



Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

Environmental and Ethical Concerns: How Do they Shape Individual Behaviour?

Marco A. Marini

Sapienza University of Rome & CIRIEC International

Valencia, 13-15 June 2022



1. Over-consumption and Sustainability

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

A protester disrupted a Louis Vuitton fashion show in Paris on Tuesday by walking down the catwalk with a banner condemning the impact of excessive consumption on the environment. Carrying a sign reading overconsumption = extinction, the woman representing Amis de la Terre France, Youth for Climate and Extinction Rebellion marched down the same path as the models, causing a stir in the audience, a Reuters witness said. (Reuters, Paris, October 5, 2021)

Over-consumption is more deadly to Earth's wildlife than climate change. (A. Micu, ZME Science, 2016)

No need to shop till you drop. (Globe and Mail 2003)



2. Shop Until You Drop

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications



Figura: Shop Until You Drop, Banksy, 2011



3. Consumerism and Environmentalism

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- Increasing protests are mounting against uncontrolled consumerism associated with the exploitation of natural resources.
- The term *consumerism* is usually attributed to John Bugas, the number two of Ford Motor Company who introduced this term in a public speech in 1955, although several authors, as for instance Thorstein Veblen in his 1899 book *The Theory of the Leisure Class: An Economic Study in the Evolution of Institutions* investigated the impact and essence of conspicuous consumption in modern capitalism.



4. Consumerism and Anti-consumerism

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- We usually mean by *consumerism* the tendency of people to evaluate as of primary importance the hedonic quality of products they consume, for instance in reason of their brand- and/or status-symbolism (e.g., Miles, 1998, Stearns, 2006).
- In contrast, *anti-consumerism* denotes any doctrine that places a stigma on a hedonically too high (compared to the average) level of consumption.
- There exists a wide literature on the evolution of social and environmental values in modern societies that, together with the behaviour of consumers and firms, has been constantly evolving over time (e.g. Dietz *et al.* 2005 for an extended survey on this).



5. Environmentalism and Sustainability

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- *Environmentalism* or *green consumerism* can be intended as any doctrine advocating sustainable consumption and production of goods and services in a given society (e.g. Kahn, 2007, Glaeser, 2014).
- In a way is a sort of *psychic cost* (*advantage*) borne by a consumer when buying a *brown* (*green*) product (see Gleaser 2014 and Marini *et al.* 2020).
- ESG investment ratings, an acronym which stands for **Environmental**, **Social** and **Government** represent around 80% of market capitalisation in 2020 (OECD 2021) and is being increasingly used as a tool to align investments with a low-carbon transition, to help investors align portfolios with specific climate-objectives and strategies in line with the Paris Agreement.



6. Hedonic and Ethical Attributes

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- Every product necessarily embeds a set of *hedonic* as well as of *ethical* (environmental, social, governance) attributes.
- The first refers to the characteristics that, for instance, distinguish a top (luxury) quality product (say a Ferrari) from a low quality (basic) product (say a utilitarian Fiat) in the perception of consumers.
- In contrast, the second refers to the ecological, social and government footprint associated with a given product, as for instance its environmental sustainability in terms of CO₂, its social impact on the community and on the labour force, as well as its alignment with stakeholders' interests.
- Therefore, the overall level of *quality* of a product perceived by consumers ultimately depends upon a mix of attributes embedded in the product.



7. Green and Brown Products

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- We can basically distinguish *two cases*.
 - 1 The first is the case in which the the more sustainable product (henceforth *green* product G) is also the one with the *high-hedonic-quality content* whereas the less sustainable (henceforth *brown* product B) is the *low-quality product*: hedonic and ethical attributes are *aligned* in available goods and hedonic q_G and ethical quality e_G of the *green* good necessarily dominates that of the *brown*: $q_G > q_B$ and $e_G > e_B$.
 - 2 In a second case, goods attributes are *misaligned* and the *hedonic* attributes of B exceed that of G , although the latter is ethically superior: $q_G < q_B$ and $e_G > e_B$.



8. Recent Trends

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- For several decades the *ethical* and *hedonic* attributes of products on sale have not been in sync, with the environmental advantages coming at the expense of high performance.
- More recently firms have started to align the hedonic and social and environmental attributes of goods, with firms devoting more attention to the ethical features of products.
- For instance, a car is evaluated by consumers for its intrinsic features (as comfort, safety and power) as well as, for its environmental footprint (e.g. CO₂ emissions or sustainable life-cycle).
- Some of the most environmentally friendly firms are also those producing goods with higher hedonic attributes: For example, the *BMW Group* has been recently ranked first in the “Automobiles” category of the Dow Jones Sustainability Index. (*Automotive World Magazine*, November 2020).



9. A Simple Setup

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- We consider a market with a unit mass of consumers. In line with the literature, we assume that the product is indivisible and that each consumer buys one unit of this product, so that the market is covered.
- Consumers are assumed heterogeneous in both their willingness to pay for the *hedonic quality* of the good (denoted θ_1 and measured on the horizontal axis) and for its *ethical quality* (denoted θ_2 and measured on the vertical axis). Let both θ_1 and θ_2 be uniformly distributed in $(0, 1)$. It descends that all consumers are geometrically contained in a *unit-square* (a square of area 1) as the one represented below.



