

ŞERİAT'N MAKSATLARI İŞİĞİNDA DÖNGÜSEL EKONOMİ KAVRAMI ÜZERİNE ELEŞTİREL BİR DEĞERLENDİRME

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ÖZ

Paradigma, doğrusal bir ekonomiden döngüsel bir ekonomiye ve özellikle geleneksel ekonomideki diğer kalkınma yaklaşımlarına, birincil amacı insan refahını daha geniş bir perspektiften teşvik etmek olan dini değerleri göz ardı etmektedir. Bu nedenle, bu çalışma döngüsel ekonomi kavramını İslam hukukunun amacı ışığında analiz etmektedir (Maqasid al-Shariah). Nitel / semantik içerik analizini bir araştırma yaklaşımı olarak benimser.

Bulgu, döngüsel ekonominin ve ilgili kavramlarının şu ya da bu şekilde İslam hukukunun (Maqasid al-Shariah) hedeflerini desteklediğini ortaya koyuyor: yaşamın ve neslin korunması, döngüsel ekonominin ekolojinin korunmasına yönelik girişimleriyle sağlanabilir. Zihnin korunması, zararlı atık ve kirliliği azaltacak önlemlerle sağlanabilir. Zenginliğin korunması, kaynakları korumaya yönelik döngüsel ekonomi önlemleriyle sağlanabilir.

Bu bulgular hem Müslüman hem de gayrimüslim topluluklara ışık tutmaktadır; Birincisi, döngüsel ekonominin Makâsid-i Şeriat'a karşı olumlu duruşu ve ikincisi, Yaratıcı'nın değerli armağanları olan ekolojik dengeyi ve çevreyi korumak için döngüsel ekonomi girişimlerini teşvik etme ihtiyacını ön plana çıkarmaktadır.

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A CRITICAL ASSESSMENT OF THE CIRCULAR ECONOMY CONCEPT IN THE LIGHT OF MAQASID AL SHARIAH

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ABSTRACT

The paradigm shifts from a linear to a circular economy and other development approaches especially in conventional economics disregard religious values of which the primary objective is to promote human wellbeings from a wider perspective. Hence, the present study analyzes the concept of circular economy in light of the purpose of Islamic law (Maqasid al-Shariah). It adopts qualitative/semantic content analysis as a research approach.

The finding reveals that the circular economy and its related concepts in one way or another support the objective of Islamic law (Maqasid al-Shariah): as the preservation of life and progeny can be achieved through the circular economy's initiatives related to the preservation of ecology and ecosystem, whereas the preservation of intellect can be achieved through the measures related to reducing harmful wastes and pollution. While the preservation of wealth can be achieved through the circular economy measures for resource conservation.

These findings enlighten both Muslim and non-Muslim communities; firstly on the positive stance of circular economy to the Maqasid al Shariah and secondly the need to promote the circular economy initiatives to preserve the ecological balance and environment which are the precious gifts from the Creator.

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INTRODUCTION

What is meant by the circular economy (CE) and how can it be contemplated under the Islamic perspective are the questions that this article tries to look at from that point of view. The concept of the circular economy is not new, it can be traced back to an indistinctive time, though, recent scholars believe that the circular economy concept was basically founded by the environmentalist and economist Turner and Pearce who developed their theoretical context based on an earlier study by Kenneth Boulding (Andersen, 2007; Ghisellini et al., 2016).

The concept gained much popularity during the 1970s from several academicians, researchers, and environmentalists (Ellenmacarthurfoundation, 2017). But, its spectacular momentum followed after the report presented to the World Economic Forum held in Davos in 2012 (Ghisellini et al., 2016). Where MacArthur foundation and Mackinsey published a report which indicated the prospects of creating material cost-saving opportunities to the European Union manufacturing sectors of up to US\$380 billion, and US\$680 billion in the transitional and advanced scenario respectively (Deselnicu et al., 2018). These profitable figures motivated even mammoth companies including NIKE to get involved in the CE businesses (Andersen, 2007).

Big companies are motivated by the CE concept because the natural resource constraints coupled with growing volumes of waste and pollution are likely to enforce increasing dangers to human welfare, these threats when perceived from a business point of view they increase competition for production and profits (Ellen MacArthur Foundation, 2018b). Thus, the CE concept seeks to minimize the negative consequences caused by the take_make_waste extractive model, hence creating new and long-term opportunities with primary concern on employment, social benefits, preserving the environment, resource conservation while creating new business opportunities (Mulhall and Braungart, 2010).

To realize the circular economy objectives, the concept is built on the main underlying principles *i). to redesign out waste to eliminate pollution*; which focuses on processes like re-use, repair remanufacture, and recycling (Ellenmacarthurfoundation, 2017), *ii). keep products and materials in use* with an emphasis on leasing or selling product's services rather than traditional sell of

physical products. Where a clear demarcation between biological components* and technical components† are identified and *iii) to regenerate the natural systems* (Stahel, 2012; Ellenmacarthurfoundation, 2017).

Hence, the circular economy concept is highly promoted because of its positive stance towards the environment, society, and the promotion of sustainable economic gains from limited resources. It attempts to redefine growth by decoupling economic activities from the take-make-waste model (linear economy) to refurbishing and recycling processes (Ellen MacArthur Foundation, 2018a). Its aim is not only limited to minimizing the adverse impacts to the environment, but also to utilizing wastes produced by the linear system for building capital, creating new business opportunities, and economic prospects that provide both social and environmental benefits (Ellen MacArthur Foundation, 2018a).

