own needs," i.e., not making things worse, this statement calls for improving the well-being of future generations. The second part of this "definition" then addresses the issue of social justice and inclusion, a concern not explicitly part of the Brundtland definition.

research, and teach students how to contribute to, and thrive personally and professionally in, all three domains: present, transition, and ultimate future. A major component, therefore, of the related research would be the discovery, development, and implementation of financial tools and change processes needed to move toward, and manage in, each of these state-of-the-world realms.

The World of Business as Usual. Companies and employees living in their own BAU world are ignoring more sustainable ways of conducting their operations or are somewhat passively pursuing sustainability initiatives only when it is demonstrably profitable to do so, and all while still performing existing profit and net present value analyses and fully honoring rate of return hurdles. When it can be demonstrated that investments and changes in procedures directly and substantially "improve the bottom line," those activities will be carried out, although not always. In his book *Getting Green Done,* Auden Schendler cites some examples where demonstrably superior financial options based on more sustainable actions were still not taken for a variety of seemingly strange and not very substantive reasons (Schendler, 2009).

The reluctance of managers to pick the "low hanging fruit" of sustainability initiatives as noted in Schendler's examples is consistent with the David B. Gleicher model of change. This model suggests when change occurs and when it does not occur, and is expressed as follows (with a slight amending of the letters but not the concepts used):

$$C = D \times V \times P > X$$

Change (C) is likely to occur when the energies associated with dissatisfaction with the *status quo* (D) multiplied by a vision of a preferred state (V) and multiplied by practical first steps to move toward that vision (P) generate enough energy for change to overcome the cost of change (X) (Stoner, 1982; Beckhard & Harris, 1987; Dannemiller & Jacobs, 1992). And, as Gleicher often observed, the really significant costs of change are very frequently the psychological costs of giving up old habits, or the taking of risks to try new things, or perhaps the psychological and egotistical pain of recognizing that we have worked for long periods of time *to get better and better at doing what should not be done at all.*

Current finance teaching to a large extent provides students with the tools and ways of thinking to contribute and to do well in a BAU world. That teaching, of course, is not likely to alert them to financial opportunities available from picking the low hanging fruit that can be revealed by knowing and understanding the very basic sustainability-consistent concepts that are useful in financial analysis and decision-making. Those concepts and tools include life-cycle assessment (LCA) (SAIC, 2006), tunneling through the cost barrier (Hawken et al., 1999), biomimicry for design and operations (Benyus, 1997; Vierra, 2014), cradle-to-cradle design (C2C) (McDonough & Braungart, 2002), design for sustainability (D4S) (UNEP, 2009), and carbon footprint measuring methods such as the ones from The Nature Conservancy (The Nature Conservancy, n.d.), the Rocky Mountain Institute (RMI, 2009), and state and national environmental protection agencies (e.g., U.S. EPA, n.d.).

In the same vein, traditional finance teaching may also not provide knowledge of sustainability-related financial markets and instruments available to firms as well as of non-financial metrics used by investors and rating agencies to assess the market value of companies' own shares and financial obligations and thus their cost of capital. Looking ahead, traditional finance teaching may well be slow in addressing the financial and strategic impacts on companies of possible future carbon taxes, carbon cap-and-trade regulations, the growth of carbon emission markets, the financial implications of technological advances in wind and solar energy, and growing governmental support for moving toward a carbon-free world.

Various aspects of financial market instruments like carbon offset certificates and programs for carbon taxes and cap-and-trade systems are currently in various stages of exploration, evolution, and controversy in many countries (e.g., CBO, 2013; Smith, 2014; Wettestad & Jevnaker, 2015; Australian Government, 2014). These evolving programs and instruments may come to play an increasing role in future financial decision-making and certainly offer interesting research opportunities for faculty members in finance and other fields. Investors' decisions are already being influenced (U.S. SIF Foundation, 2014) by the growing volume of Environmental, Social, and Governance (ESG) data available from sources such as the Global Reporting Initiative (GRI), the Institute for Research and Innovation in Sustainability (IRIS), the Global Sustainable Investment Alliance (GSIA), the Bloomberg Professional Service, MSCI, IW Financial, and the Sustainability Accounting Standards Board (SASB). These data sources are likely to become more influential in the future as climate change impacts and other environmental problems continue to increase. For instance, the continuing debate about the most effective methods to reduce atmospheric carbon levels—national legislation, cap-and-trade schemes, carbon taxes, etc.—is more likely to grow than diminish as atmospheric CO_2 levels continue their rise above the 350 ppm level, which is widely assumed to be the maximum level our planet can maintain without serious climate destabilization and enhanced global warming (e.g., 350.org, n.d.). Fortunately, the international agreements reached at the December 2015 UN COP-21 meeting in Paris provide new motivations and opportunities for seeking solutions.

The lack of exposure to such finance-relevant tools, financial markets and instruments, and company-evaluating metrics may not seem to be an obvious career disadvantage at present in many employment situations. The career situation is changing, however, as an increasing number of firms become aware of the necessity to reap the competitive and financial advantages of understanding and using the full range of concepts, tools, markets, instruments, and metrics related to creating climate change resilience. Such company awareness seems to be growing reasonably rapidly (Ernst & Young, 2013) and is sometimes communicated by serious executives like Ben Cohen and Jerry Greenfield in a light-hearted manner, such as with the new Ben and Jerry's ice cream flavor "Save our Swirled" (Boscamp, 2015). As a result, employees who currently lack the knowledge and skills related to these concepts and tools miss opportunities to stand out as innovators before this competitive awareness comes to their companies and becomes part of employees' required basic knowledge and analytic and decision-making tool kits.

