

GLOBALISATION OF HOMO ECONOMICUS AND PLASTIC BAG REGULATIONS

Küreselleşen Homo Economicus ve Plastik Poşet Düzenlemeleri

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ABSTRACT

Globalisation creates some negative and positive outcomes. Environmental problems that stem from plastic waste can be one of the examples of these negative outcomes. Governments all around the world look for strategies to reduce plastic waste. In this way, neoliberal policies and regulations based upon market actors in reducing the use of plastics can be seen as strategies popularly used by governments. Such policies and regulations are favoured by free-market economists as letting people make their own free choices without any interference by the government. Environmental governance strategies based upon consumer choices can be good examples in this regard. In fact, one of these strategies, plastic bag charges/taxes, has become globalised in recent years. This study specifically explores such regulations evident in steering the individuals' behaviour by highlighting the concept of homo economicus. Rather than focusing on whether these strategies are efficient or not, the study emphasises that homo economicus oriented plastic bag charges/taxes are away from to target the real cause of the global pollution stemming from use of plastics by criticising the neoliberal philosophy of plastic bag charges/taxes from a normative and qualitative perspective.

Key Words: Globalisation, Environmental Law, Neoliberalism, Homo Economicus, Law and Economics

ÖZET

Küreselleşme birçok olumlu ve olumsuz sonucu beraberinde getirmektedir. Plastik atıklar sonucu ortaya çıkan çevre kirliliği küreselleşmenin yarattığı olumsuz sonuçlardan biri olarak görülebilir. Dünyanın farklı yerlerindeki hükümetler plastik atık sorununa çözüm stratejileri aramaktadır. Bu hususta piyasa aktörlerinin tercihleriyle şekillenen neoliberal politikalar ve düzenlemeler birçok hükümet tarafından kullanılan uygulamalar haline gelmiştir. Bu politikalar ve düzenlemeler serbest piyasa ekonomistlerinin ateşli bir şekilde savundukları devlet müdahalesi yerine

There is no requirement of Ethics Committee Approval for this study.

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özgür birey tercihlerinden yana olan bir bakış açısını öne çıkartmaktadır. Tüketici tercihleri üzerine kurulu çevresel yönetim düzenlemeleri bunların en güzel örneği olabilir. Bu çalışma söz konusu düzenlemelerden olan ve son yıllarda küresel bir boyuta ulaşan plastik poşetleri ücretli hale getiren/vergilendiren yasal düzenlemeleri incelemektedir. Bu inceleme ekonomik insan anlamına gelen homo economicus kavramına odaklanmaktadır. Çalışma söz konusu hukuki düzenlemelerin başarılı olup olmadığıyla ilgilenmekten ziyade bu uygulamaların normatif ve nitel bir bakış açısı ile eleştirisini hedeflemektedir. Çalışmanın amacı bireylerin özgür tercihleri üzerine kurulu olduğu iddia edilen söz konusu düzenlemelerin sınırlarına dikkat çekmek ve bu düzenlemelerin plastik atık sorununun küresel yönetiminde kullandığı neoliberal yaklaşımın ne ölçüde sorunlu olduğunu irdelemektir.

Anahtar Kelimeler: Küreselleşme, Çevre Hukuku, Neoliberalizm, Homo Economicus, Hukuk ve Ekonomi

INTRODUCTION

Plastic is cheap and durable. In today's world, in almost every single technological device has plastic parts. Although plastic plays a significant role as the main material in the products that we use in everyday life, plastic pollution constitutes a significant global problem since plastics are made from fossil fuels, such as oil, gas and coal. Plastic bags made from non-biodegradable high-density polyethylene (HDPE) can be one example of these products that we use daily.¹ Around the world today, trillions of plastic bags are being used every year.² Such non-biodegradable bags have an enormously negative impact on the environment globally. Against this global problem, national governments have already started passing laws restricting or banning the single use of plastic bags.³

Over the last few decades, globalisation has transformed the regulatory power of nation states.⁴ The idea of small governments that are reluctant to interfere in the economic and social lives of their populations has become the fashion all over the world. In this environment, less interventionist regulatory strategies, grounded in the private choices of market actors, have become more favourable. Neoliberal policies and regulatory strategies relying on market

¹ Chris Edwards and Jonna Meyhoff Fry, *Life Cycle Assessment of Supermarket Carrier Bags: Draft Report* (Great Britain Environment Agency 2010)

² Kurt Spokas 'Plastics-still young, but having a mature impact' (2008) 28 *Waste Management* 473, 473-474.

³ United Nations Environment Programme (UNEP), 'Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations' (UNEP 2018) <<https://www.unenvironment.org/resources/report/legal-limits-single-use-plastics-and-microplastics>> accessed 5 August 2022.

⁴ Andreas G Scherer and Guido Palazzo 'The New Political role of Business in a Globalized World: A Review of a New Perspective on CSR and its Implications for the Firm, Governance, and Democracy' (2011) 48 (4) *Journal of Management Studies* 899, 909.

actors and requiring minimum state intervention are used in different areas of social and economic life. These strategies are being used to solve environmental issues as well.⁵ The environment, which was previously regulated by the state, has become an area that can be regulated by market actors in this neoliberal fashion. Policies and strategies based upon environmental taxes, tradable permit systems and targeted subsidies are being chosen by many governments.⁶ Some of the neoliberal policies and strategies specifically focus on the willingness of consumers to act in an environmentally friendly manner. Plastic bag charges/taxes can be good examples in this respect. Rather than banning plastic bags, for example, governments have begun to tax plastic bag consumption or require retailers and shops to charge for plastic bags.⁷ These strategies merely aim to influence the behaviour of consumers by increasing the cost of consuming plastic bags.

In accordance with such neoliberal strategies, consumers are seen as economic actors making rational choices. By letting people take their own decisions, plastic bag charges/taxes enable consumers to consider the cost of a plastic carrier bag. This philosophy of plastic bag charges/taxes by giving more freedom to consumers can be seen as a strategy that relies upon the concept of homo economicus (economic man). Homo economicus can be defined as ‘an entrepreneur of himself’.⁸ Homo economicus acts as an entrepreneur who never stops investing, rather than a mere consumer.⁹ By letting consumers take their own decisions, plastic bag charges/taxes enable individuals to consider the cost of a plastic carrier bag. In other words, such regulatory strategies enable consumers to act as homo economicus.