Therefore, the circular economy is believed to be an alternative model to a linear economy model which presently has dominated the world economy, which is overwhelmed by a vicious circle of human-induced environmental calamities (Wijkman and Skånberg, 2017). Thus, the circular economy model is attempting to minimize these impacts, hence, enabling the world to return to its natural planetary circularity system (Ellenmacarthurfoundation, 2017). The natural system does not produce waste as we can observe from nature such as the nutrients cycle, and water cycle there is no harmful waste created but a constant circular system (Khan, 2019).

In the natural planetary system, living things are constantly born, grow and die, where the remains of demised living organisms including the surviving creatures become food or nutrients of the others, hence there is no harmful waste created (Stahel, 2012). The natural system of birth, growth, and death with no harmful wastes reflects the fundamental planetary system of which the Creator created the universe. However, human beings came with the linear economic model which has brought harmful effects to humans, environments, and all other living things (Stahel, 2012).

* Biological components in the circular economy include products that can biodegrade, and they are made out of biological products, for example, perfumes and detergents.

† Technical components include the products that do not biodegrade, but people enjoy their existing services, examples, include hard wares such as cars, computers, refrigerators

Al-Mubarak and Blake (2018), pointed out that the natural system is created to be interdependent whereby balance is attained through continuous material flow within the ordinary ecosystem. But linear economy distorts this natural system by producing unwanted materials which end up making landfills

With the linear economy model in place, now it costs the earth approximately one and a half years to rejuvenate the ecological footprint that human beings can only use for a couple of days (Wijkman and Skånberg, 2017). The present productivity models of the linear economy have brought some costs in place and it can no longer support the long-term human requirements because of the limited resources (Ellen MacArthur Foundation, 2018a). Therefore, shifting to a circular economy can bring some health, business, environmental and economic opportunities by supporting the materials and product value chain in broader terms (Ellen MacArthur Foundation, 2018b).

In this case, the circular economy suggests an alternative production system to replace the predominant linear economy that relies on the take-make-dispose mechanism which has become drawbacks to the environment, as most of the materials end up making landfills (EMF, 2017). Thereby emphasizing the restorative and regenerative processes to preserve the natural system and ecological balance, promoting human welfare (Hasan, 2007).

Thus, the restorative and regenerative production systems as advocated by the circular economy can be thought of as an attempt to promote and restore the natural system's order of the Creator who created the natural system in circularity form (Hasan, 2007). In this regard, when it is observed from a wider perspective, the CE unintentionally promotes the goal of *Maqasid al Shariah* which is to promote human welfare. Thus, it is not astonishing that human beings notwithstanding their faiths often reflect the Islamic values as Islam is a universal faith that holistically addresses the entire human beings (Hasan, 2007).

Therefore, to remain within the fundamental planetary boundary as created by Almighty God there is a need to return to the natural system's order of the Creator. Allah (SWT) says as translated by Yussuf Ali "Mischief appeared on the earth because of (the meed) that the hands of men have earned. That Allah Almighty gave as a test to humans that they turn back from the Evil (the mischief)" (Quran 30:41).

Thus, CE undermines the production of toxic materials to eliminate the concept of waste which creates resource constraints, by promoting recycling economic models (Ellen MacArthur Foundation, 2017). The recycling processes have brought promising business prospects as during the year 2010 about 65 billion tons of materials were recycled and re-entered in the economic system as part of the circular economy (Ellen MacArthur Foundation, 2018b). This number was projected to increase to about 82 billion tonnes in 2020 (Ellen MacArthur Foundation, 2018a, 2018b).

Therefore, a circular economy creates business opportunities for Islamic finance to advance various Islamic financing tools to facilitate financing circular businesses (Khan, 2019). Moreover, the sustainability of the circular economy concept can be better aligned by Islamic financing as the former is motivated by sustainable development geared toward human welfare while the latter is driven by the consideration of the *Maqasid al-Shariah* (Bayzid and Nobanee, 2020).

According to Ibrahim and Shirazi (2020), Islamic financing values are more aligned with sustainable development because ethical values along with *Maqasid al-Shariah* are among the essential requirements to be applied during financial undertakings. Islamic finance is enriched with reliable financing tools that can be used to back the circular economy projects by employing equity financing and risk-sharing financing while its overall paradigm is steered by the motivation for human welfare development (Khan, 2019b).

On the other hand, both the Quran and the practices of the beloved God messenger (PBUH) appreciate the ecosystem, ecological balance, and natural resource conservation. The appreciation of the ecosystem is apparent in several chapters that bear the name of animals and insects such as Al Baqarah (The Cow), Al Nahly (The Bees), Anqabul (Spider), and al Namly (Anty) (Ibrahim Ozdemir, 2002). Also, resource-saving and conservation can be referenced from several verses of the Quran. Where the extravagance and wasteful use of resources is discouraged (Qur'an, 7:31), also God says. "He created everything in proportions", (Qur'an, 54:49) Yussuf Ali translation.

On top of that, the OIC Fiqh Academy as quoted from (Ibrahim and Shirazi, 2020) through its resolution number 185 discourages Islamic financial institutions from financing activities that distort the ecological balance. Therefore, from the referenced chapters and verses, it can be thought that the

struggles by the circular economy concept existed even during the early stages of Islamic civilization.

