515-529

doi: 10.1556/204.2018.40.4.3

Mindfulness and Buddhist Economics in the Financial Market–Generating Delta or Alpha?

Ernest C. H. Ng

Honorary Assistant Professor, Centre of Buddhist Studies, The University of Hong Kong Email: chihinng@hku.hk

The financial market is undeniably the prime exemplar of capitalism where practitioners compete under intense pressure to excel in decision making every nanosecond. This unrelenting pursuit of outperformance is limited by human physical and mental capacities to make decisions based on the available technology and information. This paper reviews the state of contemplative practices as a form of "mind technology" in the financial market. In order to deliver outperformance, financial *Alpha*, in the market, this mind technology seems to suggest that it is important to engage in contemplative practices so that our brainwaves could transcend from the faster neural *Gamma* and *Alpha* waves to the slower and advanced state of neural *Delta* waves. This research looks into the benefits of these contemplative practices, particularly in decision making and management. It then evaluates the potential integration and conflict between contemplative practices and material pursuits. It argues that while contemplative practices are conducive to better decision making and management, they have not reached their full potential. It explores the potential unique contribution of Buddhist Economics and offers some avenues for the modern mindfulness movement to rethink how we could develop our mental capacities to cope with the challenges in the market economy.

Key words: mindfulness, contemplative practices, Buddhist Economics, market economy, decision making, Applied Buddhism

JEL-codes: D80, M10, Z10.

1. Introduction

The financial market is undeniably the prime exemplar of market economies where practitioners compete under intense pressure to excel in decision-making every nanosecond. It is where competition, self-interest, and profit maximization are most celebrated, causing significant and unsustainable volatility and stress at the individual, social, and environmental levels. Despite the meaningful improvements in overall income level, mental health conditions in the world are deteriorating with the World Health Organization predicting that depression will be the second leading cause of world disability by 2020 (WHO 2001). Based on the data between 1998 and 2011, income disparity has also worsened; the incomes of the lowest 10 percent increased by only US\$65 per person, while that of the highest 1 percent grew by US\$11,800 per person (Oxfam 2017).

The performance of practitioners in the financial market is measured not only in an absolute term, but also in a relative term – how they score relative to their peers and the benchmark market indexes. The

doi: 10.1556/204.2018.40.4.3

financial outperformance (*Alpha*), is generated from the underlying market exposure (*Delta*) through the highest achievements in discipline, focus, and insight. This unrelenting pursuit of outperformance is not only constrained by factors such as time, social norms, moral codes, regulations, laws, but it is also limited by our physical and mental capacities to make decisions based on the available technology and information. While new technologies support transactions in higher frequency and volume, our mental capacities are increasingly overloaded by enormous time, moral, and financial pressures.

This paper reviews the state of contemplative practices as a form of "mind technology" in the financial market. This mind technology – prominently known as the Mindfulness Movement over the last few decades – is now adopted by the financial market as a collection of secular and evidence-based techniques to reduce stress, reduce biases, increase productivity, increase attention, and so forth. To deliver financial outperformance (*Alpha*) in the market, this mind technology seems to suggest that it is important to engage in contemplative practices so that our brainwaves could transcend from the faster neural *Gamma* and *Alpha* waves to the slower and advanced neural *Delta* waves. This interchanging pursuit of materialistic outperformance *Alpha* and neural happiness *Delta* has always been an essential process in human history. We will first discuss the implications of an instrumental use of mindfulness practices and the impact on the integrity of Buddhist values. We will then further illustrate the unique contribution of Buddhist Economics and Threefold training. This research will attempt to offer some potential avenues for Buddhist teachings and mainstream mindfulness to consider how we could develop our mental capacities to cope with challenges in the financial market.

2. Mindfulness in the Financial Market

Contemplative practices refer to a range of practices and exercises in which individuals look inward to become aware of, realize, and reflect on our mental activities inside. They have a deep linkage to ancient cultures and religions, but could also be atheistic and secular. With decades of research and development, certain well-established contemplative training programs such as the Mindfulness-Based Stress Reduction (MBSR) pioneered by Kabat-Zinn (1982), have proven to be effective in cultivating mindfulness through a structured secular program. Numerous corporations in the United States, such as Aetna, Google, eBay and Bridgewater Associates have made available mindfulness training programs, either in MBSR, Transcendental Meditation (TM), or other in-house, tailor-made programs such as the Search Inside Yourself Leadership Institute (SIYLI). These programs have been widely adopted worldwide as personal development, leadership training and management tools, due to recognition of their benefits to employees' physical and mental health (stress reduction, relaxation and emotional intelligence) and overall contribution to a more effective organization.