The World of Amended Business as Usual. In the ABAU world, companies and their employees engage in a somewhat aggressive pursuit of sustainability-friendly actions that pay off within the existing business paradigm, although perhaps with some mild tinkering with time horizons, hurdle rates, payback periods, etc. In these firms, financial analysis and decision-making are coming to be substantially informed by the concepts listed above, and related tools are actively being used. ABAU companies and organizations may also make minor, but perhaps useful, structural changes such as adding sustainability coordinators or departments, financial and career incentives for sustainability-related employee initiatives and accomplishments, and including some recognition of the need for global sustainability in their mission statements. However, even as they seek to do less harm in their pursuit of the traditional goals of profitability and competitive advantage, they are not undergoing the major structural, strategic, and values transformations that many observers (e.g., Korten, 2007, 2015; Klein, 2014) believe are needed throughout the business and non-business productive world. In these ABAU companies, which are growing in number because of competitive and regulatory—and in some cases even values-driven—pressures (Lovins & Cohen, 2011), it is a growing necessity for employees to possess and use finance-relevant tools and insights (e.g., CPA Canada, AICPA, & CIMA, 2013). Failure to provide these tools and concepts to students who are likely to work in companies in the ABAU world is therefore a growing disservice to them and to their employing organizations. As a member of the audience at a Rowen University PRME meeting a few years ago recalled hearing a Honeywell V.P. say, "sustainability is embedded in the DNA of the company to such an extent that 'any institution providing us [Honeywell] with an applicant for hire had better make sure that they understand sustainability challenges or don't bother sending them'" (Weiss, 2016).

The World of Not Business as Usual. The NBAU world, in the sense of "Business for and in a Sustainable World," is a world none of us has experienced, but attempts to describe it and the productive organizations that would make it possible are being made (Dietz & O'Neill, 2013; Klein, 2014; Korten, 2015) and many more can be anticipated. In general, the planet's inability to continue yielding the growing amount of inputs required by our current ways of producing and consuming and absorb the various wastes generated thereby very compellingly suggests that the NBAU world must be a completely transformed production-distribution-consumption global society. Such a world has been called for by many commentators, not the least of whom is Pope Francis (Francis, 2015). For organizations in such a new society, finance is likely to play many of the same roles it currently plays, but it might play some of those roles in entirely different ways as well as some brand new ones.

Although this article focuses on the field of finance, opportunities for exceptional contributions are also available to professors of marketing (e.g., Bridges & Wilhelm, 2008; Schor, 2010), accounting (e.g., Bebbington, 1997; Gray & Collison, 2002), economics (e.g., Costanza, 1991; Farley & Costanza, 2002), and to faculty outside the disciplines of business. Given that all organizations, not just for-profit businesses, are likely to undergo very deep changes, bringing such a world into being is arguably one of the greatest challenges ever presented to our species, and certainly among the most exciting ever brought to those who reside in academia. In this vein, predicting what that world will be like and preparing individuals and organizations to create and work in such a world may well be the greatest and potentially most exciting intellectual adventure finance professors and professors in all disciplines have ever had the opportunity to undertake. All academic fields, such as political science (e.g., Park, Conca, & Finger, 2008; Meadowcroft, 2011), sociology (e.g., Passerini, 1998; Burns, 2012), psychology (e.g., Schmuck & Schultz, 2002; Myers, 2013; Jaipal, 2014), and the arts (e.g., Harden, 2012; Canavan & Robinson, 2014), among others, are likely to have significant contributions to make in this transformation.

The greatest challenge in making the kind of transformation that we need to make most probably comes from the fact that nobody can know for sure what NBAU will and should eventually look like, or how to get there. At least four factors significantly complicate this situation: 1) there are very well-established business and economic models and methods in place in the BAU world, 2) all aspects and players in that world exist in a coherent, integrated, mutually supportive, self-reinforcing, and ongoing global system, 3) rewards at work and careers are based on doing well in the BAU world, and 4) there is very little career and institutional incentive for academics to think and act outside the box and great career risks in doing so.

There is, unfortunately, a fifth factor that needs to be noted: the systematic and tragically effective if misguided and selfish efforts of individuals and organizations in the United States to deny the realities and seriousness of the unsustainability of our current ways of being in the world (Krugman, 2006; Anderegg, Prall, Harold, & Schneider, 2010; Oreskes & Conway, 2010; Washington & Cook, 2011; Merchants of Doubt, 2015; Exxonsecrets.org, n.d.). Fortunately, it seems that some of the groups that have long been misled on this issue are beginning to recognize the need for constructive action (e.g., Paulson, 2014). Hopefully the actors promoting, funding, and sponsoring these systematic attempts to prevent or at least delay concerted actions to "heal this broken world" will eventually diminish and fade away entirely.

The Evolving Finance Leadership in Businesses and Other Institutions

There are many changes occurring in business and economics that can alert professors in finance and other disciplines to the need to rethink what they have traditionally researched and taught, and to the opportunities for them in doing so. Such signals of change are occurring all around us: the rising availability of environmental, social, and governance data and its increasing use in investment and business decisions; the shocking rise of global income inequality (especially in the United States) and its implications for social unrest and maybe even revolution (Piketty, 2013); the growth of full cost accounting, with increasing use of information about and reporting on traditionally ignored externalities; the growth of "impact investing" and the increase in funds flowing to "green-type" companies and investment funds; the likelihood that the set of World Bank institutions will be changing its priorities much more toward creating a more sustainable and socially just world, etc. Indeed, many of these changes can most easily and concretely be glimpsed by looking at how specific institutions are responding to the forces of change. Moreover, it is often the case that advances in business practice precede the incorporation of these concepts in business school curricula. Finance professors can thus look to many individuals and organizations outside the academy for ideas and initiatives that can help transform how finance may come to be practiced in the future or how it is already being changed. Many of these institutions in fact welcome finance professors and professionals as active partners in their explorations.