Yet to what extent plastic do bag charges/taxes based on the concept of homo economicus play a role in stopping global plastic waste? What role can they play in the developing world? Are these neoliberal strategies likely to focus on the real cause of the plastic waste problem? The following study aims to answer the above questions. For this purpose, section 1 begins with the definition of neoliberalism. In section 1.1, the main arguments of neoliberal thought are traced back to the early founders of liberalism. The section also shows how neoliberalism plays a role in the regulatory environment all over the world. Then, in section 1.2, the concept of homo economicus and its role

⁵ Karen Bakker, ‘The Limits of ‘Neoliberal Natures’: Debating Green Neoliberalism’ (2010) 34 (6) *Progress in Human Geography* 715, 735.

⁶ European Commission (EC) Environment, Environmental Economics (EC) <<https://ec.europa.eu/environment/enveco/mbi.htm>> accessed 5 August 2022.

⁷ UNEP, ‘Legal Limits on Single-Use Plastics and Microplastics’ (n 3).

⁸ Michel Foucault, *the Birth of Biopolitics: Lectures at the Collège de France, 1978-79* (Graham Burchell tr, François Ewald and Alessandro Fontana ed, Palgrave Macmillan 2008) 226

⁹ Todd May, *The Philosophy of Foucault* (Acumen Press 2006)158.

in neoliberalism are briefly introduced. In this respect, homo economicus and neoliberalism are scrutinised as an art of governance. Next, in section 2, globalisation of plastic charges/taxes is analysed. In this section, the plastic bag charges/taxes in different countries are exemplified to show the pros and cons of the regulatory strategies placed upon homo economicus. Yet, a comprehensive investigation of all neoliberal policies and regulatory strategies placed upon homo economicus is beyond the limits of section 2, which rather criticises some of the plastic bag charges/taxes applied by the governments in developing countries to reduce plastic waste. Rather than focusing on whether these strategies are successful, the section critically analyses homo economicus from a normative perspective.

A. Liberalism, Neoliberalism and Homo Economicus

Neoliberalism is mostly defined as the dominant ideology of today's world.¹⁰ What factors play a role in its dominance? On which foundations is it built upon? It may be difficult to answer these questions without understanding what neoliberalism is. Therefore, before beginning, it is crucial to conceptualise neoliberalism. To do this, one should understand what classical liberalism is since some have depicted neoliberalism as 'an updated version of classical liberalism'.¹¹

1. Classical Liberalism and Historical Background of Neoliberalism

Chronologically, classical liberalism can be traced back to John Locke. One of the main arguments of Locke is the significance of the creation of a constitutional government against absolutism.¹² In this way, Locke pays undivided attention to the protection of 'rights to life, liberty and property'.¹³ This view constitutes the early foundation of liberalism as a political ideology. Thus, it appears that the early version of liberalism aims to restrict absolute monarchies. Therefore, it can be seen as libertarian.

Free market and laissez-faire economics, undoubtedly, constitute other pillars of classical liberalism.¹⁴ According to these pillars, for example, 'the state is to refrain from "interfering" with the economic activities of self-interested citizens...'¹⁵ In this view, the role of the liberal state is no more than a 'night-

¹⁰ Alfredo Saad-Filho and Deborah Johnston (eds), *Neoliberalism: A Critical Reader* (Pluto Press 2005) 1.

¹¹ Andrew Heywood, *Politics* (5th edn, Palgrave Macmillan 2013) 295-296.

¹² *ibid.* 80.

¹³ John Locke and Peter Laslett, *Two treatises of government: A Critical Edition with an Introduction and Apparatus Criticus* by Peter Laslett (Cambridge University Press 1970) 289.

¹⁴ Manfred B Steger and Ravi K Roy, *Neoliberalism: A Very Short Introduction* (Oxford University Press 2010) 2-3.

¹⁵ *ibid.*

watchman'.¹⁶ From this perspective, the liberal state can be described as responsible for 'market expansion and stability'.¹⁷ In this environment, individual choices of self-interested people become significant. In the *Wealth of Nations*, Adam Smith clarifies this self-interested nature of individuals by stating that '[i]t is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest'.¹⁸ Smith depicts a world of barter. In the world he depicts, rational individuals act in accordance with their self-interests. There is no need for the intervention of the State in this world where the 'invisible hand' of the market works without any intervention.¹⁹ The state's intervention in the market or society may not be successful because the State has a limited knowledge.²⁰ The 'invisible hand', shaped by the egoistic behaviour of individuals, however, creates the public good.²¹

Nonetheless, economic and social inequalities stem from the capitalist system caused the birth of the new version of liberalism called modern liberalism.²² After the great depression, Keynesian economics, theorised by John M. Keynes, seeing the government intervention in the economy as vital, became the most important approach in economics.²³ Despite classical liberalism, against the government intervention in social and economic life, Keynesian economics favours government spending by highlighting its importance in creating jobs and increasing consumer spending.²⁴ According to Keynes, *laissez faire* economics constituted one of the reasons of the great depression.²⁵

In the 1970s, however, the economic crises and the oil shock damaged the popularity of Keynesian economics. The opposition against Keynesian economics triggered a deregulation movement all around the world and neoliberal policies become fashionable. In the following years, neoliberal governments seized the power. Margaret Thatcher in the UK and Ronald Reagan in the US were two figures symbolizing this fashion of neoliberalism.²⁶

¹⁶ Heywood (n 11) 63.

¹⁷ Majia H Nadesan, *Governmentality, Biopower, and Everyday Life* (Routledge 2010) 20.

¹⁸ Adam Smith, *On the Division of Labour: The Wealth of Nations, Books I–III* (Penguin Classics 1986) 119.

¹⁹ *ibid.*

²⁰ Thomas Lemke, *Foucault's Analysis of Modern Governmentality: A Critique of Political Reason* (Verso Books 2019) 384-385.

²¹ Collin Gordon, 'Governmental Rationality: An Introduction' in Graham Burchell, Colin Gordon, and Peter Miller (eds) *The Foucault Effect: Studies in Governmentality: with two Lectures by and an Interview with Michel Foucault* (Harvester Wheatsheaf 1991) 15.

²² Heywood (n 11) 33.

²³ Sarwat Jahan, Ahmed Mahmud and Chris Papageorgiou, 'What is Keynesian Economics' in J M Rowe (ed), *Finance and Development: Back to Basics: Economic Concepts Explained*, 4-5 (IMF 2017) 53-54.