Contemplative practices have also gained momentum in the financial market. The importance of developing mental health, concentration, and emotional awareness is well-recognized by leaders in the financial markets such as Paul Tudor Jones. He reveals that "one of my strengths is that I view anything that has happened up to the present point in time as history. I don't care about the mistake I made three seconds ago in the market. What I care about is what I am going to do from the next moment on. I try to avoid any emotional attachment to a market" (Schwager 1993). Other notable leaders in the financial market have publicly attributed their success to different contemplative practices as well (Ng 2015).

doi: 10.1556/204.2018.40.4.3

The former chief investment officer of the Government of Singapore Investment Corporation, Ng Kok Song, comments that meditation could help investment professionals "by allowing one to emerge with a clear mind [...] transcending our ego [...] habitual mode of self-centeredness" (Rowe 2015) and that "[g]reater clarity makes you more orderly" (Rathbone 2013).

Ray Dalio, the founder of the world's largest hedge fund Bridgewater Associates also attributes his investment success to meditation. He believes that it is very useful in generating creative thought and in evaluating and responding to the overload of information in the market (Saft 2013). He mentions that meditation "gives me a centeredness, it gives me an ability to look at things without the emotional hijacking, without the ego, in a way that gives me a certain clarity" (Saft 2013). He also suggests that it provides "an equanimity [...] to see things from a higher-level perspective and [...] to make sensible decisions" (Rathbone 2013). Bill Gross, the founder of the world's largest fixed income fund PIMCO, suggests that meditation helps him remove "confirmation bias" (Rathbone 2013). Philipp Hildebrand, the vice-chairman of BlackRock and the former head of the Swiss National Bank, further raises that the time spent on meditation is "a pause that refreshes" (Rathbone 2013).

These empirical endorsements are also supported by scholarly research. Lo, Repin, and Steenbarger (2005) demonstrated there is a relationship between investment trading performance and emotional reactions of traders. Their research argues that the ability to perform in trading does not necessarily relate to innate personality profiles – there is no specific "trader personality type" (Lo et al. 2005). Good investors could be developed, trained and practiced as a skill. Instead there seems to be a strong link between "emotional reactivity and trading performance" in financial decision-making, specifically in this case, the intensity of reaction to "monetary gains and losses" (Lo et al. 2005). Their results suggest that "extreme emotional response[s] are apparently counterproductive" and hence, a potential means to make successful investment decisions is to develop a reduced level of emotional reactions. Instead of allowing automatic emotional responses such as fear and greed (mediated by the amygdala) to dominate, they recommend that one could allow for more controlled or higher level responses (mediated by the prefrontal cortex) to guide their decision-making process (Lo et al. 2005).

Hafenbrack, Kinias, and Barsade (2014) provided data in support of mindfulness meditation as it positively correlates with increased resistance to the sunk-cost bias, even with a 15-minute mindfulness-meditation induction. People have sunk-cost biases when they fail to delineate present decision-making from the choices they made in the past, either because of the cost or effort incurred. Meditation facilitates higher resistance to sunk-cost bias by (1) developing a temporal focus on the present, instead of wandering among the present, past, and future, and (2) reducing negative regretful feelings that hinder the rational decision-making process.

Initially, those engaged in contemplative practices in the financial markets may have been considered to be part of a cult. With the publication of the *Meditation Guide for Investment Professionals* by the industry organization Chartered Financial Analyst Institute (CFA Institute 2016a), contemplative practices are now considered acceptable and even recommended in the financial market. The *Guide* includes detailed discussions on the basics and background of meditation in addition to highlighting of specific styles and forms such as *Vipassana*, Insight Meditation and Loving Kindness Meditation. It even shortlists reports on meditation by leading corporations and notable individuals with meditative

doi: 10.1556/204.2018.40.4.3

practices, as well as secular and non-secular resources. It has also published a detailed note on the scientific studies on the benefits of meditation (CFA Institute 2016b) together with a separate reference list (CFA Institute 2016c).

Not only does the *Guide* (CFA Institute 2016b) summarize the physical and mental benefits of meditation, it also covers the ethical benefits of meditation. On the physical level, it highlights that meditation and increased mindfulness are effective at relieving stress, lower inflammation, lower levels of cortisol, lower stress levels, greater emotional regulation, lower neuroticism, decreased nervous system arousal and greater purpose in life. On the mental level, it highlights that increased mindfulness is associated with a higher level of focus, better multidimensional thinking, better task performance under stress, and so forth. Its discussion on ethical benefits is particularly noteworthy as it emphasizes that meditators are more empathetic and altruistic, less likely to cheat and have more ethical inclinations.

