

The Transition to a Circular Economy in a Capitalist World

The sobering issue of Climate change has become arguably the most pressing problem of the 21st Century. What was once an ominous warning, has become an alarming reality, as the physical effects of Climate Change have materialised globally, disrupting livelihoods and threatening the future of humanity. As the world struggles to cope with the effects of Climate Change, many have been prompted to search for solutions to this issue. This has resulted in the emerging popularity of Cyclical economics, which attempts to provide a redemptive arc to the economic structures that have contributed to the environmental degradation that is plaguing the planet. This economic approach serves as a necessary alternative to the current 'Linear' economics that perpetuates the 'take, make and waste' approach to production (Kirchherr et al., 2017). While it is widely agreed that a cyclical approach to economics would be a beneficial change from the current linear framework, there is no well-established pathway to facilitate this transition. One proposed facilitator that has circulated through academic discourse and public action has been the use of economic incentives to support this transition. While this proposal can be successful in supporting the movement from linear to cyclical economics, it is insufficient as a sole facilitator as it does not account for changes to be made in the political economy and consumer cultures that are imperative to achieving a cyclical economy. As such, this paper aims to argue that the necessary transition from a linear to cyclical economic approach can not be made solely through the implementation of economic incentives but instead through the critical assessment and reformation of the Capitalist structures and norms that perpetuate the linear economy and disallow the circular economy.

The study of Linear Economics illuminates the strange and unfortunate role that humans continue to play in the planets' environmental degradation. As both the perpetrator and victim, the irresponsible actions of humans for centuries has led to their own demise. These irresponsible actions are neatly outlined in the framework of Linear Economics. Enshrined in this framework is the 'take, make, waste' model, which has contributed to the severe pollution of the world's air, land and waterways (United Nations Environment Programme, 2021). Through this model, the planet's natural resources are continuously drained without any replenishment to fuel the constant production of goods and services, which systematically creates colossal amounts of waste (Jørgensen and Pedersen, 2018). It is obvious that this is not a sustainable approach and as such, Circular Economics aims to remedy this issue. There are many facets to be considered when investigating the structure of a Linear Economy. This essay will focus on the contributors and perpetuations of the model that exist, which will remain untouched by proposed economic incentives. It is important to note that a key contributor to the Linear economy is not just producers and their unsustainable practices, but also consumers and the political economy as a whole. This is often an overlooked perspective in the analysis of a Linear economy as the relationship between the producer and the consumer is integral in upholding the Linear system altogether. An anthropological investigation of Consumerism and its impacts on the environment stands as

an area that implicitly needs to be considered when approaching the possibility of a Circular Economy.

First however, it is necessary to examine the structure of Circular Economics. As the antithesis of Linear Economics, it aims to convert the processes of 'take, make, waste' to 'reduce, reuse, recycle'. In this system, the process of production will be 'closed-looped', meaning that there would be no true waste, but instead, anything considered waste would become an input into another industry (Kirchherr et al., 2017). In addition to its environmental benefits, it also proposes to be more profitable as an alternative as the market becomes less susceptible to price fluctuations due to the stability of resources in a closed-loop system (Sariatli, 2017). These proposed economic and environmental benefits have gained popularity and favour in contemporary times. In 2017, the African Circular Economy Alliance (ACEA) was created with a mission to, "...spur Africa's transformation to a circular economy that delivers economic growth, jobs, and positive environmental outcomes." (African Circular Economy Alliance, 2017) The Alliance includes members from Rwanda, South Africa, Nigeria, Ghana, Côte d'Ivoire, Benin, Burkina Faso and Sudan. The alliance hopes to achieve the transition from a Linear to Circular economy through, "policy development, leadership and advocacy, support in scaling Circular Economic businesses and projects" (ACEA, 2017) Interestingly, with the exclusion of a few European countries like Norway and The Netherlands, African countries have been the main trailblazers in the movement towards a Circular economy. The irony in this is that the environmental degradation that is present within these African countries have mostly been as a result of the exploitation of their natural resources by the more developed countries of the global north. Nevertheless, it is apparent that the ideas of a Circular Economy are increasingly gaining popularity not just in academic discourse, but also at a governmental level.