²⁴ Steger and Roy (n 14) 6.

²⁵ Heywood (n 11) 287.

²⁶ David Harvey; *A Brief History of Neoliberalism* (Oxford University Press 2007) 9.

As mentioned above, neoliberalism is introduced as ‘an updated version of classical liberalism’.²⁷ It has some similarities with classical liberalism such as the idea that States should not be interfering with the economic activities of individuals. As classical liberalism, neoliberalism considers market regulations as burdensome. Therefore, with the rise of neoliberalism, the deregulation movement becomes fashionable. Furthermore, in neoliberalism the State pays attention to the needs of the market.²⁸ The market becomes an actor that may affect the public policies. There is no doubt that this affects the regulatory policies.

With the rise of neoliberalism, most states have turned towards market-oriented strategies more than ever before. The change from the command-and-control type regulations to more autonomous regulatory strategies has accelerated. Command-and-control regulations, in which the States play the key role, have been abandoned since they were seen as inefficient and inflexible.²⁹

Even though neoliberalism can be seen as an updated version of liberalism, there is no doubt that it is broader than that depiction. Neoliberalism can be described as a concept beyond an economic or a political ideology.³⁰ As Harvey highlights, neoliberalism also has an impact on how we interpret the world.³¹ Rather than impinging on the mere economic aspect of life, neoliberalism affects almost all aspects of life. From this perspective, neoliberalism can be depicted as a concept changing human behaviour. It makes individuals internalise ‘economic calculation’ in their decisions with respect to the different aspects of life, such as having a child or getting married.³²

In this environment, in which utility maximisation plays the key role, the most distinguishing feature of neoliberalism may be its undivided attention to competition in the market. In neoliberalism human beings are barely defined as homo economicus asserting that economic factors play the major role in the decisions that human beings take.³³ The next section elaborates the investigation of how the concept of homo economicus plays a role in neoliberal thought.

²⁷ Heywood (n 11) 295-296.

²⁸ Wendy Brown, *Edgework: Critical Essays on Knowledge and Politics* (Princeton University Press 2009) 41.

²⁹ Jennifer A Zerk, *Multinationals and Corporate Social Responsibility: Limitations and Opportunities in International Law* (Cambridge University Press 2006) 37.

³⁰ Jason Read, ‘A Genealogy of Homo-Economicus: Neoliberalism and the Production of Subjectivity’ (2009) 6 *Foucault Studies* 25, 26.

³¹ Harvey (n 26) 1.

³² Geoffroy De Lagasnerie, *Foucault Against Neoliberalism?* (Rowman & Littlefield Publishers 2020) 76-77.

³³ Wendy Brown, *Undoing the Demos: Neoliberalism’s Stealth Revolution* (MIT Press 2015) 81.

2. Neoliberalism as Governmentality and Homo Economicus

Foucault approaches both liberalism and neoliberalism from a broader perspective during his lectures at the Collège de France in 1978–79.³⁴ He starts his lectures with an explanation of the historical change in ‘the art of government’ by touching upon the ‘rationalization of governmental practice in the exercise of political sovereignty’.³⁵ According to him, political economy leads to an internal limitation of governmental rationality starting from the middle of the 18th century with the rise of liberalism. In this regard, liberalism shapes ‘the art of government’ and limits governmental action.³⁶ With the limitation of governmental action individual freedom becomes broader. Homo economicus who exchanges goods constitutes the main principle in the efficiency of the market and wealth for society. In this environment, free choices of self-interested homo economicus not only improve individual wealth but also the public good. As mentioned above, this also constitutes the chief argument of Smith’s theory of an invisible hand, which relies on barter in the market.³⁷

Self-interested homo economicus constitutes the efficiency of the market in both liberalism and neoliberalism. In Foucault’s depiction of neoliberalism, however, homo economicus individuals compete with each other. Foucault focuses on the alteration in the character of homo economicus which is now an ‘entrepreneur, an entrepreneur of himself’ rather than ‘the man of exchange’ as Smith defines him.³⁸ As Foucault depicts, in neoliberalism, even though barter still plays a role in the market, economic, social and political relations are all determined by competition amongst people. Therefore, from the Foucauldian perspective, neoliberalism can be understood more as a concept broader rather than as a mere economic or political ideology. Neoliberalism should be seen as a type of governmentality in which people are being controlled or they control themselves. Individuals internalise some of the control mechanisms as well. In other words, neoliberalism can be depicted as a way for production of the subjectivity.³⁹ In this process, people become their own guardians.⁴⁰

The nature of the State also changes with neoliberalism. Rather than classical liberalism, in which State intervention in the market is seen as undesirable, the

³⁴ Foucault (n 8)

³⁵ Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79* (Graham Burchell tr, François Ewald and Alessandro Fontana ed, Palgrave Macmillan 2008) 2.

³⁶ Foucault (n 8) 17.

³⁷ Smith (n 18) 119.

³⁸ Foucault (n 8) 225-226.

³⁹ Read (n 30).

⁴⁰ Foucault (n 8) 119.

neoliberal State seems more eager to intervene in the market conditions to sustain the competition amongst individuals.⁴¹ Even though the main claims of neoliberalism rely upon minimum government intervention in the market, the government intervention in neoliberalism is merely required to focus upon the continuation of market conditions. This intervention, however, differs from the traditional meaning of intervention in the market as criticised under classical liberalism. As Lemke lucidly highlights, in neoliberalism the market shapes the State rather than the State shaping the market.⁴² This undeniably leads to a metamorphism in the nature of the State. With this change, some of the traditional responsibilities and obligations of the State towards society are being transferred to the market actors. Social control, which traditionally belongs to the State, occurs through self-regulation.⁴³ Therefore, this new control mechanism requires freedom rather than coercion.⁴⁴

In a nutshell, neoliberalism creates a change in the behaviour of both individuals and the State to sustain competition in the market. In this way, the fashion of plastic bag charges/taxes can be a useful example to be examined. Such regulatory strategies are promoted as letting people make their own free choices without any interference in the market. By introducing these strategies, governments aim to enable homo economicus to take their own decisions in paying extra money for each plastic bag, rather than banning plastic bags. These strategies are being presented as mechanisms to reduce plastic waste and environmental damage globally. The next section touches upon how these strategies may fail to be sustainable to obtain that purpose.