10. Consumers' Space

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

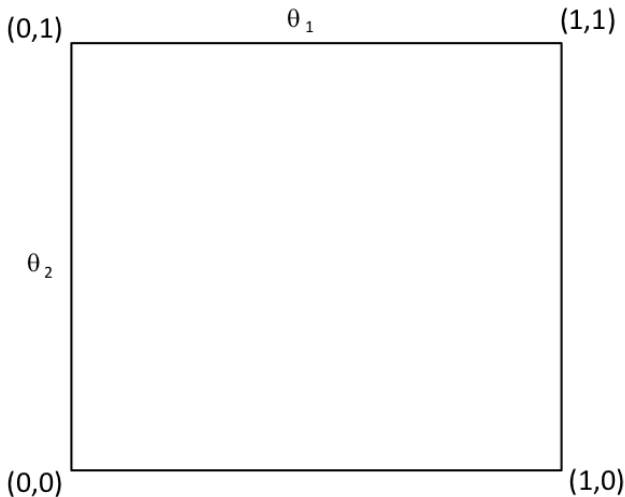


Figure 1 – Consumers' space



11. First Case: Aligned Attributes Case

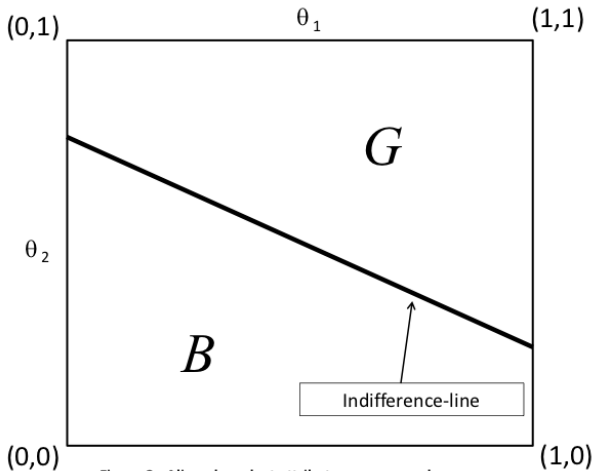
Environmental and Ethical Concerns: How Do they Shape Individual Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy Implications





12. Misaligned Attributes Case

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

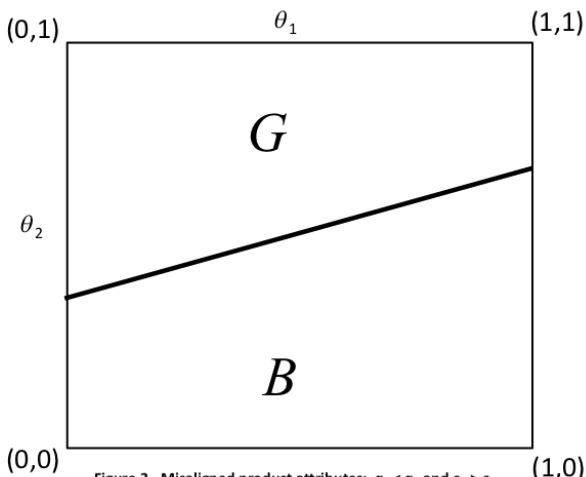


Figure 3 - Misaligned product attributes: $q_G < q_B$ and $e_G > e_B$



13. Effect of Anti-consumerism in Society: Misaligned Case

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

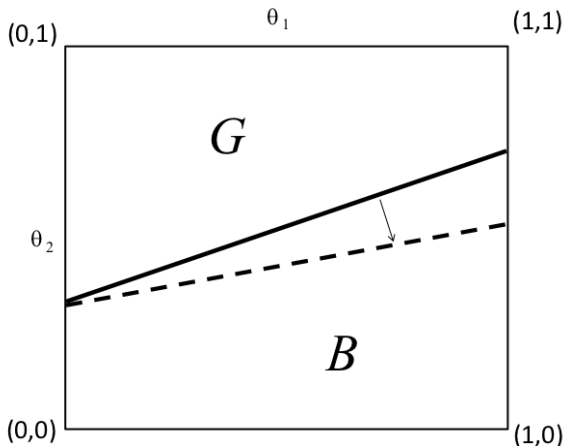


Figure 4b - *Misaligned product attributes: increase of anti-consumerism without price effect*



14. Unexpected Effect of Anti-consumerism: Aligned Case

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

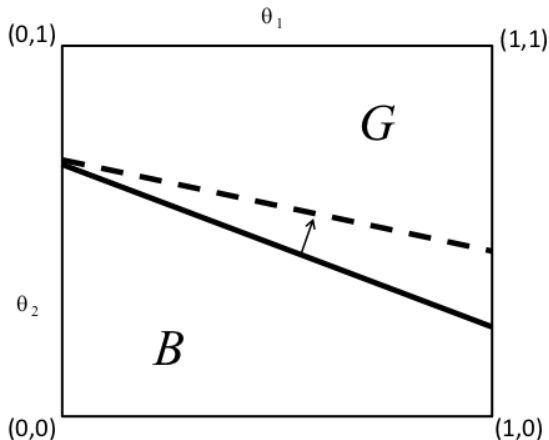


Figure 5b - Aligned product attributes: increase of
anti-consumerism without price effects.



