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## Claremont McKenna College

# A Philosophical and Empirical Investigation into Buddhist Economics

submitted to
Professor Julio Garín
and
Professor Adrienne Martin

by Hannah Doyle

For Senior Thesis Fall 2023 December 5

#### **Abstract**

There is a growing body of literature on Buddhist economics from a philosophical perspective; however, no work to date has sought to empirically validate it as an effective economic theory at a global scale. In my paper, I draw on the long history of Buddhist metaphysics to construct an account of Buddhist ethics and then proceed to derive a set of Buddhist economic principles. I draw on the World Happiness Report's methodology to quantitatively demonstrate the relationship between Buddhist economic principles and the psychological wellbeing of a country's citizens, as measured through their own evaluation of their quality of life and the dispersion of those evaluations within a given country. Overall, I find that the implementation of Buddhist economic principles at a national government level is positively correlated with higher average levels of wellbeing and lower dispersion of life evaluations. However, I also find significant differences between how Buddhist principles affect wellbeing between countries with initial higher and lower rates of wellbeing dispersion.

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#### A Philosophical and Empirical Investigation into Buddhist Economics

#### Chapter 1: The Philosophy of Buddhist Economics

Buddhism is a religion and philosophy based on the life of a man named Gautama who was born in what is now Nepal, near the border of India. He was believed to have lived from 566 to 486 BCE, although some scholars now believe he could have lived as long as 404 BCE. To make a vast history incredibly brief, this man was believed to have been born into a royal family and groomed to take on the role of King (Siderits, 20). However, in his quest to understand the world, Gautama left the kingdom and dedicated himself to a path of purity and exploration for many years before becoming the first teacher of what is known as Buddhism. Buddhism spread throughout Asia over many centuries and blossomed into numerous different schools of thought before reaching the west in the mid 1800s. Today, Buddhism is regarded as a religion and philosophy and has prompted significant debate when placed in dialogue with Western philosophies and ethics.

#### A. The Four Noble Truths

The heart of Buddhist philosophy begins with the Four Noble Truths. The first truth is that there is suffering (*dukkha*). This truth appeals intuitively to most people because everyone has experienced suffering at some point, whether it be hunger, physical pain, mental exhaustion, or the loss of something significant. The second truth explains the cause of this suffering: *trsnā*, which can most literally be translated as craving or thirst. Under a more contextual translation, suffering is caused by attachment and aversion due to ignorance about the true nature of reality (Priest, 211). Specifically, there are three fundamental characteristics of reality to which humans are ignorant: impermanence, suffering, and non-self (Siderits, 24). For most, the first two are highly intuitive; everything in life is impermanent, from emotions, seasons, things, and even the

people around you. However, we are also aware that people become attached to things even though they are impermanent, and that this loss is a common cause of suffering. For example, attachment to the feeling of being full makes hunger uncomfortable, while attachment to the feeling of painlessness causes pain to stand out. Furthermore, attachment to being well-rested makes mental exhaustion feel undesirable and attachment to those around us means that their loss feels monumental. However, as the notion of no-self lacks intuitive understanding for most in the west, we will investigate this concept further. Next, the Third Noble Truth is a corollary to the Second. It states that if one can eliminate the attitude or experience of craving, then they can also get rid of the suffering. Finally, the Fourth Noble Truth is eight guidelines to eliminate these causes of suffering, known as the Eightfold Path.

#### B. The Doctrine of No Self

First, to understand the notion of no self we must investigate what it would mean if there were a self. If we were to use the pronoun 'I,' we would be referring to the collective that we perceive makes us up: the physical body, parts of the mind, ideas, feelings, and desires.

However, we know we do not need all the constituents of ourselves to be intact to be considered a person. We could lose a limb or our sight and still be considered ourselves. Thus, there must be something fundamental to personhood that accounts for our identity over time. Such a thing could not be lost without losing the identification of being the same (numerically identical) person (Siderits, 43-44). In order to clarify the notion of what makes up a person, Buddhism denotes five *skandhas*, or bundles, that are fundamental to all people. These include:

- 1. The physical
- 2. Feelings: sensations of pain, pleasure, or indifference
- 3. Perception: mental events that relate to our senses

- 4. Volition: the forces responsible for physical and mental action, i.e., hunger or anger
- 5. Consciousness: the awareness of these mental and physical states of being In order to use these categories to investigate the existence of a self, we require the use of the exhaustiveness claim, which states that "every constituent of persons in included in one or more of the five *skandhas*" (Siderits, 50). The argument here is that every aspect of personhood can be linked to one of these five categories, with volition being the broadest that includes emotions and other sources of motivation. If we take the exhaustiveness claim to be true, we arrive at two different avenues of arguing that there is no self. The first is that of impermanence and the second is lack of control. We will focus on the first argument.

The argument for impermanence draws upon the previous definition of self, in that if there were a self, it would be something constant over time, such that the fluctuating parts of us could change, but the core self would remain the same. Using that understanding of self, the argument looks like this:

- 1. The physical is impermanent.
- 2. Sensation is impermanent.
- 3. Perception is impermanent.
- 4. Volition is impermanent.
- 5. Consciousness is impermanent.
- 6. If there were a self, it would be permanent.
- 7. There is no more to the self than the five skandhas (the exhaustiveness claim).
- 8. Therefore, there is no self (Siderits, 52).

Upon first observation, this argument is logically valid. Next, we must investigate whether each premise on its own is true to verify the soundness of the conclusion. Let's begin by defining

permanence, in regard to the self, as something existing for at least a whole lifetime (Siderits, 53). Beginning with the first premise, we know that scientists have discovered that the molecules that make up our cells are constantly being replaced by newer ones. Seven years is the average life cycle of a cell, with about 330 billion cells replaced every day inside your body (Opfer & Troutner). This clearly suggests that there is no physical aspect of the body that endures for an entire lifetime, even if it appears that way from the outside.

Some of the other *skandhas* are intuitively impermanent. Sensation, perception, and volition are experiences that change very quickly for most people. What we sense and perceive likely changes from minute to minute, or at least it is definitively not consistent throughout our entire lifetime. One could argue that certain volitions are more or less constant. The example Siderits gives is his ongoing desire for coffee. However, he was not born with this desire, and thus, it is an acquired volition, such that it cannot be deemed permanent from the day of his birth to his death (Siderits, 56-57).

Consciousness, on the other hand, is slightly more complicated. One might argue that we have awareness of our being throughout our entire lives. However, the Buddhists would argue that the mind is actually an invented fiction. They claim that what we think of as the mind is really just a continuous series of distinct mental events, with each one lasting only an instant that is immediately followed by the next one. The justification for this argument is based in causal dependence. The idea is that every mental event is caused by a specific physical or mental event, which only lasts for a moment. Let's take the example of eating cake. For most people, the moment the cake touches one's taste buds they experience a sense of pleasure, lasting only as long as the stimulus of the cake interacts with the sensors of their taste buds. As soon as the

causal event is gone, so is the mental effect. When we take another bite, the feeling returns. But the previous sensation has gone out of existence to be replaced by a new one (Siderits, 56).

Another intuitive way to consider the argument for causal dependence is that of our biology. Psychologists say that everything comes down to our nature and our nurture. The way we interpret our physical surroundings is based on the biological responses we inherited genetically, as well as the mental schema that have been reinforced through our environment. Every time a new experience occurs, some aspect of that enters our psyche and influences the way we respond to the next stimulus that we experience. In that way, our mind's experience is both fundamentally caused by the conditions that came before us (biology and previous environments), as well as it is impermanent. This is because our past experiences are always changing when present becomes past, which means in every moment the complexes of our brain our adapting to assimilate our momentary experiences that will shape how we respond to future events.

This line of reasoning is furthered by David Hume, who also found that looking within one's mind led to a recognition that all that existed were particular mental events, each of which was temporary with no singular enduring entity that contained them (Siderits, 56). He also proceeded to explain that we are never actually aware of the mind itself as something separate from mental events such as feeling, perceiving, and volition. Instead, we are only aware of the mental events themselves, which means the mind is unobservable, even when awareness is placed on it. Hume used this to justify that the mind is not a fixed entity in itself, but merely a combination of the causes and effects of feeling, perception, and volition.

Even if one does not buy into the notion that the mind is an invented fiction, there are additional ways to argue that consciousness is impermanent. Our definition of consciousness is

the awareness of the mental and physical states of our being. However, when we are sleeping, we do not experience consciousness of these mental or physical states, nor of anything at all.

Additionally, most would agree that newborns are not aware of themselves as conscious beings with physical and mental states. It is also possible that some people at the end of their life are also lacking this sense of consciousness, indicating that it is not a permanent aspect of being throughout our lives.

Finally, we may return to the argument at hand. Premise six exists based on our definition of self, such that if the argument is proven true, we can agree that there is no continuous self that exists throughout our lifetime. Lastly, we have the exhaustiveness claim. There are few direct arguments in favor of this claim. Instead of listing them, I would encourage the reader to take a minute and try to consider an aspect of self that cannot be categorized as physical, sensorial, perceptual, volitional, or conscious. If the reader cannot, then we are led to take the Buddhists word that there is no aspect of self that is not contained in one or more of the five *skandhas*. And thus, that there is no definitive self that permeates throughout time. Instead, each of our processes are part of a long causal chain of events and stimuli that produce a response that feels like "us."

In this sense, the Buddhists claim that the "I" of personhood is a convenient designator. It does not refer to anything inherently real, but it is extremely useful in conveying something that appears to be real for most of the humanity. Even if there is no persistent self, most of us have a conscious experience of being a person and identifying with our personhood. While we will use the notion of no self to help explain the larger ideas of Buddhist metaphysics, and hence ethics, we will also rely on the notion of persons as convenient designators when we bring economics

into the equation so that we are also to have a meaningful discussion of the impacts of material conditions on people.

#### C. Interconnection

To return to the first three Noble Truths, we have established that (1) there is suffering, (2) that suffering is caused by a failure to understand that the nature of reality is categorized by impermanence, suffering, and non-self, and 3) that one can get rid of this suffering through the elimination of the craving caused by our ignorance. However, this leads us to question what reality really *is* then, if it is not the permanence of anything physical, mental, or psychological. One of the best metaphors for the Buddhist understanding of reality is the Net of Indra, but first, we must understand emptiness.

Although the notion that "everything is empty" can be traced back to Buddhist scriptures 350 years after the Buddha's death, it was not until the 2<sup>nd</sup> or 3<sup>rd</sup> century CE that someone explicitly unpacked the notion of Buddhist emptiness in writing. The famous Indian philosopher Nagarjuna deconstructed the world in such a way to demonstrate the truth of universal emptiness. However, his writings are also known as one of most complicated aspects of Buddhist literature, so much so that an entire school of Buddhist thought, the Madhyamaka, was founded based on his arguments (Khalil, 50-1). Thus, we will focus on a more intuitive example to understand emptiness.

To begin, emptiness means the absence of independent existence or intrinsic nature (*svabhava*). In his chapter on Emptiness, Identity and Interpenetration in Hua-yen Buddhism, Atif Khalil uses the example of an oak tree to demonstrate what this means. First, imagine a full-grown oak tree. Next, imagine that someone plucked all the leaves off the tree. Would it still be a tree? Most would intuitively say yes because trees often lose their leaves in the winter and they

are still considered to be trees. Now, imagine all the branches were sawed off. Would a trunk with some stubs still be a tree? What if the truck was cut in half? Most would say this is closer to a stump than a tree. The challenging question becomes: "exactly when in our process of sawing off the branches does the tree stop being a tree?" The challenge of isolating a universal essence that can clearly be denoted as "treeness" helps demonstrate why there is no such universal essence to start with (Khalil, 51).

Nagarjuna would explain how this demonstrates that what people take to be something existing in its own right is, in fact, empty itself. For a tree, the unique combination of roots, trunk, branches, and leaves form the specific conditions that make up our experience of "treeness." Thus, something's identity is actually only a function of a set of conventionally designated conditions, and not a unique essence. It is instead the mind that collects this data together and creates something beyond what is truly there for the sake of convenience. Therefore, we call "tree" a convenient designator, just like the self.

Furthermore, we can apply a similar argument as the argument for impermanence to other entities in the world. As the Buddha put is, "the world is a continuous flux and is impermanent," such that physical entities are constantly moving and changing. And, although Buddha didn't know it at the time, the atomic makeup of the physical world is also in ongoing motion. This is echoed by Heraclitus who famously argued that "it is not possible to step into the same river twice," since after a mere moment it is no longer the exact same river one stepped in before (Khalil, 52).

To illustrate emptiness further, when phenomena are broken down into their parts, those parts can also be broken down into parts. Eventually, there is a point in which all essential essence is lost, and it becomes clear that there is no independent existence of something beyond the parts

that make it up. Ultimately, our ability to know and understand an entity is through its relation to everything around it. This leads us to the illustration of the Net of Indra.

The Net of Indra is a metaphorical net that stretches infinitely in every direction. In the lore, it resides in the God Indra's kingdom. Under his guidance, a crystal-clear jewel is laid at every intersection of the net to infinity. However, upon closer reflection of one jewel, the designer discovers that the jewel's brilliance is not coming from itself but because it reflects the jewels around it. In fact, every jewel reflects every other jewel throughout the entire net, such that one jewel reflects the entirety of the net (the whole), and each individual jewel (the part) is itself reflected throughout the whole of the net and each individual jewel.

This metaphor demonstrates the emptiness of every entity in the world through the jewel's crystal-clear nature. Yet, it also emphasizes how each entity has its own identity as a gem through its reflection *in* every other entity in the system. This reflects the notion of identity in Buddhism, such that all the jewels are identical to each other, representing how every entity shares the fundamental identity of being empty of intrinsic nature. Finally, the concept of interconnection or interpenetration is demonstrated through the reflection of the infinite jewels, which represents how each entity is the "cause" of every other entity and that they are intertwined for their existence. In this way, every entity depends on each other to appear to have essence, such as the oak tree depends on the leaves and branches for its "treeness."