B. Plastic Waste as a Global Problem and the Globalisation of Plastic Bag Charges/Taxes

As highlighted above, plastic waste and pollution constitute a significant global problem. Trillions of plastic bags being used by individuals make up the significant portion of this waste problem.⁴⁵ Against this problem, individual governments have started passing laws restricting the use of plastic bags.⁴⁶ Governments, for example, pass laws to charge extra money for each plastic bag. By these laws, governments let consumers make their own free choices, rather than banning use of all plastic bags by a command-and-control type of regulation. These regulations claim to make market players, particularly consumers, more significant actors in terms of reducing plastic consumption.

⁴¹ *ibid* 119.

⁴² Lemke, Foucault's Analysis of Modern Governmentality (n 20) 401.

⁴³ Nancy Fraser, 'From Discipline to Flexibilization? Rereading Foucault in the Shadow of Globalization' (2003) 10(2) *Constellations* 160, 164.

⁴⁴ Lemke, Foucault's Analysis of Modern Governmentality (n 20) 419-428.

⁴⁵ Spokas (n 2) 473-474.

⁴⁶ UNEP, 'Legal Limits on Single-Use Plastics and Microplastics' (n 3).

More specifically, by letting individuals make their own decisions, these laws enable consumers to consider the cost of a plastic carrier bag. In other words, they enable homo economicus to take their own decisions.

According to the statistics, in more than 80 countries free plastic bags are banned now.⁴⁷ Several countries in Africa, South America, Asia, Europe and the Middle East have taxed particular types of plastic bags.⁴⁸ In some countries, even if the national/federal government has not passed a plastic bag law, local governments have some restrictions such as charges/taxes on free plastic bags.⁴⁹ Developing nations, as well as the developed ones, have also been using plastic bag charges/taxes to reduce plastic waste. In fact, some governments in the developing world passed such plastic bag regulations earlier than the countries in the global north.⁵⁰ There is no doubt that the inadequate infrastructure for waste management and recycling in developing countries may be seen as a key factor for such countries in restricting the use of free plastic bags.

Plastic bag charges/taxes may play a role in reducing the number of bags used by consumers. For example, in England, the use of plastic bags decreased 95% between 2015 and 2020 after the government introduced the law requiring the supermarkets to charge 5p for single use plastic bags.⁵¹ In Ireland, the tax on plastic bags is strongly supported by the public and has decreased the use of plastic bags dramatically as well.⁵² Bans on free plastic bags in developing African countries are also appreciated as successful. In Kenya, it is asserted that the strict ban on plastic bags brought about the saving of 100 million bags a year.⁵³ Another example can be Rwanda. In this country, the ban on plastic bags is seen as an important factor in making Kigali, the capital of Rwanda, one of the cleanest cities in the African continent.⁵⁴

⁴⁷ ibid 10.

⁴⁸ Rachel M Miller, 'Plastic Shopping Bags: An Analysis of Policy Instruments for Plastic Bag Reduction' (MSc Thesis, Universiteit Utrecht 2012) 13.

⁴⁹ UNEP, 'Legal Limits on Single-Use Plastics and Microplastics' (n 3) 10.

⁵⁰ Jennifer Clapp and Linda Swanston, 'Doing Away with Plastic Shopping Bags: International Patterns of Norm Emergence and Policy Implementation' (2009) 18(3) Environmental Politics 315

⁵¹ Rebecca Smithers, 2020, 'Use of plastic bags in England drops by 59% in a year' The Guardian (30 July 2020) <<https://www.theguardian.com/environment/2020/jul/30/use-of-plastic-bags-in-england-drops-by-59-in-a-year>> accessed 3 July 2022

⁵² Scientist Action and Advocacy Network (ScAAN), 'Effectiveness of Plastic Regulation Around the World' (2019) <https://plasticpollutioncoalitionresources.org/wp-content/uploads/2017/03/Effectiveness_of_plastic_regulation_around_the_world_4_pages.pdf> accessed 18 July 2022, 1-2.

⁵³ Laura Parker, 'Plastic Bag Bans are Spreading. But are they Truly Effective?' National Geographic (17 April 2019) <<https://www.nationalgeographic.com/environment/article/plastic-bag-bans-kenya-to-us-reduce-pollution>> accessed 5 July 2022.

⁵⁴ UNEP, 'Single-Use Plastics: A Roadmap for Sustainability (rev. 2)' (UNEP 2018) <<http://hdl.handle.net/20.500.11822/25496>> accessed 3 July 2022, 50.

However, although the number of governments restricting/banning free plastic bags is increasing dramatically, ‘plastic pollution is still a [growing] global problem’.⁵⁵ There may be a myriad of reasons for this. First, even though plastic bag charges/taxes reduce plastic bag consumption in some countries, in other countries consumers continue using plastic bags even if they pay for them. For instance, in Botswana, the continuing willingness of the consumers to pay for plastic bags can serve as a good example for an ineffective plastic bag charges/taxes. Second, banning free plastic bags does not mean banning plastic bags.⁵⁶ Plastic bag charges/taxes focus only on the consumption of a particular type of single-use plastic bag. Such rules do not regulate the actual production of bags as well. Thus, even if these strategies succeed in reducing a certain type of plastic bag, plastic bag producing companies continue manufacturing those bags and some other bags not taxed by law.

Moreover, plastic bag charges/taxes are likely to make people use thicker re-usable bags, which may create a more harmful impact on the environment. According to statistics in some countries, even though plastic bag charges/taxes led to a decrease in consumption of single-use plastic bags, there has been an increase in the use of stronger reusable plastic bags.⁵⁷ With the impact of the taxes and charges on single-use plastic bags mentioned above, consumers have turned to re-usable thicker plastic bags designed to be used multiple times. Reusable plastic bags are not environmentally friendly either as their efficiency depends on how many times the consumers use them.⁵⁸

Yet more importantly, plastic bag charges/taxes may seem unlikely to solve the plastic waste problem of most developing countries due to the global neoliberal economic system. Ongoing trade of plastic waste from the developed countries to the developing ones may be one example in this regard. Even if developing countries pass new laws to tax single use plastic bags these laws may not help them reduce the plastic pollution as plastic waste mostly from western countries continues to come. Although the governments of some of these countries passed laws to restrict the use of plastic bags, trading plastic waste is still a crucial problem.⁵⁹

⁵⁵ Carole Excell, ‘127 Countries Now Regulate Plastic Bags. Why Aren’t We Seeing Less Pollution?’ World Resources Institute (11 March 2019) <<https://www.wri.org/insights/127-countries-now-regulate-plastic-bags-why-arent-we-seeing-less-pollution>> accessed 3 July 2022.