3. Instrumental Use and its Downside

While contemplative practices can be associated with many benefits, they seem to be taught, learned, and practiced as an instrument or a mind technology. In some cases, mindfulness was even adopted as a magical branding tool, a "mindful" prefix added to all activities from education and parenting to financial advisory services. While acknowledging the Buddhist root in the process of secular mass adoption, these programs "don't want to muddy the message with religion" to maintain their access to the corporate world (Clarke 2014) and other professional fields. Mindfulness programs were successful in entering major financial institutions such as Barclays, Goldman Sachs, JPMorgan, partly in response to employee burnout and stress (Clarke 2014). Instead of searching into the deeper root of greed and fear, these programs are offered to allow participants to cope with the overstretched workload and better balance work with family and other competing obligations. In its simplest form, a 15-minute mindfulness practice or even a three-minute daily "breathing space" exercise, introduced as a "quick fix", were proven to make a difference, allowing the bankers to stay competitive and contain their mental and physical stress. What are the potential downsides of such an instrumental and materialistic use of mindfulness practice? This research will explore this from both Buddhist and Buddhist Economic perspectives.

Scholars have explored the downside of the instrumental use of spiritual practices. While analyzing Buddhist Economics, Zadek argues that Buddhist Economics should not be subject to the view of the markets. It "[should] turn this equation on its head and insists rather that economic development must cohere with Buddhist values" (Zadek 1993). Economic and materialistic development should be instrumental in achieving spiritual advancement, not the other way around. In response to the advocacy of frugality in relation to savings and investments for enhancing future welfare, Bouckaert, Opdebeeck and Zsolnai (2011) argue that "this instrumentalization of frugality ends paradoxically in its elimination on the economic scene. Consumerism and material greed, just the opposite of frugality, become the basic drivers for increasing wealth, which leads to an erosion of the intrinsic and spiritual meaning of frugality."

While instrumental discussion typically asks "how" certain objectives could be achieved, the spiritual

doi: 10.1556/204.2018.40.4.3

discussion tends to look deep into the fundamental reasons of "why" and "why we should" make certain decisions. The Deep Ecology approach is another example which goes beyond the instrumental question of "how to live" but dives into the ethical questions about "how we should live" (Ims 2015). It focuses on the "underlying causes; *the roots of the problems*", including a deep reflection and change on the idea of humans as a subject (Ims 2015). This approach could therefore be a *long-term*, *deeper approach* as opposed to the *shallow ecology* which is a "technocratic attitude" of addressing the symptoms through technological fixes – regulations, technologies, levies or so forth. The *shallow approach* implies that progress and affluence is vital and hence other sacrifices are necessary to keep the consumption and production levels intact (Ims 2015).

Goulet (1980) advises that values – cultural, spiritual, or intrinsic – must not be treated in a purely instrumental way. He argues that a non-instrumental treatment of values is in fact more humane and efficient because "indigenously-rooted values are the matrix whence people derive meaning in [their] lives, a sense of identity and cultural integrity, and the experience of continuity with their environment and their past even in the midst of change" (Goulet 1980). These traditional values "harbour within them a latent dynamism which, when properly respected, can serve as the springboard for modes of development which are more humane than those drawn from outside paradigms" (Goulet 1980).

It is important to ask the question: in the process of tailor-making mindfulness practices for mainstream application – to some extent marketing, branding, and selling them like a commodity "McMindfulness" – do we risk removing not only the Buddhist and spiritual labels, but also their intrinsic values which are integral to make mindfulness practices truly beneficial to us?

4. The Limits of "McMindfulness"

In response to the recent Mindfulness Movement, Jon Kabat-Zinn, the father of MBSR, expounds on the pros and cons of mainstream mindfulness (Baer 2017). He realized the challenge of taking something thousands of years old, with really grounded and deep wisdom, and making it mainstream "without destroying it" (Baer 2017). However, he is not too "worried about the robust health of mindfulness" because of the enormous potential and depth of mindfulness practices. No doubt some elements from the Buddhist traditions were excluded, but he believes "the potential benefits far outweigh the costs. MBSR is only eight weeks long and it's meant to be a launching pad" (Baer 2017).

Thich Nhat Hanh is also confident about the depth and the transformative power of the practices. He elaborates (Confino 2014) that "it does not matter if the original intention [of mindfulness practice] is triggered by wanting to be more effective at work or to make bigger profits. That is because the practice will fundamentally change their perspective on life as it naturally opens hearts to greater compassion and develops the desire to end the suffering of others."