But paradigm shift from linear to a circular economy, principles, and other development approaches especially in conventional economics disregard religious values of which the primary objective is to promote human wellbeings from a wider perspective (Chapra, 2001). This has been attributed to environmental imbalance and social inequalities all of which have inspired further studies in Islamic economics and finance (Khan, 2019). Religion (Islam) encompasses all facets of life in this world and the Hereafter, thus either we like it or not, the economic, social, and political lives can not be completely alienated from religion (Dusuki and Abdullah, 2007). Further, it is argued that the Islamic approach is more amenable to dealing with environmental protection issues including the circular economy because many issues surrounding sustainable development comprise social, moral, ethical, and political attributes that cannot be resolved by economics or economist per se (Hasan, 2007). Moreover, *Maqasid al Shariah* seems to embody most of these attributes and lays down the foundational standards for establishing welfare principles in this world and the Hereafter (Alam et al., 2015).

Though, there have been resurgent studies stressing the significance of circular economy, yet, limited have been focused to analyze its relevance from an Islamic perspective specifically the *Maqasid al-Shariah*. Whatever the available studies mostly focused on sustainable development, environmental issues, Islamic finance's role in minimizing climate change, environmental ethics from the Islamic perspective, green Sukuk financing, the Islamic finance role in realizing SDGs; exploring Waqf to the financing of SDGs, shaping the venture Waqf to attain circular economic growth and restructuring Islamic finance to achieve SDGs (Khan, 2019b; Khan, 2019a; Aassouli, *et al.*, 2018; Aliyu et al., 2017; and Bin Mahfouz and Hassan, 2013).

Therefore, the present study is bridging the existing literature gap by focusing on contemplating the concept of CE under *Maqasid al-Shariah* this will further pave the way for further research in the area.

The remaining parts of the paper are organized as follows, the second section; is about *Maqasid al-Shariah*, the third section circular economy's school of thought, then the literature review, methodology, findings of the study, last section concludes and provides a suggestion for future studies.

MAQASID AL SHARIAH

The word *Maqasid* originates from the Arabic word '*Maqsada*' which denotes an objective or aim of an action, whereas the word *Shariah* originates from the Arabic word '*Shara*' of which in legal terms means to establish a law (Islamic law). Thus the combination of the two words '*Maqasid al-Shariah*' refers to the purpose or the objective of the Islamic Law (Kamali, 2008). The earlier and prominent Muslim scholars have attempted to define the concept of *Maqasid al-Shariah*; such that Iman Abu Hamid al-Ghazali (1058-1111), defined the objective of Islamic law as to promote and protect the well-being of an individual as well as the community,

The Ghazali idea has been agreed upon and this has been considered as the primary (*al Asliyyah*) objective by several other scholars after him, see also Chapra et al. (2008). One of the earliest scholars to approve Ghazali's writing is Imam Abu Ishaq Al Shatibi, whose writings came about three centuries later after Ghazali's. According to Imam al-Shatibi (720 - 790 A.H./1320 - 1388 C.E.) the *Shariah* objective rests on freeing human beings from the grip of their whims so that they become true servants (Chapra, 2000). Therefore the prime objective of *Shariah* hereinafter referred to as *Maqasid Al Shariah* is to promote and protect human welfare against any detriment (Nyazee, 2005), which stem from safeguarding their faith (*din*), human self (*nafs*), intellect (*aql*), posterity (*nasl*), and wealth (*Mal*).

Therefore, whichever safeguards these five elements will serve the best public interest (*Maslahah*), on the other hand, whichever, impairs with these five objectives is considered to be against the public benefit (*Mafsadah*) and hence the elimination is desirable (Chapra, 2000). Thus the realization of this public benefit (*Maslahah*) Muslim scholars have regarded to be the primary objective of *Maqasid al-Shariah*, this is why *Maslahah* has become another name for *Maqasid* which are used interchangeably (Kamali, 2008). These objectives have been directly or indirectly implied in the Quran and Sunnah (Chapra et al., 2008). The term protecting or safeguarding as used in this context is not only limited to preservation of the status quo but also to promote sustained improvement to achieve the ideal state, that can help human beings continually improve their wellbeings (Chapra, 2000).

However, recent Muslim scholars, believe that the *Maqasid al-Shariah* as proposed by Ghazali is not the only mechanism aimed at achieving human well

beings, others can be derived from the Quran, Sunnah, using the scholastic opinions which may be referred to as corollaries (*Tabiah*) of the primary objectives (Chapra et al., 2008). The corollaries along with five sub-objectives are shown in Table I.

Table I: *The Maqasid Al Sharia'h Objectives Adjusted Version. Extracted from Mergaliyev, et al, 2019 p.g 04.*

<i>Maqasid al-Shariah</i>	<i>Corollaries</i>
i. Invigorating the value of human life	a. Faith b. Human rights
ii. Invigorating human self	a. Self b. Intellect
iii. Invigorating society	a. Posterity b. Social entity
iv. Invigorating physical environment	a. Wealth b. Environment

Ghazali pointed out *Maslahah* cum *Maqasid al-Shariah* being the only fundamental *Shari'ah* objective that's satisfactory to characterize all measures considered to be advantageous to people Dusuki and Abdullah (2007). Therefore, in this context, the *Maqasid al Shariah* including the corollaries as proposed by recent scholars are to be used as the guidelines in contemplating the concept of the circular economy.

Maslahah (consideration of public interest)

Maslahah or plural '*Masalih*' literally means the acquisition of benefits, interest, or welfare (*manfa'ah*) or repulsion of injury or harm (*Madarra*) (Dusuki and Abdullah, 2007). The word *Maslahah* technically means the preservation of Islamic law (Nyazee, 2016). Preservation of Islamic law is intended to promote human wellbeings as directed by the Lawgiver which is the main objective of Islamic Law (*Maqasid al-shariah*) (Chapra, 2008; Kahf, 2014).