⁵⁶ ScAAN (n 52) 4.

⁵⁷ UNEP, ‘Single-Use Plastics’ (n 54) 27-44.

⁵⁸ Kat Eschner, ‘Reusable Grocery Bags Aren’t as Environmentally Friendly as you Might Think’ Popular Science (28 October 2020) <<https://www.popsoci.com/story/environment/single-use-plastic-misconceptions/>> accessed 22 July 2022.

⁵⁹ Kutoma Wakunuma, ‘Plastic Waste is Hurting Women in Developing Countries – but There are Ways to Stop it’ The Conversation (22 October 2021) <<https://theconversation.com/>

In many developing countries there are now restrictions on single use plastics. However, even though the governments of these countries pass new laws to ban free plastic bags, plastic waste is still a crucial problem. In this regard, Turkey can serve as a good example of this phenomenon in Europe. In 2018, with an amendment made in the Environmental Law No. 2872 free plastic bags were banned in supermarkets. The regulation, which requires supermarkets to charge TL 0.25 (of which 0.10 liras consist of factory cost and 0.15 liras for environmental projects) per a plastic bag, entered into force on January 1, 2019. In accordance with the regulation consumers are required to pay extra money for each plastic bag. With this law, the Turkish government aimed to prevent ecocide by decreasing plastic bag consumption since more than 200.000 tonnes of plastic bags were being used in the country per year. In fact, the law led to a dramatic decrease in the use of plastic bags in the country.⁶⁰

However, even though plastic bag charges/taxes reduces the number of plastic bags being used by citizens, the plastic waste import of Turkey has increased recently.⁶¹ Turkey's import of plastic waste from Europe has increased dramatically over the last few years.⁶² For instance, plastic waste trade from the UK to Turkey has increased sharply in recent times.⁶³ In 2022, an experiment showed that recycled plastic products with tracking devices of one of the largest British retailer companies ended up, after a long journey, in Adana, in the south of Turkey.⁶⁴ It is alleged that these products are not properly recycled and pollute the environment in the country.

In addition to Turkey, there may be many examples to illustrate the increase in plastic waste exported from the developed countries to the developing ones.⁶⁵ Malaysia, Vietnam, Thailand and Indonesia can serve as some leading

plastic-waste-is-hurting-women-in-developing-countries-but-there-are-ways-to-stop-it-166596#:~:text=Developing%20countries%20are%20likely%20to,into%20extreme%20poverty%20during%202021> accessed 3 July 2022.

⁶⁰ Gokhan Ergocun, 'Turkey: Plastic Bag Use Down 50 pct with New Regulation' Anadolu Agency (4 January 2019) <<https://www.aa.com.tr/en/economy/turkey-plastic-bag-use-down-50-pct-with-new-regulation/1355806#:~:text=Plastic%20bag%20usage%20in%20Turkey,urbanization%20minister%20said%20on%20Friday.>> accessed 21 July 2022.

⁶¹ Kathryn Snowden, 'UK Plastic Waste being Dumped and Burned in Turkey, says Greenpeace' BBC News (17 May 2021) <<https://www.bbc.co.uk/news/uk-57139474>> accessed 21 July 2022.

⁶² Selin Ugurtas, 'Why Turkey became Europe's garbage dump' Politico (18 September 2020) <<https://www.politico.eu/article/why-turkey-became-europes-garbage-dump/>> accessed 21 July 2022.

⁶³ ibid.

⁶⁴ Kit Chellel and Wojciech Moskwa, 'A Plastic Bag's 2,000-Mile Journey Shows the Messy Truth About Recycling' Bloomberg (29 March 2022) <<https://www.bloomberg.com/graphics/2022-tesco-recycle-plastic-waste-pledge-falls-short/>> accessed 21 July 2022.

⁶⁵ Wakunuma (n 59).

examples in this respect.⁶⁶ Most of these countries have introduced plastic bag charges/taxes based upon the concept of homo economicus.⁶⁷ For instance, even though single use plastic bags are banned in Jakarta, most of the plastic waste from western countries goes to Indonesia.⁶⁸ Waste from the developed world, such as Germany, Australia, the Netherlands and the UK, to Indonesia increased considerably over the last few years.⁶⁹

In order to fight the plastic waste problem in the developing world, there is indubitably a need for international regulations. Nation-states, both the developing and developed ones need to agree upon an international treaty to reduce the production of plastics and plastic waste export.⁷⁰ However, even if nations agree upon an international treaty to reduce plastic waste, this treaty may not be successful in ending plastic waste, as plastic is still the cheapest and easiest to use material for homo economicus. Such treaty may be insufficient to prevent the exportation of plastic waste to the developing world since plastics are often transported to developing countries illegally.⁷¹ Therefore, the concept of homo economicus deserves a further critique.

1. Critique of Homo Economicus

More important critiques of plastic bag charges/taxes may be related to the concept of homo economicus on which the global neoliberal policies are built. In fact, listing the shortcomings of homo economicus can help us to contemplate to what extent plastic bag charges/taxes are likely to be sufficient in the war against the global plastic waste.

Urbina and Ruiz-Villaverde clearly list the problematical aspects of homo economicus.⁷² One criticism originates from behavioural economics.

⁶⁶ Greenpeace, 'Data from the Global Plastics Waste Trade 2016-2018 and the Offshore Impact of China's Foreign Waste Import Ban' (23 April 2019) <<https://www.greenpeace.org/eastasia/publication/5907/data-from-the-global-plastics-waste-trade-2016-2018-and-the-offshore-impact-of-chinas-foreign-waste-import-ban/>> accessed 21 July 2022, 1.

⁶⁷ UNEP, 'Single-Use Plastics' (n 54).

⁶⁸ Interpol, 'Emerging Criminal Trends in the Global Plastic Waste Market since January 2018' (Interpol 2018) <<https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-report-alerts-to-sharp-rise-in-plastic-waste-crime>> accessed 21 July 2022,

⁶⁹ *ibid* 13.