The last important note about this metaphor is the issue of the red speck. Let's say only one of the infinite jewels contains a speck of red. However, because of the reflection process, every jewel reflects the red speck equally. In this example, the speck of red represents the experience of suffering. Even if one only entity experiences suffering, the laws of interpenetration show that every entity in the system will "reflect" and take on that suffering in some degree. Real world

experiences may have already demonstrated this. Let's say someone was not experiencing suffering prior to stepping into an environment with a high level of collective suffering, for example, a neighborhood after a natural disaster, a hospital emergency room, or even many parts of downtown Los Angeles. Most people will consciously or unconsciously take on a bit of that suffering in virtue of being nearer to and more aware of it. Although the Net of Indra's example does not rely on proximity, there may still be an intuitive understanding that the suffering of others has an uncanny effect on each of us, and collective suffering has a unique way of impacting even those who are not directly affected by the perceived cause of the suffering.

#### D. Compassion

This brief and simplified overview of the fundamental aspects of Buddhist metaphysics bring us to the most foundational ethical consideration: *karunā* or compassion. First, we will start by evaluating the "goals" of Buddhism. Ultimately, Buddhism would hope that its followers learn to live life according to the Eightfold Path (the final of the four Noble Truths) and reach nirvana, or enlightenment. However, given that so far only the Buddha has been known to reach that "goal," is seems advantageous to establish a slightly more attainable end, particularly one that could be achieved in this lifetime, assuming it is in alignment with Buddhist practices and wisdom. Scholar Graham Priest highlights how the antithesis of suffering, in a Buddhist sense, is best described as the experience of inner peace, equanimity, or peace of mind. Because suffering represents a fundamental misunderstanding of the nature of reality, inner peace emerges when one lives in harmony with the notion of the world as fluctuating and transient. He also notes how this parallels the value of *ataraxia* (calmness) for Greek philosophers or *tranquillitas* (tranquility) for the Romans.

Priest is clear that inner peace is not the same as "emotional flat-lining." In fact, certain emotions, like joy or bittersweet sadness, are perfectly compatible with peace of mind. It is also important to note that while inner peace is a desirable outcome, it cannot be accomplished by desiring it, since additional attachment will only produce more suffering. This may paint inner peace in an impossible light, but we will discuss its practical relevance in the following sections (Priest, 214-15).

It was also important for Priest to highlight why inner peace is so uniquely important. First, there are many other potentially valuable goods; for example, a medium-rare steak, theater, and long walks in nature. However, all of these goods are subjective based on the preferences of the consumer, while inner peace is objectively instead of subjectively good. First, since the state of being disquieted is inherently bad, the converse of inner peace seems inherently good. Second, Priest argues that inner peace is a prerequisite to enjoying other goods in life. Walking through nature while experiencing anxiety about the environment, eating steak while worrying about money, or enjoying the theater while worrying about one's dog left at home hardly produce the same value as those experiences given the presence of inner peace. This example underlines the importance of inner peace both for an individual's wellbeing as well as for their ability to enjoy other things that promote positive experiences (Priest, 216). Fundamentally, inner peace reflects an understanding of the metaphysical truth that everything is transient and impermanent, and thus out of our control. Thus, responding with negative emotions do no good to produce a positive outcome either materially or psychologically. In a powerful quote, Priest emphasizes that "inner peace does not free you *from* the world, it frees you *for* the world" (Priest, 220).

As Priest discusses next, the notion of interconnectedness undermines the idea that personal inner peace is enough. Using the red fleck analogy, it is insufficient to only minimize one's own

suffering due to the reflecting nature of all entities. Hence, each individual must be equally as concerned with the suffering of others as with their own. The Buddhist term for this is *karunā*, which I will translate as compassionate care, or compassion for short. However, instead of modern notions that compassion involves taking on the suffering of others, the Buddhist understanding of compassion simply means we must care that another is suffering, and often care enough to do something about it, if possible (Priest, 221). Indeed, Priest lays out additional evidence from experimental psychology to help the skeptic reader along with the idea of interconnection. Two examples include:

- 1) "The key suggestion is that observation or imagination of another person in a particular emotional state automatically activates a representation of that state in the observer, with its associated autonomic and somatic responses[...] These results suggest that regions associated with feelings of emotion can be activated by seeing the facial expression of the same emotion, a phenomenon described as *emotional contagion*."
- 2) "[...]results showed that participants who have viewed negative news items reported significantly greater increase in anxiety and negative affect along with greater decrease in positive affect than those participants who viewed the combined positive and negative news items. This study[...] demonstrates that anxiety and momentary mood disturbance do not dissipate with distraction activity" (Priest, 224).

Although empirical examples are not necessary to demonstrate the validity of these Buddhist arguments, they may help those newer to Buddhism recognize how they unconsciously exhibit symptoms of interconnectedness in their daily lives. As Priest notes, no one's nature is independent of its environment. In particular, we are who we are because of our causal interactions with others, including family, friends, or even those we read about in news articles.

Their natures influence our nature, both in a given moment and over a long period of time, just as our nature influences theirs (Priest, 222). Even if we are only aware of it within a small circle of proximity, the impact of those around us on our inner state and overall nature cannot be ignored.

Furthermore, this notion of compassion can be applied as part of the foundation of Buddhist ethical theory. If inner peace, collectively and individually, is the aim of being, then compassion appears to promote it. This happens through two key pathways. First, the experience of compassion increases the likelihood that the person with compassion will do something positive to lessen the suffering of the person experiencing it. Second, by responding to someone who is suffering with compassion instead of judgement, anger, disgust, or pity, we allow ourselves the experience of inner peace which, in turn, reflects positively outward. Furthermore, compassion, even if it was not practically useful, is key to demonstrating an understanding of truthful metaphysics that grasps the significance of our interpenetration with all other things. As Priest explains eloquently in relation to the issue of the red speck, "compassion is an important piece of personal technology conducive to helping a person get rid of attachment to the (non-existent) self" (Priest, 228).

Finally, a potentially problematic response to compassion must be addressed. Some might say that compassion justifies ignoring physical suffering and instead encourages everyone to learn meditation so humans can contemplate away their suffering and reach inner peace.

Unfortunately, this is metaphysically inaccurate and morally problematic. The experience of craving and desire are deeply ingrained in most human psyches and are oftentimes related to survival instincts when basic needs are not being met. Without the desire to quench one's extreme hunger, a malnourished child could die without ever having the opportunity to experience the joys of inner peace. Additionally, the distracting nature of extreme physical pain

and discomfort make it virtually impossible to ever reach such a state through mental quietude alone. Hence, a certain level of outer peace, reflected by meeting all of one's basic needs, is a prerequisite to further spiritual or psychological development in a Buddhist sense (Priest, 227). As someone might point out, even monks need to eat.

In conclusion, Priest discusses some of the primary factors that inhibit humanity's ability to access the goods of inner peace. First, poverty, driven by extremely unequal national and worldwide wealth distribution, is one of the main causes of suffering globally (Priest, 234). This manifests as a lack of safe and clean water, stable food supply, housing, natural disaster relief, education, healthcare, and other necessities needed for a baseline quality of life. Second, our inability to care for our environment has significant effects on both humanity and other sentient creatures. Specifically, the rate of environmental destruction caused by society's overconsumption is causing material and psychological suffering on the sentient animals who are losing their habitats and food supplies at alarming speeds. As an ecologist would likely argue from an environmental science standpoint, nothing will improve until we realize that we are all fundamentally dependent on one other.

Although Buddhism does not lay out a comprehensive moral or ethical framework, we will utilize the discoveries we have made in combination with traditional Buddhist teachings to uncover a Buddhist ethics that can be utilized on a global scale. Finally, allow us to return to the final of the four Noble Truths.

#### E. The Eightfold Noble Path

The Fourth Noble Truth, summarized briefly, consists of the Eightfold Noble Path, or the path to enlightenment. The eight key factors are as follows: right view, right intention, right speech, right action, right livelihood, right exertion, right self-possession, and right concentration

(Siderits, 24). Although these eight categories may appear to build upon each other, it is not the case that they should be practiced one after the other in the order listed above. Instead, it should be understood how they are all linked together, and how the cultivation of one promotes the development of the others (Rahula, 32).

The combination of these eight factors is related to the three essentials of Buddhist training, which include Ethical Conduct, Mental Discipline, and Wisdom. Within Ethical Conduct, the area of Buddhist practice that most concerns our analysis, the factors right speech, right action, and right livelihood are the most relevant, although right view and right thinking also seem intrinsically related to a Buddhist understanding of ethics. (Rahula, 33). Although Ethical Conduct relies on the prerequisites of Wisdom and Mental Discipline, the manifestation of these latter two categories is usually not visible in the physical world besides how they inform Ethical Conduct. Hence, we will focus on the visible manifestations of the Buddhist Eightfold Noble Path through an analysis of Ethical Conduct.

Most fundamentally, right view is a deep understanding of the Four Noble Truths and their implications – that we all suffer due to ignorance of our inherent interconnected, impermanent, and non-self nature, but that that suffering can be transformed. Most people believe that specific conditions will make them happy, yet Buddhists tell us that that *belief* in the first place will likely prevent us from being happy, because every such condition is impermanent. In fact, it is our attachment to those conditions and our aversion to not having them that produces suffering.

Right speech draws from an understanding of compassion and the ethics of doing no harm. In its most basic form, it includes speaking truthfully and kindly, or at least not cruelly.

This includes not "speaking with a forked tongue," where we tell two people different things, not

exaggerating or embellishing, and not speaking in a way that creates hatred or causes unnecessary harm. (Thich, 87). Similarly, right action is the practice of acting with love and preventing harm, including nonviolence toward oneself and others. This includes an emphasis on generosity and mindful consumption (Thich, 96). This is very closely linked to right livelihood, which focuses on earning a living through non-harmful means that don't compromise the ideals of love and compassion. This includes whether what we produce is capable of causing harm, i.e. manufacturing weapons or exploiting nature, or whether our wealth hoarding and purchasing causes damage, which is increasingly hard to avoid in today's economic conditions (Thich, 114).

Before diving into Buddhist economics, let us turn to a construction of Buddhist ethics that allows us to make sense of the Buddhist metaphysics we have laid out.

#### F. Understanding Buddhist Ethics

To understand how Buddhist philosophy promotes a Buddhist ethical theory, we will turn to Jay L. Garfield's "Engaging Buddhism: Why It Matters to Philosophy." In his section on ethics, Garfield lays out Buddhism as *a moral phenomenology* that is primarily concerned with transforming our understanding and experience of the world, which then dictates how we relate and interact within it. Hence, Garfield argues Buddhist ethics is not like other moral theories that focus on actions, their consequences, or other inherent duties, but instead with the nature of our *experience* (Garfield, 279). Fundamentally, the Buddha argues that suffering doesn't "just happen," but it is created from our actions that are based on a fundamental misunderstanding of the world; hence, this justifies the study of what Buddhist ethics would entail to mitigate the creation of unnecessary suffering. (Garfield, 281).

Unfortunately for most Western readers, Garfield explains that within Buddhist ethics "there is no boundary drawn [...] that circumscribes the ethical dimensions of life; there is no

distinction between the obligatory, the permissible and the forbidden; there is no distinction drawn between the moral and the prudential; the public and the private; the self-regarding and the other-regarding" (Garfield, 284). Instead, Buddhist ethics highlights the complexity of living a moral life. In contrast to the consequentialists, it is not only what one does that matters or the impact of those actions, it is also the intentions and principles that create those actions, although intentions alone are also not enough. As Garfield summarizes, each component of an action, including its intent and outcome, have morally significant elements. (Garfield, 282-5).

Within Mahayana and other schools of Buddhism, compassion or  $karun\bar{a}$  plays a central role and is seen as the core of morality. Although  $karun\bar{a}$  is traditionally translated as compassion, Garfield focuses on the root kr, which means "to act." This means that  $karun\bar{a}$  doesn't simply ask us to have an emotional response to other's suffering, but instead requires a commitment to engage in action that mitigates their suffering (Garfield, 289). He also notes that Buddhist morality doesn't exist in a vacuum and instead requires the actor to view all actions and situations within their social and cultural context, which helps create a more flexible understanding of ethics than clear-cut rules and duties (Garfield, 292).

Furthermore, an understanding of Buddhist interconnection is central to moral theory, such that "our happiness, suffering and moral progress depends at all times on the actions and attitudes of others, as well as on their welfare" (Garfield, 294). Hence, the idea of Buddhist ethics can most simply be understood as cultivating a set of virtues that are in accordance with an understanding of the interconnectness of all things, specifically generosity, patience, attention, meditation, and wisdom (an accurate understanding of reality that motivates correct action) (Garfield, 295). Thus, acting on the notion of *karunā* requires a commitment to view our sorrows and joys as collective, as well as a willingness to act in a way that promotes collective wellbeing

so as many sentient beings as possible can be relieved of suffering (Garfield 296). Ultimately, through an understanding of metaphysical interconnection, *karunā* is the most rational approach one take in life (Garfield, 297).

While Garfield highlights the differences between Buddhist ethics as a moral phenomenology and the Western approach of Aristotelian virtue ethics, he also highlights specific virtues, like *karunā*, that could be viewed as leaning towards a virtue ethics approach. Indeed, a commitment for compassionate action is *secondarily* valued because of the positive impact it makes towards reducing suffering, which would position it more like a duty or praiseworthy virtue like that of Aristotelian virtue ethics. However, these virtues are valued *primarily* because of their rationality, and because they represent the most rational comportment towards the world given an accurate metaphysical understanding of reality. These virtues can best be viewed as instrumentally valuable in making the complexity of Buddhist ethics more manageable, as well as instrumentally valuable in creating a world with less suffering that could promote the attainment of higher spiritual wisdom and inner peace.

Revered Buddhist monk Thich Nhat Hanh explains that the goal of moral behavior is not "to become an agent who regularly maximizes utilities, and not respect for duty. Instead, ethical perfection consists primarily in a way of seeing things, in a kind of awareness of others and one's place in the world" (Garfield, 298). In discussing Santideva's views on meditation, Garfield highlights how the philosophical project of Buddhism is not just to create mental awareness of its truths, but to become so familiar with them that they become embedded and transform your worldview (Garfield, 307). Furthermore, meditation does not just influence one's thinking about the world, but the overall experience of *being* in the world, such that we acknowledge our existence as interdependent and impermanent (Garfield, 309).