Moreover, Imam Al Ghazali contended that *Maslahah* includes securing the benefits while avoiding harm, which is in balance with the objective of the Islamic law (*Maqasid al-Shariah*) (Chapra, 2008). These benefits are achieved primarily by protecting the five fundamental values of the objective of Shariah

through repelling harm (*Mafsadah*) and pursuing benefits (Kahf, 2014). This could clarify why Muslim scholars use the two terms one in place of the other.

In the existing textual evidence of Islamic scholars have classified *Maslahah-cum-Maqasid al-Shariah* in several ways one of these include three levels: the first is the necessities (*Daruriyyat* **الضروريات**), which involve the preservation of the five essential values; religion, life, intellect, progeny, and wealth such that omission in promoting and preservation of these values may cause harm and total collapse of the society (Kahf, 2014). The second is complimentary needs i.e. the hardships removal (*Hajiyyat* **الحاجيات**), these are needed for the advancement of the society, such that nonexistence of which may create hardships but not to a total collapse (Syaputra et al., 2014). The third level is beatification or luxury that leads to desirable reputation and embellishment (*Tahsiniyyat* **التحسينيات**) (Kahf, 2014, Syaputra et al., 2014).

Thus, it is generally argued that human actions towards development must be aligned in promoting and improving the wellbeings of the societies for it to be accepted as beneficial. In this regard, it is expected that the circular economy concept will be in harmony with the *Maqasid al Shariah cum Maslahah* (public interest) as both intend to preserve human welfare.

CIRCULAR ECONOMY'S SCHOOL OF THOUGHT

The circular economy can be traced back to several schools of thought that have made remarkable contributions towards the development of the concept, these schools of thought include; cradle to cradle (C2C), performance economy, biomimicry, industrial ecology, and natural capitalism.

Cradle to Cradle (C2C)

The cradle to cradle was first developed by Michel Braungart and William McDonough during the 1990s. In their book titled “*remaking the way, we make things*” McDonough and Braungart (2002), emphasized creating innovative ways to design material goods of which the focus should be beyond economic efficiency. That is to say, the focus should not only be limited to generating business profits by way of resource-saving but also to reducing negative effects on the environment (Wautelet and Impakt, 2018). Cradle to Cradle uses a scientific concept known as nutrient metabolism as a slogan to achieve the circular economy goal. Nutrient metabolism includes technical and biological metabolisms (William & Michael, 2013). The technical metabolism consists of the component of materials that do not biodegradable such materials include car parts, refrigerators, and other machines that makeup landfills after being used. Whereas biological metabolism includes the biodegradable components of materials such as food products, detergent, perfumes, and so forth (McDonough and Braungart, 2002).

Hence, under the nutrient metabolism, C2C considers all materials whether from industrial, domestic, or commercial activities as nutrients, such that they can be redesigned for continued recovery and re-utilization (William and Michael, 2013).

In the Cradle to Cradle three main underlying principles mark its transition to the nutrients-metabolism i). Waste equals food. ii). The power of renewable energy and iii). Celebrate the biodiversity (Respect human beings and natural ecosystems). Cradle to cradle has implemented several environmentally friendly projects, such as the bio-nutrients recycling projects in the cities of Silva Jardim Rio de Janeiro, and Favelas Brazil in 1992, accordingly these projects had generated both social and environmental benefits (Ellenmacarthurfoundation, 2017).

As the two projects transformed toxic industrial wastes into profitable nutrients for crops production created fertile soil for reforestation, and provided solar power to the local community (Ellenmacarthurfoundation, 2017). This paradigm shift towards better communities and human life which has been propagated by circular economy represent the everlasting purpose of *Maqasid* al-Shariah. Therefore, this paradigm can be well integrated with the halal circular economy as it is compatible with Islamic financing (Khan, 2019b).

Performance Economy (PE)

The performance economy is also known as functional service economy is a school of thought founded in 1976 by Walter Stahel, wherein that year Stahel and Genevieve Reday indicated the potential of substituting manpower for energy to the European Union (EU) (Stahel, 1982). The performance economy views the economy as a closed-loop* (circular), with the emphasis on re-use, repair, and re-manufacturing (Stahel and Reday-Mulvey, 1981). The loop system is built on four R (4-R) appropriate technology; *Reuse, Repair, Reconditioning, and Recycling*, the 4-R concept was initially named by John Davis (Stahel, 2012).

According to Stahel (2012), the loop system will have impacts on employment creation, creates economic competitiveness, resource-saving, and waste prevention see also Ellenmacarthurfoundation (2017). To achieve the desired level of a closed-loop system, PE relies on four principles which are; product-life extension, long-life goods, reconditioning, and waste prevention, accordingly these principles form a building block toward the circular economy (Stahel, 2012).

* Closed loops have neither the starting point nor the ending point.

On top of that, performance economy proposes several business models as a paradigm towards a successfully circular economy; such models are: Selling Performance^{*}, Retaining Ownership[†], buying performance[‡], and sustainable taxation[§] (Stahel, 1982). According to Stahel, adopting these business models enables a firm to become an exclusive owner of the product throughout its life circle, through the slogan: “*the goods of today becomes the resources of tomorrow at yesterday’s resource price*”. For instance, he showcased the concept of buying performance models in the aircraft industries where the aircraft do not buy the airplane tires rather they hire with the fixed fee paid in every 100 miles per landing (Stahel, 2012).