⁷⁰ In March 2022, the commitment by the States to build a legally binding treaty to reduce plastic waste at the United Nations Environment Assembly of the UNEP can be an important step in this regard. United Nations Environment Assembly of the UNEP, 'End Plastic Pollution: towards an International Legally Binding Instrument' (7 March 2022) UNEP/EA.5/Res.14

⁷¹ Jake Kwoon, 'South Korea's Plastic Problem is a Literal Trash Fire' CNN (3 March 2019) <<https://edition.cnn.com/2019/03/02/asia/south-korea-trash-ships-intl/index.html>> accessed 16 August 2022; Interpol (n 67).

⁷² Dante A Urbina and Alberto R Villaverde, 'A Critical Review of Homo Economicus from Five Approaches' (2019) 78(1) *American Journal of Economics and Sociology* 63



Behavioural economics, argue that humans suffer some cognitive and non-cognitive biases.⁷³ From this perspective, in some circumstances, it is possible to claim that homo economicus may not act rationally even if they have enough information.⁷⁴ Individuals occasionally make mistakes as they have partial data, and sometimes they modify their decisions according to their culture. Individuals may not also spend sufficient time in thinking about the consequences of their choices. Therefore, today, many governments in different countries use behavioural regulatory strategies, such as nudging, to steer the bad choices of their citizens.⁷⁵ In such strategies, paternalistic governments aim to help or control the thoughts of individuals while they are making choices.⁷⁶

Second, with respect to the choices of homo economicus there may be another question: Can individuals take decisions without any social considerations? There is no doubt that as social creatures, individuals can also be depicted as homo sociologicus (sociological humans).⁷⁷ Social relations and values may affect the decisions of homo economicus. Individuals, for example, individuals may consider what other people think about their behaviour.⁷⁸ According to a research about psychological predictors of plastic bag consumption, individuals who care about their physical appearance are more likely to purchase plastic bags.⁷⁹ In the same research, it is highlighted that young people are inclined to pay extra money for a plastic bag. These findings show that the decisions of homo economicus may differ according to the social groups to which they belong. In other words, social factors may affect the decisions of individuals.

Third, regulatory strategies based upon the concept of homo economicus can be criticised for being anthropocentric. In anthropocentrism, human needs, rather than the needs of the environment, are considered as the central factor in decision making.⁸⁰ This approach seems to reflect the main philosophy of liberalism in which nature is understood as useful for human needs. In strategies like plastic bag charges/taxes, consumers who may agree to pay additional money for plastic bags are free to create plastic waste in the ecosystem for their own needs. In other words, homo economicus can take decisions 'at the

⁷³ *ibid* 67.

⁷⁴ Peter Fleming, *The Death of Homo Economicus: Work, Debt and the Myth of Endless Accumulation* (Pluto Press 2017) 105.

⁷⁵ Will Leggett, 'The Politics of Behaviour Change: Nudge, Neoliberalism and the State' (2014) 42(1) *Policy & Politics* 3

⁷⁶ *ibid* 8.

⁷⁷ Irene CL Ng and Lu-Ming Tseng, 'Learning to be Sociable: The Evolution of Homo Economicus' (2008) 67(2) *American Journal of Economics and Sociology*, 265

⁷⁸ *ibid* 273-277.

⁷⁹ Rosa Lavelle-Hill and others, 'Psychological and Demographic Predictors of Plastic Bag Consumption in Transaction Data' (2020) 72 *Journal of Environmental Psychology* 101473

⁸⁰ Heywood (n 11) 113.

expense of the environment'.⁸¹ In fact, some of these decisions may even create negative consequences for homo economicus individuals themselves in the long run. It can even be claimed that individuals' short-term myopic decisions can be one of the reasons for today's environmental degradation.⁸²

The decisions taken by homo economicus do not only affect their life but also affect the needs of future generations. In this regard, even if individuals can be free to make their own choices, one may ask whether they are free to make choices on behalf of future generations. In fact, homo economicus may contradict sustainability. In accordance with the concept of sustainability, individuals are supposed to consider the needs of future generations. According to the United Nations Brundtland Commission, sustainability means 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'.⁸³ This definition clearly highlights the necessity that individuals are expected to consider the needs of future generations. That point of view exceeds the short-sighted nature of homo economicus. Sustainable decisions can be seen as beyond the economic interests of individuals. It is also clear that letting individuals take decisions that are associated with the interests of the next generations may not be sustainable. Thus, two concepts, sustainability and homo economicus, are likely to contradict each other.

Plastic bag charges (and other neoliberal regulatory strategies relying upon homo economicus) see individuals as self-interested creatures. If individuals are expected to act like entrepreneurs, it is likely to see them who jeopardise the common heritage of humanity for their own short-term interests. Plastic bag charges/taxes are based upon the neoliberal philosophy that individuals perceive almost everything from a commercial perspective. Therefore, even the environment is commodified and commercialised from this perspective. As Lemke highlights, in neoliberalism, nature has been commercialised and become exploitable as well.⁸⁴

Finally, yet importantly, neoliberal strategies like plastic bag charges/taxes based upon homo economicus are unlikely to stop the plastic waste problem especially in developing countries. Unquestionably, plastic waste does not only stem from the use of plastic bags. In daily life plastic is an inseparable part of

⁸¹ Sirca S Gogus, 'Can "Homo Economicus" Help Save the Environment?' Climate Exchange (20 September 2014) <<https://climate-exchange.org/2014/08/20/can-homo-economicus-help-save-the-environment/>> accessed 21 July 2022.

⁸² Urbina and Villaverde (n 71) 78.

⁸³ World Commission on Environment and Development, 'Our Common Future' (Oxford University Press 1987) 383.

⁸⁴ Thomas Lemke, 'Foucault, Governmentality, and Critique' (Rethinking Marxism Conference, University of Amherst, 21-24 September 2002) <<http://www.thomaslemkeweb.de/publikationen/Foucault,%20Governmentality,%20and%20Critique%20IV-2.pdf>> accessed 18 July 2022, 8.

the items that we use. Thus, plastic bag charges/taxes may not be sufficient to solve the plastic waste problem. Moreover, plastics compare to other materials are cheap as well. Hence, neoliberal strategies make individuals turn towards plastics. Such strategies that rely upon homo economicus produce mere economic subjects. Thus, in this neoliberal world, in which people act as self-interested entrepreneurs, the export of plastic waste from rich countries to poor countries proliferates dramatically.⁸⁵

From both the perspective of the exporting developed country government and importing developing country governments, the concept of homo economicus constitute the main justification for such neoliberal strategies. As highlighted above, many governments tend towards neoliberal strategies like plastic bag charges/taxes. Undoubtedly, economic benefits of plastics play a role in this respect. Rather than banning the production of certain types of plastics, neoliberal strategies expect homo economicus to take decisions with respect to plastic consumption. Whereas these strategies aim at making individuals more responsible for their consumption habits, they do not focus on reducing the production of plastics. In this regard, in some of the developed countries, companies, such as the ones producing consumer goods and making a profit from fossil fuels, enjoy a lack of strict regulations to reduce the production of single-use plastics.⁸⁶ In developing countries, on the other hand, the economic revenue from the plastic waste sector makes governments less eager to pass strict laws as hundreds of thousands of people are employed in this sector.⁸⁷ Therefore, developing countries become the final destination of the plastic waste.