The Aspen Institute. A promising source of ideas and resources for finance professors who are looking for ways to transform their teaching is the Aspen Institute's Business and Society Program (http://www.aspeninstitute.org/policy-work/business-society), the mission of which is to "Align Business with the Long-term-Health of Society" by incorporating sustainability and values-based leadership into business practice. A part of the program is the Aspen Center for Business Education which collects data and recognizes innovative research, courses, programs, and educators addressing change in business education. Until 2016, the program also ran CasePlace.org, a repository of teaching materials that included case studies and syllabi on finance and global sustainability. The future availability of that repository was under consideration as this article was being completed.

B-Lab and the B-Corporation Movement. For finance professors who are seeking opportunities to be leaders in a new domain of finance research and teaching, the growing movement that allows companies to register themselves as "Benefit Corporations" may be a very interesting phenomenon to explore. The not-for-profit organization B-Lab (https://www.bcorporation.net) has created a framework that enables for-profit corporations to define their purpose, explicitly and legally, as going beyond shareholder value maximization to include a commitment to solve social and/or economic problems, that is, to "redefine success in business"[3] (B-Corporation, 2016).

There are three initiatives within B-Lab: 1) lobby governments to pass legislation permitting the creation of "benefit corporations" or "B-Corps" and provide legal protection for these businesses to pursue non-financial objectives along with, or instead of only, financial goals; 2) minimize false claims of social and environmental purpose by identifying companies

[3]Some legal scholars argue that there is nothing in current U.S. corporation law requiring for-profit corporations to pursue shareholder wealth maximization (SWM) as their primary or only purpose. Rather, they point out that the standard text of state corporation laws in the U.S., including in Delaware—seen as the most important state for corporate law and its judicial interpretation, does not require SWM but simply permits the corporation to engage in any lawful act. So, while these scholars might see the B-Corporation movement as an important way to support non-financial corporate goals and bring these companies and data about them to the attention of the broader public, they consider the notion of the B-Corp as legally unnecessary (Sneirson, 2009; Stout, 2012).

that meet the environmental and social performance, accountability, and transparency standards of B-Lab, and by acknowledging them as "Certified B-Corporations," and 3) create a database for benchmarking social and environmental performance and a "B-Analytics" platform for accessing it.

In mid-2016, B-Lab reported 1) that thirty U.S. states and the District of Columbia had passed B-Corp legislation, 2) that more than 1,750 corporations from 50 countries and 130 industries had been certified, and 3) that the B-Analytics database, containing information from more than 1,100 companies, was in wide use within the professional investment community (B-Corporation, 2016).

Beyond the data in B-Analytics, B-Lab also has a list of B-Corps available on its website, as well as a blog, videos, and annual reports, all of which might be useful to finance professors, plus a jobs-board which should be of interest to finance students.

Patagonia. The outdoor apparel manufacturer Patagonia, one of the most successful B-Corporations, is a model of a company whose corporate goal transcends financial value. Its mission statement is to "build the best product, cause no unnecessary harm, [and] use business to inspire and implement solutions to the environmental crisis." Patagonia's employees consistently donate their time while the company donates its services—and at least 1% of its sales revenues—to "hundreds of grassroots environmental groups all over the world who work to help reverse the steep decline in the overall environmental health of our planet" (Patagonia, 2016).

Contrary to the take-make-waste philosophy of so many companies that are happy to see their products become obsolete so they can sell and profit from replacements, Patagonia prides itself on the longevity of its products. Their "Worn Wear Tour" sends a biodiesel repair truck throughout the United States where they repair, and teach customers how to repair, damaged Patagonia products free of charge. They also accept used clothing on consignment in their Portland, Oregon store, and pay one-half of the sales price to the consignor once the item is sold.

Patagonia's sustainability-related efforts include initiatives involving fabrics, clothing manufacturing, transparency, and food. The company works with fabric mills to reduce negative environmental and social impacts and with clothing factories to promote fair labor practices and ensure good working conditions; such activities are described in "The Footprint Chronicles" (Patagonia a, n.d.). The company focuses on making its supply chain as transparent as possible to identify and reduce any harmful environmental effects. Patagonia also has a subsidiary called "Patagonia Provisions" (Patagonia b, n.d.) which addresses environmental issues in the food industry.

Ray Anderson and Interface. Among corporate initiatives to transform large, successful, and complex industrial organizations into globally sustainable institutions, that led by Ray Anderson until his recent and widely mourned death in 2011 was probably the best known of all. At a time when so much anger and contempt had been aimed at the personal greed of, and social and environmental harm caused by, too many CEOs and other corporate leaders (e.g., Krugman, 2006; Ratley, 2014; Buchheit, 2013), Ray Anderson, like Patagonia founder Yvon Chouinard, was one of those corporate leaders who became widely respected and admired for their commitments and actions to create a more sustainable world. The gradual evolution of Interface's financial metrics and decision-making processes are hinted at in Anderson's three books (Anderson, 1998, 2009; Anderson & White, 2011) and information on their further growth is likely to be widely shared by his successors as they continue to "climb Mount Sustainability."