In the beginning, you believe that if you cannot become number one, you cannot be happy, but if you practice mindfulness you will readily release that kind of idea. We need not fear that mindfulness might become only a means and not an end because in mindfulness the means and the end are the same thing. There is no way to happiness; happiness is the way. (Confino 2014)

doi: 10.1556/204.2018.40.4.3

Nonetheless, the Zen master reminds us that if business executives are conducting the practice for selfish reasons, then they are experiencing a "mere pale shadow of mindfulness." If we adopt mindfulness as a means of profit, an instrument to satisfy our materialistic desires, we are far from the true purpose. Thich believes that "it may look like the practice of mindfulness but inside there's no peace, no joy, no happiness produced. It's just an imitation [...] If you're happy, you cannot be a victim of your happiness. But if you're successful, you can be a victim of your success" (Confino 2014).

Dhammajoti (2011) takes this debate further by challenging the very meaning of the "modern application of Buddhism." He argues that despite the good intention behind linking Buddhist teachings with modern application, "Applied Buddhism" is a misnomer because the Buddha-dharma should not be considered as purely a theory, it "has the sole purpose of guiding sentient beings out of the suffering (Pali: *dukkha*) of existence with cycles of rebirth (Skt: *saṃsāric*)." Speaking of research attempts to link Buddhist teachings with the results of certain scientifically proven impact, Dhammajoti (2011) warns that "the greater danger lies in their often over-simplification, and even distortion, of Buddhist doctrines and the whole integrated system of Buddhist praxis." In evaluating the impact of meditation on personality transformation, it is important to know that in Buddhist meditation "there is the integrated context of skilful understanding, awareness, motivation and living environment, coupled with the powerful inspiration of a religious ideal" – in brief, meditation is practised within the integrated context of moral discipline (Pāli: *sīla*), mental concentration (Pāli: *samādhi*), and wisdom (Pāli: *pañña*). In conclusion, Dhammajoti (2011) reiterates that:

true, lasting and transforming impact of the Dharma is not to be judged by the great pomp and popularity that a Buddhist event or project is accompanied by. It is to be sought in how an individual is truly transformed through the development of insight on the basis of proper understanding and practice of an inspiring teaching.

5. Mindfulness in the Context of Buddhist Economics

In contrast with the financial market which focuses on maximizing profit, desires, market, instrumental use, self-interest, Zsolnai (2007) highlights that the key principles of Buddhist Economics are minimizing suffering, simplifying desires, non-violence, genuine care, and generosity. Buddhist Economics is a "minimizing framework where suffering, desires, violence, instrumental use, and self-interest have to be minimized." It is the comparison between "less is more" and "more is more" (Zsolnai 2011).

Indeed, the financial market is built upon a world-view drastically different from Buddhism, specifically in the realm of individualism and the reach of the market. The market economy upholds selfish individual achievements which appear to be at odds with a moral life and generosity. Income equality, charity and social responsibility are considered to be noble traits which can make people feel enriched spiritually but poor in terms of material gains. In the maximizing process, we indulge in consumption and spending without reflecting on the quality of our life and work. We also ignore our responsibility to society and the environment. The interests of those who are not represented such as

doi: 10.1556/204.2018.40.4.3

future generations, non-human members of the environment and less influential low-income and disadvantaged groups cannot be properly and equally reflected in the market (Zsolnai 2008).

From a Buddhist perspective, the Mindfulness Movement would have a positive impact on decision-making and organizational management. However, an instrumental and materialistic approach to mindfulness could lead to an over-emphasis on the positive impact without a full discussion on the potential adverse effects (Lustyk et al. 2009). The true meaning of mindfulness practices could have been lost if these practices do not lead the practitioners to the realization of their "true mind" (Sharf 2015), but instead lead people into the extremes of either depersonalization or personal empowerment craving for better "control" of their "self".

Mainstream mindfulness promoted to financial professionals could serve as a launching pad, but they are far away from the sophisticated and integrated Threefold training of the moral discipline, mental concentration, and wisdom (Pāli: $s\bar{\imath}la$ – $sam\bar{a}dhi$ – $pa\tilde{n}\tilde{n}a$) taught and practiced in the Buddhist teachings. Buddhist Economics could offer some unique perspectives for mainstream mindfulness programs.

6. Mindfulness as Part of an Integrated Threefold Training

While the modern instrumental world calls for a minimum viable product (MVP) of addressing human sufferings – focusing on an even shorter or more efficient version of mindfulness by downplaying the "religious" and "intensive" part of moral discipline and wisdom, Buddhist teachings consider mindfulness as part of an integrated Threefold Training, comprising moral discipline, mental concentration, and wisdom. If Threefold Training is the MVP of Buddhist teachings, each one of them would require lifetimes of long-term committed training, leading to the eventual perfect cessation of suffering comparable to the Bodhisattva and the Buddha. Threefold Training can serve as core pillars for decision-making, understanding human psychology and guiding sustainable investment decisions in the financial market.