Ultimately, Buddhist ethics as a moral phenomenology means understanding how Buddhist truths transform how one engages in the world; and moral development is the cultivation of "appropriate engagement with reality" given those truths. Thus, moral actions are praiseworthy not because of the impacts they create, but because they reflect an epistemically accurate awareness of what it means to operate within the world given interdependence and the need for compassion (Garfield, 316).

At a larger scale, Garfield discusses that both individual moral behavior and collective, political action is key to drive progress. For example, individual and collective understanding of the importance of human rights has contributed to the promotion of these rights and the mitigation of suffering, even if imperfectly. However, he also acknowledges that these values must be intuitionally supported, such that human rights can never be guaranteed without political and social reform (Garfield, 297). Although Buddhist ethics addresses the complexity of moral life, Garfield agrees that it can also "meet profitably" with Western moral theory in order to solve tangible human issues without losing sight of the fundamental Buddhist values. This leads us into a discussion on Buddhist economics before returning to reimagine how these bodies of work intersect. Ultimately, we will see that while Buddhist economics seeks to promote specific, tangible changes in world, it also should be valued for embodying an accurate understanding of reality (namely impermanence and interconnection) that transforms political-economic systems while promoting *karunā*.

#### G. Motivating Buddhist Economics

The study of Buddhist economics officially began with the best-selling book *Small is Beautiful* by economist E. F. Schumacher in 1973. His argumentation focused on the factor of right livelihood as the main justification for a Buddhist system of economics. He believed the

existence of right livelihood as a fundamental Buddhist requirement indicated that "it is clear, therefore, that there must be such a thing as Buddhist economics" (Schumacher, 34).

Schumacher saw this system as a middle way between the modern growth economy and economic stagnation (Brown, 1). Schumacher argues that economists, "like most specialists, normally suffer from a kind of metaphysical blindness," such that they rarely consider their underlying assumptions about the world in their analyses (Schumacher, 34). Hence, modern economics justifies horrendous working conditions in many parts of the world, unimaginable environmental damage, lack of substantial government regulation, a booming advertisement industry to fuel rampant consumerism, and an absurd amount of waste. In contrast, a Buddhist economic system is primarily about the perpetuation of the Buddhist ethical conduct of compassion and non-violence at a local economy, government, and corporation-wide level.

In addition to Schumacher's justification, I will present two additional reasons to motivate the concept of Buddhist economics. In various texts, the Buddha explicitly advises states of heads as to Buddhist ethical applications in government. In the Cakkavatti Sutta and Digha Nikãya texts, the Buddha highlights five universal monarch duties, rooted in compassion for all. Part of the Buddha's justification is that poverty is the root of many evil deeds, including stealing, cheating, and killing, which are forbidden due to their contribution to unnecessary suffering. He also explicitly discusses the obligation of monarchs to provide available meaningful work to all citizens. Finally, in the Kūtadanta Sutta, economics are described as the "substratum [bedrock] of the state," such that political and social organization cannot disregard the fundamental role of economics in contributing to or hindering the success of the state (Ritthithit et al, 36). These examples indicate the Buddha's intention that Buddhist ethics are

applied at a larger scale as well as specifically to the government's regulation of the economy, due to the role of the economy in promoting or inhibiting suffering.

Second, I will appeal to Priest's argument that inner peace is a central good of Buddhist practice. However, as he describes, a basic quality of life is a prerequisite to accessing the greater benefits of Buddhism. Hence, I see two clear types of suffering. The first is the main type of suffering discussed in Buddhism; let's call it metaphysically unjustifiable suffering. This is the suffering based on a fundamental misunderstanding of the world and unnecessary attachment and aversion to certain conditions that produce the experience of suffering. Let's call the second type metaphysically justifiable suffering, such that one's hunger, thirst, heat, cold, or exhaustion is generally considered to be inhumane. In those cases, no amount of Buddhist proverbs and meditation can alleviate the suffering, unlike in the first case where the suffering is based on a cognitive process that we have come to believe is true. For example, if we miss a meal, we may suffer because we believe that we should not have to experience hunger pains and we prescribe a negative connotation to that experience. However, with a belief that feeling hungry is not a terrible thing, as long as we know we will be fed the next day, then we could experience the hunger pains as merely as a sensation without prescribing negative judgement to that experience that creates an experience of suffering.

In differentiating between the two types of suffering, we see that Buddhist practice in the form of mindfulness and meditation alone cannot solve for the metaphysically justifiable case of suffering. Given that understanding, the Buddhist goal of mitigating collective suffering can never be achieved without considering the material conditions of millions of people who live below a basic level of subsistence. While there is no clear bright line (at least not yet) for a

Buddhist-justified level of resources, we can all understand how the extreme poverty plaguing much of the world is clearly not it.

Additionally, Buddhist ethics inherently cares about society at large, at least from the perspective that the wellbeing of society impacts every individual, and the goal of eliminating suffering cannot be achieved without eliminating the suffering of the society. Given that Buddhism suggests that their ethical framework should be universally applicable, there is no reason it shouldn't also be able to apply to a system of economics. Following these three arguments that justify the study of Buddhism in economics (and economics in Buddhism), we shall diverge briefly to evaluate what the current market system assumes.

#### H. A Review of Modern Economics

To better understand how Buddhist economics compares and contrasts with modern economists, allow us to investigate what the current market system entails. As Debra Satz discusses in her book, "Why Some Things Should Not Be For Sale: The Moral Limit of Markets," many economics assume that markets involve individual rational decision-making which results in market equilibrium under perfect competition that then create Pareto efficient outcomes. Pareto efficient is the idea that no one can be made better off without making someone worse off, such that people engage in mutually beneficial exchanges until they cannot improve further (Satz, 18). However, Pareto efficiency assumes an exogenous initial distribution of resources, such that if the developed world started with the majority of wealth and resources in the 20th century, the current global allocation of wealth could theoretically be described as Pareto efficient without actually addressing the absolute distribution of goods. The idea of efficiency is also often referred to as Kaldor-Hicks efficiency, which involves a cost-benefit analysis strategy to validate actions that produce more overall benefits than costs (Satz, 19).

However, within this view of efficiency, people are considered better off when their individual preferences are satisfied. Some might object that not all preferences of equal importance or worthy of satisfaction, such that one's first meal of the day seems inherently more valuable than someone's fifth. Furthermore, there are significant limits to what would be included within benefits or costs, likely excluding goods that are harder to measure, such as quality of life, perceived freedom, or life satisfaction. Although Pareto efficiency is only one measure of efficiency, it is cited frequently in economics such that these limitations quite often hold true.

There are a few conditions and assumptions that justify a market's implied efficiency. Property rights allow people to hold onto what they exchange in the markets, free information allows all actors to be informed enough to make rational decisions, and anti-monopoly conditions ensure that one firm doesn't have total control of any market in a way that inhibits the competition that is necessary for Pareto efficiency to hold true (Satz, 27-31). However, it is well-known that market transactions do not always validate these assumptions, which leads to market failure, often in the form of externalities which are costs borne on third parties. Things such as pollution, congestion, or secondhand smoke are examples of externalities that are typically not included in the original cost-benefit analysis of the market transactions. However, by "internalizing those externalities" or including them in economic calculations by pricing them, those externalities can be avoided, mitigated, or compensated fairly (Satz, 31-33).

Through the rise neoclassical economics, marginalist theorists dominated the field. The issue of economics became more focused on the optimal allocation of resources given the condition of scarcity (Satz, 57). While marginalist thinking applies to the system as a whole, it also applies to individual decision makers. The notion of diminishing marginal utility means that every additional unit of a good consumed creates additional utility, but at a lesser rate than the

previous unit consumed. This result has been empirically validated by modern psychology. Even though new research suggests that higher income levels do produce greater "happiness" with no real end point, they still confirm that each additional dollar gained contributes to less happiness than the dollar before it. However, it's also worth noting that day-to-day happiness and overall life satisfaction are measured differently, with the latter metric showing the most significant upswings once individuals move above the poverty line (CNN).

At a grander level, the switch to marginalist economics places a much greater focus on individual decisions that maximize utility, moving away from a focus on social relations between various classes. As Satz aptly puts it, "economics no longer contemplates the capitalist and his control over his employees, the land's lack of contribution to productive growth, or the dynamic tendencies of differing markets" (Satz, 58-59). Instead, modern theorists usually take social relationships to be exogenous to and thus outside economics. However, most founders of early economics acknowledged that market interactions are responsible for creating these social classes and relationships in the first place, and thus should be included in economic analysis.

Specifically, we will look at Adam Smith, one of the founders of modern economics, who discusses the role of the market system in creating "a society of horizontal relationships based on free interaction, equality, and reciprocal self-interest" (Satz, 42). Smith highlights the ability of markets to produce individual freedom, such that agents have control over their own consumption and a choice between a set of alternatives where they are free to experiment and try new goods as they please (Satz, 21). However, Smith takes a differing approach to the latter marginalists by asserting that government intervention in markets may be necessary to reduce poverty and promote "justice and efficiency." He even advocated for progressive taxation on carriages in proportion to their price such that "the indolence and vanity of the rich is made to

contribute in an easy manner to the relief of the poor" (Satz, 43). Smith went even further to explain that the value of markets in promoting freedom, equality, and efficiency are only guaranteed under specific institutional conditions and restrictions. He summarizes by emphasizing that only a "separate and independent state" can ensure the wellbeing and liberty of the state's poor by loosening the grip of the rich and dogmatic (Satz, 44).

Smith also concedes that the opinions of the masses are not exogenous from markets. In fact, many of the worker's preferences and capabilities are shaped by the market's division of labor. Furthermore, it is the objective of efficiency that creates strong distributions of labor which fuel the preferences and capabilities of the population (Satz, 45). Smith goes as far as to the say that "the difference of natural talents in different men is, in reality, much less than we are aware of; and the very different genius which appears to distinguish men of different professions [...] is not upon many occasions so much the cause, but the effect of division of labor" (Satz, 46). This quote illustrates how the market has both individual and collective impact on the preferences and abilities of its members, justifying why the market cannot be judged on its efficiency alone. Satz extends this thesis to emphasize how even a labor market that was efficient and voluntary could "fail" if it used its workers as mere tools or placed them under servile dependence with those who control the means of production (Satz, 46).

Taking these ideas further, Amartya Sen uses Smith's foundation to highlight the fundamental role of markets in promoting a person's actual capabilities, that is, one's ability to do and receive. Some key capabilities Sen highlights are the ability to nourish oneself, to be literate, and to "appear in public without shame," as drawn from Smith (Satz, 50). Essentially, a market institution can promote or limit one's range of choices. Hence, eliminating some market

choices could be ideal if it creates new, better choices that would have otherwise been unavailable.

This conception of production describes a reciprocal relationship between labor markets and workers, such that workers contribute to the production within labor markets, and labor markets contribute to the personal development (or lack thereof) of its workers. Sen's understanding of capabilities emphasizes their role in promoting actual freedom, such that true freedom is limited by what someone can feasibly do. This intuitively makes sense in that even if there are thousands of models of cars to theoretically choose from, creating one type of "freedom," your capability to spend only \$500 dramatically limits your "real" freedom within the market. Furthermore, the ability to theoretically choose from thousands of available jobs is constrained by your lack of a college degree, unless your decades of work experience make you uniquely qualified, which demonstrates the role of real capabilities in one's quality of life and the reciprocity of the labor market.

These analyses highlight Smith's view of the marketplace as a "political and cultural as well as an economic institution, where differing interests wielded power and some types of exchanges shaped the participants" (Satz, 51). This view is in stark contrast to the more modern marginalists who failed to examine the role of markets outside of their impact on the size of the economic pie.

Furthermore, I think it is important to briefly address four key assumptions that economics use to justify the efficiency of markets. Anti-monopoly is one such condition. As time has progressed, certain sectors have become increasingly dominated by fewer, larger players that much more closely model a monopoly than the founders of modern economics would have appreciated. For example, as of 2019 in the US, three companies control 80% of mobile

telecommunications, three control 95% of all credit cards, four manage 70% of all airline travel, and Google oversees 60% of the country's internet searches (Forbes). The list goes on, but these numbers illustrate a startling theme. The economy is clearly not operating under the same assumptions that were originally intended. Consequently, as most modern economists acknowledge, markets today are not "efficient" even in a pricing and profit manner, such that consumers are losing out while the market giants rake in excessive profits.

Additionally, other assumptions of efficient markets may not hold true in reality. According to the 2002 Nobel laureates in economics, Daniel Kahneman and Vernon Smith, individual behavior is rarely rational due the frequency of imperfect, incomplete, or non-symmetrical information in decision making (Altman). Furthermore, externalities in production, namely carbon dioxide emissions, water pollution, or overall waste, are usually excluded from economic cost and benefit considerations. Finally, property rights are still insecure in much of the world. As of 2015, more than one billion households in poor countries live without publicly registered or secure rights to their own homes (Forbes). Moreover, the World Bank details how women in half of the countries in the world, even as of 2019, were still denied land and property rights despite laws theoretically granting them (World Bank). These shocking statistics and considerations shed light on the many differences of markets in theory from markets in reality.

After evaluating how modern economics falls prey to four key areas of market failures, I will briefly highlight how a Buddhist economic approach could address these conditions for efficiency. First, in Schumacher's aptly titled book coining Buddhist Economics, "Small is Beautiful," he highlights the harms of big business that perpetuate much of the current economic inequality and drive the market further away from embodying Buddhist principles. By promoting a stronger sense of interconnection that likely leads to community building, small businesses

become more valuable within a community because of the understanding of an individual's ability to decrease the suffering of those around them through local purchasing decisions. Regarding rationality, a Buddhist understanding of economics already acknowledges that most people lack an accurate metaphysical understanding of the world, which inherently inhibits rational decision making. Indeed, a Buddhist economic approach that seeks to transform individual values as well as promote a collective understanding of interconnection and impermanence that would encourage making economic decisions from that metaphysically rational perspective.