Bloomberg L.P. Bloomberg L.P. has been a leader in corporate sustainability efforts, targeting energy use, renewable energy sources, LEED certified office space, and diversity in its workforce. The company has been committed since 2007 to "help prove the 'business case for sustainability' by integrating finance into sustainability and sustainability into finance" (Bloomberg, 2014). As such, one of their initiatives going forward is to achieve a 20% reduction in absolute carbon emissions while simultaneously achieving a 20% internal rate of return on their sustainability investments by 2020 (Bloomberg, 2015).

The ESG sustainability metrics available on the Bloomberg Professional Service are fully integrated with company financial data and are reported to be widely used by financial analysts to study and understand the impact of ESG issues on traditional financial valuation (Bloomberg Professional Services, n.d.). In mid-2016, the Service contained ESG data on more than 11,300 companies worldwide as well as executive compensation data from over 16,000 companies in 69 countries, with such data being used by more than 12,000 of their clients (Bloomberg, 2016). Finance professors teaching investment analysis will find this service to be an important source of data as well as one that provides insightful guidance on the building of valuation models.

Many of Michael Bloomberg's personal initiatives during his twelve years as mayor of New York City were also aimed at contributing to a more sustainable world, as have similar activities by his media company, Bloomberg L.P., and foundation, Bloomberg Philanthropies. As New York City mayor, Bloomberg launched a comprehensive city-wide sustainability initiative, PlaNYC 2030, with the goal of making New York the greenest city in America. The plan paid particular attention to energy usage and carbon emissions, and served as a roadmap to assist companies doing business in New York to become more efficient.

The U.S. Military. In a 2015 report to the U.S. Congress, the U.S. Department of Defense (DOD) concluded that "climate change is a security risk" and that "global climate change will have wide-ranging implications for U.S. national security interests over the foreseeable future" (U.S. DOD, 2015). Indeed, the DOD for some years has been applying sustainability concepts and tools in powerful ways that will be of interest and value to finance professors and their students, using concepts like tunneling through the cost barrier (Hawken et al., 1999), for example, in making investment and building design decisions.

Both the U.S. Navy and Army have also used sustainability-informed financial analyses to guide their decisions on resource allocations and commitments to alternative energy investments. The Navy's assessment of the impact of climate change on the vulnerability of coastal military installations, which is being used to guide policy level decisions on how to protect those facilities (SERDP, 2013b), noted that "climate-related effects are already being observed at Department of Defense (DoD) installations in every region of the United States and its coastal waters" (SERDP, 2013a). For the Army, decisions in support of aggressive initiatives to develop alternative energy sources such as solar power were guided by analyses like the estimated fully-burdened financial (US$400 dollars per gallon) and casualty costs of delivering fuel to some remote locations in Afghanistan (Tiron, 2009).

The Capital Institute. Located in Greenwich, Connecticut, the Capital Institute is just one of a number of private organizations, usually not-for-profit, that are aggressively seeking ideas and approaches for dealing with what they see as fundamental flaws in the BAU model of business and in the currently dominant shareholder wealth maximization paradigm. The Institute was founded and is led by John Fullerton, an impact investor and a former Managing Director at JPMorgan where he managed capital markets and derivatives units. He was also the Chief Investment Officer of LabMorgan, the bank's high-tech, private investment vehicle. In 2014, Fullerton was elected to full membership in the Club of Rome, a widely respected informal global association of

100 thought leaders who "share a common concern for the future of humanity and the planet" (Club of Rome, 2016a).[4]

Given its roots in very successful ventures in the for-profit finance community as well as the broad financial expertise of its key members both in traditional financial value-maximizing activities and the emerging finance for a sustainable world, the Capital Institute's papers and programs—especially Fullerton's blog titled "The Future of Finance," available on the Institute's website, www.capitalinstitute.org—may be of particular interest and value to finance professors.

The Not-for-Profit Community. If cooperatives and social enterprises continue to increase in number and expand their roles in producing goods and services, as some predict they will (e.g., Kim & Bradach, 2012; Bernasek, 2014), they will likely continue and broaden their use of sustainability-focused financial tools and metrics in their operations. More importantly for finance professors, the nature of their missions may also lead them to explore and develop new sustainability tools and metrics and find innovative ways to use existing ones. One example of such tools that not-for-profits are likely to investigate is the IRIS set of "generally-accepted performance metrics that leading impact investors use to measure the social, environmental, and financial performance of their investments" (IRIS, n.d.). Acumen, the not-for-profit organization pioneering entrepreneurial approaches that address global poverty, develops and uses tools with a similar objective (Dichter, 2014).

The Humanistic Management Network and others. The Humanistic Management Network (HMN), which applied to the Academy of Management for Interest Group status in 2013, is one of many organizations and networks that are exploring ways in which the global production-distribution-consumption system needs to evolve to create a sustainable world. Other such organizations include The Evolution Institute, The New Economy Coalition, the Presencing Institute, and the related U.Lab initiative. As these organizations push forward with their intellectual and action-focused agendas, finance professors can look to them for information on, and ideas about, how finance practices are evolving and need to evolve as companies align themselves with the

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[4]In 2016, the Club of Rome launched an initiative to change economics education called "Reclaim Economics" because of their concern that "today's economic system is failing us. It is the cause of climate change, resource destruction and rising inequality. The idea that the free market works for everyone is a fantasy." The goal was "to inspire and support students, activists, intellectuals, artists, video-makers, teachers, professors and many others to help us shift the teaching of economics away from the mathematical pseudo-science it has become" (Club of Rome, 2016b).

need for a sustainable world. One of HMN's and other organizations' major themes directly relevant to finance teaching and research, for example, is the measurement of societal and organizational success and contribution. Beyond the well-known "Triple Bottom Line" (Elkington, 1997), metrics that focus on contributions to human and environmental well-being (such as Bhutan's GNH or Gross National Happiness; see Gnhcentrebhutan, 2016) are being explored as possible replacements for traditional ones such as Gross National Product and corporate profits. Finance professors of course need not restrict their role in these inquiries to that of purely passive observers—both professional opportunity and the chance to contribute to society invite them to be leaders in such pursuits.