Biomimicry

The concept was developed by the biologist Ms. Jenine Benyus. Biomimicry is founded on the concept of nature-inspired innovation (Benyus, 1998). The biomimicry school of thought advocates studying nature's most excellent ideas and imitates from it the applicable inventions to develop a sustainable solution to be used in addressing human problems (Benyus, 1998). The central idea of the biomimicry concept is that nature has as of now illuminated many issues that human beings are adapting to, thus, human beings should consider nature as a model for replicating and creating a sustainable solution to solve the incumbent problems such as energy, climate, and system of production (Biomimicry Institute, 2017).

For instance, one of the biomimicry’s nature-inspired innovation was implemented in Lavasa India, where the project mimicked the design from nature, such that the mimicked knowledge was transformed into a useful ecological design (Peters, 2011). Accordingly, the projects mimicked how the canopies trees deflected the rainwater, and another imitation studied the behavior of harvester ants on how they build their nests on muds to protect themselves from being washed away by floods (Peters, 2011). Accordingly, these projects offered an alternative solution against the problem of flooding to the indigenous communities in Lavasa India (Biomimicry Institute, 2017; Peters, 2011).

On to of that, Biomimicry concept is based on three underpinning principles such as *nature as a model*, *nature as a measure*, and *nature as a mentor* which views nature as not only something that we can always extract from it but also as a

* Selling performance emphasizes leasing products' services.

† Retaining ownership; the idea of selling performance results in retaining the ownership of goods and its exemplified resources for the whole life span of the goods.

‡ Buying performance is the demand side of selling performance.

§ Sustainable Taxation; the business model that emphasizes several mottos such as "do not tax work human labor as a zero-carbon renewable resource.

model from which human beings can learn and mimic from it (Benyus, 1998; Ellenmacarthurfoundation, 2017).

Industrial Ecology (IE)

According to Andersen (2007) and Preston (2012), the idea of a circular economy has its roots in the industrial ecology. This concept emerged because industrial economic activities have been causing unsatisfactory ecological changes (Andersen, 2007; Erkman, 1997). Thus, industrial ecology (IE) came up with solution that the materials from the manufacturing activities should be approached in two distinctive ways. The first is material-specific* and the second is product-specific† (Lowe and Evans, 1995). By studying the flow of materials and energy from the industrial activities, through creating a special interrelationship between the industrial processes and the ecological system that would keep the ecological balance through a closed-loop process (Erkman, 1997). According to the IE, the waste materials from industrial processes can serve as inputs for other products' design, that is why it is also known as the science of sustainability (Jelinski *et al.*, 1992).

It further postulates that the activities from the industrial ecosystem and the environments should be viewed as integral parts of the larger whole, with a focus on promoting ecological balance and preventing environmental hazards while promoting social wellbeing (Iung and Levrat, 2014).

Natural capitalism

Natural capitalism is derived from the term 'natural capital' which implies the world's stocks of natural resources including water, air, soil, and living organisms (Lucas, 2005). Natural capitalism is pioneered by Paul Hawken, L.Hunter, and Amory Lovins, in their book titled 'natural capitalism' the authors appreciate the interdependence that exists between production, the flow of natural capital, and the flow of man-made capital. By realizing this interaction, they propose four principles underpinning the natural capitalism.

Radically increasing the productivity of natural resources' is the resource-saving strategy that stresses increasing the efficiency of natural resources. Increasing the productivity of natural resources would reduce the competition and depletion of existing resources, curbs waste and pollution, hence yielding higher profits for businesses as a result of enhanced resource efficacy.

* Material specific approach is where a particular or group of materials are selected and analyzed in the ways it flows in the ecosystem.

† The products specific approach selects a product or group of products and analyzes how the flows in the different components.

Shift to a biologically-inspired mode of production; this principle emphasizes on the production of goods that are biodegradable causing no harm to the ecosystem while their end-use serve as an input for other manufacturing products.

Move to a solution-based business model; this principle underlines a service-based model instead of the conventional sale of goods.

Reinvest in natural capital, where businesses are encouraged to strengthen and increase resource availability by investing in natural resources to match the increasing human needs through the model of restorative, sustain, and expand the earth's ecosystem.

THEORETICAL AND EMPIRICAL LITERATURE REVIEW

After the Ghazalian writing on *Maqasid al-Shariah* and other scholars that followed after him, there have been several other studies conducted in the field.

Among them is Ibn Ashur as quoted from Ahmad al-Raysuni (2005) who contended that the higher objective of Islamic Law is the sensible purposes on the part of the Lawgiver which can be perceived in all of the situations to which the Law pertains. It includes objectives that are not visible in all types of rulings, although they are observable in many of them (Ahmad al-Raysuni, 2005). Allal al-Fasi has brought together both the general and specific objectives into a clear and concise meaning. That *Maqasid Al-Shariah*, its intention, and the underlying causes which the Lawgiver has assigned within every single ruling is to populate and improve the earth and preserve order and harmony (Ahmad al-Raysuni, 2005). To reform everything which needs to be reformed on the earth, exploits its resources, and plan for the goodness of human beings and their surroundings (Ahmad al-Raysuni, 2005). Thus, the notion of *Maqasid al-Shariah* has been used as an authentic framework for generating acceptable models, theories, and approaches in various angles of human lives (Omar and Sari, 2019). This has further attracted so many studies on the application of *Maqasid* to various economic and social development, one of these studies include a study by Ibrahim and Shirazi (2020) who demonstrated that Islamic finance can apply the richness of its compassionate contracts that are motivated by the *Maqasid* objective to engage in circular business.