Next, we turn to the issue of externalities, with the main consideration that of negative environmental impacts of production. By acknowledging the inherent interconnection of humans with the environment, Buddhist economics advocates taking a radical approach to sustainable production such that long-term suffering is reduced through a higher value of environmental sustainability, even if there are short-term drawbacks from reimaging the production process.

Finally, we evaluate the issue of property rights. In returning to the Buddha's recommendations for monarchs, we summarize that all must have a chance to make an honest living, equal protection must be provided to all in the land, and there must be measures to protect against exploitation. I think it is highly possible that a fully-fledged Buddhist economic system might dismantle property rights entirely to promote a greater sense of interconnection. However, the intermediate value of property rights in a Buddhist sense can be understood from their necessity in promoting a standard level of wellbeing in the world, such that all groups do receive equal protection, are guaranteed not to be exploitation, and are able to make an honest living.

On a final note, we will look to the economic principle of diminishing marginal utility to uncover an additional benefit of wealth distribution beyond mere equality. Essentially, this

principle implies that more total utility is achieved through more equal distribution of wealth, because one dollar taken from a rich household costs them less utility than that gained from the same dollar given to a poor household. Although this understanding is not nearly enough to justify wealth redistribution on its own, it's a useful fact to keep in mind in discussions of inequality, redistribution, and collective wellbeing. A Buddhist system of economics could also harness this economic truth, such that overall suffering could be decreased while promoting greater total equality.

After this divergence from Buddhist philosophy, we can see a few key themes that allow us to better compare neoclassical economics to Buddhist economics. As demonstrated by Adam Smith's original understanding of markets, Buddhist economics' inclusion of government and institutional reform and regulation to promote equality and freedom are in alignment with founding market ideologies, even if later economics strayed away from these considerations. Second, modern markets suffer from numerous forms of market failure, including a lack of effective property rights, protection against monopolies, access to sufficient information to make rational decisions, and the inclusion of externalities in economic calculations. Lastly, the role of markets, specifically labor markets, in producing preferences and real capabilities cannot be overstated. This justifies evaluating market failure beyond mere efficiency.

These analyses highlight potential reasons why current markets fail to promote overall equality, as well as why they should consider the distributive effects they produce altogether. It also suggests that the overall market system may not be entirely flawed, and that proper governmental intervention could be utilized to promote equality, at least from Adam Smith's viewpoint.

#### I. Returning to a Buddhist Economic System

To briefly return to the notion of Buddhist ethics, a Buddhist economic system would ultimately seek to be ethical in a Buddhist sense. This means the political-economic structure of the system would embody an understanding of interconnection and impermanence, and hence promote values like *karunā*, such that the system is valued for being epistemically accurate in a Buddhist sense. Drawing parallels from the idea that specific Buddhist virtues are instrumentally valuable in the overall project of Buddhist ethics, one can also view these Buddhist economic principles as political virtues instrumentally valuable in creating a world order that better reflects Buddhist metaphysics. While this might seem challenging at a large scale, I will lay out both political recommendations specifically from the Buddha as well as policy extrapolations from other Buddhist scholars. The core idea here is that these recommendations help move the market system closer to reflecting the fundamental Buddhist truths, even if there is a temporary, instrumental value in consequentialist logic that acknowledges material wellbeing as a prerequisite to collective, material and spiritual flourishing.

While the initial Buddhist metaphysics we discussed may seem so far removed from traditional Western ideology that is becomes hard to reconcile the two, we can see some surprising similarities between the construction of traditional economics and Buddhist economics. In his 2021 book, "A Buddhist Approach to International Relations," Professor William Long highlights some fundamental differences and similarities between the two economic systems. At a metaphysical level, Buddhist economics acknowledges that the material world and everything in it is impermanent and, when understood properly, it is also a prerequisite to greater forms of happiness that cannot be attained through material goods alone. Neoclassical economics obviously takes the material world as real and relatively permanent and

material goods to be one of the main (if not the most important) source of happiness (Long, "A Buddhist Approach to International Relations," 42). While modern economics seeks to satisfy humans' continually expanding desires for material consumption, Buddhist economics understands the role of material goods in creating the foundation necessary to transcend the self and the experience of suffering.

Long also explains how using GDP to measure the success of an economic system is flawed from a Buddhist perspective, such that only a holistic metric that accounts for the numerous facets of human flourishing in connection with the environment can account for the real goals of an economic system (Long, "A Buddhist Approach to International Relations," 43). A truly Buddhist system of economics would divert attention away from the modern-day focus of "maximizing the size of the economic pie" in favor of reconceptualizing what the pie includes in the first place. Utility would no longer just include consumption and leisure, but other Buddhist requirements for a good life, such as opportunities to work in safe conditions, to give to charity, to enjoy environmental health, etc. This reflects an example of internalizing externalities, but also a reevaluation of the metaphysics presupposed by the market system. Furthermore, this new system would require radically reimagining the notion of happiness and wellbeing, as well as the role of consumption, production, corporations, governments, and individuals within the "free" market.

It is also important to note that while Buddha prescribed higher value to spiritual wellbeing, he specifically warned against ignoring one's physical needs and instead advocated for a "Middle Way" between material indulgence and asceticism in the journey towards happiness (Long, "A Buddhist Approach to International Relations," 39). Hence, Long describes the goal of Buddhist economics as providing "material security and economic stability for

individuals and society and sustainable growth." He also highlights the role of the government in guaranteeing the "four essentials of Buddhist economics: food, clothing, shelter, and medicine (health care), as these constitute the foundation for other pursuits such as moral development and the acquisition of wisdom (Long, "A Buddhist Approach to International Relations," 39-40).

While the Buddha made many comments on the correct form of an economic system, he was also aware that these systems must be "flexible and culturally appropriate for a particular time and place (Long, "A Buddhist Approach to International Relations," 43). Hence, Long argues that the Buddha's recommendations are compatible with a modern, mixed market economy, but that he prescribed a greater role for the government in regulating the economy to promote sustainable growth and poverty reduction than modern economics does (Long, "A Buddhist Approach to International Relations," 43). This leads us into the discussion of what the role of the government looks like given Buddha's understanding of the connection of government and the economy in promoting basic quality of life for its citizens.

#### J. Government and Equality in Buddhist Economics

There are two main methods to evaluate what would fall within a Buddhist economic system. The narrower method would only include principles clearly derived from a specific aspect of Buddhist teaching. The broader method would include any principal that aligns with Buddhist ethical theory more generally. In his analysis, Schumacher implicitly acknowledges that the state of the world has changed so drastically from the writing of the original Buddhist texts that the narrow method simply cannot address most of the current economic happenings. Hence, some economic principles we will discuss are more directly drawn from Buddhism, while others will be justified as clear corollaries from the larger theory of Buddhist ethics.

Let's return to the five universal monarch duties the Buddha laid out. First, monarchs must act in alignment with the supreme principle, which includes upholding "truth, righteousness, goodness, reason, principle, and rightful regulation as standards." Second, one must provide fair and righteous protection to all groups of people in the land. Third, unrighteous action must be prohibited, such that there are "preventive and remedial measures against exploitation, corruption, or unrest in the country." These three principles, in combination with the notion of right and honest speech, will be the basis for the first set of derived principles which shall be referred to as Ethical Factors. The fourth principle concerns distributing resources to the poor, such that "there are no poverty-stricken people in the land by arranging that all people have a chance to make an honest living" (Ritthithit, 36). This principle, in addition with the notion of right livelihood, will help justify the second set of principles we will use, known as Economic and Social Factors. Finally, the third set, Environmental Factors, can be clearly derived from the principle of right action that concerns non-violence for all sentient beings.

The fourth principle for monarchs is also useful in understanding the relationship between governments and economics in a Buddhist sense. The Buddha lays out the role of the government in ensuring that all have a chance to make an honest living, which implies a level of governmental involvement in the creation of jobs and the functioning of a national economic system. The note that the government should ensure "that there are no poverty-stricken people in the land" also suggests that the government has a responsibility to use the economy to decrease poverty. In combination with the third principle of ensuring there is no exploitation in the land, this suggests that the government should also apply an ethical lens to the regulation of the economy such that workers' time is fairly compensated and their wellbeing is prioritized over the goal of unbounded economic growth. To Buddha, it seems that the role of government in

protecting its citizens and providing jobs to decrease poverty are linked, such that the government's role both concerns the physical, material, and ethical elements of what it means to care for one's citizens. To Buddha, the natural arbitrator of economic development and security is the benevolent monarch in their quest to promote overall wellbeing for all.

While Buddha didn't see politics as an end in itself, he clearly acknowledged their role in creating the necessary conditions, or lack thereof, for personal advancement. He described government as key to maintaining social order and general welfare through values and processes consistent with the notion of "dharma" (Long, "A Buddhist Approach to International Relations," 36). In this context, the dharma is a set of universal or natural laws that reflect a Buddhist metaphysical understanding of suffering and interconnection. Essentially, the government's policies should reflect a Buddhist understanding of the world.

As the Dalai Lama addresses in a 1993 speech, "Buddhism is essentially a practical doctrine. In addressing the fundamental problem of human suffering, it does not insist on a single solution. Recognizing that human beings differ widely in their needs, dispositions and abilities, it acknowledges that the paths to peace and happiness are many. [...] This kind of pluralistic approach, in which individuals themselves are responsible, is very much in accord with a democratic outlook" (Dalai Lama). In alignment with that quote, it seems Buddha would have also taken a pragmatic and flexible approach to government and economic recommendations. As Buddha did not advocate for one explicit type of government or economic system, as long as a set of Buddhist virtues were embodied, it is logical that Buddha also did not have a strict account of exactly how the government should regulate the economy, as long as it sought to mitigate suffering in accordance with the dharma. Given that Buddha highlights the role of the state in

reducing poverty and promoting meaningful work, it is reasonable to consider governmental regulation of an economy to achieve those ends, but that need not be the only method.

Furthermore, the notion of dharma is also relevant to politics through the Buddhist understanding of equality. This can be derived from the idea of the "Buddha nature," which implies that "all human beings have inherent worth and capacity for enlightenment" (Long, "A Buddhist Approach to International Relations," 36). This may appear to contradict with the notion of all being's inherent nature of emptiness, but Buddha's extrapolations of the Buddha nature justify at least a conventional value of our shared and equal dignity as people. Buddha also explicitly rejected the caste system to highlight his understanding of spiritual equality. He explains, "now since both dark and bright qualities, which are blamed and praised by the wise, are scattered indiscriminately among the four castes, the wise do not recognize the claim about the Brahmin caste being the highest ... [anyone can] become emancipated ... by virtue of dharma" (Long, "A Buddhist Approach to International Relations," 36).

Next, it is useful to develop an account of equality from a government perspective. We can combine the idea of the Buddha nature with the third supreme monarch principle of ensuring "fair and righteous protection to all groups of people in the land." With the understanding that all people have metaphysical equality, we then consider how this reflects the promotion of equality through a governmental lens. The notion of fair protection to all also signals a universal kind of human dignity, such that one life is not worth more than any other. I don't imagine Buddhists to advocate for strict equality, such that everyone has the exact same level of resources. Instead, I hypothesize that they would prefer greater equality of opportunity, such that all have access to fair and meaningful work, time for leisure and family, protection from violence or theft, etc., as highlighted by these monarch duties. However, the notion that all are interconnected and reflect

each other's suffering suggests that the suffering of all must be significant to each person and indicates that a basic level of resource security for an individual is positive for the collective.

Furthermore, it doesn't seem like Buddhists would say that everyone is "owed" the same level of psychological wellbeing; however, everyone should have access to at least a basic level of resources such that they have access to achieve spiritual wellbeing if they desire to pursue it, as indicated through their inherent Buddha nature. Hence, I see equality as an equal acknowledgement of every person's Buddha nature and the creation of opportunities that allows all to act on that nature and experience spiritual wellbeing if they desire, with the acknowledgement that basic material needs are a prerequisite to spiritual development.

I think it's also important to note that there is no clear formula that lays out how one's suffering impacts those around them. For example, is it better to have two people just above the poverty line or one very poor and one very rich person? If the people just above the poverty line are still suffering significantly, does that actually produce more overall suffering than one person who is very poor? Unfortunately, a simple utilitarian calculation cannot be applied here, both due to the lack of explicit understanding of how the magnitude of different levels of suffering affect those around the sufferers, as well as the knowledge that Buddhists don't prescribe to strictly utilitarian ethics. However, one of the significant elements here is that both people above the poverty line likely have a better chance of experiencing spiritual wellbeing than the incredibly poor person struggling with basic sustenance. Furthermore, these people may even have a better chance at spiritual wellbeing than the very rich person. Even if only the first extrapolation is true, this allocation of resources seems "more equal" because it provides a more equitable opportunity for all to achieve the spiritual goods that Buddhism is concerned with.

Ultimately, in order to eliminate suffering, everyone requires at least needs a basic level of sustenance, as previously discussed. However, eliminating suffering is not possible if all but one person has this level of resources and opportunity, given an understanding of the red speck in the Net of Indra. Hence, I see Buddhist economics as inherently concerned about both the average wellbeing of one's citizens as well as the dispersion of that wellbeing, but with a slightly larger focus on its dispersion, since that indicates the extent to which many people are unable to access these spiritual goods. Furthermore, given that Buddhists are opposed to excess materialism, such that wealth doesn't distract from spiritual development, it seems they would also prefer a smaller dispersion of material wellbeing to increase the likelihood that spiritual development is undertook.

To tie it all together, Buddhist ethical theory advocates for *karunā* through the equal care and concern of those around them, as derived from the idea of no self, interconnection, and Buddha nature. Next, unequal distribution of resources is a main cause of poverty worldwide, which is one of the largest inhibitors of the capacity for spiritual development to ultimately reduce suffering. Additionally, Buddha lays out the role of a good monarch in minimizing poverty and providing access to meaningful work, which partially helps derive an understanding of Buddhist economics. Finally, Smith and Satz highlight the role of markets in producing or inhibiting relational equality between people, which addresses the potential of well-regulated markets to act in accordance with *karunā* and decrease overall suffering.