According to Karunadasa (2015), Threefold trainings are in fact three stages of moral development corresponding to the three levels of expression regarding moral unskillful qualities: (1) moral discipline, to restrain our morality, expressed in vocal and physical actions; (2) mental concentration, to still the mind in turbulence, although it cannot remove unskillful qualities lying below surface-consciousness, and (3) wisdom, to uproot all roots of moral unskillful qualities which have sunk to the "bottom" of the mind when the mind becomes still. Instead of a quick fix, the practice of a moral life is a graduated discipline (Pāli: anupubba-sikkhā), a graduated course of conduct (Pāli: anupubba-cariyā) and a graduated mode of progress (Pāli: anupubba-paṭipadā) of our mind and bodily actions.

Moral disciplines in Buddhism are the dos and don'ts of a moral life. They are the compasses to direct internal thought processes, and external vocal and physical actions (Ng 2015). External acts of transgression due to temptation could be more harmful, but are easier to control than thoughts of temptation themselves. They should, therefore, be the level where the practice of moral life begins (Karunadasa 2001). Moral disciplines ensure harmony in the mental and bodily actions within oneself, but also within a community and should be enacted based on an empirical understanding of human

doi: 10.1556/204.2018.40.4.3

minds and actions and how they affect development. They are also a foundation for the cultivation of mental concentration and wisdom.

While mental concentration can focus and relax minds, without the development of wisdom and moral discipline, one can focus on the wrong subjects with the wrong perspectives. Wisdom without concentration is equally fruitless because our minds wander around without pinpointing on the right subjects (Ng 2015).

6.1. Mental Concentration

To achieve genuine stress reduction, happiness, control, and freedom in the Buddhist context is neither through instrumental control nor indulgence, but through mastery of truly free decision-making. True freedom, liberty, and happiness are achieved when we have a mind and body fully under our control. A moral life is truly free when our body and mind will not be overcome by greed, hatred and delusion and hence, cause harm to ourselves as well as others (Ng 2015).

In contact with the outside world, our mental faculties receive information and translate them into our internal consciousness with different perceptions of the sensations. To understand this world, we cannot think and act in the usual way, i.e. a convoluted endless action and mental process, which keeps interacting and expanding. Buddhism suggests the meditative observation of a simple recurring phenomenon, e.g. a simple flow of breath upon which we practice our ability to focus. Reflection without *samādhi* is like seeing through a glass of muddy water. Concentration is the process of acute focus and filtration, so still and calm that all the dust and pieces of impurities are settled to an extent that only clear, transparent water is left at the top. Mental concentration is achieved in the Noble Eightfold Path through Right Effort, Right Concentration, and Right Mindfulness. In other words, mental concentration requires the right efforts (methodology and striving) to apply the right focus on the right objects (of meditation).

Ruedy and Schweitzer (2010) argue that people with a higher level of mindfulness tend to be more open-minded and less subject to biases or self-serving views on relevant information related to decision-making processes as mindfulness is associated with greater awareness of one's present environment and oneself with an accepting, non-judgmental quality. They suggest that mindfulness is also linked to ethical decision-making which is essential for meeting increasing regulatory and compliance demands within financial markets.

6.2. Moral Discipline

Buddhism focuses on the ways we acquire, keep, and deploy wealth, not only in ways that are morally sound, but also sustainable. It teaches us to use our effort and intelligence through moral means so that we can nurture our discipline, concentration and intelligence. Immorality includes activities like stealing, cheating, and exploitation which arise from three unwholesome roots: greed (Pāli: *lobha*), aversion (Pāli: *dosa*), delusion (Pāli: *moha*). Karunadasa (2015) illustrates that there is an inseparable causal correlation between morality and happiness in Buddhist teachings: what is morally good leads to happiness, and what is morally bad leads to unhappiness.

doi: 10.1556/204.2018.40.4.3

From a psychological perspective, Karunadasa (2015) further explains that moral wrongdoings exist on three levels of: (1) latency (Pāli: anusaya), where our moral unskilful qualities are "asleep" below the surface-consciousness; (2) arising-all-around (Pāli: pariyuṭṭhāna) where what have been asleep are now fully awakened. Our mind's turbulence is expressed through negative emotions and excited feelings. With necessary conditions, our latent thoughts will lead to the arising of emotions and feelings and will be further expressed externally, (3) at the level of going beyond (Pāli: vītikkama) where what has awakened is expressed in the form of vocal and physical bodily actions. Morality is reflected through mental-psychology-body activities. If economic decisions and activities are the means to generate and enjoy wealth with the pursuit of happiness as the goal, morality of economic activities then must become an integral part of our economic decisions.

