



EDMOND
DE ROTHSCHILD

THE SRI CHRONICLES

N° 34 - July 2023



News | p.3

OUR PLASTIC
DIETS...

From an academic point of view | p.4 et 5

WHO RECEIVES CREDIT
OR BLAME?



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THE CHALLENGES FOR RESPONSIBLE INVESTMENT IN 2023 AND BEYOND

Today, Responsible Investing - a “Must-have” and no longer a “Nice-to-have” - is at a crossroads and facing major challenges. It is now crucial to measure the social and environmental impact of investments, with complete transparency, partly in response to the criticisms voiced in the United States since the issue of sustainable finance has seeped into presidential campaign discussions.

On the regulatory front, Europe is in a transition phase characterised by changing rules, inevitable and complex fumbling, and a desperate lack of clarity. With the 2024 European elections just around the corner, we expect a regulatory pause that could pave the way for a period of stabilisation from September 2023 running until early 2025. This would give us the time needed to draw our own conclusion on the many sets of rules: CSRD, SFDR, taxonomy, MiFID, etc.

Demand for transparency has never been greater - and this is good news. Sending out a clear and readable message helps to simplify both the issue and the debates. We believe that the core of the matter lies with the social and/or environmental added value of our investments. Retail and institutional clients are choosing funds with embedded ESG criteria to meet expectations that must imperatively be addressed.

We also welcome the improved methodologies and datasets now available to sustainable finance players. On complex issues such as biodiversity, the Taskforce on Nature-related Financial Disclosures (TNFD)'s recommendations (v1.0) will be released at the end of 2023. These will provide a framework and common language for all private sector players - just as the Climate-related Financial Disclosures (TCFD) did for climate change in 2017.

We wish you an enjoyable read and a very pleasant summer.

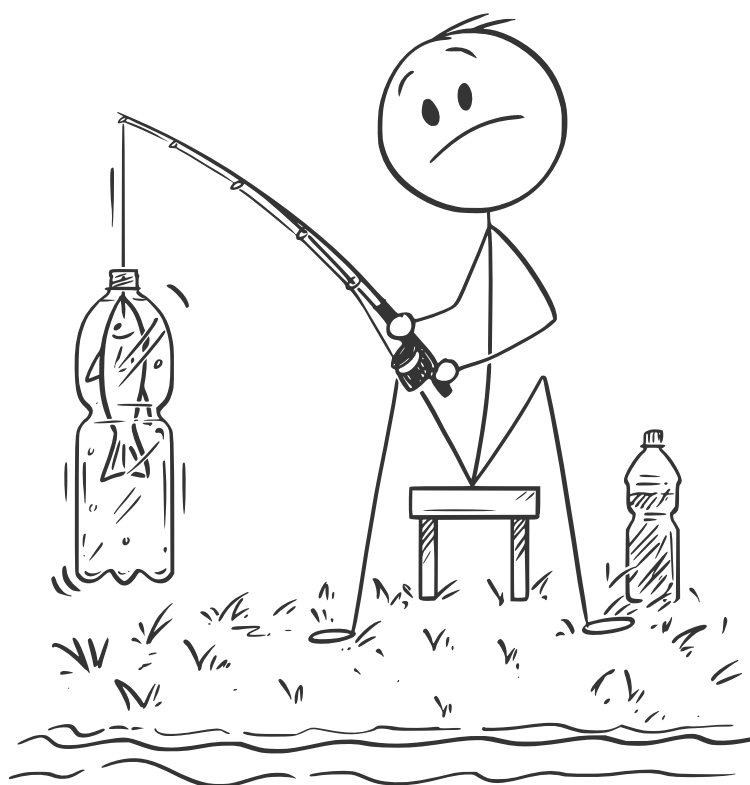
OUR PLASTIC DIETS...

Were you aware that humans ingest 5 grams of plastic every week, which is equivalent to a credit card? The WWF study that unveiled this figure was conducted in 2019 and it is reasonable to assume that the quantity is even higher today.