Khan (2019) in his study titled reforming Islamic finance to achieve SDG, suggests the paradigmatic and regulatory reforms in Islamic finance are needed in achieving comprehensive human development. Moreover, Khan (2019b) proposes the use of a model which he called compassionate financial contract in venture waqf such that the defaulted amount can be converted into equity instead of traditional collateral foreclosure. Accordingly, this approach will promote the sustainability of the business and encourage investment in circular businesses.

On the other hand, Sadiq (2015) postulates that Islamic financial institutions can engage in resolving environmental and social issues by incorporating the macro *Maqasid*, by supporting the development of the social sector that inspires investment in circular businesses.

Other conventional studies including Berndtsson (2015) analyzed the relationship between the circular economy and sustainable development, it was found that there is a close relationship between the circular economy and sustainable development; that the concept of circular economy complies with the sustainable development criteria. On top of that, the circular economy concept has been built from the existing concepts with new implementation techniques that target business groups.

However, there are some issues where the previous studies have not properly addressed especially the interrelationships between circular and *Maqasid al-Shariah*, hence there is a dire need to analyze the concept of the circular economy under the Islamic perspective. Therefore, the present study focuses on that angle, hence, the finding will be adding to the existing literature on the subject matter.

METHODOLOGY

The study adopted qualitative/semantic content analysis. According to Colorado University (2004), semantic content analysis is the research instrument that is used to analyze the existence of certain related words, concepts, or meaning in a text or group of texts. The advantage of this method is that it enables the researcher to analyze several phrases that appear to have similar or equivalent meanings, but have been spoken differently (Palmquist, 1990; Colorado University, 2004).

Therefore, with the aid of other secondary data sources from the existing publications on the subject matter, this study attempts to evaluate the circular economy concept by examining the co-occurrences of the main words and other similar phrases that appear to have a similar goal in promoting human welfare that correspond to purposes of *Maqasid al-Shariah*. The main unity of analysis was the CE concept and principles, whereas *Maqasid al-Shariah's* would serve as a benchmark. In this regard, the study explored the extent to which the *Maqasid* objectives were implicitly or explicitly revealed in the Circular Economy concepts and principles. The results enabled the establishment of a concept pattern or groups of associated co-occurring concepts that would suggest an overall meaning appearing to promote the *Maqasid Al-Shariah*.

Analysis and Discussion of Findings

Contemplating the concept of the Circular Economy under Maqasid Al-Shariah

Despite several critics posed against the concept of the circular economy by Larsson (2011) who postulates that the CE is the repetition of preceding concepts. Other critics posed by Hahn sees the CE concept has no new issues and it is not a real paradigm shift rather the reinstatement of ideas that are presented as an intervention strategy to be lucrative for gaining popularity. Sillanpaa (2019) and Berndtsson (2015) believe that circular economy lacks sustainability solutions towards social dimension, also according to European Commission (2014), the concept of CE today appears to be very closely attached to business goals.

Nevertheless, there is hardly critics posed against the main goals of the circular economy such as preserving the environment and the natural system, promoting the use of alternative energy resources like solar power, reducing wastes and pollution to protect the biodiversity, and minimizing toxic industrial production that won't jeopardize the resources for the future generation.

These objectives when examined in detail they entail streamlining human economic activities towards prioritizing economic approaches that have primary benefits for the environment and the implicit gains to the economy and society at large. Moreover, if these objectives are to be fully realized the likely outcome lies in promoting healthy living along with human wellbeings while balancing the ecosystem.

For instance, the promotion of human wellbeing has been explicitly highlighted by Cradle to Cradle through its circular economy development projects undertaken in Favelas Brazil 1992 (Ellen MacArthur Foundation, 2017). Thus, the realization of these goals in turn can directly or indirectly promote the *Maqasid al Shariah*; religion, life, intellect, progeny, and wealth.

In this regard, two key *Maqasid al-Shari'ah* maxims are embodied in the circular economy concept, this includes the axiom of preventing or expelling harm such as preventing harmful wastes, pollution, and the axiom of promotion of human wellbeings such as promoting human and environmentally friendly economic activities. All these goals of the circular economy form the intrinsic objective of *Maqasid al-Shariah*.

Even though there are conflicting opinions regarding what constitutes real well-being. Well-being according to a world view is attached to material things such as income and wealth, while religious scholars and moral philosophers have questioned the attachment of human wellbeing to income and wealth alone (Chapra, 2008). These scholars have encouraged the inclusion of spiritual and non-material contents as parts of wellbeing (Chapra, 2008).

However, despite the differences, the well beings that might be enjoyed by an individual in the form of healthy life due to life enjoyment as a result of living

in a society with a clean and unpolluted environment might be similar because it is based on value judgment. One of these is the spiritual and nonmaterial well beings such as peace of mind (intellect) and gratification which are not necessarily achieved through income and wealth.

Protecting the faculty of mind from toxic pollution enables a human being to properly perform other obligations like worshiping (religion), healthy life, progeny, and maintain his/her zeal to seek more wealth. On top of that the material, well-being can be realized through the actualization of the circular economy's principles such as regenerating the natural system which prioritizes protecting the endowments in the form of natural resources. All of which is the primary objective of *Maqasid al-Shariah*.

Henceforth, by considering the fundamental goals of circular economy, without looking at hidden motives as postulated by critics of the concept, based on Imam Shafii school's opinion, it is not ideal to nullify something based on hidden intentions which are not known (Ahmad al-Raysuni, 2005). Similarly, one of the hidden motives as cited by several critics is the attachment to the business goal.