The Fowler Center for Business as an Agent of World Benefit. Another promising source of ideas and possible examples of transformational finance in the for-profit sector and in innovative new social enterprises, the Fowler Center applies the greatly respected appreciative inquiry approach to organizational and societal transformation in much of its work. It is at present conducting a major study of "how the business sector is putting its people, imagination and assets to work for the benefit of humanity" (Fowler Center, n.d.). The Center also integrates the appreciative inquiry approach with the sustainable value framework (Hart & Milstein, 2003; Laszlo, 2008) and the concept of flourishing (Ehrenfeld, 2008 and others). As such, innovations in financial management and perhaps in fundamental levels of organizational transformation that are of interest to finance professors may emerge as the Center's work progresses and evolves.

The Investment Integration Project. The Investment Integration Project (TIIP) aids institutional investors in seeing the relationship of the returns and risks of their investment decisions with natural, social, and economic systems. As was made clear during the financial crisis of the last decade, systemic risks can have a severe impact on financial value and the well-being of society. TIIP's vision, therefore, is "a world in which institutional investors recognize the influence of their investment decisions on the earth's systems, and therefore intentionally make those decisions with the realization that healthy portfolio returns are not possible without healthy systems" (The Investment Integration Project, n.d.; see http://tiiproject.com/about/). The resources offered by TIIP can be useful and important additions to courses in investment analysis and portfolio management as well as to the research agendas of finance professors.

The Evolving Finance Teaching in Business Schools

As finance professors who recognize the importance of incorporating sustainability into their courses and programs seek out examples and models of what such innovations might look like, they can turn to a growing number of progressive schools that have been actively transforming the way they teach finance and the other business disciplines. Schools that are leaders in incorporating sustainability into their degree programs are an excellent place to look for guidance as they all have one or more courses in sustainability-related finance within their curricula.

Schools and Programs Whose Focus is Sustainability. The 21st century has seen the emergence of schools that have committed their educational efforts to sustainability. One of the first was the Bainbridge Graduate Institute (BGI) within Pinchot University in Washington State. BGI offered MBA degrees in Sustainable Business and Sustainable Systems. In 2016, Pinchot University and BGI were acquired by the Presidio Graduate School of Management in San Francisco, California, another pioneering school focused on global sustainability. Presidio offers both an MBA and an MPA in Sustainable Management (https://www.presidio.edu/).

Schools with Sustainability Degrees. Other schools which are not specifically focused on sustainability have created sustainability degree programs. Examples of these are

- Bard College in Annandale, New York, which offers an MBA in Sustainability at its New York City campus (www.bard.edu/mba);

- Brandeis University in Waltham, Massachusetts, which offers an MA in Sustainable International Development (http://heller.brandeis.edu/sustainable-international-development/index.html);

- Duquesne University in Pittsburgh, Pennsylvania, which offers an MBA in Sustainability (http://mba.sustainability.duq.edu);

- Marylhurst University in Marylhurst, Oregon, which offers an online MBA in Sustainable Business (https://www.marylhurst.edu/degrees-and-programs/masters-degrees/mba-sustainable-business/);

- the University of Exeter in the UK, which offers their "One Planet MBA" (http://business-school.exeter.ac.uk/mbaatexeter/oneplanetmba/oneplanetmbaprogramme);

- the University of Michigan in Ann Arbor, Michigan, which offers an MBA/MS in Sustainability through its ERB Institute and School of Natural Resources and Environment (http://erb.umich.edu/education-programs/mbams/); and

- the University of Vermont, which offers a "Sustainability Entrepreneurship MBA" (http://catalogue.uvm.edu/graduate/businessadmin/businessadministrationmba/).

Schools with Sustainability Majors and/or Minors. Still other schools have developed a sufficient number of sustainability-related courses to offer a major or minor in sustainability or other related topic without creating full-blown degree programs in sustainability. Examples of these are

- the Questrom School of Business of Boston University in Boston, Massachusetts, which offers a concentration in Energy and Environmental Sustainability within its MBA program (http://questromworld.bu.edu/gpo/mba-program/concentrations/ees-concentration/);

- the Tepper School of Business at Carnegie Mellon University in Pittsburgh, Pennsylvania, which offers a concentration in "Ethics and Social Responsibility" within its MBA program (http://www.tepper.cmu.edu/mba/mba-curriculum/concentrations/index.aspx);

- Clark University in Worcester, Massachusetts, which offers a concentration in sustainability within its MBA program (http://www.clarku.edu/gsom/graduate/fulltime/concentrations.cfm);

- Fordham University in New York City, which offers a concentration in "Social Innovation" and a minor in "Sustainable Business" to its undergraduates (http://www.fordham.edu/info/24491/majors_concentrations_and_minors/3057/sustainable_business); and

- the Keenan-Flagler School at the University of North Carolina, which offers a concentration in Sustainable

Enterprise within its MBA program (http://www.kenan-flagler.unc.edu/sustainable-enterprise/education/mba-concentration).