Buddhism considers morality in the "skilfulness" or "unskilfulness" of our psychological state. A mind is "skilful" (Pāli: *kusala*) when it has "skilful" qualities. We experience mental health (Pāli: *ārogya*), mental purity (Pāli: *anavajjatā*), and mental ability (Pāli: *cheka*), all of which result in mental happiness (Pāli: *sukha-vipāka*):

a mind that is obsessed with greed, malice and delusion is a mind that is 'defiled' (*kiliṭṭha-citta*), 'diseased' (*ātura-citta*) and 'in bondage' (*avimutta-citta*). Such a mind cannot see things in their proper perspective. A defiled and diseased mind is in a state of disharmony with actuality. It is therefore called 'unskillful' (*akusala*). (Karunadasa 2015)

On the other hand, when the mind has the opposite qualities, such as generosity, compassionate love and wisdom, it experiences positive qualities of mental purity, mental health and mental freedom. It is a mind that is in harmony with actuality (Karunadasa 2015). For professionals in the financial market, integrating moral discipline into their work and life are conducive to the process of achieving sustainable happiness for oneself, society, and the rest of the ecosystem. It could gradually transform part of our daily moral decision-making into a habitual self-correcting mechanism, which we can adhere to with consistence and confidence even when we are emotionally or intellectually vulnerable. This, in turn, allows for more resources to be used in other personal development and self-control areas.

6.3. Wisdom

To explain the origin of things in this world, the Buddha rejects any dualistic views advocated by other schools of thought. He proclaims the doctrine of dependent arising as "when this exists, that comes to be; with the arising of this, that arises" (MLDB 39 1995) and "when this does not exist, that does not come to be; with the cessation of this, that ceases" (MLDB 39 1995). According to Karunadasa (2001), it is defined "to mean the arising of phenomena in dependence on other phenomena, with no unchanging substance behind the phenomena."

On individuality, the Buddha argues that there is "no independent self-entity, mental or material, which is impervious to change" (Karunadasa 2001). By applying the doctrine of dependent arising into the

doi: 10.1556/204.2018.40.4.3

analysis and synthesis of our reality and self-entity, we could understand that the nature of reality is in fact centred in impermanence (Pāli: *anicca*), while the nature of self is in fact selflessness (Pāli: *anatta*). The *Great Full Month Night Discourse* (MLDB 109 1995) suggests that it is from the clinging of our perceptions that we further fabricate a self-identity in terms of the five aggregates because our "perceptions" could only be "justified" if there is a continuous existence of "I" with the ability to cling.

According to Karunadasa (2015) this grasping process is expressed in three ways: "This is mine (Pāli: etaṃ mama), this is I am (Pāli: eso' ham asmi), and this is my self (Pāli: eso me attā). The first is due to craving (Pāli: taṇhā); the second to conceit (Pāli: māna); and the third is due to a mistaken belief in a self-entity (Pāli: diṭṭhi)." Sufferings and conflicts arise as a result of "identifying ourselves with what is impermanent (Pāli: anicca), with what does not come under our full control (Pāli: anatta)" (Karunadasa 2015a). This is the wrong view of selflessness as self.

The *Anumāna Sutta* (MLDB 15 1995) suggests that conceit or ego are the most important and difficult qualities for monks to admonish. Grasping of our "self" would lead to contempt of others' views and attachment to our views to an extent that we would conceal our blemishes, as discussed in the *Anaṅgaṇa Sutta* (MLDB 5 1995). The "self" is therefore described as the "mother of all blemishes." This fixation on self and self-view can be addressed through inferring whatever unwholesome qualities are in us as if they are in others. This is an effective form of practice because, in this way, we are getting rid of the idea of "self" by equating our "self" to "others." On the other hand, if we only look outward at the blemishes of others, we will never be able to reflect upon our own blemishes and our self because the notion of "self" is further inflated and promoted by stepping on others' egos.

This commitment to self-control in our decision-making and actions is highly valuable in the financial market because, through a deep self-examination, we will be able to understand situations where we failed to maintain consistent rational decisions in real life (Ng 2015). Greed and fear in the financial market prevent us from thinking rationally because we crave for what we do not have and fear losing what we already have. For each decision we make, our views reinforce our identity, as we recognize the decision made and the "I" capable of making the decision. When good or bad decisions are made, we feel accordingly good or bad about ourselves as a decision-maker. We define ourselves not by the profit generated, but by the decision and action we took to maximize wealth.