However, since the Buddhists care about much more than material wellbeing, I also wish to understand the role of Buddhist economics in promoting one's overall life satisfaction, which is likely moderated by material wellbeing but also extends beyond it. This concept will be

discussed in detail in Chapter 2 to highlight how life evaluations are measured and interact with other elements of wellbeing.

# K. Components of an Adapted Buddhist Economic System

Finally, let's apply Buddha's understanding of politics and equality to motivate the three sets of principles within Buddhist economics. Beginning with the Ethical Factors for which data is available, we include four main components: government corruption, government effectiveness, political stability and absence of violence/terrorism, and voice and accountability. I will now justify the various principles based on the Buddha's understanding of the proper role of government. First, governmental corruption clearly violates the supreme principle, the first rule for monarchs, and notion of adherence to truth and goodness. As Dr. Nigel Crawhall of the Hout Bay Theravada Buddhist Center explains, there are three unwholesome roots that cause the majority of the world's suffering: greed, hate, and ignorance or delusion. Corruption of governments and government officials is driven by the craving for more wealth and power than they have, which is clearly explained by greed.

Additionally, they embody a willful ignorance as to the impacts of their actions on their citizens, which clearly embodies the third unwholesome root of delusion, as well as their delusion that more wealth and power will create happiness (Crawhall). Furthermore, corrupt actions violate the value of right understanding, which requires an awareness of the difference between right and wrong and the karmic consequences of one's actions. Finally, the second Buddhist precept of moral action states "do not steal or shed greed and excessive desire."

Crawhall interprets this to include evaluating whether things not given directly to us are duly

ours, and whether things that come into our possession are truly meant for us before assuming ownership. This awareness about right understanding is clearly missing in cases of government corruption and the absence of corruption would be praised by a Buddhist understanding of the role of government. Furthermore, an understanding that corruption is usually related to the use of state resources, money and power helps explain its relevance as a Buddhist economic principle.

Second, the previous discussion of equality justifies the importance of governmental effectiveness, such that only an effective government can sufficiently produce the prerequires for personal advancement while creating and implementing policies that effectively promote equality. The Buddha also acknowledges the inherent role of the government in promoting the wellbeing of its citizens. Given that government effectiveness demonstrates how well a government undertakes that moral obligation, it clearly seems related to the ethical aspects of Buddhist governance. Furthermore, it can be taken as a prerequisite to promoting overall Buddhist ethics at a national level, such that even a well-intentioned government cannot produce positive outcomes, which are prerequisites for spiritual advancement, without the ability to effectively implement its desired policies.

Third, political stability and absence of violence/terrorism can also be clearly derived from the Buddha's teachings. As Long highlights, "because of the equality and ultimate goodness of every individual (and because they all suffer), Buddha taught that they are each worthy of our compassion and, at a minimum, should not be harmed by the state (Long, "A Buddhist Approach to International Relations," 37). Furthermore, most Buddhist scholars recognize nonviolence as the ethical corollary of teachings on human equality, which can be combined with the Buddha's explicit requirement that benevolent rulers follow the precepts of no killing, lying, or stealing. First, political stability is necessary to mitigate violence caused by

one's citizens against each other. Furthermore, lack of stability promotes the proliferation of terrorism and thus fails to protect the inherent goodness of their citizens. Hence, to promote the ethical values of Buddhism, a country must have sufficient political stability to maintain nonviolence.

The fourth and final ethical factor is "voice and accountability," which represents how much citizens are able to participate in selecting their government and their levels of freedom or expression and free media. Even though monarchy was the dominant form of government during the Buddha's lifetime, he advocated that governments should be based on popular consent and not divine right, in alignment with the notion of human equality. While the Buddha did not explicitly favor one type of government, he made his preference for democratic and representative forms of government clear. He specifically favored "citizen participation and free expression of opinion, (...) voting and respect for popular consent, (and) transparency via face-to-face meetings and public debate (Long, "A Buddhist Approach to International Relations," 38). Thus, even though democracy is not the only method to maximize citizen's wellbeing, Buddha was clear that a government in alignment with the people's freely expressed preferences is a probable prerequisite to ethical and effective governance.

Next, allow us to evaluate the Buddhist underpinnings of the Economic and Social factors. These also include four elements: national expenditures on both education and health, access to basic drinking water services, and labor force participation rate. As Professor Long describes in his article, "The Mouse that Roared: Bhutan's Buddhist Approach to Democracy and Development," beyond just providing the four essentials of food, clothing, shelter, and healthcare, the Buddha advocated that a political-economic system should ensure access to

"education, time with family and friends, participation in community and meaningful work" (Long, "The Mouse that Roared," 75-6).

The Buddhist value of education can also be seen through the commitment of Buddhist monasteries to provide free education indiscriminately. Based on the high value Buddhists place on wisdom and their acknowledgment of the harm of ignorance, education is a necessary prerequisite to free oneself from suffering both at a material and spiritual level. Hence, government spending on education as a percent of Gross National Income demonstrates how much national governments value providing quality education to their citizens compared to their overall level of wealth and available resources.

We will use the Buddha's understanding of the role of political-economic systems to highlight the importance of the three final Economic and Social factors. Long highlights how the Buddha saw poverty as the largest threat to both individual and collective development and the importance of meaningful work available for all in promoting societal wellbeing. First, Buddhists understood the value of health as a prerequisite to spiritual flourishing, such that they included it within the four essentials. Additionally, despite being independently valued as a basic human need, health is also valued as a prerequisite to being able to engage in meaningful work and contribute to community wellbeing and development. Furthermore, access to basic drinking water is a necessary factor in promoting health and can be included in the Buddha's four essentials as a corollary to the value of food. Finally, a high labor force participation rate is a prime demonstration of access to work, and even if not all jobs are traditionally considered meaningful, the Buddha would argue that the availability of work is crucial to the project of social and collective wellbeing. Hence, we will focus on these four elements of economic and

social wellbeing in evaluating the fundamental ability of a state to provide for its people in a meaningful way.

Finally, we arrive at the Environmental Factors. As previously discussed, Buddhism acknowledges the inherent interconnection between all living things, including humans, animals, and the environment at large. As Long discusses, Buddha was one of the first advocates of environmentally sustainable economics as a core social principle. Buddha used the analogy that humans, while creating wealth, must treat nature like the bee that collects pollen, such that the bee neither damages the flower's beauty or fragrance while instead promoting its future propagation. In terms of economics, this means the development of wealth must not harm the natural environment in unsustainable ways (including destroying her regenerative powers or disrupting her beauty) nor inhibit future generations ability to generate wellbeing from the natural environment (Long, "A Buddhist Approach to International Relations," 42). Given this framework, the environmental sustainability of the means of production cannot be ignored within a Buddhist economic system. To measure this, I will focus both on carbon dioxide damage as a percent of Gross National Income and total greenhouse gas emissions to understand how much the country cares about the impact of their economic activity on the environment.

To conclude, the philosophical background of Buddhist metaphysics helps us understand how a Buddhist economic system could be conceived. Through a discussion of the Four Noble Truths, the doctrine of no self, interconnection, compassion, and a brief overview of the Eightfold Path, we create a basic understanding of the Buddhist view of the universe and its ethical implications. In relating this to an economic system, we are forced to acknowledge that all people and things are interconnected and reflect each other's suffering, such that no one's suffering can be fully relieved if another entity in the system is experiencing suffering. We also

discuss, in alignment with the Buddha's views, that Buddhist economics strives to represent a Middle Way such that one cannot ignore the basic material resources necessary to access spiritual wisdom and, eventually, achieve freedom from suffering. Through unpacking the Buddha's recommendations for monarchs and his views on political-economic systems, we understand that Buddhist Economics advocates for a government that embodies the Ethical, Social, Economic, and Environmental factors I have discussed.

While this philosophical investigation helps us better understand the theory of Buddhist economics, the lack of empirical evidence validating a Buddhist approach to economics makes it much more challenging to validate. In the second section of my paper, I will attempt to do just that. Although there are limits to what available data can demonstrate about the impact of implementing Buddhist principles, I selected the principles most closely related to the Buddha's own recommendations for governments that had available data for a sufficient number of countries over roughly the past decade. My hope is that further research will delve beyond Buddhist Economics as a theory and evaluate the success of its philosophy on traditional and relevant measures of wellbeing.

# Chapter 2: An Empirical Analysis of Buddhist Economics

#### A. Introduction

As many economists have discussed, GDP is a lacking measure of overall wellbeing within a country. Firstly, it fails to evaluate the distribution of wealth within a country, nor does it measure or prescribe value to things such as leisure, home production, psychological wellbeing, job satisfaction, or freedom to make life decisions (Jones and Klenow, 2426¹). More fundamentally, it assumes a metaphysical value of utility based on production, without as much concern for individual quality of life, social or governmental quality, or environmental destruction. Although all social science must make some metaphysical assumptions to understand the human experience enough to study it, in economics there is often conflation between happiness or wellbeing and economic success, as well as a frequent prioritization of consumption in producing utility that the Buddhists would certainly question. A country's economic success is traditionally measured in terms of the size of the economic pie, but this can't always explain citizens' psychological wellbeing or produce an equitable distribution of that wellbeing.

Accordingly, I aim to engage in a project to measure the relative success of a different type of economic system, namely Buddhist Economics, which includes a dramatically different collection of "goods" within wellbeing. The data and previous research on this topic are lacking, hence, my project can be viewed as an initial experimental investigation to assess whether this

<sup>&</sup>lt;sup>1</sup> Note that I use MLA throughout the paper to keep citations consistent with the first chapter's usage of MLA as is common in philosophy literature.

topic should be qualitatively studied in greater depth. My economic analysis will seek to understand if a country's population displays higher levels of psychological wellbeing, measured through life satisfaction, and a lower dispersion of psychological wellbeing when they employ a set of Buddhist economic principles.

The motivation for this topic stems from the vast philosophical history of Buddhist metaphysics and the blossoming field of theoretical Buddhist economics. Within this metaphysical construction of the world, only an economic system that accounts for the interconnectedness of all people and the environment can ultimately solve for individual and collective suffering, which is an objective of both Buddhism and the free market economy. However, instead of merely assessing the philosophical underpinnings of this economic system, as many other scholars have done, I will review them and then proceed to use economic analysis to evaluate whether the theory of Buddhist economics has empirical validity.

Instead of analyzing Buddhist economic success by evaluating traditionally Buddhist countries, I prefer to create three sets of "Buddhist economic and social principles" that relate to policies any government could have adopted, specifically "Ethical, Economic and Social, and Environmental Factors," respectively. By analyzing principles that are not explicitly Buddhist but are clearly in alignment with Buddhist values and governmental recommendations, I can best analyze the effects of Buddhist economics as an overarching philosophy of life, instead of as religious practices adopted only by Buddhist countries. Therefore, my economic analysis will attempt to measure the effect of a wide set of Buddhist principles on a population's wellbeing in terms of life satisfaction and the dispersion of life satisfaction, while controlling for the effect of GDP per capita and other country-level differences. I predict that countries that demonstrate greater Buddhist principles will also have higher levels of psychological wellbeing within their

populations, with the effects of ethical and economic/social factors outweighing those of environmental factors.

My sample consists of 42 countries from most regions of the world. They include Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Bolivia, Cameroon, Chad, Chile, China, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Georgia, Guatemala, Honduras, India, Indonesia, Israel, Kazakhstan, Kenya, Kyrgyzstan, Lithuania, Moldova, Nepal, Nicaragua, Niger, Panama, Peru, Russia, Senegal, South Africa, South Korea, Tanzania, Thailand, Uganda, Ukraine, the United States, Uruguay, and Vietnam. It is worth noting that only two of these countries have a majority Buddhist population, namely Thailand and Vietnam. However, given my focus on the implementation of *philosophically* Buddhist principles by national governments, this is a non-issue in my analysis as population preferences are not considered.

After initial analysis, I found that only a few principles are statistically significant predictors of a country's average wellbeing as measured by their "Life Ladder" or average evaluations of one's quality of life. However, in regressing my set of Buddhist principles on a countries coefficient of variation (the dispersion of the life ladder), I found additional significant variables. This is interesting considering the Buddhist focus on equality of wellbeing in eliminating overall suffering due to the effects of interdependence. These significant variables reflect findings in previous editions of the WHR, including the role of Government Effectiveness, Education, Labor Force Participation, and GDP per capita.

Furthermore, I divided my countries into two sub-samples based their coefficients of variation which helped demonstrate how Buddhist principles impact countries at different levels of development differently. Between these two sub-samples, variables such as Political Stability,

Voice & Accountability, Education, FDI, Access to Basic Drinking Water Services, GHG emissions and CO2 were significant, but the magnitude, direction, and level of significance of their effects varied substantially between the two samples. This could encourage further research that considers the impacts of Buddhist principles based on the level of development of a country and possibly help prioritize Buddhist principles based on a country's stage of development. Ultimately, my hypotheses are validated such that some Buddhist principles do positively impact the average wellbeing within a country as well as decrease the dispersion of that wellbeing, as predicted by an understanding of interconnectedness and impermanence.

In returning to the motivation for this research, one only need look at the state of the world to understand that our current economic system has much room for improvement. As our global economy exacerbates an already precarious environmental situation, overall inequality increases for more than 70% of the world's population, and political instability caused the greatest level of violent conflict in 2016 than in the past thirty years, it's clearly time to reimagine whether our global economic system is actually promoting global wellbeing (United Nations and United Nations News). I argue that reimagining how we evaluate wellbeing and economic success in the first place may be necessary to create a system that accounts for the distribution of psychological wellbeing in the first place, and that employing those values in government policies will create a positive result in their populations.