The environmental damage caused by the soaring use of plastic in just 60 years is well known – fossil-based inputs generating high greenhouse gas (GHG) emissions at production and incineration stages, low recycling rates (9% worldwide, 20% in Europe), harmful effects on ocean biodiversity, and so on. On our current trajectory, by 2050, the volume of plastic in our oceans will exceed the volume of fish! The Pacific Trash Vortex, a 6th continent of floating plastic, has formed in the North Pacific and covers a surface area of around 3.4 million km².

This obvious challenge for the environment is also a public health issue, though this aspect is frequently overlooked. Several studies (World Bank, WHO...) estimate that 9 to 13 million human deaths are caused every year by the ingestion of plastic. Covid appears to have a formidable and silent rival.

To address this double environmental and public health issue, a coalition of 57 countries (including the European Union and Japan) is working on an agreement on Plastic. After a meeting held on May 29th - June 2nd in Paris, 175 countries agreed on drafting a



treaty to fight plastic pollution. This should be addressed in 2023 at the next conference in Nairobi. The project will explore a series of complex issues such as how do you reduce production, single-use plastics, toxic molecules, manage the waste etc.?

In the meantime, let's end on a happier note. Awareness is rising at a spectacular rate, as demonstrated by the many initiatives now being deployed: specialised projects and start-ups, ocean cleaning, recycling technologies, the use of enzymes, and chemical processes that break down plastics that had been impossible to decompose until now. In addition to these solutions, new regulation – notably in Europe, will also ban the use of some of the most harmful forms and uses of plastic.

WHO RECEIVES CREDIT OR BLAME?

The Effects of Made-to-Order Production on Responses to Unethical and Ethical Company Production Practices



NEERU PAHARIA

Neeru Paharia is professor of marketing at the W. P. Carey School of Business. She conducts research on consumer behavior, branding, sustainability, and political consumption. Prior to joining ASU, Paharia was on the faculty at Georgetown University, and was the research director for the Edmond J. Safra Center for Ethics at Harvard University. She spent three years on the founding team at Creative Commons serving as assistant and executive director, after working at McKinsey as an associate consultant. She has cofounded several community-oriented social networking sites in education, research, and music including Peer 2 Peer University (p2pu.org), Acawiki.org, and ccmixer.org. Paharia holds a doctorate in marketing from Harvard Business School, a master's degree in public policy and management from Carnegie Mellon University, and a bachelor's degree in economics from the University of California, Davis.

While prior research has found that consumer-influenced production improves purchase intentions, the present paper proposes that it can counterintuitively backfire. This research examines how consumer participation in production (e.g., made-to-order) interacts with a company's ethical and unethical business practices to moderate purchase intention, a previously unexplored interaction that has important implications for both business and society.

This work contributes to an emerging stream of research on the paradox of high-stated interest but low market share for an ethically made product.

STUDIES DEMONSTRATE POSITIONING STRATEGIES

Considering ethical production attributes, the author states the hypothesis that when consumers participate in production (operationalized as made-to-order production), they disfavor products made with negative ethical attributes more than if they had considered these same products from inventory (operationalized as made-to-stock production).

The author uses a series of studies that test the hypothesized effects in a variety of different contexts, across varied categories and participant population.

INVOLVEMENT IN PRODUCTION

The first study demonstrates these effects using Facebook's advertising platform to test its real-world applicability. When consumers have

direct responsibility for whether a product is made, they feel more involved in the production and attribute the results to their own actions. This can reinforce their concern for the ethical parameters of the product, as they feel responsible for their choices. On the other hand, when the firm decides the ethical parameters of production, consumers tend to perceive the production as being independent of their actions, which may reduce their concern for ethical processes.

In her case study, using Facebook's advertising platform, the author tests whether varying participation in production will change consumers' responses to more negative ethical production.

The study demonstrates that participants were more likely to click on ad for fair-trade products and to sign a petition to improve labor conditions when made-to-order production was the focus rather than made-to-stock production.

FEELINGS OF GRATIFICATION OR GUILT

The second study finds an interaction between participation in production and the ethicality of production, while

also demonstrating the mediating process of guilt using an incentive-compatible design. The author tests the hypothesis, that with unethical production, consumers would prefer made-to-stock production to made-to-order production and anticipated guilt would mediate this effect. On the other hand, with ethical production, consumers would prefer made-to-order production to made-to-stock production, driven by anticipated gratification.