If that is the case still the CE concept cannot be invalidated based on a business claim unless there is clear evidence that such a business is founded on prohibited transactions under Islamic law. However, this needs further studies to prove with clear evidence that such a business model as postulated under the CE is against the *Shariah* tenets.

So far, the CE concepts endeavor to protect the earth's resources and biodiversity from rapid depletion. This is also stressed in the Quran that "Human beings as the Vicegerent of God have been honored and most favored over all other creatures (Quran 2:30, 17:70). Therefore, human beings as a vicegerent of God have a potential role to make the world a better place for all living beings including protecting these endowments given by the Creator. This will enable full-actualization of needs through various technological innovations while sustaining wellbeing which is the objective of the *Maqasid al-Shariah*.

In a nutshell, through the CE concept, the preservation of intellect entails that the society can resist and stay protected from the pollutive domestic and commercial activities that imperil the natural environment including human life. On the other hand, the preservation of posterity is intended for ensuring inter-generational justice in the allocation of natural resources (wealth and property), which further entails the conservation of natural and man-made resources, including the nourishment of the environment.

Moreover, a circular economy can promote the *Maqasid al-shariah* such as faith (*Din*), the human self (*nafs*), the intellect (*Aql*), the posterity (*Nasl*), and wealth (*Mal*) as shown in Tables II and Table III.

Table II: *Comparative Summary of Circular Economy and its Principles under Maqasid Al-Shariah*

Circular Economy Concept	Principles	Implications on <i>Maqasid al-Shariah</i>
A. Circular Economy	a. Design out waste	i. It is the zero-waste principle intended to reduce environmental pollution, the move may lead to protecting health and intellect (<i>Aql</i>).
	b. Keep product and materials in use (reuse)	ii. This principle is meant to reduce over-dependence on virgin natural resources, thereby extending the life of existing products through re-use technique. the realization of which may protect wealth (<i>Mal</i>).
	c. Regenerate the natural system	iii. It entails preserving and restoring the natural resources (wealth), as well as keeping them for future generations, this translates into preserving posterity (<i>Nasl</i>) and wealth (<i>Mal</i>).

Moreover, the protection and preservation of ecosystem and ecological balance can be referenced from the Holy Quran and the sayings of the beloved God Messenger (PBUH). Both of which require human beings to appreciate the earth's endowments and the existence of other creatures as all these serve as blessings from Him.

This can be referenced from this verse ;

“There is not an organism that lives on the earth, nor a being that flies on its wings, but then again forms part of communities like you. Nothing We have excluded from the Book, and they all shall be assembled to their Lord at the end” (Qur’an, 6:38). This verse can be translated to mean that all living things count, deserve to live their lives, and being protected as it is a blessing from Him, thus human beings as the vicegerent God required to respect their existence even protecting them.

Table III: Comparative Summary of CE's school of thought and Principles under Maqasid Al-Shariah

Circular Economy school of thought	Underlying Principles	Implications on Maqasid al-Shariah
A. Cradle to Cradle	<ul style="list-style-type: none"> a. Eliminate the concept of waste (Waste equal food) b. Power of renewable energy such as solar power c. Celebrate diversity respect human and natural system) 	<ul style="list-style-type: none"> i. It relates to A(a)(i) in Table II. ii. This principle emphasizes the use of solar energy instead of fossils and hydrocarbons. The realization of which leads to the preservation of life (<i>nafs</i>), posterity (<i>Nasl</i>), and wealth (<i>Mal</i>). iii. It stresses protecting the natural system, including the life of all living creatures hence safeguarding life (<i>Nafs</i>), posterity (<i>Nasl</i>), and wealth (<i>Mal</i>).
B. Performance Economy	<ul style="list-style-type: none"> a. Closed-loop system. b. Product life extension and long-life goods. c. Retained ownership (selling and buying performance). 	<ul style="list-style-type: none"> i. This principle relates to Table II-A(a)(i). ii. This principle stresses extending the existing products life cycles, hence conserving wealth (<i>Mal</i>) iii. This principle stresses on leasing of products as a service. Hence, the implication of this principle is to reduce products that make landfills. Thus, promoting and preserving life, intellect, and protecting other living creatures on the earth (posterity).
C. Biomimicry	<ul style="list-style-type: none"> a. Nature as a model. b. nature as a mentor. 	<ul style="list-style-type: none"> i. This principle considers nature as a mode, where nothing should be extracted from it. Therefore, it promotes preserving the resource (<i>Mal</i>). ii. Nature as a mentor is a principle for replicating nature's idea and creating a new design, this idea reduces pressures on resource depletion, hence preserving natural wealth (<i>Mal</i>).
D. Industrial Ecology	<ul style="list-style-type: none"> a. Waste as an input b. Natural capital restoration c. Eliminate the concept of unnecessary products 	<ul style="list-style-type: none"> i. Waste as inputs see also A(a)(i) Table II. ii. Natural capital restoration implies maintaining natural endowments which relate to preserving wealth (<i>Mal</i>). iii. This princip related to A(a)(i) Table II
E. Natural Capitalism	<ul style="list-style-type: none"> a. Rise thele productivity of natural resources b. Change to biological inspired production model and materials c. Reinvest in natural capital 	<ul style="list-style-type: none"> i. This implies keeping, and promoting the resource productive capacity even for future generations in turn protecting wealth (<i>Mal</i>) and Posterity (<i>Nasl</i>) ii. This principle encourages the production of environmentally friendly goods to avoid pollution hence preserving the intellectual mind (<i>Aql</i>). iii. This principl one advocate boosting natural resources, hence preserving (<i>wealth</i>)

It was also reported that the beloved God's Messenger (PBUH) taught that believers should behave sympathetically not only towards human beings but to all living beings (Tirmidhi, Birr, 16). Likewise, through the practices of God's Messenger (PBUH), Muslims have been encouraged to plant trees and protect

the existing ones. There are examples that Abu Bakr, the first Caliph, when sending out an expedition for a battle to Muta, gave directives: "for not cutting down trees and killing animals except for food (Ibrahim Ozdemir, 2002).