## B. Literature Review

Since no economic analysis has sought to empirically validate Buddhist economics at a global level, I will rely on regional studies of Buddhist economics or studies of wellbeing more broadly to provide insight on how to study this issue. Although a comprehensive literature review is outside the scope of this paper, but I will briefly go over two studies that shed light on

how to study this issue as well as a more thorough discussion of the 2020 World Happiness Report to better understand how they evaluate the different factors that contribute to psychological wellbeing and life satisfaction.

First, we will look to Wanna Prayukvong's 2005 article, A Buddhist economic approach to the development of community enterprises: a case study from Southern Thailand, which seeks to evaluate the success factors within three community enterprises in Southern Thailand by adopting a Buddhist economic approach. In addition to evaluating the financial success of these enterprises, the author also evaluates non-financial factors key to quality of life from a Buddhist perspective, including the process of "good thinking," which is defined as the constructive use of wisdom among leaders through the processes of "right understanding and right thought." This paper is useful in explaining how Buddhist economic principles can be quantified and evaluated, even if it is at the micro-level. Prayukvong also validates the motivation behind the study by referring to Daniel Kahneman and Vernon Smith, the 2002 Noble laureates in Economics, who demonstrate how individual behavior is rarely rational due to the normalcy of imperfect, incomplete, or non-symmetrical information in decision making. As rational decision making is usually presupposed in neoclassical economics, this demonstrates how this thinking may not ultimately be utility maximizing, justifying the investigation of an economic alternative. The author further uses this explanation to justify an investigation into Buddhist economics, which assumes a majority of human behavior is irrational due to most people's fundamental misunderstanding of reality. Although my methodology will look notably different, the Buddhist principles I will evaluate flow from the values of right understanding and right thought, in a Buddhist sense.

Next, we will look at Fruehwirth, Iyer, and Zhang's 2019 paper, *Depression and Religion in Adolescence*, which demonstrates how objective measures of psychological wellbeing can be evaluated through OLS modeling. This paper evaluates how mental health in high schoolers is determined by religiosity, observable background characteristics, and school fixed effects that might affect mental health in unobservable ways. Similarly, my model will evaluate how psychological wellbeing is affected by a country's level of Buddhist principles, observable background characteristics like national income, and country fixed effects that could impact wellbeing in unobservable ways.

Finally, we will utilize the World Happiness Reports' (WHR) thorough investigation of the relationship between various national factors and measures of wellbeing to better understand the connection between government policies and happiness. Chapter 2 of the 2020 WHR highlights the importance of social environments for overall wellbeing. First, they note that the six key variables they use to estimate wellbeing – GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and freedom from corruption – do indeed explain 75% of the variation in life evaluations for countries between 2005 and 2019. Life evaluations are one of the primary methods they use to evaluate wellbeing. A life evaluation uses the Cantril ladder and asks participants to rate how satisfied they are with their life on a scale of 1 to 10. Next, they discuss both the role of various emotional states on life evaluations as well as the role of different elements within the social environment.

Starting with positive affect, the authors discovered that positive affect actually has the largest impact on overall life evaluations. Even though the role of freedom and generosity is also significant, their influence is controlled through their role in promoting positive affect. They also discuss that while positive affect is significant in explaining overall wellbeing, negative affect is

not. Through additional research on psychology, they note that positive emotions are much more significant than the absence of negative emotions for predicting aspects like longevity or resistance to the common cold. Hence, I will value how Buddhist principles impact positive affect over their impact on decreasing negative affect (Helliwell, 20).

Turning to the role of social environments, the authors highlight how both personal relationships and government institutions predict a significant amount of overall wellbeing. Specifically, the combination of having someone to count on, generosity, freedom to make life choices, and absence of corruption can explain more than half of the average difference between a country's life evaluation and that of their fictional worst-off country, Dystopia (Helliwell, 23). Additionally, the authors focus on the role of institutions in decreasing inequality of wellbeing, which is more relevant to our analysis.

The WHR finds that the combination of high social and institutional trust has large and significant impacts on promoting both average life satisfaction and equal distribution of that satisfaction. For example, all else equal, a high trust environment creates an average life satisfaction ranking of 7.72 compared to 6.76 in the lower trust environment, while the distribution of satisfaction is 40% larger in conditions of low trust. Additionally, most of the positive changes in satisfaction are felt by those at the low end of the distribution, demonstrating how trust has the largest impact on those that are the worse off (Helliwell, 42). While the impacts of social and institutional trust are not isolated in this analysis, some forms of social trust are also promoted through positive governmental institutions, especially since this measurement of social trust does not include personal relationships.

Next, allow us to turn to Chapter 3 of the report that discusses the impact of the environment on wellbeing. Based on a Gallup World Poll with data from 160 countries, 62% of

respondents would prioritize the environment over economic growth. This demonstrates at least a perceptual value of environmental protection with 74% of respondents believing that climate change will be a very or somewhat serious threat to them and their families (Helliwell, 111). The report lays out three potential hypotheses as to why the environment impacts wellbeing. The first is biophilia which is the idea that humans innately have an intuitive and close connection to other living organisms or habitats as a result of biological evolution, therefore creating a *direct* positive impact on happiness due to our "evolutionary origin." Second, others suggest that there is an indirect positive impact on the environment, such that a healthy and beautiful environment promotes physical activity and social interaction, both of which have been validated by epidemiological and social research. Finally, clean natural environments are free of air or noise pollution which have been linked to disease and stress. This theory discusses another indirect way environments affect happiness and also suggests that a healthy environment promotes natural beauty and more recreational land (Helliwell, 113).

To highlight the role of environmental quality on wellbeing, the authors use World Gallup Data that covers more than 99% of the world's population. They control for sociodemographic conditions and the economic standing of individuals as well as country conditions like GDP per capita, population level, and density. Around the world they find that both large and small particulate matter, as well as monthly average and maximum temperatures, significantly decrease overall life evaluations (Helliwell, 115).

Furthermore, the authors appeal to a case study in London that utilized a smartphone app to track momentary experiences of happiness based on precise GPS location and timestamp data. This case study finds that being outdoors in blue or green spaces is correlated with a significant increase in happiness. Responses from public green spaces relate to one percentage point

increase in happiness, all else equal, with walking or hiking leading to a two-percentage point increase, and other activities such as gardening, nature walking, or sports creating a four to seven point increase. Finally, just being outdoors creates a 1.5-point increase compared to being indoors, which validates the indirect benefit hypothesis of environmental satisfaction (Helliwell, 117-8). Overall, these results indicate a significant value for environmental protection and suggest there are numerous factors that cause environmental health to promote wellbeing.

Next, we will turn to Chapter 6 that discusses the impact of sustainable develop on wellbeing. This section relies on the Sustainable Development Goal index (SDG) as well Gallup World Polls that measure subjective wellbeing (SWB). Overall, there is a highly significant correlation coefficient of 0.79 between SWB and the SDG index. Furthermore, the best fitting model is quadratic, which indicates that a higher SDG score correlates stronger with SWB at higher levels of the SDG index. The authors interpret this to mean that economic growth is a key factor of wellbeing at the early stages but becomes less significant later on. In other words, this means there are increasing marginal returns to sustainable growth in terms of subjective wellbeing (Helliwell, 157).

However, there is an interesting contradiction the authors discovered. While most SGDs are strongly and positively correlated with wellbeing, two are significantly negatively correlated: responsible consumption and production (SDG 12) and climate action (SDG 13). Climate action would require a CO2-emmission reduction, but it would also be promoted from an overall production reduction which appears to conflict with other drivers of wellbeing. This suggests these goals are in tension with at least short-term wellbeing while the current economic system is undergoing the transition towards environmental sustainability at scale (Helliwell, 161-3). However, the authors also note that it is possible that neither of these SDG goals fully captures

how people value the environment, as the Environmental Protection Index has a strong positive correlation with wellbeing overall (Helliwell, 163). An additional study suggests potential reasons for this environmental paradox, including a time lag between environmental degradation and a decrease in wellbeing, the experience of decoupling from nature through technology, and the lack of large-scale innovation that would promote the production of basic things necessary for wellbeing, i.e. food, in sustainable ways (Helliwell, 164).

Finally, to understand the larger picture of wellbeing, we will turn to Chapter 7 to understand why the Nordic countries consistently rank high amongst the happiest countries.

From 2013 to present, five Nordic countries, namely Finland, Denmark, Norway, Sweden, and Iceland, have occupied half of the top ten spots in the WHR, with Nordic countries in the top three spots in 2017, 2018, and 2019. In reviewing existing theories, studies, and the data behind the WHR, the authors isolated three key explanations for the success of the Nordic countries: reliable and extensive welfare benefits, low corruption, and well-functioning democracy and state institutions (Helliwell, 179). Additionally, high levels of freedom and social trust are prevalent throughout Nordic countries and significantly contribute to overall higher life evaluations. Before we seek to further understand why the Nordic countries are so unique, it is important to dispel one of the common misconceptions that does not uniquely explain Nordic wellbeing: homogeneity.

Some scholars theorize that it is easier to create wellbeing in small and homogenous countries like the Nordic countries, and this level of wellbeing could never be possible in a large and diverse country, such as the United States. However, research has yet to find a relationship, positive or negative between the size of a given population and overall life satisfaction. Second, smaller countries are also not necessary more homogenous than larger countries. In fact, the

Nordic countries are more heterogenous than many believe, with nearly 20% of Sweden's population being born abroad. Furthermore, additional studies by Charron & Rothstein demonstrate that the effect of ethnic diversity on social trust is essentially eliminated when controlling for government quality. Finally, previous WHR's demonstrate that the immigrant ratio within a country is not indicative of the average level of happiness of the locally born population, with the ten happiest countries averaging immigrant populations of 17.2%, about twice the world average (Helliwell, 180).

With this misconception out of the way, let us address five of the main success areas of Nordic countries that most significantly contribute to happiness, beginning with welfare. In a longitudinal study from 18 industrial countries between 1971 and 2002, Pacek and Radcliff measure welfare by evaluating the level of freedom from market dependency in terms of pensions and unemployment and disability benefits and find that more welfare generosity positively and significantly promotes life satisfaction. Another study that evaluates OECD countries found that the extent of welfare benefits and labor market regulation significantly promoted life satisfaction, even when controlling for income such that both poor and rich individuals benefit from the extensive government support. Further research from Gallup World Poll data finds that the positive link between progressive taxation and life evaluations is completely mediated by the way in which public funds are used and the quality of services produced, which leads us to the importance of institutional quality (Helliwell, 180-1).

Many studies have highlighted the role of institutional quality in promoting life satisfaction. Since most of this research is cross-sectional, they also discussed a study by Helliwell et al. that specifically analyzed changes in institutional quality in 157 countries between 2005 and 2012. They saw that increased intuitional quality, both in terms of democratic

quality and the quality of service delivery, led to more overall wellbeing around the world. Given this, it is unsurprising that the Nordic countries usually hold the top spots in international comparisons of governmental quality (Helliwell, 181).

In evaluating the role of income inequality, Zagorski et al. find that for 28 European countries, inequality is negatively correlated with average wellbeing. However, this effect is eliminated when controlling for GDP per capita. The authors note however that if such inequality contributes to lower perceived fairness, trust or economic opportunities and higher levels of status anxiety, this could contribute to less overall life satisfaction. Furthermore, European countries are more likely to intrinsically value equality than other regions of the world, such that low levels of inequality could be uniquely significant for overall wellbeing for Nordic populations even if that doesn't hold for other countries (Helliwell, 182).

Next, we discuss freedom, trust, and social cohesion. Freedom to make life choices has been positively and significantly linked to life satisfaction, and Nordic countries also rank high in personal freedom due to their well-functioning democratic governments and generally liberal values. In terms of trust and social cohesion, a recent study by Delhey and Dragolov found that all three measures of social cohesion, specifically connectedness to others, good social relations, and a focus on the common good, were both collectively and individually associated with higher wellbeing in a sample of 27 EU countries (Helliwell, 182-3).

Lastly, education is analyzed as a final factor that could be instrumental in promoting wellbeing. Studies by Uslaner and Rothstein have found that the mean number of years in school in 1870 is surprisingly correlated with corruption in the same country in the year 2010, and actually explains 70% of its variance. The Nordic countries have long valued and promoted free, quality education for all citizens with the goal of creating social and institutional trust. In turn,

they rank low in terms of corruption and high in these forms of trust and social cohesion (Helliwell, 188).

After evaluating these five key drivers of wellbeing in Nordic countries, we will also review a comparison of these countries with the world's wealthiest non-Nordic countries. To do this, the authors of the WHR created coefficients of variation by dividing the standard deviations of life evaluation by the average life evaluation over the past three years for 149 countries worldwide, including the ten richest non-Nordic countries – Luxembourg, Singapore, United Arab Emirates, Kuwait, Ireland, Switzerland, Hong Kong, and the US. Unsurprisingly, they found that inequality of wellbeing was lower for the Nordic countries than the rest of the world, and both average life satisfaction and the equality of that wellbeing was higher for Nordic countries than in the world's richest 10 countries (Helliwell, 185-7).

Although this chapter focused heavily on the Nordic countries, a brief analysis of other countries frequently at the top of the WHR list – Switzerland, the Netherlands, New Zealand, Canada, and Australia – highlights that they have many of the same social and institutional practices in place. To summarize, the authors highlight that there is no "secret sauce" specifically for Nordic happiness that is unavailable to others. Instead, there is a broader formula for promoting citizen's wellbeing: "ensure that state institutions are of high quality, non-corrupt, able to deliver what they promise, and generous in taking care of citizens in various adversities" (Helliwell, 188). While the authors acknowledge that this is much easier said than done, especially since low-trust societies easily fall into cycles of continued low trust in governments and each other that block meaningful reform, there are still institutional actions available to all that could decrease the gap between Nordic countries and the rest of the world. Ultimately, they conclude that the role of institutions in paramount in mitigating corruption and maximizing

public participation in government decisions that promote institutional trust and social cohesion, while ensuring the economic welfare of their citizens (Helliwell, 189).