The study uses the example of Nike, where ethics are manipulated by the country of production of shoes (Bangladesh or no mention). Participants were informed that there would be a lottery, in which, if won, they would receive either 40\$ in cash or a 100\$ Nike gift card to buy shoes. The results confirm that when the country of production is mentioned, participants were less likely to choose a Nike gift card over 40\$ in cash if the shoes were made-to-order than if they were made-to-stock. However, when there was no mention of where the shoes were produced, there was no difference based on participation in production.

The next study explores whether the effects reverse with more positive ethical production and finds that participants are willing to pay a premium for recycled products when they have control over production because they anticipate a greater feeling of gratification. The study examines the purchase intentions of books printed on regular paper (neutral in ethicality) or recycled paper (positive in ethicality) for a 25% premium and papers have the same quality. Participants indicated a higher purchase intention for a book printed on recycled paper when it is made-to-order compared with when it is made-to-stock.

DIMENSIONS OF RESPONSIBILITY

Two additional studies explore two other dimensions of responsibility, diffusion of responsibility and broad responsibility, which can help strengthen the link between consumers and production even when products are premade (made-to-stock), thereby acting as moderators.

In one study, participants considered a similar choice between a regular book and a recycled book as in the last study. The study demonstrates that reducing group size (vs. a typical mass-consumption context of a large group size) can reduce feelings of diffusion of responsibility and increase feelings of efficacy, leading consumers to weigh ethical production more heavily. Even when products are made-to-stock, the author found that reducing diffusion of responsibility can increase purchase intentions for more ethical products.

The last study aimed to further extend the previous findings by identifying a second method to manipulate feelings of responsibility independent of

direct causal agency. The authors demonstrate that cuing participants to think beyond their direct level of responsibility and consider their broad collective level of responsibility attenuated the previously found effects. While direct responsibility appears to be more spontaneous and results from personally causing or not causing something to happen, broad responsibility can be cued to focus consumers on a more collective type of responsibility, attenuating the effect.

CONCLUSION

This research demonstrates how participation in production can influence consumer behavior with respect to ethical production. In fact, participation in production increases the importance of ethical attributes. The study demonstrates that having responsibility for production increases feelings of guilt and gratification, thereby mediating purchase intentions, depending on the ethicality of the production process. Furthermore, strengthening the link between consumers and production by reducing the group size in the made-to-stock condition or inducing broad responsibility through a cue attenuates the effect.

RESEARCH CONTRIBUTIONS AND MANAGERIAL IMPLICATIONS

This research contributes to an emerging stream of work that details the various ways consumers increasingly enact their political and moral views in the marketplace. More broadly, this work contributes to the co-creation literature by showing that participation in production can have negative or positive effect depending on the ethicality of the product. Finally, this paper contributes to the literature on responsibility and agency as well as to operations management.

As the study was limited to ethical production as defined by marketing literature, further research should consider other ethical contexts in which control over production could affect consumer choice.

Finally, this work has clear and actionable forward looking recommendations for managers regarding their production strategy within an context of increasing social accountability.

Neeru Paharia, Who Receives Credit or Blame? The Effects of Made-to-Order Production on Responses to Unethical and Ethical Company Production Practices, *Journal of Marketing*. 2020, Vol. 84(1) 88-104

AIXTRON, ENHANCING ENERGY EFFICIENCY TO KEEP MOORE'S LAW ALIVE



In 1965, Intel co-founder Gordon Moore – who died in March this year,

coined a rule that carried his name. Moore's Law refers to the observation he made that chip intensity would double every 18 months. Since 1965, he has generally been proven right, but his rule is becoming increasingly difficult to follow.

Today, the challenge for the semiconductor industry is about nanometres – on a scale of one billionth of a meter – as a nanometre is 20,000 times thinner than human hair! Energy efficiency has become an imperative for the chip industry. Not only is this positive for the environment, but it also helps to perpetuate the Moore Law.

Aixtron is a German provider of deposition equipment for the semiconductor industry and plays an integral role in meeting this imperative. Created in 1983, Aixtron emerged as a spin-off from RWTH Aachen University. The company specialises in Metal Organic Vapour Deposition (MOCVD) and owns 75% of the global market share. Aixtron uses a crystal-based deposition technique whereby the components are deposited onto the single-crystal substrate by a vector gas.