Sustainability-Focused Finance Courses. Some individual faculty members in finance have developed courses on sustainability, often in schools that are not yet committed to including sustainability in their degree programs in a systematic manner. One place to search for such courses is the Aspen Institute's CasePlace.org database as mentioned above. The authors of this article have also developed a course titled "Sustainability and Finance" that has been offered in the MBA program at Fordham University's Gabelli School of Business since 2007, as well as a parallel upper-level undergraduate course that has been offered since 2013 and which may be taken as a stand-alone elective, as part of the undergraduate concentration in Social Innovation, or as part of the minor in Sustainable Business. Other examples include the sustainability-focused finance courses offered by Columbia University's School of Professional Studies, including "Sustainable Finance," "Financing the Green Economy," and "ESG Investing and Responsible Investment Practices" (which do lead to a certification of Professional Achievement in Sustainable Finance); Duke University's courses in "Energy Finance" and "Water Resources, Finance, and Planning"; and the University of Washington's course titled "Finance and Accounting from a Sustainability Perspective."

NOW WHAT? SPECIAL OPPORTUNITIES FOR FAITH-ENABLED BUSINESS SCHOOLS—AND THE VERY SPECIAL OPPORTUNITY FOR JESUIT BUSINESS SCHOOLS

As unfortunate as it may be that so many business schools are not actively challenging the assumption that firms serve society best when their focus is on enriching their owners and with no other obligation than to obey laws and regulations (which they often help create to serve their own interests in the first place), such a stance is particularly upsetting when it occurs on the campuses and in the classrooms of faith-enabled universities and business schools.

Faith-enabled schools by their very nature embody the values of acting responsibly and of serving community and society. Engaging in an active inquiry, therefore, into how the current goals and activities of businesses often damage society and the environment, and how these goals and activities, if changed, might instead contribute to global sustainability, should fit well with their mission-vision statements, and perhaps much more so compared to their non-faith-enabled peers. Such an inquiry would provide intellectual challenges far beyond those offered by routine teaching, and could empower faculty, students, administrators, and staff alike to discover new opportunities for major contributions both to themselves and to society at large.

While the mission statements of almost all faith-enabled universities and business schools provide ample justification for those institutions to act on opportunities for both educational and societal contribution and leadership toward a more sustainable world, the call to do so is particularly clear for Jesuit business schools, and their opportunity to contribute on a global scale is exceptional. At least nine things make this call particularly clear and urgent. Some are quite recent, and some have long been in place. They include 1) the recent invitations to action in Pope Francis's 2015 encyclical on the environment, *Laudato Si'*; 2) the very similar invitations in the 2012 Jesuit Task Force Report on Ecology, *Healing a Broken World*; 3) the long-standing entreaty for just action and teaching implicit in the wisdom and beauty of Roman Catholic Social Teaching; 4) the American College and University Presidents' Climate Commitment (ACUPCC); 5) the Principles for Responsible Management Education (PRME); and, very importantly, 6) the Jesuit universities' espoused missions. Moreover, the opportunities for Jesuit business schools to make exceptional contributions arise from 7) the sheer size and global breadth of the IAJBS network of member schools and other organizations, which collectively gives them the opportunity to pioneer the transformation of business education from part of the problem of global unsustainability to part of the solution; 8) the visibility and staying power of the IAJBS World Forum's very unusual commitment to make leadership for global sustainability its annual conference theme for 10 years; and 9) the opportunity to make the bold, visible, and very symbolic act of adding a fourth Jesuit education-foundation-stone, one calling for care of our created world, to the centuries-old original three: *cura personalis*, *homines pro aliis*, and *magis*. Taken together, these factors create a particular urgency, justification, and excitement for IAJBS member schools to do what all business schools are called to do: provide a business education that serves humanity and all species in this and all future generations.

Laudato Si'. The recent papal encyclical, *Laudato Si'*, is clear and explicit in its call to engage in dialogue and to take action to avert the worst of the unfolding tragedies already arising from climate change and global unsustainability. It is a call addressed not just to Roman Catholics or even just to Christians but to all the world. It is also one that is especially poignant and compelling for members of Jesuit universities—we really are being called to take our existing commitments to creating a sustainable world to an entirely new and higher level, and to seize the opportunity to provide global leadership as we do so.

Healing a Broken World. The Jesuit Task Force Report on Ecology, *Healing a Broken World*, invites the entire Jesuit community to add care for God's creation to all aspects of its work and way of being in the world. This invitation calls for positive actions beginning at the time of entry into the order (formation) and continues for all aspects of the order's contributions to global well-being. The report thus contains eight recommendations for making the commitment to global sustainability visible, powerful, and a daily reality. Prominent among these recommendations for business schools are the gently but compellingly couched "invitations" for "Jesuit higher education institutions—business schools (and) research and capacity-building centers—to engage students in transformative education and to explore new themes and areas of interdisciplinary research," and to "develop curricula that address sustainability issues and impart a certain level of environmental literacy" (Promotio Iustitiae, 2011).

Roman Catholic Social Teaching. The year 2016 was celebrated as the 125th anniversary of Pope Leo XIII's encyclical *Rerum Novarum*, which is considered to be the founding document and stimulus for succeeding treatises and encyclicals that make up the set of principles and themes intended to guide decisions and behavior with respect to social justice. As identified by the United States Conference of Catholic Bishops, the seven themes of Roman Catholic Social Teaching constitute a strong call to commitment and action in upholding social justice and creating a sustainable/flourishing future. These are 1) the sanctity of human life and dignity of the person; 2) a call to family, community, and participation, as well as to the pursuit of the common good; 3) social justice; 4) care for the poor and vulnerable; 5) the dignity of work; 6) solidarity and the universal destiny of the goods of the Earth; and 7) care for God's creation (United States Conference of Catholic Bishops, n.d.).