Once we understand the meaning of dependent arising (Pāli: *paṭiccasamuppāda*) and selflessness (Pāli: *anatta*), we would understand that our decision is dependent on all relevant causes and conditions and that we need to review the evolution of events and our mental and physical activities constantly. We would identify the source of uncertainties and risk and the impermanent nature of our internal and external world.

We should be able to appreciate how individuals are inseparable from society and the rest of the ecosystem. Each of us will share in the fortune or misfortune that results from the rest of society and the ecosystem. The deepening of wisdom, together with moral discipline and mental concentration are the ultimate Buddhist solutions to personal, organizational and societal development.

7. Conclusion

doi: 10.1556/204.2018.40.4.3

This research attempts to establish that Buddhism can contribute to problem-solving in financial markets by looking deeper into the underlying causes of human suffering through a holistic and multilayered approach – in contrast with "cosmetic" and "stop gap" responses and solutions to social, political, and economic challenges. As Ng (2015) proposes, a Buddhist-based sustainable approach could address some of the negative effects of financial market organizations and their stakeholders by including more profound and long-term considerations. The entire package of Buddha-Dharma could be too intensive for beginners or for secular purposes not only because it requires a thorough understanding of quite a few fundamental Buddhist concepts together, but it also requires us to live the practices in daily life. Still, Dhammajoti reassures that the values of Buddhist teachings should stand against the test of time and popular consensus:

There is no need to worry about ancient teachings being "out of date" or being as good as dead. Any truthful spiritual teaching—and, for that matter, any truthful and worthy human thought system—will naturally find its ever-renewed form of manifestation and provide inspiration in diverse manners, at different times and places of sentient existence. They are the eternal legacy of mankind. (Dhammajoti 2011)

It is with this level of confidence and self-worth that Buddhist teachings can maintain their integrity while continuing to contribute to contemporary needs.

References

- Baer, D. (2017): The Father of Mindfulness on What Mindfulness Has Become. *Thrive Global* 12. https://journal.thriveglobal.com/the-father-of-mindfulness-on-what-mindfulness-has-become-ad649c8340cf, accessed 10/05/2017.
- Bouckaert, L. Opdebeeck, H. Zsolnai, L. (2011): Frugality. In: Bouckaert, L. Zsolnai, L. (eds): *The Palgrave Handbook of Spirituality and Business*. London: Palgrave-Macmillan, pp. 269-276.
- CFA Institute (2016a): Resources. *Meditation Guide for Investment Professionals*. https://www.cfainstitute.org/learning/products/onlinelearning/Pages/131397.aspx?, accessed 24/08/2016.
- CFA Institute (2016b): Scientific Studies on the Benefits of Meditation. *Meditation Guide for Investment Professionals*.

 https://www.cfainstitute.org/learning/products/onlinelearning/Pages/131397.aspx?, accessed 24/08/2016
- CFA Institute (2016c): References on the Benefits of Meditation. *Meditation Guide for Investment Professionals*.
 - https://www.cfainstitute.org/learning/products/onlinelearning/Pages/131397.aspx?, accessed 24/08/2016.