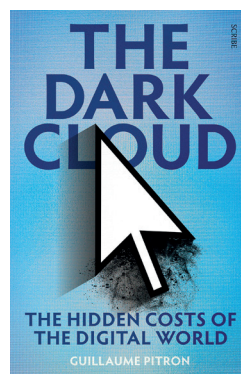
Thanks to the company's active role in improving semiconductor energy efficiency, in 2022, 58.5% of Aixtron's revenues were aligned with the European Union's green taxonomy – despite the latter being highly selective. Only 3-4% of the EU's economy is taxonomy-aligned. Finally, 70% of Aixtron's sales are shipped to Asia. Believe it or not, Europe is a high export hub!

The information about the companies cannot be assimilated to an opinion of Edmond de Rothschild Asset Management (France) on the expected evolution of the securities and on the foreseeable evolution of the price of the financial instruments they issue. This information cannot be interpreted as a recommendation to buy or sell such securities.

THE DIGITAL WORLD: DREAM OR NIGHTMARE?

Over the past few years, digitalisation has spread massively and penetrated all areas. These transformations have unlocked vast opportunities to create value, but they also have an impact on the environment and climate change. The digital world currently generates 4% of the planet's total CO₂ emissions and growth trends are regularly being revised upwards.

Author Guillaume Pitron investigates the environmental, economic, and geopolitical impacts of these new technologies. In *The Dark Cloud*, he explores the dark side of the digital world. This “dematerialised” world is in fact much more material than we like to imagine. Faced with this environmental challenge, which remains largely underestimated, digital sobriety needs to be an integral part of our ecological responsibility.



The Dark Cloud
by
Guillaume Pitron

382 billion dollars

Worldwide investment in solar energy in 2023 should be worth \$382 billion, \$11 billion more than for oil production.

Source: IEA.

3X

Worldwide, the number of cases of obesity has almost tripled since 1975, according to the WHO.

EDMOND DE ROTHSCHILD ASSET MANAGEMENT⁽¹⁾ JOINS THE “NET ZERO ASSET MANAGERS” INITIATIVE

After joining the Institutional Investors Group on Climate Change (IIGCC), we joined the Net Zero Asset Managers (NZAM) initiative a few weeks later in May 2023 - a decision consistent with our continued commitment to support the energy and environmental transition. NZAM membership is a major step in Edmond de Rothschild's ESG strategy.

This initiative is designed to galvanise the asset management industry to lead the transition to net zero. In addition, it delivers the ambitious action and investment strategies that are necessary to achieve the goal of net zero emissions. The NZAM also gives a forum to share best practice and overcome barriers to aligning investments with the net zero goal.

Together with 300 other signatories weighing around 60 trillion dollars in asset under management (AUM), Edmond de Rothschild Asset Management will step up its action in partnership with asset owner clients. This will include setting decarbonisation targets consistent with the ambition of reaching net zero emissions by 2050 or sooner, for all AUM within the scope of the initiative.

Over the next twelve months, we shall work actively on disclosing the following information:

► the initial percentage of the portfolio managed in

line with the initiative

- our “fair share” interim targets for AUM managed in compliance with the Net Zero initiative
- the target date for achieving these interim targets
- and the methodology used to set these targets.

We shall monitor these commitments closely over time and will review our interim targets at least every five years, with a view to ratchetting up the proportion of AUM covered until 100% of the assets are included.

Note that in 2017, Edmond de Rothschild Asset Management built a climate roadmap aligned with the Paris Agreement to take part in the global effort to limit global warming to less than 2 degrees. This was then updated in 2020 to account for urgent climate issues and the response from various economic players and regulatory authorities. Before the end of 2023, the roadmap will be strengthened with the addition of biodiversity preservation considerations and our new commitments, after we recently joined the Net Zero Asset Managers initiative (NZAM). Edmond de Rothschild Asset Management has reached an important milestone in supporting the “net zero greenhouse gas emission by 2050” objective, consistent with the efforts deployed globally to limit global warming to 1.5°C.

(1) Through Edmond de Rothschild (Switzerland) S.A.

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