As this rising popularity grows, the concept of a Circular Economy will become more than just that- a concept. Instead, practical applications of the structure will be developed as a means of implementing it as a functioning body. As mentioned previously, a main suggested facilitator is that of economic incentives, which has been purported as an appropriate and efficient means of implementing a Circular Economy. In this context, the importance of an Anthropological perspective is especially apparent. In order to effectively strategize the transition from a Linear to Circular Economy, it is imperative to identify the contributors to the issue that is being sought to resolve. Contrary to what classical economists may argue, the economy is not an independent naturally occurring phenomena (Bahre, 2013). In fact, it can be argued that the economy is not scientific at all, but instead a social construct (Luyendijk, 2015). It is this understanding of Economics that allows for an opposing view on the use of Economic incentives to implement 'circularity' into the economy. The Linear Economy that exists today did not naturally manifest itself into society. Instead, it was carefully and concisely developed over centuries, with a solid backbone of Capitalist motivation as its foundation. The link between Linear Economics and Capitalism is undeniable, yet often overlooked in ecological discourse. This may come as a result of the previously mentioned notion of economics as a science which is immovable and inevitable. This is explored in an article written by Peter Newell in the *Journal of Global Environmental Change*,

“...capitalism is taken as a background given: an irredeemable fact and seemingly irreversible reality of contemporary social and economic life whose implications it hardly seems worth naming, let alone systematically examining in relation to particular (human) ecologies.” (Newell, 2011)

Despite the fact that the connection may be overlooked, it is imperative to study the link between Linear economics and Capitalism in order to effectively implement a Circular Economy. The motivations of Capitalism are precisely the drivers of a linear economy- profit accumulation, economic growth and resource exploitation by any means necessary (Jacoby, 1971). As such, it can be implied that Linear Economics is implicitly Capitalist in nature, which poses a major issue for those in favour of economic incentives as a facilitator of Circular Economics (Yakovleva, 2020). If a Linear Economy is implicitly Capitalist, can a Circular Economy truly be introduced and furthermore exist, within the same framework?

Through the use of economic incentives the transition from a Linear economy to a Circular economy will be made through a Capitalist route. The insinuation of economic incentives is the proposition of profit as the driving force for this transition, which in itself is problematic. The complication lies not merely within the questioning of whether profit should be the driving force of this transition, but rather if it will succeed as such. In his book, *Green Economics: The God That Failed* Richard Smith investigates the possibility of environmental redemption in a Capitalist Society writing,

“ I claim that the capitalist market system is inherently eco-suicidal, that endless growth can only end in catastrophic eco-collapse, that no amount of tinkering can alter the market system’s suicidal trajectory, and that, therefore, like it or not, humanity has no choice but to try to find a way to replace capitalism with some kind of post-capitalist ecologically sustainable economy.” (Smith, 2016)

However, the supporters of economic incentives as a means of implementing a Circular Economy may rely on the existence of Capitalist countries that have circular models, one of the most popular and successful of such being The Netherlands. The Dutch government seeks to have a completely circular economy by the year 2050 and aims to reduce their use of raw materials by 50% by the year 2030. They aim to reach this goal through, “focus on legislation and regulations that have a stimulating effect, smart market incentives, funding, knowledge and innovation, and international cooperation” and have made much headway as they currently boast an 80% waste recycling rate (The Dutch Ministry of Infrastructure, the Environment and Economic Affairs, 2016). An easy rebuttal would rely on the fact that the Dutch government does not plan on solely using economic incentives as a means of implementing a circular economy, but rather as an aid alongside more powerful tools such as legislation and technological development. However, this does not discredit the fact The Netherlands are seemingly making strides in their approach to a Circular Economy despite being a Capitalist country.

In her article ‘*Future-Proofing Capitalism: The Paradox of The Circular Economy For Plastics*’, Alice Mah argues that in a Capitalist Society, the Circular Economy can be used as an effective environmentally-conscious facade. Similar to the notion of ‘green-washing’ that is present within companies today, through which brands make

unsubstantiated claims to promote themselves as sustainable and environmentally friendly, the Circular Economy can have a similar role on a governmental level in Capitalist countries. It can be argued that this situation is occurring in The Netherlands. Despite being heralded as one of the best countries at recycling its waste, it has been found that a majority of Dutch plastic is exported to third party countries like Turkey and Malaysia that are not equipped to recycle this waste and are thus left to pollute the environment (Lindhout, 2022). As well as this, almost 50% of The Netherlands end-of-life plastics are incinerated, which is quite contrary to the closed-loop economy they seek to support (Brouwer et al., 2019). Additionally, the Dutch government has not successfully terminated short life span products that significantly contribute to linear chains and have high impacts on the environment. In fact, it was reported that “there is currently no broad, fundamental change from the existing linear system to a circular economy.” (Hanemaaijer et al., 2021) This has resulted in recent reports that in 2023 the levels of circularity in the Dutch economy have barely increased since 2014, in terms of the level of recycled products within the economy (Statistics Netherlands, 2023).