doi: 10.1556/204.2018.40.4.3

- Clarke, P. (2014): Don't mention meditation: Inside the health craze sweeping the financial sector. http://news.efinancialcareers.com/uk-en/172192/firms-bringing-hippy-meditation-practice-corporate-world, accessed 16/05/2014.
- Confino, J. (2014): Thich Nhat Hanh: is mindfulness being corrupted by business and finance? *The Guardian*, 28 March.
- Dhammajoti, K. L. (2011): Application of the Buddha's Teachings. Convocation address at the 4th Convocation of IBC, 31 August. http://thanhsiang.org/en/content/application-buddhasteachings, accessed 01/05/2017.
- Goulet, D. (1980): Development Experts: the One-eyed Giants. World Development 8(7/8): 481-489.
- Hafenbrack, A. C. Kinias, Z. Barsade, S. G. (2014): Debiasing the Mind Through Meditation: Mindfulness and the Sunk-Cost Bias. *Psychological Science* 25(2): 369-376.
- Ims, K. J. (2015): Deep Ecology and Personal Responsibility. In: Zsolnai, L. (ed.): *The Spiritual Dimension of Business Ethics and Sustainability Management*. Cham: Springer, pp. 47-56.
- Kabat-Zinn, J. (1982): An Outpatient Program in Behavioral Medicine for Chronic Pain Patients Based on the Practice of Mindfulness Meditation: Theoretical Considerations and Preliminary Results. *General Hospital Psychiatry* 4 (1): 33-47.
- Karunadasa, Y. (2001): The Early Buddhist Teaching on the Practice of the Moral Life. The Numata Yehan Lecture in Buddhism Fall 2001, University of Calgary.
- Karunadasa, Y. (2015): *Early Buddhist Teachings: The Middle Position in Theory and Practice*. Hong Kong: The University of Hong Kong, Centre of Buddhist Studies.
- Lo, A. Repin, D. V. Steenbarger, B. (2005): Cognitive Neuroscientific Foundations of Behavior: Fear and Greed in Financial Markets: A Clinical Study of Day-traders. *The American Economic Review* 95(2): 352-359.
- Lustyk, M. K. B. Chawla, N. Nolan, R. S. Marlatt, G. A. (2009): Mindfulness Meditation Research: Issues of Participant Screening, Safety Procedures, and Research Training. *Advances* 24(1): 20-30.
- MLDB 5 (1995): Anangaṇa Sutta: Without Blemishes. In: Ñanamoli, B. Bodhi, B. (eds): *The Middle Length Discourses of the Buddha: A translation of the Majjhima Nikaya*. Somerville: Wisdom Publications, pp. 108-114.
- MLDB 15 (1995) Anumāna Sutta: Inference. In: Nanamoli, B. Bodhi, B. (eds): *The Middle Length Discourses of the Buddha: A translation of the Majjhima Nikaya*. Somerville: Wisdom Publications, pp. 190-193.
- MLDB 39 (1995): Mahātaṇhāsankhaya Sutta: the Greater Discourse on the Destruction of Craving. In: Ñanamoli, B. Bodhi, B. (eds): *The Middle Length Discourses of the Buddha: A translation of the Majjhima Nikaya*. Somerville: Wisdom Publications, pp. 349-361.

doi: 10.1556/204.2018.40.4.3

- MLDB 109 (1995): Mahāpuṇṇamā Sutta: The Greater Discourse on the Full-moon Night. In: Ñanamoli, B. Bodhi, B. (eds): *The Middle Length Discourses of the Buddha: A translation of the Majjhima Nikaya*. Somerville: Wisdom Publications, pp. 887-891.
- Ng, C. (2015): Buddhist Perspectives on Economic Growth: a Buddhist-based Sustainable Investment Model within Market Economy. Thesis. The University of Hong Kong.
- Oxfam. (2017): An Economy for the 99%. *Oxfam Briefing Paper*. https://www.oxfam.org/en/research/economy-99, accessed 20/10/2017.
- Rathbone, J. (2013): Zen and the Art of Management. Financial Times, September 16.
- Rowe, S. D. (2015): The Importance of Meditation for Investment Professionals. CFA Institute. https://blogs.cfainstitute.org/investor/2015/08/18/the-importance-of-meditation-for-investment-professionals/, accessed 01/12/2015.
- Ruedy, N. E. Schweitzer M. E. (2010): In the Moment: The Effect of Mindfulness on Ethical Decision Making. *Journal of Business Ethics* 95(1): 73-87.
- Saft, J. (2013): Meditation and the Art of Investment. *Reuters*, 17 April. http://blogs.reuters.com/james-saft/2013/04/17/meditation-and-the-art-of-investment/, accessed 10/05/2017.
- Schwager, J. D. (1993): *Market Wizards: Interviews with Top Traders*. New York: New York Institute of Finance.
- Sharf, R. H. (2015): Is Mindfulness Buddhist? (and Why It Matters). *Transcultural Psychiatry* 52(4): 470-484.
- WHO (2001): The World Health Report 2001. Mental Health. New Understanding. New Hope. Geneva WHO.
- Zadek, S. (1993): The Practice of Buddhist Economics? Another View. *American Journal of Economics and Sociology* 52(4): 433-445.
- Zsolnai, L. (2007): Western Economics versus Buddhist Economics. *Society and Economy* 29(2):145-153.
- Zsolnai, L. (2008): Buddhist Economic Strategy. In: Bouckaert, L. Opdebeeck, H. Zsolnai, L. (eds): *Frugality: Rebalancing Material and Spiritual Values in Economic Life*. Oxford: Peter Lang Publishing, pp. 279-304.
- Zsolnai, L. (2011): Buddhist Economics. In: Bouckaert, L. Zsolnai, L. (eds): *The Palgrave Handbook of Spirituality and Business*. London: Palgrave-Macmillan, pp. 88-94.