15. The Effect of Environmentalism or Sustainability: Misaligned Attributes

Environmental and Ethical Concerns: How Do they Shape Individual Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy Implications

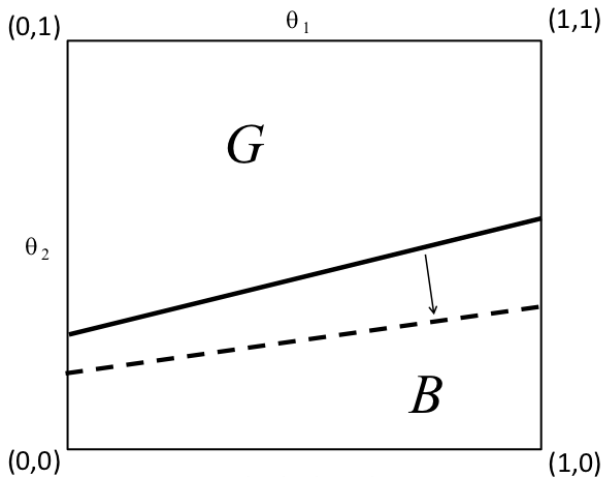


Figure 6a - Misaligned product attributes: increase of environmentalism without price effects.



16. The Effect of Environmentalism or Sustainability: Aligned Attributes

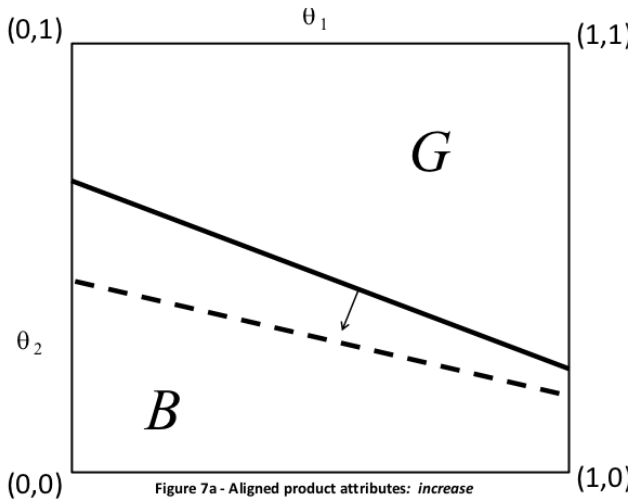
Environmental and Ethical Concerns: How Do they Shape Individual Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy Implications





17. Effect of Environmentalism or Sustainability with Prices Adjustments: Aligned Attributes

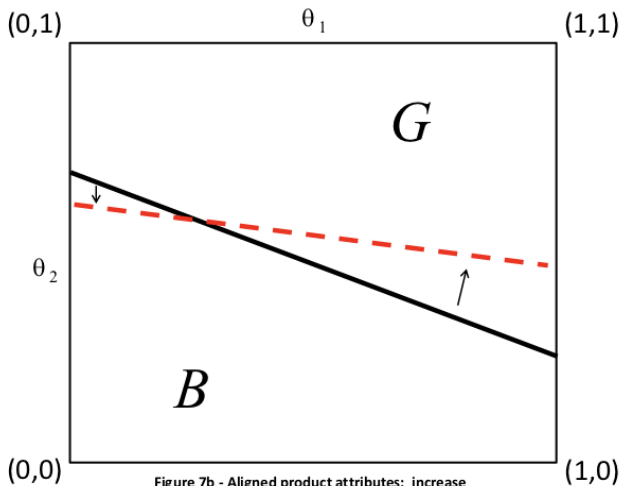
Environmental and Ethical Concerns: How Do they Shape Individual Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy Implications





18. Some Policy Implications

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- Environmental (as e.g. *Fridays for Future*), anti-consumeristic ideologies and social movements certainly help moving society values, inducing more transparency from firms. However, taken alone, san hardly solve all sustainability issues of modern societies.
- A deeper investigation on how policy instruments as *minimum quality standards, fiscal incentives for green and ethical consumption and production* interact with the *ex ante* as well as *ex post* behaviour of consumers subject to different society movements (NGOs, Governments, National and International Organizations).



19. Concluding Remarks

Environmental
and Ethical
Concerns: How
Do they Shape
Individual
Behaviour?

Marco A. Marini

Introduction

A Simple Setup

Policy
Implications

- Green and social movements can become more and more pivotal in orientating firms and consumption choices in developed and developing countries. However, still very little is known about how they impact on consumers and firms' decisions.
- Using a simple two-dimensional setting we showed that the effects of ethical concerns and anti-consumerism can produce a *re-bound effect* when good attributes are *aligned* as is occurring more and more frequently in recent years.
- Firms and consumers react strategically to incentives: in particular, firms can use the change in consumers' perception to rise prices, thus causing unexpected results on the final footprint of the market activity.