After reviewing what the WHR can tell us about wellbeing broadly, I wish to briefly return to the Buddhist principles laid out to acknowledge their connection to the success or Nordic countries. As discussed when laying out the Buddhist economic factors, the Buddha himself either directly or indirectly would have advocated for all the factors that co-create Nordic happiness: welfare, low inequality, trust, and social cohesion based on an understanding of interconnection, institutional quality and lack of corruption to promote public wellbeing, and freedom to promote economic and social involvement in the community. Although these principles may seem intuitively positive to many, their reflection of an understanding of interconnectedness and inherent human value rooted in equality are clear echoes of Buddhist metaphysical principles. Upon understanding that these principles are empirically linked to wellbeing and more equal distribution of wellbeing in Nordic countries, I further hypothesize that other countries embodying these principles will also demonstrate higher and more equal wellbeing.

#### C. Data

One of the most challenging aspects of this investigation is finding appropriate and viable data for applications of Buddhist economic principles at a global level with corresponding data for those countries and years for psychological wellbeing. As previously described, I will be organizing these principles into three categories, namely Ethical Factors, Economic and Social Factors, and Environmental Factors. All the data for my independent variables come from the World Bank, specifically the Worldwide Governance Indicators and the World Development Indicators. First the variables of interest for both inputs and outputs were selected and then

narrowed down based on general availability for a majority of countries over the time period 2006-2018.

The Ethical Factors include an estimate of the control of corruption, an estimate of government effectiveness, an estimate of political stability and absence of violence/terrorism, and an estimate of voice and accountability, all of which are given in units of a normal standard distribution ranging from -2.5 to 2.5. Control of Corruption measures the extent to which political power is exercised for private gain as well as "capture" of the state by elite or private interests. Government Effectiveness captures perceptions of the quality of government services as well as the level of its independence from political pressure, the quality of public policy and commitment to effective implementation. Furthermore, Political Stability includes perceptions of political instability or politically motivated violence. Finally, Voice and Accountability captures perceptions of the extent to which citizens have say in choosing their government, as well as freedom of expression, association, and media (The World Bank, "Worldwide Governance Indicators").

The Economic and Social Factors include adjusted savings of education expenditures as a percent of GNI. Adjusted savings includes the current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment. It will also include current health expenditures per capita PPP, percent of people using at least basic drinking water services, and the labor force participation rate. Finally, the Environmental Factors will include adjusted savings of carbon dioxide damage as a % of GNI and total greenhouse gas emissions in terms of kilotons of CO2 equivalent. Adjusted savings of carbon dioxide damage includes the cost of damage from carbon dioxide due to fossil fuel use and the manufacture of cement using the estimated cost of US\$40 per ton of CO2. Lastly, the controls

will include adjusted net national income and GDP per capita (The World Bank, "World Development Indicators"). Ultimately, the sample of countries was selected based on available data for these metrics over the desired time period, creating a sample of 42 countries.

The outcome variable will be drawn from data collected for the World Happiness Report (WHR) by the Sustainable Development Solutions Network, powered by Gallup World Poll data. The WHR primarily relies on the Cantril Ladder, commonly referred to as the "Life Ladder" or simply life evaluations, to measure overall life satisfaction. Ultimately, this measure is an average of the responses to the question of how satisfied you are with your life on a scale of 0 to 10. The question is worded as follows: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" (Helliwell).

A second outcome measure is the correlation of variation for the distribution of life satisfaction within a country, like the WHR utilized to analyze the relative distribution of wellbeing in the Nordic countries compared to the world's wealthiest countries. This measure is calculated by dividing the standard distribution of the life ladder by the mean of the ladder, which seeks to consider both the average life satisfaction as well as the inequality of that satisfaction. I hypothesize that the model will successfully predict Life Ladder values, with some variables being more highly significant than others, like Corruption, Government Effectiveness, and Health and Education expenditures. Similarly, I hypothesize that my model will also predict the coefficient of variation as well or better than the Life Ladder, given that these Buddhist principles should not just promote wellbeing but also greater equality of wellbeing.

# D. Methodology

My OLS Regression will look as follows:

 $Wellbeing = \beta_0 + \beta_1(Corruption) + \beta_2(Government\ Effectiveness)$   $+ \beta_3(Political\ Stability) + \beta_4(Voice\&Accountability)$   $+ \beta_5(Education\ Expenditures) + \beta_6(Health\ Expenditures)$ 

+  $\beta_7$ (Labor Force Participation Rate)

+  $\beta_8$  (Basic Drinking Water Services) +  $\beta_9$  (Foreign Direct Investment)

 $+ \beta_{10}(Carbon\ Dioxide\ Damage) + \beta_{11}(Total\ GHS\ Emissions) + \alpha + \gamma + \varepsilon$ 

where  $\alpha$  represents controls for the natural log of GDP per capita,  $\gamma$  represents country-fixed effects and year-fixed effects, and  $\varepsilon$  represents the error term.

I will conduct four main regressions that measure the effect of these set of Buddhist principles on four different measures of wellbeing. The first measure of wellbeing will be the Life Ladder and the second will be the coefficient of variation for the Life Ladder, which is calculated by dividing the standard deviation by the mean of the ladder. The coefficient of variation (CV) is a standard metric to evaluate economic inequality with a value of zero representing complete equality. Hence, smaller values of the CV are preferrable for our analysis. Unfortunately, the drawback of the CV is that it does not have an upper bound, but it is more mathematically tractable than the Gini coefficient (Bellu and Liberati, 26). For my analysis, I will use it not to measure economic inequality, but inequality within average life evaluations to understand the dispersion of quality of life with a given country. Next, I ordered the countries in terms of their CVs of the Life Ladder and conducted two separate regressions with the sample limited to the top third and bottom third countries in terms of their CVs to better understand the impact of my input variables on countries with more or less initial levels of wellbeing dispersion.

## E. Results

Table 1 shows the summary statistics for each of the included Buddhist principles and the two output measures. Table 2 shows the regression coefficients when regressing the Life Ladder on the Buddhist principles, while Table 3 displays the coefficients when regressing the CV on the same principles. Tables 4 and 5 show the regressions on the coefficients of variation for the top and bottom thirds of countries ordered by their coefficients of variation. Overall, all my models are significant with the probability > F equaling zero.

TABLE 1 – Summary Statistics for Wellbeing & Buddhist Principles

	(1)	(2)	(3)	(4)	(5)
VARIABLES	N	mean	SD	min	max
Government Effectiveness	546	-0.171	0.669	-1.608	1.643
Level of Corruption	546	-0.385	0.689	-1.534	1.544
Political Stability & Absence of Violence/Terrorism	546	-0.404	0.655	-2.021	1.063
Voice & Accountability	546	-0.176	0.759	-1.721	1.227
Education Expenditures (% of GNI)	546	3.858	3.188	1.017	8.430
Health Expenditures per capita, PPP	546	877.8	1,356	47.25	10,515
Labor Force Participation Rate	546	69.81	8.336	43.72	89.65
Access to Basic Drinking Water Services (% of population)	546	86.23	16.78	0	100.0
Foreign Direct Investment (net inflows)	546	3.858	3.188	-4.846	21.38
Carbon Dioxide Damage (% of GNI)	546	1.832	1.400	0.206	7.648
GHG Emissions (kt of CO2 equivalent)	546	645,762	1.915e+06	7,560	1.247e+07
GDP per capita (natural log of current US\$)	546	8.233	1.135	5.818	11.05
Coefficient of Variation	546	0.395	0.0980	0.208	0.866
Life Ladder	546	5.383	0.950	2.903	7.615
Number of countries	41	41	41	41	41

TABLE 2 – Life Ladder

VARIABLES	(1) Fixed Effects
Government Effectiveness	0.431**
	(0.178)
Level of Corruption	-0.204
	(0.210)
Political Stability & Absence of Violence/Terrorism	0.117
	(0.114)
Voice & Accountability	-0.0122
	(0.240)
Education Expenditures (% of GNI)	0.0762*
	(0.0422)
Health Expenditures per capita, PPP	-8.96e-06
	(8.56e-05)
Labor Force Participation Rate	0.0181
	(0.0136)
Access to Basic Drinking Water Services (% of population)	0.00479**
	(0.00205)
Foreign Direct Investment (net inflows)	-0.00108
	(0.00882)
Carbon Dioxide Damage (% of GNI)	-0.0957
	(0.0643)
GHG Emissions (kt of CO2 equivalent)	-1.33e-08
	(7.11e-08)
GDP per capita (natural log of current US\$)	0.159
	(0.132)
Constant	2.313
	(1.441)
Observations	509
Number of countries	41
R-squared	0.131
Country FE	YES

Robust standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

For the first model on the Life Ladder, the only statistically significant variables are Government Effectiveness, Education Expenditures, and Access to Basic Drinking Water Services, with education being significant at the 10% level and the others at the 5% level. The

model only accounts for 13.1% of variation in the Life Ladder for my sample of countries. For Government Effectiveness, every 1 standard deviation increase in effectiveness increases life evaluations by .431 points on a scale from 0 to 10. The inclusion of Government Effectiveness makes sense when considering the significance of governmental quality in predicting happiness in Nordic countries, and generally as indicated in reviewing previous WHRs. The coefficient also seems logical given that the range for government effectiveness is measured from -2.5 to 2.5, such that a significant increase in government effectiveness would likely lead to a nearly .5 increase in life evaluations, which is the largest coefficient on my significant variables.

For Education Expenditures, every 1% increase in education expenditures as a percent of GNI creates a .0762 boost in life evaluations. This also seems logical given the hypothesis that the Nordic focus on education has promoted high life evaluations and the intuition that more money spent on education could indicate higher quality of education and more future job opportunities. For Basic Drinking Water Services, every 1% increase in the population that has access to these services leads to a .00479 increase in life evaluations. The significance of Access to Basic Drinking Water Services makes sense when considering the fundamental nature of one's ability to access water. The lack of access to safe drinking water correlates with very low material wellbeing and would likely inhibit the ability to engage in other activities that makes life worth living.

In the second model, there are six statistically significant variables: Government Effectiveness, Education Expenditures, Labor Force Participation (LFP) Rate, net inflows of Foreign Direct Investment, Carbon Dioxide Damage, and GDP per capita. Since the CV is measuring the ratio of the standard deviation of the Life Ladder to the mean of the ladder, a

TABLE 3 - Coefficient of Variation

	(1)
VARIABLES	Fixed Effects
G	0.064444
Government Effectiveness	-0.0641**
	(0.0273)
Level of Corruption	0.0337
	(0.0418)
Political Stability & Absence of Violence/Terrorism	-0.0142
77 t 0 A 1915	(0.0133)
Voice & Accountability	-0.0150
F1 44 F 144 40CM	(0.0326)
Education Expenditures (% of GNI)	-0.0169*
77 14 F	(0.00865)
Health Expenditures per capita, PPP	-6.63e-06
	(8.94e-06)
Labor Force Participation Rate	-0.00563*
A	(0.00299)
Access to Basic Drinking Water Services (% of population)	0.000972
	(0.00166)
Foreign Direct Investment (net inflows)	-0.00237*
C I D' II D (A/ ACNT)	(0.00134)
Carbon Dioxide Damage (% of GNI)	0.0428***
CHC Feeliniana (Lee COO) and include	(0.0103)
GHG Emissions (kt of CO2 equivalent)	1.93e-09
CDD	(6.92e-09) <b>0.0661***</b>
GDP per capita (natural log of current US\$)	
Countrat	(0.0233) 0.151
Constant	
	(0.298)
Observations	509
Number of countries	41
R-squared	0.171
Country FE	YES

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

smaller value is better since that indicates less dispersion in wellbeing for a higher average of wellbeing. Government Effectiveness is significant at the 5% level with education, LFP, and FDI significant at the 10% level and all negatively correlated with the CV. Government Effectiveness

is also negatively correlated with the CV such that a one unit decrease in the standard deviation of effectiveness produces a .0641 unit decrease in the CV. The negative correlation makes sense intuitively since higher effectiveness should decrease the disparity between average levels of life evaluations.

Second, a 1% increase in education expenditures as a percent of GNI decreases the CV by 0.0169, which also makes sense intuitively as higher spending on education should increase the earning potential of the population which would also decrease the relative dispersion of wellbeing. Labor force participation rate is also significant and negatively associated with the CV at the 10% level, such that a one percent increase in the LFP rate decreases the CV by .00563 units. This also seems logical given that more people actively working or looking for work would indicate sufficient economic opportunity and greater contribution to one's family and community, thus suggesting an increase in average wellbeing or decrease in dispersion of life evaluations. Next, a 1 unit increase in Foreign Direct Investment (FDI), measured by net inflows of the receiving country divided by GDP, would create a .00237 unit decrease in the CV. This could just suggest that FDI inflow promotes economic opportunity with a country, which spurs job opportunities that increase life evaluations or decrease their dispersion.

Next, two variables are significantly positively correlated with the CV, namely Carbon Dioxide (CO2) Damage and GDP per capita, and are thus correlated with a higher dispersion of life evaluations. In terms of Carbon Dioxide Damage, a 1% increase in damage as a percent of GNI increases the CV for the Life Ladder by .0428, which is significant at the 1% level. This parallels the WHR discussion of short-term trade-offs between carbon dioxide reductions and material wellbeing, which likely explains why CO2 damage is positively related to greater dispersion of life evaluations even if sustainability in the long-run need not be incompatible with

higher wellbeing. Finally, GDP per capita is significant at the 1% level and positively correlated, indicating that a 1% increase in the natural log of GDP per capita would increase the dispersion of the CV by .0661%. This could suggest that wealthier countries are more likely to have higher dispersions in life evaluations, possibly due to the higher expectations of material success within a given country and the notion that greater inequality does produce additional suffering in those who witness it. This result indicated that it could be useful to regress the top third highest and lowest countries in terms of the CV separately to understand if these variables affect the two types of countries differently.