CONCLUSION

The current study puts an emphasis upon regulatory developments in favour of the free choices of individuals. In this regard, governments' tendencies to use strategies based upon homo economicus, more specifically plastic bag charges/taxes, are analysed to criticise neoliberalism. The main point made in this study is that even though plastic bag charges may play a role in reducing the consumption of plastic bags to some extent, they do not aim to change the philosophy of neoliberalism which is causing plastic waste. The laws passed by governments charging fees for the use of plastic bags show how the governments make individuals responsible for plastic pollution. Such laws enable homo economicus to take a decision about the money to spend for an extra plastic bag. In this respect, self-interested home economicus is expected

⁸⁵ Greenpeace (n 66).

⁸⁶ Kate Lin, 'Why Plastic Pollution is an Environmental Justice Issue' Greenpeace (23 April 2019) <<https://www.greenpeace.org/international/story/21792/plastic-waste-environmental-justice/>> accessed 15 August 2022.

⁸⁷ Wakunuma (n 59).

to take economically rational decisions that may affect the consumption of plastic bags.

Despite the arguments of both liberalism and neoliberalism in favour of free choices of homo economicus, homo economicus should not be completely free to take decisions that may affect future generations. Regulatory strategies investigated in this study, based upon the free choices of homo economicus, contradict the concept of sustainability. These strategies, which enable customers to take decisions to pay extra money for a plastic bag, allow them to contribute to environmental degradation. Sustainability requires taking decisions without harming the environment for future generations. Thus, it is significant to keep in mind that today's homo economicus does not have a right to take decisions on behalf of generations to come.

Furthermore, although the globalisation of plastic bag charges can be seen as a good development in reducing the use of plastic bags, the global neoliberal system plays a crucial role in the creation of the plastic waste problem in the developing world. Even if some countries, especially developing ones, have plastic bag charges/taxes in practice, they suffer more than rich developed countries in terms of plastic waste. Strategies like plastic bag charges/taxes seem to fail to be adequate in stopping plastic pollution and protecting the environment in developing countries since neoliberalism itself seems to reproduce environmental degradation. Thus, there is a need for much more robust policies to reduce the production of plastic products, rather than neoliberal policies that are based upon homo economicus.

BIBLIOGRAPHY

Bakker K, 'The Limits of 'Neoliberal Natures': Debating Green Neoliberalism' (2010) 34 (6) *Progress in Human Geography* 715

Brown W, *Edgework: Critical Essays on Knowledge and Politics* (Princeton University Press 2009)

Brown W, *Undoing the Demos: Neoliberalism's Stealth Revolution* (MIT Press 2015)

Chellel K and Moskwa W, 'A Plastic Bag's 2,000-Mile Journey Shows the Messy Truth About Recycling' *Bloomberg* (29 March 2022) <<https://www.bloomberg.com/graphics/2022-tesco-recycle-plastic-waste-pledge-falls-short/>> accessed 21 July 2022

Clapp J and Swanston L, 'Doing Away with Plastic Shopping Bags: International Patterns of Norm Emergence and Policy Implementation' (2009) 18(3) *Environmental Politics* 315

Edwards C and Fry JM, *Life Cycle Assessment of Supermarket Carrier Bags: Draft Report* (Great Britain Environment Agency 2010)

Ergocun G, 'Turkey: Plastic Bag Use Down 50 pct with New Regulation' Anadolu Agency (4 January 2019) <<https://www.aa.com.tr/en/economy/turkey-plastic-bag-use-down-50-pct-with-new-regulation/1355806#:~:text=Plastic%20bag%20usage%20in%20Turkey,urbanization%20minister%20said%20on%20Friday.>> accessed 21 July 2022

Eschner K, 'Reusable Grocery Bags aren't as Environmentally Friendly as you Might Think' Popular Science (28 October 2020) <<https://www.popsci.com/story/environment/single-use-plastic-misconceptions/>> accessed 22 July 2022

European Commission (EC), Environment, Environmental Economics (EC) <<https://ec.europa.eu/environment/enveco/mbi.htm>> accessed 5 August 2022

Excell C, '127 Countries Now Regulate Plastic Bags. Why Aren't We Seeing Less Pollution?' World Resources Institute (11 March 2019) <<https://www.wri.org/insights/127-countries-now-regulate-plastic-bags-why-arent-we-seeing-less-pollution>> accessed 3 July 2022

Fleming P, *The Death of Homo Economicus: Work, Debt and the Myth of Endless Accumulation* (Pluto Press 2017)

Foucault M, *the Birth of Biopolitics: Lectures at the Collège de France, 1978-79* (Graham Burchell tr, François Ewald and Alessandro Fontana ed, Palgrave Macmillan 2008)

Gogus SS, 'Can "Homo Economicus" Help Save the Environment?' Climate Exchange (20 September 2014) <<https://climate-exchange.org/2014/08/20/can-homo-economicus-help-save-the-environment/>> accessed 21 July 2022

Gordon C, 'Governmental Rationality: An Introduction' in Graham Burchell, Colin Gordon, and Peter Miller (eds) *The Foucault Effect: Studies in Governmentality: with two Lectures by and an Interview with Michel Foucault* (Harvester Wheatsheaf 1991)

Greenpeace, 'Data from the Global Plastics Waste Trade 2016-2018 and the Offshore Impact of China's Foreign Waste Import Ban' (23 April 2019) <<https://www.greenpeace.org/eastasia/publication/5907/data-from-the-global-plastics-waste-trade-2016-2018-and-the-offshore-impact-of-chinas-foreign-waste-import-ban/>> accessed 21 July 2022

Harvey D, *A Brief History of Neoliberalism* (Oxford University Press 2007)