Adherents of all faith traditions and many who do not profess any religious faith accept, in many respects, most of these tenets of Roman Catholic Social Teaching—particularly the calls for dignity, community, pursuit of the common good, and care for the physical environment. Such teaching can thus serve as a guide for many finance executives and academics—as well as for those in other business disciplines—as they grapple with how to move toward greater sustainability. One particularly powerful document that is universal in application, for example, and which can advance the thinking of those who are seeking to go beyond Business As Usual, is the "reflection" of the Pontifical Council for Justice and Peace titled "Vocation of the Business Leader." It urges businesspeople not to separate their beliefs about their responsibilities to humanity from their beliefs about their responsibilities to their work, and gives guidance to help business leaders keep their focus on

- producing goods and services that meet genuine human needs while taking responsibility for the social and environmental costs of production, of the supply chain and distribution chain;…

- organising productive and meaningful work, recognising the *human dignity* of employees and their right and duty to flourish in their work ("work is for man" rather than "man for work"), and [on] structuring workplaces with *subsidiarity* that designs, equips and trusts employees to do their best work; and

- using resources wisely to create both profit and well-being, to produce sustainable wealth and to distribute it *justly* (a just wage for employees, just prices for customers and suppliers, just taxes for the community, and just returns for owners). (Naughton & Alford, 2012)

American College and University Presidents' Climate Commitment (ACUPCC). In 2006, twelve university presidents founded the ACUPCC, a commitment to achieve climate neutrality on their campuses, integrate sustainability into their curricula and their students' educational experience, and publicly report their progress. As of mid-2016, 665 schools have made the same commitment.

The crisis of global climate change and other aspects of global unsustainability have validated the wisdom of the founding members of the ACUPCC and challenged all university and college presidents to join and act upon the organization's commitments. Nowhere is this call more valid than in the many IAJBS member institutions that have since joined the ACUPCC and in the others that have yet to join.

The Principles for Responsible Management Education (PRME). The PRME principles (UNPRME, n.d.) contain a strong call for re-aligning management education in all business schools toward contributing to a more sustainable world. Twenty-six Jesuit business schools had joined PRME by mid-2016 (UNPRME, 2016; IAJBS, 2016a, 2016b), and there are at present very ambitious initiatives underway to raise that membership total to 100%. In fact, the first executive director of the PRME Secretariat, Manuel Escudero, until recently the dean of the Deusto Business School in Bilbao, Spain, has been an active leader in the initiatives for bringing PRME to all Jesuit business schools and making it real on each campus. The present director, Jonas Haertle, has also been a strong supporter of efforts to bring PRME to all Jesuit business schools.

For faculty members and deans of Jesuit business schools who are seeking to move business school curricula from being part of the problem of global unsustainability (Porth & McCall, 2015; Werner & Stoner, 2015) to being part of the solution, *Laudato Si', Healing a Broken World*, Roman Catholic Social Teaching, the ACUPCC, PRME, and other related calls to action are clear justifications for leading the way in changing what is being taught and researched. These calls also provide a potentially powerful and morally strong basis for asking presidents, deans, administrators, faculty, students, and alumni why more is not being done, and faster.

Mission. The commitment to social justice and inclusion has been a hallmark of Jesuit institutions since each was founded. As such, all the factors described above as well as the ones that follow are anchored in, and supported by, the very DNA of Jesuit university mission. And, although a deep commitment to contributing toward a more sustainable world has not been included in mission statements as rapidly as might be expected, many of the universities have taken forceful steps to communicate clearly the connection between their historical missions and the need for global sustainability. Three examples are provided by Santa Clara University, Loyola University of Chicago, and Fairfield University (a more complete enumeration of the initiatives of the various Jesuit universities and their business schools will be provided in the third article of this series).

Santa Clara's president, Michael J. Engh, S.J., proposed in his 2009 inaugural address that the University should "become a major center for discussions of environmental justice, and for examining the ethical dimensions of how we treat the physical world ... (and that it) ... lead in the development and promotion of practices, businesses, and technologies that will ensure a viable and just future for all" (Engh, 2009). One of the ways Santa Clara has backed up that commitment has been in its leading role in teaching, research, and action in the field of social enterprise and social entrepreneurship, a field that many see as shaping the future of productive enterprises in key ways that will contribute to a more sustainable world.

At Loyola University of Chicago (LUC), the very visible and articulate commitment to global sustainability led by Michael Garanzini while he was president, combined with the work of faculty, administrators, and university partners, created the Institute of Environmental Sustainability (IES). LUC and IES played major roles in the research and writing that led to the Jesuit Task Force Report on Ecology and the new free e-textbook, *Healing Earth* (Healing Earth, n.d.). LUC and the Institute also host a very well-attended and influential Annual Climate Change Conference.

Fairfield's president, Jeffrey P. von Arx, S.J., has played a leading role in the University's global sustainability commitment and carbon neutrality progress. Their website states that as

> a Jesuit university committed to the belief that all humans have a responsibility for all creation, Fairfield infuses sustainability throughout its departments, programs, and infrastructure. Ignatius of Loyola, founder of the Jesuits, advocated in the 16th century that humans are stewards of the Earth—not owners of it or masters of other species. To honor the dignity and worth of all creatures and living things, we, humankind, must hold ourselves accountable for the environmental crisis that we have, ourselves, created. (Fairfield University, n.d.)