In my next regressions, we find that only Access to Basic Drinking Water Services is significant in predicting the CV of life evaluations for both the top and bottom third of countries in terms of their CV. The top third of the sample represents the countries with the lowest coefficients of variation, suggesting that being in the top third is better by indicating lower dispersion of life evaluations. These countries include Israel, the US, Costa Rica, Vietnam, Thailand, Kazakhstan, Belarus, Argentina, Chile, Lithuania, Bolivia, Moldova, Kyrgyzstan, and Uruguay. The bottom third, or countries with the highest dispersion of wellbeing, include Ukraine, Nepal, Niger, South Africa, Kenya, Cameroon, Chad, Georgia, Armenia, Nicaragua, Uganda, Honduras, and Tanzania. The most significant differences between these two country groups is GDP per capita, with the lower dispersed countries having a mean GDP per capita of \$12,647, which is roughly five times higher than the higher dispersed countries mean of \$2,398.

TABLE 4 – Coefficient of Variation for the Top Third of the Distribution

	(1)
VARIABLES	Fixed Effects
	0.00664
Government Effectiveness	-0.00664
* 1.00	(0.0163)
Level of Corruption	0.0203
	(0.0321)
Political Stability & Absence of Violence/Terrorism	-0.0189*
	(0.00999)
Voice & Accountability	-0.0419**
	(0.0158)
Education Expenditures (% of GNI)	-0.00459
	(0.00543)
Health Expenditures per capita, PPP	-1.05e-05
	(9.22e-06)
Labor Force Participation Rate	-0.00376*
-	(0.00184)
Access to Basic Drinking Water Services (% of population)	-0.000764***
	(0.000120)
Foreign Direct Investment (net inflows)	0.000909
	(0.000894)
Carbon Dioxide Damage (% of GNI)	0.0231**
	(0.0105)
GHG Emissions (kt of CO2 equivalent)	-5.27e-08*
• ,	(2.92e-08)
GDP per capita (natural log of current US\$)	0.0359
	(0.0241)
Constant	0.353
	(0.311)
	(011)
Observations	174
Number of countries	14
R-squared	0.191
Country FE	YES

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

TABLE 5 – Coefficient of Variation for the Bottom Third of the Distribution

	(1)
VARIABLES	Fixed Effects
Community F.CC at	0.00245
Government Effectiveness	-0.00245
I and of Commution	(0.0671) 0.0172
Level of Corruption	
D-1'4'1 C4-1:1'4- 0- A1	(0.0541)
Political Stability & Absence of Violence/Terrorism	-0.00509
Voice & Accountability	(0.0192) 0.0230
Voice & Accountability	(0.0230)
Education Expenditures (% of GNI)	-0.0208**
Education Expenditures (70 of GN1)	(0.00907)
Health Expenditures per capita, PPP	6.74e-05
Ticatui Experiatures per capita, 111	(6.59e-05)
Labor Force Participation Rate	-0.00644
24001 1 0100 1 artiolpation ratio	(0.00447)
Access to Basic Drinking Water Services (% of population)	0.0274***
g ( F.F)	(0.00362)
Foreign Direct Investment (net inflows)	-0.00403*
	(0.00198)
Carbon Dioxide Damage (% of GNI)	-0.00241
	(0.0213)
GHG Emissions (kt of CO2 equivalent)	-2.16e-07
	(4.22e-07)
GDP per capita (natural log of current US\$)	-0.127
	(0.0725)
Constant	-0.0368
	(0.545)
Observations	173
Number of countries	14
R-squared	0.591
Country FE	YES

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

For the top third of the distribution, Political Stability and GHG emissions are negatively and significant at the 10% level, while Voice & Accountability is negative and significant at the 5% level and CO2 damage is positive and significant at the 5% level. Access to Basic Drinking

Water Services is negative and significant at the 1% level. For the bottom third, education and FDI inflows are negative and significant at the 5% and 10% level, respectively, in addition to Access to Basic Drinking Water which is positive and significant at the 1% level.

For every 1 unit increase in Political Stability, as measured on a scale from -2.5 to 2.5, the CV decreases by .0189 for the top third sample and by .00509 for the bottom third sample. This suggests that Political Stability is more important for the dispersion of wellbeing for countries that generally have lower dispersion of life evaluations, which are the wealthier subsample. The mean of Political Stability for the bottom third is -.667 while the top third is .0008922, which could suggest that countries with lower political stability adapt to the instability such that smaller changes in stability don't correlate to the same change in life evaluations.

For Voice & Accountability, similarly the impact is more correlated with the CV for the top third of countries, with a one unit increase in Voice & Accountability creating a .0419 unit decrease in the CV, compared to for the bottom third where it actually leads to an increase of .023 units. For the top third sub-sample the mean of Voice & Accountability is .054 versus -.367 for the bottom third, which could indicate that the transition towards more democratic practices doesn't produce lower dispersion of life evaluations in the short run, even if countries in the top third clearly have higher levels of Voice & Accountability that correlate with their success.

Carbon Dioxide Damage is positively correlated with the dispersion of life evaluations for the top third countries, such that a one percent increase in CO2 damage as a percent of GNI leads to a .0231 unit increase in the dispersion of wellbeing, compared to a .00241 decrease for the bottom third countries. This could be related to the idea that for the bottom third countries, which are also notably poorer, an increase in production as measured through greater CO2 damage could contribute to economic development and thus higher life evaluations.

Contrastingly, for the wealthier countries, that economic development or lack of environmental regulation promotes greater dispersion of life evaluations. Although GHG Emissions has a negative coefficient for the top third countries, the coefficient is near zero for both sets of countries, which could be due to the complexities of moving away from a high emission economy.

For the bottom third of the distribution, there are two additional significant variables. Education Expenditures is significant at the 5% level, with a one percent increase in expenditures as a % of GNI contributing to a .0208 decrease in the dispersion of life evaluations. For the top third, the coefficient is still negative but significantly smaller such that a one percent increase only decreases dispersion by .00459 units. This could be because the mean of education expenditures is already larger for the top third, at 4.88 percent of GNI versus 3.55 percent, such that the marginal benefit from greater expenditures is smaller, especially given the GDP is likely larger to begin with so 4.88 percent of GNI represents a larger absolute value of spending as well.

Furthermore, Foreign Direct Investment inflows is significant at the 10% level for the bottom third, indicating a .00403 decrease in dispersion of life evaluations for every one unit increase in the ratio of FDI inflow to total GDP of the receiving country. For the top third, FDI is slightly positive with a coefficient of .000909. For wealthier countries, I hypothesize that the positive impact of FDI on the economy is smaller than it is for poorer countries, which could indicate why it has a smaller impact on improving the dispersion of wellbeing.

Finally, Access to Basic Drinking Water Services is significant for both at the 1% level, but for the bottom third, one percent more of the population with access to drinking water decreases dispersion of wellbeing by .000764, while for the top third, it increases it by .0274. For

the bottom third the mean value is 73 with a standard deviation of 22 percent of the population, while the top third mean is 94 with a standard deviation of 8.6, which could indicate that greater access to water is more significant in countries with less access to drinking water, on average.

Overall, I found it interesting that corruption and health expenditures were not significant in any of my regressions. Although corruption intuitively seems significant in life evaluations, it is possible its effect is mediated by government effectiveness, political stability, or GDP per capita. On another note, it is possible the varying cost of healthcare around the world influences the significance of this variable in my regression, or that health is less predictive of life evaluations than I hypothesized.

#### F. Discussion

It is important to note that this is significantly different from my originally intended methodology. First, when initially selecting my sample, I intended to focus on Bhutan due to their creation of the initial Gross National Happiness Index in accordance with Buddhist values. I created a sample of twenty countries based on geographical proximity to Bhutan and similar levels of GDP per capita. The other half of my sample was the top 10 happiest countries from the WHR's estimates, as well as a set of countries with comparable GDP per capita that were not the top 10 happiest. However, in searching for sufficient data for these countries, I was unable to measure any of the principles that were most salient over a sufficient number of years and decided to reconstruct a sample primarily based on data availability.

Second, I also began by utilizing an evaluation of Buddhist metaphysics and economics to philosophically derive the principles I intended to analyze. These included components like total welfare redistribution practices, labor rights and regulations, luxury spending habits, material waste indices, food waste, the availability of "meaningful work," worker satisfaction,

levels of corporate spending on advertisements, the use of toxic chemicals in production, average ESG scores of corporations, etc. In initially searching for data, I sought out country-level data on these more obscure Buddhist principles, but quickly realized that the level of reliability is much lower when aggregating data from individual country-level sources. Hence, I decided to alter my sample of countries in favor of selecting them from available aggregated data sources.

Unfortunately, even with the ability to look at any country, I was still unable to find aggregated data on elements like luxury good expenditures, workers' rights and job satisfaction, or overall wealth redistribution for the same countries over the same time period from reliable sources. Hence, I adjusted my methodology again and sought out Buddhist-derived principles that were more generally available in the data with a higher level of reliability. Given the breadth of publicly available data through the World Bank, I was able to utilize both their governance and development indicators and find data for 150 countries over twenty years. However, after comparing the countries and years of this data to what was available via the WHR, I scaled my sample down to 42 countries over the period 2006 to 2018.

Third, I initially intended to generate my own metric of wellbeing based on available data from the World Happiness Report. This would have included a weighted index of various principles like the life ladder, social support, generosity, positive and negative affect, the Gini index, and possible levels of corruption and democracy. While further analysis could measure the effect of various Buddhist principles on different elements of wellbeing, I wanted to be clear through my analysis which elements of wellbeing were being affected and, hence, chose to focus on the Life Ladder and its CV in a similar way as the methodology in the WHR. Although these other aspects of wellbeing are important, overall life satisfaction has been utilized as a comprehensive measure of wellbeing as it is less dependent on situational influences in a

person's life that could hinder the reliability of the results, such as a measure like positive affect. Therefore, I decided not to create an aggregated measure of wellbeing that includes components like positive and negative affect and instead looked for broader, long-term trends throughout the data.

### G. Limitations

After analyzing the results of these regressions, it's important to note the limitations of my analysis. One significant limitation was data availability. As previously discussed, there were many Buddhist principles, such as luxury spending and worker satisfaction, that could have been included if there was sufficient and reliable data. Unfortunately, my Buddhist principles were largely restricted to indicators of development and governance quality and were not able to include elements of public behaviors, culture, spending habits, or firm-level decisions. There is significant room for research as to how government intervention influences firm decisions in more or less Buddhist directions. Furthermore, it is very challenging to guarantee the reliability of the data I utilized across countries, such that some countries are likely to have more resources dedicated to accurate data collection than others.

On another note, many components of governance that I utilized are based on public perception and not more objective measures. This is especially prevalent for Government Effectiveness, Corruption, Political Stability, and Voice & Accountability. Additionally, not all the indicators of development fully reflect the desired components I sought to measure. For example, a measure of quality of education might have been for my analysis than education expenditures as a percent of GNI, if it had been available. Furthermore, availability of meaningful work would have been aligned with Buddhist values than the LFP rate, but this variable was still able to help us identity the significance of an involved labor force. Besides

issues with the measures that were available to me, a larger number of countries over a longer period of time could have yielded more verifiable results.

Although my analysis helps shed light on where to begin in empirically validating Buddhist economics, there is significant room for further research. First, collecting data about other Buddhist principles would be worthwhile endeavor so more accurate reflections of Buddhist values could be captured in the data. Second, further research into how Buddhist principles affect countries at different levels of development could yield interesting and relevant results.

### H. Conclusion

After analyzing the effect of various Buddhist principles on wellbeing and its distribution, we see that only a few principles are statistically significant predictors of a country's average Life Ladder and its coefficient of variation. Ultimately, the significance of more variables on the regression of the CV is even more interesting and relevant for our understanding of the success of Buddhist economics. As the distribution of wellbeing is arguably more important than the average wellbeing in a given country due to a Buddhist understanding of interconnection, this model is crucial given that the suffering of those around you causes you to suffer. The significant variables from my second model show important similarities to what was found in previous editions of the WHR, including the importance of effective governments, education, and involvement in the labor force, and GDP per capita. Additionally, there are parallels to the WHR discussion of short-term trade-offs between carbon dioxide reductions and material wellbeing, which likely explains why CO2 damage is positively related to greater inequality of wellbeing.

Furthermore, the division of countries into two sub-samples based on relative levels of the CV helped highlight how Buddhist principles impact countries at different levels of development very differently. For countries with a higher dispersion of life evaluations, variables such as education and FDI were significant and negative, whereas Access to Basic Drinking Water Services was significant and positive. For those with the least dispersion of life evaluations, Political Stability, Voice & Accountability, and GHG emissions were negative and significant, while CO2 damage was positive and significant. This could encourage further research to evaluate countries at different levels of development differently, such that there is an order to the importance of implementing some Buddhist principles at different stages of a country's development.

My hope is that future research expands upon the idea that Buddhist economics can be empirically validated. There is room to evaluate the influence of population wide preferences or cultural conditions that impact the success of a government's implementation of Buddhist principles. It could be interesting to do a comparative analysis of countries with majority Buddhist populations to comparable non-Buddhist countries to assess whether these principles are received or influence wellbeing differently. Additionally, evaluating firm-level responses to Buddhist principles could yield interesting results and highlight potential pushback to consider for other country's future implementation of these principles. Furthermore, different measures of wellbeing could be used as previously discussed, such as a more general aggregate of wellbeing, just psychological wellbeing, or an alternative measure of quality of life.

Ultimately, my hypotheses are validated such that some Buddhist principles do positively impact the average wellbeing within a country as well as decrease the dispersion of that wellbeing, as predicted by an understanding of interconnectedness and impermanence. Given the

significant limitations in available data to measure the applications of Buddhist principles and the lack of empirical evidence on the topic, my hope is that this initial exploration promotes the collection of more relevant data and further research. As Buddhist economics continues to be developed as a philosophical theory, validating its success empirically could promote greater awareness of the benefits of Buddhist economics in increasing wellbeing and equality and addressing the presence of significant market failures. Through understanding how the success of Nordic countries aligns closely with Buddhist economic principles, the theoretical success of these principles seems possible to validate with sufficient data and analysis. Ultimately, given the state of inequality and environmental destruction plaguing our modern economy, the potential benefits of Buddhist economics seem worthy of continued research and implementation.

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