Heywood A, *Politics* (5th edn, Palgrave Macmillan 2013)

Interpol, 'Emerging Criminal Trends in the Global Plastic Waste Market since January 2018' (Interpol 2018) <<https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-report-alerts-to-sharp-rise-in-plastic-waste-crime>> accessed 21 July 2022



Jahan S, Mahmud A and Papageorgiou C, 'What is Keynesian Economics' in J M Rowe (ed), *Finance and Development: Back to Basics: Economic Concepts Explained*, 4-5 (IMF 2017)

Kwoon J, 'South Korea's Plastic Problem is a Literal Trash Fire' CNN (3 March 2019) <<https://edition.cnn.com/2019/03/02/asia/south-korea-trash-ships-intl/index.html>> accessed 16 August 2022

Lagasnerie GD, *Foucault Against Neoliberalism?* (Rowman & Littlefield Publishers 2020)

Lavelle-Hill R and others, 'Psychological and Demographic Predictors of Plastic Bag Consumption in Transaction Data' (2020) 72 *Journal of Environmental Psychology* 101473

Leggett W, 'The Politics of Behaviour Change: Nudge, Neoliberalism and the State' (2014) 42(1) *Policy & Politics* 3

Lemke T, *Foucault's Analysis of Modern Governmentality: A Critique of Political Reason* (Verso Books 2019)

— — 'Foucault, Governmentality, and Critique' (Rethinking Marxism Conference, University of Amherst, 21-24 September 2002)

<<http://www.thomaslemkeweb.de/publikationen/Foucault,%20Governmentality,%20and%20Critique%20IV-2.pdf>> accessed 18 July 2022

Lin K, 'Why Plastic Pollution is an Environmental Justice Issue' Greenpeace (23 April 2019) <<https://www.greenpeace.org/international/story/21792/plastic-waste-environmental-justice/>> accessed 15 August 2022

Locke J and Laslett P, *Two treatises of government: A Critical Edition with an Introduction and Apparatus Criticus by Peter Laslett* (Cambridge University Press 1970)

May T, *The Philosophy of Foucault* (Acumen Press 2006)

Michel Foucault, *the Birth of Biopolitics: Lectures at the Collège de France, 1978-79* (Graham Burchell tr, François Ewald and Alessandro Fontana ed, Palgrave Macmillan 2008)

Miller RM, 'Plastic Shopping Bags: An Analysis of Policy Instruments for Plastic Bag Reduction' (MSc Thesis, Universiteit Utrecht 2012)

Nadesan MH, *Governmentality, Biopower, and Everyday Life* (Routledge 2010)

Nancy Fraser, 'From Discipline to Flexibilization? Rereading Foucault in the Shadow of Globalization' (2003) 10(2) *Constellations* 160

Ng ICL and Tseng L, 'Learning to be Sociable: The Evolution of Homo Economicus' (2008) 67(2) *American Journal of Economics and Sociology* 265

Parker L, 'Plastic Bag Bans are Spreading. But are They Truly Effective?' *National Geographic* (17 April 2019) <<https://www.nationalgeographic.com/environment/article/plastic-bag-bans-kenya-to-us-reduce-pollution>> accessed 5 July 2022

Read J, 'A Genealogy of Homo-Economicus: Neoliberalism and the Production of Subjectivity' (2009) 6 *Foucault Studies* 25

Saad-Filho A and Johnston D (eds), *Neoliberalism: A Critical Reader* (Pluto Press 2005)

Scherer AG and Palazzo G, 'The New Political role of Business in a Globalized World: A

Review of a New Perspective on CSR and its Implications for the Firm, Governance, and Democracy' (2011) 48 (4) *Journal of Management Studies* 899

Scientist Action and Advocacy Network (ScAAN), 'Effectiveness of Plastic Regulation Around the World' (2019) <https://plasticpollutioncoalitionresources.org/wp-content/uploads/2017/03/Effectiveness_of_plastic_regulation_around_the_world_4_pages.pdf> accessed 18 July 2022

Smith A, *On the Division of Labour: The Wealth of Nations, Books I–III* (Penguin Classics 1986)

Smithers R, 2020, 'Use of Plastic Bags in England Drops by 59 % in a Year' *The Guardian* (30 July 2020) <<https://www.theguardian.com/environment/2020/jul/30/use-of-plastic-bags-in-england-drops-by-59-in-a-year> > accessed 3 July 2022

Snowdon K, 'UK Plastic Waste being Dumped and Burned in Turkey, Says Greenpeace' *BBC News* (17 May 2021) <<https://www.bbc.co.uk/news/uk-57139474>> accessed 21 July 2022

— —, 'Plastics-still Young, but having a Mature Impact' (2008) 28 *Waste Management* 473

Steger MB and Roy RK, *Neoliberalism: A Very Short Introduction* (Oxford University Press 2010)

Ugurtas S, 'Why Turkey became Europe's Garbage Dump' *Politico* (18 September 2020) <<https://www.politico.eu/article/why-turkey-became-europes-garbage-dump/>> accessed 21 July 2022

UNEP, 'Single-Use Plastics: A Roadmap for Sustainability (rev. 2)' (UNEP 2018) <<http://hdl.handle.net/20.500.11822/25496>> accessed 3 July 2022



United Nations Environment Assembly of the UNEP, 'End Plastic Pollution: Towards an International Legally Binding Instrument' (7 March 2022) UNEP/EA.5/Res.14

United Nations Environment Programme (UNEP), 'Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations' (UNEP 2018) <<https://www.unenvironment.org/resources/report/legal-limits-single-use-plastics-and-microplastics>> accessed 5 August 2022

Urbina DA and Villaverde AR, 'A Critical Review of Homo Economicus from Five Approaches' (2019) 78(1) American Journal of Economics and Sociology 63

Wakunuma K, 'Plastic Waste is Hurting Women in Developing Countries – but there are Ways to Stop it' The Conversation (22 October 2021) <<https://theconversation.com/plastic-waste-is-hurting-women-in-developing-countries-but-there-are-ways-to-stop-it-166596#:~:text=Developing%20countries%20are%20likely%20to,into%20extreme%20poverty%20during%202021>> accessed 3 July 2022

World Commission on Environment and Development, 'Our Common Future' (Oxford University Press 1987)

Zerk JA, *Multinationals and Corporate Social Responsibility: Limitations and Opportunities in International Law* (Cambridge University Press 2006)