The Netherlands actually proves to be a useful case study in this argument against economic incentives for a circular economy. For instance, the examination of the country’s use of a ‘waste tax’ to increase their recycling rate as mentioned previously has shown to be controversial and ineffective. It was found that the waste tax actually has not effectively reduced landfill waste as landfilling and even incineration of waste is still more favoured than recycling because it is more financially attractive (European Commission, 2021). This is an important acknowledgement to make in this context, as the promise of profitability that is the driving point of economic incentives is also the driver of the Linear economy in the first place, therefore the possibility of a Circular Economy being implemented using this measure lies not on the environmental responsibility that firms should hold, but rather on how profitable it is in comparison to Linear models. On a very practical level, this is a serious barrier to implementing a circular economy through economic incentives, as Linear models are inherently run by profit maximisation. Therefore attempting to implement an alternative model that will compete with these profits is an ambitious task.

Another issue that arises within this argument is the scope of what economic incentives can truly reach and affect, particularly with concern to consumers. Consumerism is acknowledged as the protection of “constant acquisition of consumer products (goods and services), consumerism is the essential ideology of global capitalism” (Schmitt, Brakus and Biraglia, 2021). In addition to the role of governments and firms in environmental degradation and the climate crisis, consumerism has also been a major contributor. The ‘insatiable wants’ of consumers that classical economics suggests, has created a culture of limitless consumption within society which has contributed to the unsustainable accumulation of waste and the perpetuation of the Linear economy (Assadourian, 2010). Through the use of economic incentives regardless of being aimed at businesses or civilians (in the form of taxes etc.), consumerist culture is not addressed, which is absolutely necessary for the success of a circular economy. Not only do economic incentives fail to address consumerist culture, it can be argued that it protects it. Economic incentives do not include bans, straight-forward regulations and measures that would directly prevent the unsustainable consumption of goods and services, instead, as its name suggests- it ‘incentivises’ which is crucial in the protection of the illusion of choice enshrined in capitalist society. Thus meaning, people can still *choose*

to consume unsustainably regardless of the increased cost that may arise from such. This further highlights the incompatibility of a circular economy in a Capitalist society, as a circular economy requires the capitalist ideology of consumerism to be addressed.

“In a cyclical economy, it is necessary to separate economic growth from resource consumption, focusing on maintaining value in order to protect ecosystems and natural capital... In many definitions, systemic change is seen as a fundamental part of achieving a cyclical economy.” (Yakovleva, 2020)

As economic incentives have proven to be ineffective as a facilitator of a circular economy, the next logical step may seem to be to find an effective replacement. However, as stated throughout this paper, there is no singular policy or action that can achieve the transition from a linear to cyclical economy. Instead, a review and reform of the enabling system of Linear economics- Capitalism must be conducted. Sustainability researcher and academic Erik Assadourian highlights this need by writing, “Yes, altering a system’s rules (with legislation, for instance) or its flow rates (with taxes or subsidies) can change a system too, but not as fundamentally. These will typically produce only incremental changes. Today more systemic change is needed.” (Assadourian, 2010)

The effective transition from a Linear economy to a truly circular economy consists of more than just the implementation of economic incentives. The principles and framework of these opposing models are so fundamentally different that it is almost ludicrous to assume that they could exist within the same political economic framework. Capitalism is consciously and thoroughly intertwined with the structure of a Linear Economy and thus it can not be replaced and improved within the same capitalist framework. The use of economic incentives to attempt to achieve this change from linearity to circularity is a blatant and arguably lazy attempt to model a new form of capitalism through which the same environmental and social consequences exist, just under a more ‘responsible’ guise. Economic incentives do not only fail to create systemic change within the political economy, but also within consumer cultures that play a crucial role in the longevity of a linear economy. Logically, in order to solve a problem, the contributors to the creation and perpetuation of the problem must be addressed. This logic is strongly deficient in the use of economic incentives in this context. In order for the possibility of a Circular Economy to become reality in our society, the contributor to Linear Economics, that being Capitalism, must not only be addressed but also dismantled. Only through this crucial systemic change, can a Circular Economy truly exist, in which the environment and society are respected and protected to ensure the longevity of human existence on this planet.

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