Also, there is writing which shows that green is the symbol of Islamic civilization and the green color of the Prophet's (PBUH) tomb is an indication that Islam gives weight to the greenery of nature (Ibrahim Ozdemir, 2002). In this regard, it is apparent that Islam has embraced all facets of lifestyles not only compatible in the Hereafter but also in this-worldly affairs, containing the approaches that are more amenable to dealing with environmental issues including the circular economy.

The circular economy concept in-relation to corollaries of the primary objectives' perspective

The circular economy concept can be also reflected in the corollaries as proposed by the recent Islamic scholars that the corollaries and the primary objectives support each other (Chapra, 2008). The reason for including corollaries in this analysis is because, corollaries are considered to be more social-oriented, occupying a wider social dimension (Auda, 2007). There are four corollaries as shown in Table I, consider, for example, the circular economy's goal to minimize the pollutive cultural practices, this implies safeguarding the intellect which is similar to invigorating the human self and the society, also regenerating resources to spare for the future generation implies invigorating physical environment which includes wealth and ecology. Also, there is textual evidence as quoted by (Hassan, 2007) showing that Umar (RA) rejected to distribute conquered lands in Iraq amongst the militaries for the sake of the future needs of the people. Therefore supporting the CE concept is meant to promote and protecting the objective of *Maqasid al shariah*.

CONCLUSION

The study assessed the circular economy concept in the light of Maqasid al-Shariah, the findings revealed that the circular economy concept does not contravene with the *Shariah* objectives rather supports them in different ways such that; Religion can be promoted indirectly by the measures to prevent pollution through the recycling process, depress the use of toxic energy resources such as fossil fuels, nuclear power, etc.

The Protection of life, posterity, and wealth can be achieved through the principle of “celebrate diversity” and “respect of natural systems”. It was also learned that the prevention of environmental pollution is intended to minimize the negative impact of toxic emissions that could be associated with the polluted environment, hence safeguarding the intellect mind (*Aql*).

Natural capitalism’s principles such as restoration and regenerative natural systems, are intended to keep and promote the earth’s resources. This implies the protection of wealth (*Mal*). There is Hadith that considers planting trees as the act of almsgiving; “If a Muslim plant a tree, the part of the produce from that tree consumed by other creatures will be as almsgiving. Also, if any fruit is stolen from that sapling shall be almsgiving. That part which the fowls eat from that trees shall also be as almsgiving for the Muslims who planted it”. (Bukhari, Tajrid al-Sahih, vii, 122, Muslim, Musaqat,2 No:2).

Invigorating the value of human life and society is promoted through circular economy principles like cultural diversity, social justice, and wellbeing these also were among the cradle to cradle quality life projects. It was reported that the Prophet (PBUH) prohibited cutting trees around Madinah which can be related to the circular economy endeavor for keeping ecological balance and the ecosystem.

Policy implication

The circular economy is intended to repel environmental harm that is caused by linear economy while promoting the goodness of the natural system (*Maslahah*) hence promoting human wellbeing which is the primary objective of *Maqasid al-Shariah*. Therefore, the implications of these findings call for reforming Islamic finance in bolstering circular economy businesses as Islamic finance has been incorporated with *Maqasid* elements that are more amenable to environmental sustainability.

Moreover, Islamic financial institutions should instead of focusing simply on a mere return on investment, they need also prioritize the resource-productivity (environmental concerns) for sustainable financing which recently has been disregarded by several policymakers.

Issues for further research

The circular economy concept is somehow become challenging for successful implementation especially in developing countries, where a significant part of total economic activity relies on the extraction and consumption of natural resources like forests, marine products, and water resources. The scattered land and populations which are hindered by unreliable transportation and communication infrastructures can hinder the implementation of the CE business models such as selling performance, retained ownership, and buying performance as proposed by the performance economy.

Also, investment in recycling technologies requires a separate and huge capital investment while substantial parts of a population are immersed in a vicious circle of poverty with low education. The governments still striving to combat the problem of poverty, therefore investing in recycling technologies is another issue of concern, which might be given low priority by the stakeholders at certain levels. So it might be difficult to slow down the exploitation of natural resources. Therefore, further studies need to be done to investigate how the circular economy concept can be successfully implemented in OIC and other developing economies by considering the special needs of these countries. The implementation of which may generate further employment opportunities while promoting the *Maqasid* objectives.

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AUTHORS' PERCENTAGE-BASED CONTRIBUTION

The contributions of each author to the study by percentages are as follows:

The percentage-based contribution of the author is 100%.

The Author: Literature review, data analysis, writing, research design, model construction.

DECLARATION OF CONFLICTING INTERESTS

There is no financial or individual relationship with a person or an institution in the context of the study. Also, conflicting interests do not exist.

ETHICAL APPROVAL OF THE STUDY

All rules within the scope of “Instruction on Research and Publication Ethics for the Higher Education Institutions” were observed through-out the study. No actions mentioned in the Instruction's second chapter titled “Actions Against to Scientific Research and Publication Ethics” were taken in the study.