IAJBS Scope and Potential Impact. The 90 Jesuit business schools around the globe and the approximately 40 other members of the IAJBS (IAJBS, 2016a, 2016b) make up what is very likely the largest body of business schools and associated institutions of its kind in the world. It is no wonder then that they have enormous potential as a group to contribute to the world (Garanzini, 2015). The scope and sheer size of this global network offer the member schools, acting together and in partnership with many other similarly committed organizations and institutions, an exceptional opportunity to contribute to the transformation of business education.

The IAJBS World Forum and Its 10-Year Commitment. The IAJBS has become a growing force in supporting and encouraging its member schools to recognize that their long-standing commitments to social justice and poverty alleviation now require leadership in the domain of global sustainability. At the 2008 World Forum at Fordham University in New York City, the possibility arose that the 2009 World Forum at XLRI in Jamshedpur might focus on global sustainability, and the next year the Forum's theme was "Leading the Way to Sustainable Development." At that 2009 World Forum, the membership passed a very unusual resolution for any annual conference: a recommendation to the Executive Board of the IAJBS and to future World Forum host institutions that the theme of the annual meetings over the next ten years would be "leadership for global sustainability"—a resolution that was promptly approved by the Executive Board at its next meeting. The following year, at Ateneo de Manila University in Manila, Philippines, the possibility of founding a new journal devoted to global sustainability was proposed by the IAJBS board chair and dean of the Ateneo business school, Rodolfo Ang, and his colleagues. Meetings of the emerging editorial board were then held in New York and at subsequent World Forums in Lima

(Universidad del Pacifico, 2011) and Barcelona (Institut Quimic de Sarriá, 2012). The first two issues of the journal appeared in 2013.

Cura personalis, homines pro aliis, magis, *and?*

Many conversations occurring within the Jesuit community and well beyond it focus on how to capture and make real some of the opportunities and calls for Jesuits and their partners to continue making even greater contributions to the world in this Anthropocene Age[5] in which we now all live. Some of these conversations, for instance, focus on how Jesuit educational institutions can continue their almost five centuries of educational leadership (Lowney, 2003). One of many such opportunities to take a large, symbolic, and potentially powerful next step up the educational leadership ladder was also noted in the editorial for volume 2, issue 1 of this *Journal*. That step would be to add a fourth foundation stone to the three that have guided the Jesuit education commitment for hundreds of years, and to make that fourth tenet as real in mission, teaching, research, and service as the other three already are.

Changing the World a Second Time

Taken together, these calls and opportunities to act on conscience and with compassion for all species and all generations place the IAJBS member schools, individually and collectively, in a position to make still another contribution on a scale comparable to the Jesuits' own initial gift to the world: the establishment of educational institutions around the globe, which led Chris Lowney to describe the Jesuits as the "the 450 year old company that changed the world" (Lowney, 2003). Almost five centuries after those first steps, Jesuit business schools are called once again to take a leadership role in transforming the world, and they are exceptionally well-placed, perhaps uniquely well-placed, to do so—this time to transform business education (and business practice) from being part of the problem of global unsustainability to being part of the solution.

[5]Through the work of Nobel Prize-winning atmospheric chemist Paul Crutzen, the term "Anthropocene Age" has become widely used since 2000 to describe this world of today that has been profoundly influenced and changed by human activity. However, according to the International Union of Geological Sciences, we are officially still in the Holocene Epoch which began as the Paleolithic Ice Age ended some 11,700 years ago (Stromberg, 2013).

AN INVITATION TO CONTRIBUTE TO "TRANSFORMING FINANCE AND BUSINESS EDUCATION III: RECENT EXAMPLES OF TRANSFORMATION"

In the spirit of the *Journal*'s first editorial statement, we see this article as one part of a continuing conversation within the *Journal* and beyond that we hope will help influence "all of us as scholars, managers, leaders, and citizens of the world to effect positive change" (Stoner, 2013: 1). As such, we as a matter of course welcome any and all comments and suggestions for improving what we have said in this article, as well as opportunities to correct any errors we may have made or infelicitous phrasings we may have chosen. Most importantly, however, we wish to request guidance as to where we can find and report about initiatives being undertaken, especially (but not exclusively) in Jesuit business schools, to transform finance as well as all other forms of business and management education into being part of the solution to global unsustainability.

As part of this continuing conversation, therefore, we invite all readers of the *Journal* as well as all other concerned individuals to contribute to a third article in this series, with the working title "Transforming Finance and Business Education: Recent Examples of Transformation." Please share with us what you have tried, what others have tried, what has worked, and what has failed. We will assemble your reports and guidance and submit them to the *Journal* so we can extend this present article's initial coverage of opportunities for transforming finance education and initiatives for doing so. We also hope to report on the relationship of such initiatives with other efforts to make business and management education more consistent with the need for a more sustainable world. Some of those other initiatives, for instance, might include impact investing organizations and impact investment teaching, Net Impact's existing and possible future contributions, and the social-enterprise/social-innovation and Ashoka Changemaker Campus initiatives (with three Jesuit universities/business schools among the more than thirty Changemaker campuses worldwide), among others.

Our ultimate goal, however, above and beyond compiling and submitting a third article, is (and must be) to continue building a network of concerned scholars and practitioners who see the value and necessity of changing current business paradigms and practices; who understand the need to change the way finance and the other business disciplines are being taught; who grasp the professional and societal opportunities in doing so; and who will join with us to keep this vital conversation, inquiry, and transformation moving forward.

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